

BERKELEY TECHNOLOGY LAW JOURNAL

VOLUME 23

NUMBER 1

ANNUAL REVIEW 2008

TABLE OF CONTENTS

I. INTELLECTUAL PROPERTY

A. PATENT

1. Notes

- HOW *KSR* BROADENS (WITHOUT LOWERING) THE EVIDENTIARY STANDARD OF NONOBVIOUSNESS *by Justin Lee* 15
- *IN RE SEAGATE TECHNOLOGY LLC*: A CLEAN SLATE FOR WILLFULNESS *by Danny Prati*..... 47
- *MICROSOFT CORP. v. AT&T*: A WELCOME RETURN TO PATENT LAW’S TRADITION OF TERRITORIALITY *by Sean Fernandes* 75
- *INTEGRA LIFESCIENCES I, LTD. v. MERCK KGAA*: RE-EXAMINING THE BROAD SCOPE OF THE § 271(E)(1) SAFE HARBOR *by Daniel Wobbekind*..... 107
- BITING OFF MORE THAN YOU CAN CHEW: THE NEW LAW OF ENABLEMENT *by Jason Romrell*..... 139
- DECLARATORY JUDGMENT ACTIONS IN PATENT CASES: THE FEDERAL CIRCUIT’S RESPONSE TO *MEDIMMUNE v. GENENTECH* *by Jennifer R. Saionz*..... 161
- INJUNCTIVE RELIEF IN THE POST-*EBAY* WORLD *by Benjamin Petersen* 193
- REGULATORY PRIORITIES GOVERNING STEM CELL RESEARCH IN CALIFORNIA: RELAXING REVENUE SHARING & SAFEGUARDING ACCESS PLANS *by David C. Tolley*..... 219
- NOW YOU SEE THEM, NOW YOU DON’T: THE PTO’S RULES ON CLAIMS AND CONTINUATIONS *by Matt Browning* 247
- TRIALS AND TRIPS-ULATIONS: INDIAN PATENT LAW AND *NOVARTIS AG v. UNION OF INDIA* *by Linda L. Lee* 281

2. Additional Developments

- *IN RE NUIJTEN*
- *IN RE COMISKEY*
- *PFIZER, INC. v. APOTEX, INC.*
- *VODA v. CORDIS CORP.*
- COMPULSORY LICENSES IN THAILAND AND BRAZIL
- NANOTECHNOLOGY

B. COPYRIGHT

1. Notes

- NOT A COPYRIGHT LAW? *UNITED STATES V. MARTIGNON* AND WHY THE ANTI-BOOTLEGGING PROVISIONS ARE UNCONSTITUTIONAL by *William McGinty*..... 323
- LET IT BE? THE CHALLENGES OF USING OLD DEFINITIONS FOR ONLINE MUSIC PRACTICES by *Joshua Keesan*..... 353
- *PERFECT 10 V. AMAZON.COM: A STEP TOWARD COPYRIGHT'S TORT LAW ROOTS* by *Meng Ding* 373
- A GOOD VALUE CHAIN GONE BAD: INDIRECT COPYRIGHT LIABILITY IN *PERFECT 10 V. VISA* by *David Haskel*..... 405
- FORTIFYING THE SAFE HARBORS: REEVALUATING THE DMCA IN A WEB 2.0 WORLD by *Brandon Brown*..... 437
- STEPPING IT UP AND TAKING IT TO THE STREETS: CHANGING CIVIL & CRIMINAL COPYRIGHT ENFORCEMENT TACTICS by *Kim F. Natividad*..... 469

2. Additional Developments

- *N.Y. MERCANTILE EXCHANGE, INC. V. INTERCONTINENTAL EXCHANGE, INC.*
- *LIVE NATION MOTOR SPORTS, INC. V. DAVIS*
- *UNITED STATES V. AMERICAN SOCIETY OF COMPOSERS, AUTHORS & PUBLISHERS*
- *SCO GROUP, INC. V. NOVELL, INC.*
- *IN RE MECHANICAL & DIGITAL PHONORECORD DELIVERY RATE ADJUSTMENT PROCEEDING*
- GOWERS REPORT: U.K. KEEPS COPYRIGHT TERM AT 50 YEARS
- AUSTRALIAN COPYRIGHT AMENDMENT ACT OF 2006
- U.S.-SINO WTO DISPUTE OVER CHINESE INTELLECTUAL PROPERTY PROTECTION

C. TRADEMARK

1. Note

- ANTI-DILUTION LAW, NEW AND IMPROVED: THE TRADEMARK DILUTION REVISION ACT OF 2006 by *Jennifer Files Beerline* 511

2. Additional Developments

- *GOOGLE INC. V. AMERICAN BLIND & WALLPAPER FACTORY, INC.*
- *BOSTON DUCK TOURS, LP V. SUPER DUCK TOURS, LLC*
- *IN RE REED ELSEVIER PROPERTIES, INC.*
- *ITC, LTD. V. PUNCHGINI, INC.*

D. TRADE SECRET

1. Developments

- *JENNINGS V. ELECTIONS CANVASSING COMM'N*

II. CYBERLAW

A. Notes

- FOR BETTER OR WORSE: INTRODUCING THE GNU GENERAL PUBLIC LICENSE VERSION 3 by *John Tsai*..... 547
- THE OPTIMAL LIABILITY SYSTEM FOR ONLINE SERVICE PROVIDERS: HOW *ZERAN V. AMERICA ONLINE* GOT IT RIGHT AND WEB 2.0 PROVES IT by *Cecilia Ziniti*..... 583
- STRANGER DANGER AND THE ONLINE SOCIAL NETWORK by *Richard M. Guo*..... 617

B. Additional Developments

- *DOUGLAS V. U.S. DISTRICT COURT EX REL TALK AMERICA, INC.*
- *HOWARD V. MISSOURI BONE & JOINT CENTER, INC.*
- *CAPITOL FEDERAL SAVINGS BANK V. EASTERN BANK CORP.*

III. TELECOMMUNICATIONS

A. Developments

- BIDDING FOR BANDWIDTH: THE 700 MHZ SPECTRUM AUCTION

IV. ANTITRUST

A. Notes

- *LEEGIN V. PSKS*: NEW STANDARD, NEW CHALLENGES by *Ashley Doty*..... 655

B. Additional Developments

- *BELL ATLANTIC CORP. V. TWOMBLY*
- GOOGLE/DOUBLECLICK MERGER
- *IN RE RAMBUS INC.*
- *RAMBUS INC. V. FTC*

V. PRIVACY

A. Notes

- PAY NO ATTENTION TO THE MAN BEHIND THE CURTAIN: THE GOVERNMENT'S INCREASED USE OF THE STATE SECRETS PRIVILEGE TO CONCEAL WRONGDOING by *Margaret Ziegler*..... 691
- *WARSHAK V. UNITED STATES*: THE *KATZ* FOR ELECTRONIC COMMUNICATION by *Tamar R. Gubins*..... 723
- PAN, TILT, ZOOM: REGULATING THE USE OF VIDEO SURVEILLANCE OF PUBLIC PLACES by *Jeremy Brown*..... 755

B. Additional Developments

- *PICHLER V. UNITE*
- *IMS HEALTH INC. V. AYOTTE*
- MINNESOTA'S PLASTIC CARD SECURITY ACT

SUBSCRIBER INFORMATION

The *Berkeley Technology Law Journal* (ISSN 1086-3818), a continuation of the *High Technology Law Journal* effective Volume 11, is edited by the students of the University of California School of Law, Berkeley (Boalt Hall), and published four times each year (March, June, September, January) by the Regents of the University of California, Berkeley, Journal Publications, School of Law, 311 Boalt Hall, University of California, Berkeley, CA 94720-7200. Periodicals Postage Rate Paid at Berkeley, CA 94704-9998, and at additional mailing offices. POSTMASTER: Send address changes to Journal Publications, 311 Boalt Hall, School of Law, University of California, Berkeley, CA 94720-7200.

Correspondence. Address all correspondence regarding subscriptions, address changes, claims for non-receipt, single copies, advertising, and permission to reprint to Journal Publications, 311 Boalt Hall, School of Law, Berkeley, CA 94720-7200; (510) 643-6600; JournalPublications@law.berkeley.edu. Authors: see section entitled Information for Authors.

Subscriptions. Annual subscriptions are \$65.00 for individuals, and \$85.00 for organizations. Single issues are \$27.00. Please allow two months for receipt of the first issue. Payment may be made by check, international money order, or credit card (MasterCard/Visa). Domestic claims for non-receipt of issues should be made within 90 days of the month of publication; overseas claims should be made within 180 days. Thereafter, the regular back issue rate (\$27.00) will be charged for replacement. Overseas delivery is not guaranteed.

Form. The text and citations in the *Journal* conform generally to the UNITED STATES GOVERNMENT PRINTING OFFICE STYLE MANUAL (29th ed. 2000) and to THE BLUEBOOK: A UNIFORM SYSTEM OF CITATION (Columbia Law Review Ass'n et al. eds., 18th ed. 2005). Please cite this issue of the *Berkeley Technology Law Journal* as 23 BERKELEY TECH. L.J. ____ (2008).

BTLJ ONLINE

The full text and abstracts of many previously published *Berkeley Technology Law Journal* articles can be found at <http://www.btlj.org>. Our site also contains a cumulative index, general information about the *Journal*, selected materials related to technology law, and links to other related pages. Author, volume, and subject indexes may also be found in Volume 20, Number 4 (2005) of the *Journal*.

INFORMATION FOR AUTHORS

The Editorial Board of the *Berkeley Technology Law Journal* invites the submission of unsolicited manuscripts. Submissions may include previously unpublished articles, essays, book reviews, case notes, or comments concerning any aspect of the relationship between technology and the law. If any portion of a manuscript has been previously published, the author should so indicate.

Format. Authors may submit manuscripts in electronic or hardcopy form, though electronic submissions are strongly encouraged. Electronic submissions should be sent as attachments in Microsoft Word format to btlj@law.berkeley.edu. Authors should submit double-spaced, single-sided manuscripts with generous margins. We regret that submissions cannot be returned. Authors should retain an exact copy of any material submitted.

Citations. All citations should conform to THE BLUEBOOK: A UNIFORM SYSTEM OF CITATION (Columbia Law Review Ass'n et al. eds., 18th ed. 2005). In addition, the author should include his or her credentials, including full name, degrees earned, academic or professional affiliations, and citations to all previously published legal articles.

Copyrighted Material. If a manuscript contains any copyrighted table, chart, graph, illustration, photograph, or more than eight lines of text, the author must obtain written permission from the copyright holder for use of the material. A photocopy of such written permission should accompany the submission.

Mailing Address. BTLJ highly prefers electronic submissions sent as Microsoft Word attachments to btlj@law.berkeley.edu, but also accepts hardcopy manuscripts sent to:

Submissions Editor
Berkeley Technology Law Journal
University of California, Berkeley
Boalt Hall School of Law
587 Simon Hall
Berkeley, California 94720
(510) 643-6454 (Phone)

DONORS

The *Berkeley Technology Law Journal* and the Berkeley Center for Law & Technology acknowledge the following generous donors to Boalt Hall's Law and Technology Program:

Benefactors

AKIN GUMP STRAUSS HAUER &
FELD LLP

ORRICK, HERRINGTON
& SUTCLIFFE LLP

COOLEY GODWARD KRONISH LLP

SKADDEN, ARPS, SLATE, MEAGHER
& FLOM LLP & AFFILIATES

DLA PIPER US LP

WEIL, GOTSHAL & MANGES LLP

FENWICK & WEST LLP

WHITE & CASE LLP

KIRKLAND & ELLIS LLP

WILSON, SONSINI, GOODRICH
& ROSATI

LATHAM & WATKINS LLP

NIXON PEABODY LLP

Members

BAKER BOTTS LLP	HICKMAN, PALERMO, TRUONG & BECKER, LLP
BINGHAM MCCUTCHEN LLP	JONES DAY
COVINGTON & BURLING LLP	KEKER & VAN NEST LLP
DAVIS POLK & WARDWELL	KNOBBE MARTENS OLSON & BEAR LLP
DAY CASEBEER MADRID & BATCHELDER LLP	MAYER BROWN LLP
DECHERT LLP	MCDERMOTT WILL & EMERY
DREIER STEIN & KAHAN LLP	MORGAN, LEWIS & BOCKIUS LLP
FINNEGAN HENDERSON FARABOW GARRETT & DUNNER LLP	MORRISON & FOERSTER LLP
FISH & RICHARDSON PC	ROPES & GRAY LLP
FOLEY & LARDNER LLP	SONNENSCHN NATH & ROSENTHAL LLP
GUNDERSON DETTMER STOUGH VILLENEUVE FRANKLIN & HACHIGIAN LLP	TOWNSEND AND TOWNSEND AND CREW LLP
HELLER EHRMAN LLP	

Patrons

BAKER & MCKENZIE	O'MELVENY & MYERS LLP
GREENBERG TRAURIG LLP	VAN PELT, YI & JAMES LLP
HOWREY LLP	WINSTON & STRAWN LLP

The *Berkeley Technology Law Journal* is a nonprofit organization and welcomes donations. Donors are recognized appropriately for their contributions. For more information, contact the *Berkeley Center for Law and Technology*, Boalt Hall School of Law, 355 Boalt Hall, University of California, Berkeley, California 94720. Telephone: 510-642-8073. E-mail: bclt@law.berkeley.edu.

ADVISORY BOARD

ROBERT BARR
*Executive Director of the Berkeley Center
for Law & Technology*
Boalt Hall School of Law
Berkeley, California

ROBERT C. BERRING, JR.
Walter Perry Johnson Professor of Law
Boalt Hall School of Law
Berkeley, California

JESSE H. CHOPER
Earl Warren Professor of Public Law
Boalt Hall School of Law
Berkeley, California

PETER S. MENELL
*Professor of Law and
Director of the Berkeley Center for
Law & Technology*
Boalt Hall School of Law
Berkeley, California

ROBERT P. MERGES
*Wilson Sonsini Goodrich & Rosati
Professor of Law and Director of the
Berkeley Center for Law & Technology*
Boalt Hall School of Law
Berkeley, California

REGIS MCKENNA
Chairman and CEO
Regis McKenna, Inc.
Palo Alto, California

DEIRDRE K. MULLIGAN
*Director of the Samuelson Law,
Technology & Public Policy Clinic and
Clinical Professor of Law*
Boalt Hall School of Law
Berkeley, California

JAMES POOLEY
Pooley & Oliver LLP
Palo Alto, California

MATTHEW D. POWERS
Weil, Gotshal & Manges LLP
Redwood Shores, California

PAMELA SAMUELSON
*Professor of Law & Information
Management and Director of the Berkeley
Center for Law & Technology*
Boalt Hall School of Law
Berkeley, California

LIONEL S. SOBEL
*Professor of Law and Director of the
International Entertainment & Media Law
Summer Program in London, England*
Southwestern University School of Law
Los Angeles, California

LARRY W. SONSINI
Wilson Sonsini Goodrich & Rosati
Palo Alto, California

MICHAEL STERN
Cooley Godward LLP
Palo Alto, California

MICHAEL TRAYNOR
Cooley Godward LLP
San Francisco, California

THOMAS F. VILLENEUVE
Gunderson, Dettmer, Stough, Villeneuve,
Franklin & Hachigian LLP
Menlo Park, California

BOARD OF EDITORS

2007-2008

Editor-in-Chief

MICHAEL DAVIS-WILSON

Managing Editor

NIKI WOODS

Senior Article Editors

JEFFREY KUHN
WINSTON SU

Senior Executive Editor

BOBBY GLUSHKO

Senior Annual Review Editors

ALAN GALLOWAY
PUNEET KAKKAR

Executive Editors

Submissions Editors

GALEN HANCOCK
JEREMY PRICE

Production Editors

MICHAEL MCCARTHY
STEVEN SUTTON

External Relations Editors

RICHARD DAVID
THOMAS LLOYD

Bluebook Editors

JENNIFER SAIONZ
ELVIN LEE

Notes & Comments Editors

TAMAR GUBINS
CYNTHIA SU

Symposium Editors

JENNIFER FILES BEERLINE
LINDA LEE

Member Relations Editor

KIM NATIVIDAD

Annual Review Editors

DAVID HASKEL
YONGDAN LI
CECILIA ZINITI

Web Editor

ERIC FONG

Assistant Managing Editor

CAMERON YAHR

Publishing Editor

CHRIS YEH

Article Editors

BRANDON BROWN

MENG DING

ASHLEY DOTY

AARON EPSTEIN

SEAN FERNANDES

DANIEL KIM

PATRICIA KUO

JUSTIN LEE

ALPA PATEL

DANNY PRATI

JENNIFER RAAB

MARGARET THOMSON

BERKELEY CENTER FOR LAW & TECHNOLOGY

Executive Director

ROBERT BARR

Faculty Directors

PETER MENELL
PAMELA SAMUELSON

ROBERT MERGES
PAUL SCHWARTZ
MOLLY VAN HOUWELING

DEIRDRE MULLIGAN
HOWARD SHELANSKI '92

Assistant Director

LOUISE LEE

Assistant Director

DAVID GRADY

*Affiliated Faculty and
Scholars*

STEPHEN BARNETT
ROBERT BERRING '74
AARON EDLIN
JOSEPH FARRELL
RICHARD GILBERT
BRONWYN HALL
THOMAS JORDE

MICHAEL KATZ
AMY KAPCZYNSKI
DAVID MOWERY
ERIN MURPHY
DAVID NIMMER
DANIEL RUBINFELD
ANNALEE SAXENIAN
SUZANNE SCOTCHMER

CARL SHAPIRO
MARJORIE SHULTZ
LON SOBEL
DAVID TEECE
HAL R. VARIAN
OLIVER WILLIAMSON
BRIAN WRIGHT

BERKELEY TECHNOLOGY LAW JOURNAL

ANNUAL REVIEW 2008

Annual Review Supervisors

PETER S. MENELL
ROBERT BARR
MOLLY S. VAN HOUWELING
CHRIS HOOFNAGLE

Senior Annual Review Editors

ALAN GALLOWAY
PUNEET KAKKAR

Production Editors

ALICE AHN
HILLIARY CREELEY

Editor-in-Chief

MICHAEL DAVIS-WILSON

Annual Review Editors

DAVID HASKEL
YONGDAN LI
CECILIA ZINITI

Advisors

NATE DAVIS
ALAN GALLOWAY
DANA HOWELLS

JEANNINE MARQUES
PUNEET KAKKAR
JEFF KUHN

DEANA SOBEL
JEFF THOMAS
KAI ZHU

Authors

JENNIFER FILES BEERLINE
BRANDON BROWN
JEREMY BROWN
MATT BROWNING
MENG DING
ASHLEY DOTY
SEAN FERNANDES
TAMAR R. GUBINS

RICHARD M. GUO
DAVID HASKEL
JUSTIN LEE
LINDA L. LEE
JOSHUA KEESAN
WILLIAM MCGINTY
KIM F. NATIVIDAD
BENJAMIN PETERSEN

DANNY PRATI
JASON ROMRELL
JENNIFER R. SAIONZ
DAVID C. TOLLEY
JOHN TSAI
DANIEL WOBBEKIND
MARGARET ZIEGLER
CECILIA ZINITI

Contributors

CESAR ALVAREZ
CONSTANCE CHOI
ELIZABETH IGLESIAS
TONEY JACOBSON

NATE KAMESAR
ALYSSA KNUTSON
MYKOLA KOVALENKO
YONGDAN LI

MIKE SAWYER
DAVE TROSSEN
DAVID TOLLEY

FOREWORD

By Alan J. Galloway[†] & Puneet V. Kakkar[‡]

Each year, the *Berkeley Technology Law Journal* publishes an Annual Review of Law and Technology, providing descriptions and analyses of the year's most significant developments at the intersection of law and technology. The goal of the Annual Review issue is to provide a valuable resource for judges, policymakers, practitioners, students, and scholars. Each Note provides not only a presentation of a recent and emerging issue of law and technology, but also a primer on that specific area of law to provide the reader with the larger context of the development. As the Annual Review enters its second decade, its coverage reflects the many areas of law in which technology is playing a vital role—intellectual property, cyberlaw, constitutional issues, and increasingly with respect to international developments and privacy. This year, we have made a specific push to highlight the broader themes of law implicated by each new development.

The twenty-four Notes contained in this issue cover a range of topics: the recent Supreme Court decisions on patent doctrine; breaking issues in copyright law, including constitutional concerns; legal implications of Web 2.0; a major shift in antitrust jurisprudence; trademark dilution; and timely analyses of email privacy, video surveillance, and the state secrets doctrine. Beyond the Notes, other significant decisions, statutes, and activities of 2007 are addressed in twenty-seven Additional Developments.

I. INTELLECTUAL PROPERTY

A. Patent

This year's Annual Review explores a wide range of issues within patent law. This year's Notes analyze decisions regarding obviousness, willful infringement, extraterritoriality, enablement, and the safe harbor for FDA-bound research. Beyond doctrinal issues, the Notes also address the effects of recent decisions on the availability of declaratory judgments and the issuance of injunctive relief, the patenting framework of California's

© 2008 Alan J. Galloway & Puneet V. Kakkar.

[†] Senior Annual Review Editor, *Berkeley Technology Law Journal*; J.D., 2008, University of California, Berkeley, School of Law (Boalt Hall).

[‡] Senior Annual Review Editor, *Berkeley Technology Law Journal*; J.D., 2008, University of California, Berkeley, School of Law (Boalt Hall).

stem cell research initiative, and proposed new rules on patent claims and continuations. In addition, as patent laws of other jurisdictions have become an international concern, we also explore recent developments in India in this year's Annual Review.

1. *Doctrinal Developments and Analysis*

The Supreme Court modified the doctrine of nonobviousness in *KSR International Co v. Teleflex Inc.*¹ The first Note reviews the doctrine of nonobviousness and observes that courts have always used implicit means to find "motivation" for an invention as evidence of obviousness. The principal argument of the Note is that the Supreme Court, in *KSR*, confirmed that the teaching, suggestion, or motivation supporting a finding of obviousness need not be explicit. Thus, courts in the future should broaden the scope of evidence permitted under the test. The Note also explores ramifications of the Supreme Court's decision, such as the consequences for the "obvious-to-try" doctrine.

Our second Note analyzes *In re Seagate*,² in which the Federal Circuit set "objective recklessness" as the standard for willful infringement, abolished the affirmative duty to retain counsel to evaluate infringement notices, and held that the waiver of attorney-client privilege created by an "advice of counsel" defense to willfulness does not, generally, extend to trial counsel. Overall, the Note concludes that *Seagate* is good news for patent infringement defendants and aligns patent's willfulness doctrine with Supreme Court precedent. The Note asserts that the higher bar for willfulness rightly focuses on acts rather than state of mind, while still allowing courts to deter culpable conduct.

This past year, the Court also sought to clarify the extraterritorial bounds of U.S. patent law. The next Note explains the Court's decision in *Microsoft Corp. v. AT&T Corp. (AT&T III)*,³ and the larger legal landscape of territoriality in U.S. law. In *AT&T III*, the Court held that 35 U.S.C. § 271(f) warrants a narrow interpretation and that U.S. exporters of software master disks are not liable for infringement if foreign manufacturers make copies of those disks in a foreign jurisdiction and subsequently use those copies to assemble infringing products. The Note argues that this is a welcome development in U.S. patent law, establishing territorial limits that respect comity between countries and the practicalities of enforcing patents on the global scale. The Note highlights that this deci-

1. 127 S. Ct. 1727 (2007).

2. *In re Seagate Tech., LLC*, 497 F.3d 1360, 1365 (Fed. Cir. 2007) (en banc), cert. denied, 128 S. Ct. 1445 (Feb. 25, 2008).

3. 127 S. Ct. 1746 (2007).

sion curbed potentially expansive readings by limiting § 271(f) to tangible components of product claims.

Then, this year's Annual Review addresses more discrete issues in patent law. The fourth Note considers a series of Supreme Court and Federal Circuit cases addressing whether 35 U.S.C. § 271(e)(1) protects pre-clinical experimentation on potential drug candidates. The Note examining examines the broad scope of protection resulting from the Federal Circuit's decision in *Integra Lifesciences I, Ltd. v. Merck KGaA*,⁴ the Supreme Court's overruling of that decision,⁵ and the Federal Circuit's subsequent decision on remand.⁶ The Note argues that the resulting broad scope of § 271(e)(1) protection creates uncertainty for researchers and courts and, in combination with the research use exception, may leave some deserving research unprotected while extending protection to certain uses of patented research tools that should not receive protection. To solve these problems, the Note suggests an approach modeled after the laws of Germany and the United Kingdom and after Judge Newman's dissent in the initial Federal Circuit decision.

Our fifth Note looks at the Federal Circuit's strengthening of patent law's enablement requirement, at least with respect to the "predictable arts," in *Liebel-Flarsheim Co. v. Medrad, Inc.*⁷ and *Automotive Technologies International, Inc. v. BMW of North America, Inc.*⁸ The Federal Circuit, the Note argues, has imported into the mechanical arts the stringent standards of enablement previously used for biotechnical and chemical inventions. The Note argues that the new enablement standard goes beyond that needed for one skilled in the art to practice the invention, unnecessarily blurs the line between written description and enablement, and creates uncertainty as to what constitutes adequate disclosure. The Note concludes that an overly strict disclosure requirement might stifle research and development, but a balanced and well-defined enablement requirement can promote second-generation innovation by preventing unwarranted extension of claim scope.

The next Note presents the recent developments in the Supreme Court and the Court of Appeals for the Federal Circuit establishing which declaratory judgment actions in patent cases are justiciable. The Supreme Court, in *MedImmune v. Genentech, Inc.*,⁹ eliminated the "reasonable ap-

4. *Integra Lifesciences I, Ltd. v. Merck KGaA*, 331 F.3d 860 (Fed. Cir. 2003).

5. *Merck KGaA v. Integra Lifesciences I, Ltd.*, 545 U.S. 193 (2005).

6. *Integra Lifesciences I, Ltd. v. Merck KGaA*, 496 F.3d 1334 (Fed. Cir. 2007).

7. 481 F.3d 1371 (Fed. Cir. 2007).

8. 501 F.3d 1274 (Fed. Cir. 2007).

9. 127 S. Ct. 764 (2007).

prehension of suit” standard that the Federal Circuit had required a claimant to meet in order to bring a declaratory judgment action. The Note surveys post-*MedImmune* cases at the Federal Circuit, and argues that courts should increase the rigor of inquiry into the declaratory judgment claimant’s legal interests in the activities covered by the patent at issue.

The final Note addressing issues of patent law doctrine builds upon the Annual Review’s coverage of the Supreme Court’s decision in *eBay Inc. v. MercExchange, LLC*,¹⁰ in which the Court held that courts need not automatically issue injunctions upon finding patent infringement. This year’s Note analyzes trends that have emerged from district court decisions following *eBay*, such as the increased attention to whether parties are competitors in deciding whether to issue an injunction. The Note also analyzes two open questions in light of *eBay*: whether a denial of injunctive relief leads to higher royalty rates, and whether such denial of an injunction amounts to compulsory licensing. Finally, the Note argues that after *eBay*, patent plaintiffs have increasingly resorted to the International Trade Commission for relief.

2. *Stem Cell Research in the Patent Context*

This year’s Annual Review also seeks to advance the discussion of intellectual property in the stem cell arena, an issue particularly relevant to California. Our eighth Note evaluates the intellectual property policies developed by the California Institute for Regenerative Medicine (CIRM). The Note begins with an overview of the science and the controversy at the heart of human embryonic stem cell research, and then compares CIRM’s IP policies to the Bayh-Dole Act, which governs IP ownership for federally funded biomedical research. The Note then evaluates CIRM’s revenue-sharing policies, arguing that revenue sharing is imprudent given the likelihood of much larger economic returns through comprehensive benefits to society such as longer, more productive lives and improved healthcare. The Note further argues that CIRM’s broad access regulations with respect to exclusive licensing arrangements are crucial to CIRM’s IP policies, because broad access would be unlikely without regulatory intervention. Lastly, the Note offers a principle of interpretation for discerning whether licensing agreements are exclusive or nonexclusive under ambiguous CIRM regulations.

10. 547 U.S. 388 (2006); see Jeremy Mulder, Note, *The Aftermath of eBay: Predicting When District Courts Will Grant Permanent Injunctions in Patent Cases*, 22 BERKELEY TECH. L.J. 67 (2007).

3. *PTO Rule Changes*

The U.S. Patent and Trademark Office (PTO) has also communicated an interest and moved to change rules governing patent prosecution. Our ninth Note addresses the proposed rule changes developed by the PTO, designed to address increasing backlogs and improve patent quality. The proposed final rules limit continuation and continuation-in-part applications, limit requests for continued examination, limit claims per application, and require applicants to identify related applications. Before the rules could take effect, the United States District Court for the Eastern District of Virginia held that the rules were substantive and outside the PTO's statutory authority¹¹—a result argued for in our Note of one year ago.¹² This year's Note argues that, if eventually implemented, the rules may decrease incentives for innovation in industries like biotechnology that rely on continuation applications, but could, if successful in reducing the PTO's backlog, increase incentives for innovation in industries like software that rapidly send inventions to market. However, the Note concludes that, even if implemented, the rules are unlikely to be effective in decreasing the backlog of unexamined applications.

4. *International Developments in Patent Law*

Finally, patent law concerns also reach beyond U.S. borders, as the patent law regimes of countries such as India draw the attention of U.S. corporations and those interested in the balance between public interest and intellectual property protection. Our final Note addressing patent law focuses on an emerging debate regarding intellectual property rights in India. The recent case, *Novartis AG v. Union of India*, has grabbed the attention of multinational pharmaceuticals concerned about the generic market and the international community concerned about India's compliance with the World Trade Organization's requirements for a country's patent laws. The Note provides a legal primer on Indian patent law and its regulatory apparatus, and the current legal challenge to India's ambiguous and untested requirement of "enhanced efficacy" for patents to new uses of known substances. The resolution of this dispute will, at the least, affect India's ability to meet its healthcare needs and protect the integrity of its intellectual property regime.

11. *Tafas v. Dudas*, 2008 U.S. Dist. LEXIS 26086 (E.D. Va. Apr. 1, 2008).

12. See Laxman Sahasrabuddhe, Note, *Is the PTO Authorized to Promulgate the Proposed Rule Change to the Continuation Practice?*, 22 BERKELEY TECH. L.J. 193 (2007).

B. Copyright

The copyright section of this year's issue reviews significant constitutional and doctrinal developments in copyright law, each of which in some way involves the challenges posed to copyright by the Internet.

The first Note addresses the constitutional sources and limitations of Congress's power to grant copyright (or copyright-like) protections, and the role of the Copyright Clause of the U.S. Constitution. Specifically, the Note critiques a recent decision from the U.S. Court of Appeals for the Second Circuit, *United States v. Martignon*.¹³ In that case, the court found that civil and criminal anti-bootlegging provisions of the Uruguay Round Agreements Act were authorized pursuant to the Commerce Clause. The Note highlights that the Copyright Clause also provides a source of authority for the statute, which would require limitations on time and the scope of works protected. The Note argues that because the court was interpreting a statute grounded in other sources of authority of Congress, the court should have applied the "fundamental inconsistency" test to apply restrictions of the Copyright Clause to the statute.

As new technologies reshape the music industry, this year's Annual Review addresses resulting issues for copyright law. Our second Note concerning copyright argues that a shift away from traditional music distribution channels to the web as music's primary medium is forcing the industry to re-conceptualize its business model, and in particular, that the old collective rights system—in which various distinct collective rights agencies managed separate and distinct rights attaching to sound recordings and musical works—has become obsolete. The Note explains the current system for administering online music rights, and traces the development of the collective rights organizations. The Note examines two major points of controversy: first, the problem of "double dipping" vis-à-vis downloads and online streaming; and second, the issue of determining fair royalty rates for webcasters and internet radio. The Note argues that a streamlined system in which one middleman handled all rights clearances for music on the Internet might be the most feasible and efficient solution to these problems.

The Ninth Circuit has recently decided a string of cases brought by Perfect 10 testing various corners of copyright law—particularly, fair use and various forms of vicarious and secondary liability. The third Note examines issues raised in *Perfect 10, Inc. v. Amazon.com*,¹⁴ a recent opinion in which the Ninth Circuit found Google not liable for providing thumb-

13. 492 F.3d 140 (2d Cir. 2007).

14. 508 F.3d 1146 (9th Cir. 2007), *modifying* 487 F.3d 701 (9th Cir. 2007).

nail versions of copyrighted photographic images on its image search interface, and remanded on the issue of secondary liability. The Note details the fair use aspect of the holding, and focuses on the theory of secondary liability the court adopted: whether Google had knowledge of infringement and could have but did not take “simple measures” to prevent further infringement. The Note argues that the standard is a welcome return to the tort liability concept of secondary liability, though inconsistent with Supreme Court precedent in *Sony Corp. v. Universal City Studios, Inc.*¹⁵ and *MGM Studios, Inc. v. Grokster, Ltd.*¹⁶

The fourth Note in the section on copyright addresses another case involving Perfect 10. This Note addresses the challenges to copyright enforcement posed by foreign infringement in a digital world, arguing that when enforcement against foreign websites is not a realistic option, the best solution is imposing a limited form of liability sufficient to dissuade the provision of credit card services. The Note reviews the law of secondary liability and critically examines *Perfect 10, Inc. v. Visa International Service Ass’n*,¹⁷ in which the Ninth Circuit held the credit card companies were neither contributorily nor vicariously liable as a result of providing payment services to websites that distributed infringing material, finding that the link between payment services and direct infringement was too attenuated. Using the concept of value chains, the Note analyzes the optimal stage in the chain of infringement for enforcing copyright, concluding that holding credit card companies liable is appropriate so long as the law protects them from monetary damages.

This year’s fifth copyright Note examines the framework of the Digital Millennium Copyright Act (DMCA), and its “safe harbors” that grant limited immunity to online service providers that comply with DMCA’s notice-and-takedown framework. Viewing the safe harbors as a quid pro quo exchanging limited immunity for minor burdens of DMCA compliance, the Note argues that the bargain is an unfair one with respect to Web 2.0 business models, in which certain websites are based on and encourage user-generated content. The Note argues that a blatant inequity exists when websites reap high profits from the presence of infringing material, but are obligated to make only the most minimal efforts to prevent copyright infringement. The Note contends that courts’ common-law-based interpretation of the DMCA safe harbors shields infringers and may discourage innovation. The Note concludes that court should reinterpret the

15. 464 U.S. 417 (1984).

16. 545 U.S. 913, 937-41 (2005).

17. 494 F.3d 788 (9th Cir. 2007).

safe harbor provisions, implementing a balancing approach to allocate the burden of preventing infringement in a more just and economically efficient way.

The copyright law section of the Annual Review closes with a general survey on new civil and criminal enforcement against direct infringers in the United States and China. The Note details the increased efforts of the Recording Industry Association of America (RIAA) to identify and target direct infringers. The Note also explains parallel efforts by the U.S. Department of Justice and its partnership with industry leaders in pursuing criminal enforcement of copyright law. Finally, the Note provides a two-fold comparative look on this issue. First, the Note describes the imperfect mechanisms for enforcing U.S. copyrights internationally. Second, the Note surveys the less vigorous copyright enforcement regime in China, where competing goals of social and economic development have made copyright enforcement a low priority. Ultimately, the Note highlights the importance of growing partnership between industry and government actors to strengthen support for copyright enforcement both in law and in societal norms.

C. Trademark

Our sole trademark law Note examines the Trademark Dilution Revision Act of 2006 (“TDRA”),¹⁸ presenting the theory of dilution and the history behind the new statute, including the shortfalls of the 1996 Federal Trademark Dilution Act (“FTDA”)¹⁹ and the 2003 Supreme Court decision *Moseley v. V Secret Catalogue, Inc.*²⁰ On the whole, the Note argues that the TDRA is a significant improvement over its predecessor, providing more clarity, greater balance, a higher standard for trademark fame, a lower requirement for proof of harm, and broader exclusions for comment, criticism, and parody. However, the Note explains, the TDRA does not resolve all of the FTDA’s ambiguities and introduces new ambiguities of its own. In particular, the Note identifies problems with the TDRA’s extension of anti-dilution protection to marks of acquired distinctiveness.

Among the Additional Developments in trademark law are two court decisions holding that the purchase of internet search terms is a “use in

18. Trademark Dilution Revision Act of 2006, Pub. L. 109-312, § 120 Stat. 1730 (to be codified as 15 U.S.C. § 1125(c) and replacing the Federal Trademark Dilution Act, Pub. L. 104-98).

19. Federal Trademark Dilution Act of 1995, Pub. L. 104-98, 109 Stat. 985 (codified at 15 U.S.C. §§ 1051, 1125, 1127 (2000) (amended 2006)).

20. 537 U.S. 418 (2003).

commerce” under the Lanham Act.²¹ As these decisions run contrary to holdings in other jurisdictions, there is potential for an eventual circuit split on this issue.

D. Trade Secret

Although this year’s Annual Review does not include any Notes on trade secret law, the case of *Jennings v. Elections Canvassing Commission*,²² in which trade secret protection was held to preclude an examination of electronic voting machine source code with respect to a disputed election, is discussed as a Development.

II. CYBERLAW

Free and open-source software has become increasingly important with respect to the Internet and the digital economy. One Note evaluates the third version of the GNU General Public License (GPL), which was released in June 2007. GPL is an influential “copyleft” license that is widely used for free software. The Note provides a comprehensive history and traces the development of the GPL, and particularly highlights the significant changes in the third version with respect to patents and the scope of the license. First, GPL Version 3 seeks to clarify the license scope and licensors’ obligations; second, GPL Version 3 enacts an express patent license in certain cases where a licensee who modifies the code and distributes the modified version. The Note assesses these new provisions and highlights certain legal issues of GPL Version 2 that remain unresolved, including the treatment of dynamic linking and proprietary kernel modules.

Over ten years ago, Congress enacted Section 230 of the Communications Decency Act (CDA),²³ which shields online service providers from liability for their users’ actions and related content. One Note evaluates § 230 and the case law interpreting it, including the key case of *Zeran v. America Online*²⁴ and post-*Zeran* developments. The Note argues that a close look reveals a sound legal framework that has fostered the past decade of web development, including the emergence of Web 2.0. The Note

21. *Google Inc. v. American Blind & Wallpaper Factory, Inc.*, 2007 WL 1159950 (N.D. Cal. April 17, 2007); *Boston Duck Tours, LP v. Super Duck Tours, LLC*, 527 F.Supp.2d 205 (D. Mass. 2007).

22. No. 2006-CA-2973, 2006 WL 5508548 (Fla. Cir. Ct. Dec. 29, 2006), *cert. denied*, 958 So. 2d 1083 (Fla. Dist. Ct. App. 2007).

23. Communications Decency Act of 1996, Pub. L. No. 104-501, 110 Stat. 133 (codified at 47 U.S.C. 230 and scattered sections of 47 U.S.C.).

24. 129 F.3d 327 (4th Cir. 1997).

considers potential alternatives to § 230's wide grant of immunity under *Zeran*, identifying problems with each alternative and concluding that the post-*Zeran* cases have created a liability scheme constitutionally, practically, and socially preferable to the alternatives—especially as applied to the new landscape of Web 2.0 services.

Because of the broad immunity under § 230, an important social and safety issue has emerged as a result of the popularity of the Web 2.0 movement: sexual predators looming online social networks. The next Note provides a background on the Web 2.0 phenomenon and online social networks and the problem of sexual predators on the networks. The Note discusses the regulatory framework of the Web 2.0 online social networks, the reach of the CDA, and other federal and state laws on online social network regulation. The Note argues that the broad immunity the CDA affords allows online social networks to flourish, and further regulation may cripple their vitality. Rather, the Note argues that self-regulation, which will arise as a result of public and media pressure to improve safety, is a better route for the continuing functions of online social networks.

III. TELECOMMUNICATIONS

This Annual Review does not have any Notes focusing on an issue in the telecommunications field. Nonetheless, we chose to highlight one recent development in the telecommunications field, the recent auction of the 700 MHz radio and television broadcast band, which has the potential provide competition for the major wireless carriers. Our coverage of the controversy regarding NSA wiretapping of telephone lines is covered in our privacy section, discussed below.

IV. ANTITRUST

In a strong trend of applying economic analysis to antitrust law, the Supreme Court handed down two significant cases involving antitrust issues during October Term 2006. The sole Note in the antitrust section details *Leegin Creative Products v. PSKS*,²⁵ in which the Supreme Court overturned a nearly 100-year-old doctrine that prohibited vertical resale price restraints. This Note discusses the background and practice of vertical resale price maintenance and its economic effects. The Note then analyzes the underlying economic rationales the Court embraced to reach its decision in *Leegin*, and the shift in antitrust jurisprudence from finding

25. 127 S. Ct. 2705 (2007).

such restraints *per se* illegal to holding them subject to a rule of reason. The Note provides factors for future courts to apply in cases involving resale price restraints, given the reliance concerns on the historic doctrine that prohibited them. Ultimately, the Note addresses how these concerns may be relevant in cases implicating the first sale doctrine in patent law.

The Annual Review also reviews the Supreme Court's other landmark antitrust case from October Term 2006, *Bell Atlantic v. Twombly*,²⁶ which also changes federal pleading standards. Additional developments in antitrust include an analysis of the FTC's approval of the Google/DoubleClick merger in December 2007 and the U.S. Court of Appeals for the District of Columbia's decision to vacate an FTC finding that memory-chip maker Rambus violated the antitrust laws by allegedly deceiving a standard-setting organization.

V. PRIVACY

As an increasing number of people conduct an increasing number of activities over the Internet, the privacy (or the lack thereof) of those activities is an increasingly important issue. Security concerns have resulted in Congress's relaxing restrictions on government surveillance as new technologies and data mining techniques enable surveillance on an unprecedented scale. In addition, the government has reportedly engaged in surveillance that goes beyond statutory authorizations. With this as background, this year's Annual Review presents three Notes focused on privacy.

Our first Note in this area discusses the holding in *Hepting v. AT&T*,²⁷ a recent case challenging alleged widespread government wiretapping of American citizens, and the district court's refusal to dismiss the case on state secrets grounds. The Note provides an overview of wiretapping, chronicling both the technological developments and the evolution of wiretapping law. After examining the origins of the state secrets doctrine as an evidentiary privilege, the Note argues that government is attempting to use the state secrets privilege to avoid judicial and legislative regulation of wiretapping, and that this constitutes an abuse of the state secrets privilege that could hide government wrongdoing.

Our second privacy Note examines privacy in e-mail and other electronic communication, addressing the issue of whether such communications ought to be protected under the Fourth Amendment. The Note exam-

26. 127 S. Ct. 1955 (2007).

27. *Hepting v. AT&T Corp.*, 439 F. Supp. 2d 974 (N.D. Cal. 2006).

ines the Sixth Circuit's now-vacated decision in *Warshak v. United States*.²⁸ In *Warshak*, the court held that there was a reasonable expectation of privacy in e-mail, signaling that electronic communication merited Fourth Amendment protection going beyond the modest protections of Congress's Electronic Communications Privacy Act (ECPA). Besides reporting on the case and its reasoning, the Note reviews the varying levels of protection offered by judicial and statutory rules, and argues that technological developments result in a growing share of inadequately protected communications. The Note concludes that the Sixth Circuit and future courts should affirm the principle that the Fourth Amendment provides protection for electronic communication.

Our concluding Note addresses an emerging concern of privacy: video surveillance of public places. The Note responds to the increased use of video surveillance in light of advanced technology that facilitates its use—and potential misuse, according to the Note—by all levels of government. The Note reviews the history of municipal use of video surveillance and the current inadequacy of judicial regulation to prevent police misuse. The Note then turns to the regulatory framework, and argues that current federal regulation, embodied in the E-Government Act of 2002, should serve as a model for states and local jurisdictions, as they are best poised to address these concerns.

28. *Warshak v. United States*, 490 F.3d 455 (6th Cir. 2007), *vacated*, *Warshak v. United States*, No. 06-4092, 2007 U.S. App. LEXIS 23741 (6th Cir. Oct. 9, 2007) (granting rehearing en banc).

HOW *KSR* BROADENS (WITHOUT LOWERING) THE EVIDENTIARY STANDARD OF NONOBVIOUSNESS

By Justin Lee

I. INTRODUCTION

In *KSR International Co. v. Teleflex Inc.*, the Supreme Court revisited the question of nonobviousness in patent law for the first time since before the creation of the Court of Appeals for the Federal Circuit in 1982.¹ In a unanimous opinion, the Supreme Court rejected the Federal Circuit's rigid application of the teaching, suggestion, or motivation test ("TSM"). It also touched on various other nonobviousness doctrines including the obvious-to-try doctrine, the line between law and fact in nonobviousness determinations, and the ability of expert testimony to foreclose summary judgment of nonobviousness.

The general thrust of the opinion can, and should, be interpreted to broaden the *type* of evidence that can be used to support a finding of obviousness, without discarding the decades of Federal Circuit precedent requiring rigorous evidence guarding against hindsight bias. Even after *KSR*, the Federal Circuit has ample power to mold the law of nonobviousness, and so far it has shown itself reluctant to let the evidentiary standards slip. The Court rejected several Federal Circuit rules without promulgating replacements, instead explaining itself with equivocal language that allows flexible interpretation. Furthermore, in *KSR* the Federal Circuit had departed from its own precedents making it unclear how far beyond merely correcting that error the Supreme Court intended to go. This and the fact that the Court reaffirmed that nonobviousness is a matter of law put the Federal Circuit in a strong position to shape post-*KSR* nonobviousness law.²

This Note examines *KSR* along with relevant post-*KSR* Federal Circuit interpretation. Part II considers the case law of nonobviousness and the TSM test, with focus on cases allowing an inference of motivation to

© 2008 Justin Lee.

1. 127 S. Ct. 1727 (2007).

2. Rebecca Eisenberg, Commentary, *The Supreme Court and the Federal Circuit: Visitation and Custody of Patent Law*, 106 MICH. L. REV. FIRST IMPRESSIONS 28, 32 (2007), <http://www.michiganlawreview.org/firstimpressions/vol106/eisenberg.pdf> ("Indeed, by affirming that the ultimate determination of obviousness is a question of law rather than a question of fact, the Supreme Court left intact the plenary review power that has allowed the Federal Circuit to reshape obviousness doctrine over the years.").

combine. These cases show that the Federal Circuit has at times taken a flexible approach to the TSM test. Part III details the facts and history of the *KSR* litigation.

Part IV addresses five substantive lessons stemming from the Supreme Court's *KSR* opinion. First, the Federal Circuit's opinion below departed from its own precedent, making it possible to limit the Court's *KSR* holding to a rejection of this error, rather than a wholesale change in the nonobviousness inquiry. Second, though the Court introduced common sense and creative inferences into the nonobviousness inquiry, this should not be interpreted as a rejection of evidentiary requirements for overcoming hindsight bias. On the contrary, *KSR* should broaden—rather than lessen—the type of evidence allowed in the nonobviousness inquiry. Third, contrary to first impressions from the opinion, the obvious-to-try doctrine remains unchanged post-*KSR*. Fourth, *KSR* may remove a barrier to summary judgment on nonobviousness questions when expert testimony conflicts in certain cases. Fifth and finally, in a subsequent case, the Federal Circuit used *KSR* to justify a rule creating a prima facie case of obviousness when a claim consists of the routine addition of electronics or computers to an otherwise unpatentable device.

Part V concludes that despite the overtones of common sense and creative inferences in the Supreme Court's opinion, in the hands of the Federal Circuit *KSR* will not, and should not, result in a major change in the substantive standard of nonobviousness. However, *KSR* will result in a liberalization of the nature of evidence allowed to support a finding of obviousness, and—it is hoped—higher quality outcomes.

II. BACKGROUND ON THE LAW OF NONOBVIOUSNESS

A. The Development of Predictability and the Person of Ordinary Skill

In 1850, the Supreme Court added the nonobviousness hurdle to patentability. At the time, the statutory requirements only included subject matter, novelty, and utility. In *Hotchkiss v. Greenwood*, the Court invalidated a claim for a doorknob of porcelain connected to a metal shank using a dovetail joint.³ Each of the elements—the shank, the dovetail joint, and the porcelain knob—was well known in the prior art, but the claimed *combination* of elements was new. The Court considered whether the substitution of a porcelain knob for the traditionally used metal or wood knob

3. *Hotchkiss v. Greenwood*, 52 U.S. 248, 264-67 (1850).

showed sufficient “ingenuity or skill.”⁴ The Court noted that any benefits from the substitution arose from the qualities of the material itself, not from any “new mechanical device or contrivance.”⁵ The Court thus held that the porcelain substitution did not warrant a patent, because it did not require more ingenuity or skill than would be possessed by an ordinary mechanic acquainted with the business.⁶

The Court later explained, in *Atlantic Works v. Brady*, that the nonobviousness requirement is needed to balance the costs of granting a patent with the incentive effect of the “monopoly” grant.⁷ Some developments in a given field are the natural products of ordinary workers as a response to the demands of their everyday needs.⁸ Indeed, many advances occur by “spontaneous trials and attempts in a hundred different places.”⁹ Granting exclusionary rights for any “trifling device” which would “naturally and spontaneously” occur to any skilled mechanic fails the essential purpose of the patent system—to advance the state of the art by rewarding inventors.¹⁰ The nonobviousness requirement ensures that patent rights are only granted to reward sufficiently substantial advancements.¹¹

The key policy guiding both *Atlantic Works* and *Hotchkiss* is the notion that a patent grant is a quid pro quo. The patentee is granted a bundle of exclusionary rights and the public receives in return a disclosure of previously unknown technological know-how. It follows that if any “mechanic”¹² would naturally choose a claimed invention when faced with a

4. *Id.* at 266. “Ingenuity or skill” was then the preferred phrase for addressing “nonobviousness.”

5. *Id.*

6. *Id.*

7. 107 U.S. 192, 199-200 (1883). Early court opinions refer to the bundle of exclusive rights associated with a patent as a “monopoly,” but courts in the Federal Circuit era have avoided the term on the grounds that patent rights are distinct from a monopoly in the economic or legal antitrust sense. *See* 35 U.S.C. 271(d)(5) (2000) (declining to presume market power in patent misuse cases); ROBERT L. HARMON, PATENTS AND THE FEDERAL CIRCUIT § 1.4(b) at 22-23 (8th ed. 2007) (“Patent rights are not legal monopolies in the antitrust sense of the word. Not every patent is a monopoly, and not every patent confers market power.”); *In re Kaplan*, 789 F.2d 1574, 1578 (Fed. Cir. 1986) (noting that the illegality associated with the term monopoly is not conducive to dispassionate analysis).

8. *Atl. Works*, 107 U.S. at 199-200.

9. *Id.*

10. *Id.*; *see* U.S. CONST. art. I, § 8, cl. 8.

11. *Atl. Works*, 107 U.S. at 199-200.

12. “Mechanic” is the term used in early inventions, presumably because most patents were mechanical. *See, e.g., Hotchkiss v. Greenwood*, 52 U.S. 248, 253 (1850) (considering knowledge level of “an ordinary mechanic acquainted with the business”). Today the term is a “person having ordinary skill in the art.” 35 U.S.C. § 103 (2000).

given problem, then the grant of exclusionary rights succeeds only in preventing the public from exercising its rights to practice technology already within its grasp without giving anything back to the public return. Conversely, the grant of term-limited exclusionary rights is justified when the claimed invention requires some labor or inventiveness beyond what an ordinary mechanic can provide, because the invention's disclosure adds something to the public knowledge.

The basic elements of these early inquiries remain the guideposts of the modern nonobviousness standard. The nonobviousness standard asks whether a claim is more than a *predictable* variation *over prior art* to a person having *ordinary skill* in the art at the *time of invention*. For example, in *Great Atlantic & Pacific Tea Co. v. Supermarket Equipment Corp.*, the last Supreme Court case on nonobviousness before Congress codified the nonobviousness standard, the Court invalidated a patent on a combination of known elements because each element in the new invention behaved without change in the element's known function.¹³ The invention was a three-sided rack, mounted on rails, which helped supermarket customers and clerks move goods along an extended counter. Each element behaved as expected: the counter held goods off the ground; the rack pushed goods along a smooth surface; the rail guided the rack in a straight line.¹⁴ Even though the results of combining the elements of the claim yielded results "more striking perhaps than in any previous utilization," each element performed the function that one skilled in the art would have predicted.¹⁵ As in *Atlantic Works*, the policy motivating the nonobviousness requirement was whether or not the claim added enough to the state of the art to justify granting exclusionary rights.¹⁶ The *Great Atlantic* Court held that granting the exclusionary rights would subtract from the resources formerly available to those skilled in the art rather than adding to the sum of useful knowledge.¹⁷ The Court also considered but was unpersuaded by what are now known as secondary considerations: the clear commercial success of the device and the fact that it provided a solution for a long-felt need.¹⁸

Congress codified the nonobviousness standard in the 1952 Patent Act, 35 U.S.C. § 103. Section 103 bars a patent when:

13. 340 U.S. 147, 153 (1950).

14. *Id.* at 152.

15. *Id.* at 153.

16. *See Atl. Works v. Brady*, 107 U.S. 192, 199-200 (1883).

17. *Great Atl.*, 340 U.S. at 153.

18. *Id.* at 153. Before 1952, the Court used the phrase "lack of invention" instead of "obviousness."

. . . the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.¹⁹

The Court laid out the basic post-Section 103 test of nonobviousness in *Graham v. John Deere Co. of Kansas City*.²⁰ Under *Graham*, factfinders determine (1) the scope and content of the prior art, (2) the differences between the prior art and the claims at issue, and (3) the level or ordinary skill in the art.²¹ Against this factual background the court determines obviousness as a matter of law. In addition, secondary considerations such as commercial success or long-felt need “might be utilized to give light to the circumstances surrounding the origin” of the invention.²² At least one element of the invention must be nonobvious in light of these considerations for the patent to withstand Section 103.²³ *Graham* offered insights into facts that help frame the question, but how courts should resolve the legal query remained largely unanswered.²⁴ The courts have produced rich case law in response.

B. Doctrines of Nonobviousness

The law has failed to develop a single, step-by-step process to resolve the question of nonobviousness. This Section presents an overview of common approaches used by the courts. Some support a finding of obviousness, others support a finding of nonobviousness, and one of the best-known doctrines does neither.

In *Anderson's-Black Rock, Inc. v. Pavement Salvage Co.* and *Sakraida v. Ag Pro, Inc.*, the Supreme Court articulated a “synergy” test.²⁵ This test

19. 35 U.S.C. § 103(a) (2000).

20. 383 U.S. 1 (1966).

21. *Id.* at 17-18.

22. *Id.* Compare this language with the Federal Circuit’s formulation, which sometimes treats the secondary factors as a fourth factual predicate and refers to them not as “secondary” but as “objective” indicia. *See, e.g., Merck & Co., Inc. v. Teva Pharm. USA, Inc.*, 395 F.3d 1364, 1369 (2005); *see also* Rebecca S. Eisenberg, *Obvious to Whom? Evaluating Inventions from the Perspective of PHOSITA*, 19 BERKELEY TECH. L.J. 885, 893-94 (2004) (arguing that the Federal Circuit inappropriately elevates “objective” evidence over purely technological analysis focusing on the level of skill in the art).

23. *See Graham*, 383 U.S. at 24.

24. *See id.* at 17-18; *see also* *Panduit Corp. v. Dennison Mfg. Co.*, 810 F.2d 1561, 1567 (Fed. Cir. 1987) (detailing standards of review and the line between law and fact in obviousness determinations).

25. *Anderson's-Black Rock, Inc. v. Pavement Salvage Co.*, 396 U.S. 57 (1969); *Sakraida v. Ag Pro, Inc.*, 425 U.S. 273 (1976).

looks at each element of a combination patent and asks if the elements do something more than they would independently, or if the combination otherwise achieves more than one skilled in the art would expect. *Anderson's-Black Rock* dealt with a claim for a patented burner attached to a patented paving machine. Each component behaved as it would separately, and the results were the same as if they were used sequentially.²⁶ Thus, the combination was unpatentable because it created no “synergistic” effects.²⁷ *Sakraida* concerned a claim for using raised tanks and sloped floors to run water over the floor of a dairy to wash away cattle waste. The court refused to find synergy, stating that “[e]xploitation of the principle of gravity adds nothing to the sum of useful knowledge where there is no change in the respective functions of the elements of the combination.”²⁸

These cases have been criticized as “unfortunate lapses” back to the infamous “flash of creative genius” standard, which was specifically overruled by Congress in 1952.²⁹ In 1972, Judge Giles Rich criticized the use of the word “synergistic” as either trivial and useless or strict and insurmountable.³⁰ Judge Rich considered examples in physics and chemistry: a new element is an arrangement of old protons and electrons, and new compounds are arrangements of old atoms. In the mechanical arts, a hammer and wedge can split wood in a way that neither could do alone, but nothing would be invalidated under such an expansive view of synergy.³¹ Today he might have considered software systems, where the defining characteristic is the unrelenting predictability of how parts of a system interact. “The laws of physics and chemistry in accordance with which all inventions perform do not permit of the judicially imagined magic according to which $2 + 2 = 5$. Wherever such a spurious test prevails all patents are invalid.”³² Judge Rich also offered a prophesy which *KSR* validates over thirty-six years later: that if inconsistencies between *Anderson's-Black Rock* and *Graham* were ever reconsidered, the Court would “stick

26. *Anderson's-Black Rock*, 396 U.S. at 61 (“A combination of elements may result in an effect greater than the sum of the several effects taken separately. No such synergistic result is argued here.”).

27. *Id.*

28. *Sakraida*, 425 U.S. at 282.

29. ROBERT L. HARMON, PATENTS AND THE FEDERAL CIRCUIT § 4.2(a) at 171 (8th ed. 2007); *Cuno Eng'g Corp. v. Automatic Devices Corp.*, 314 U.S. 84, 91 (1941) (applying “flash of creative genius” standard); 35 U.S.C. § 103 (2000) (“Patentability shall not be negated by the manner in which the invention was made.”).

30. Giles Rich, *Laying the Ghost of the “Invention” Requirement*, 1 APLA QUARTERLY JOURNAL 26, 44-45 (1972).

31. *Id.*

32. *Id.*

with *Graham* and say—for face-saving reasons—that *Black Rock* is really to the same effect.”³³

In *United States v. Adams*, a companion ruling to *Graham*, the Court announced what became known as the “teaching away” doctrine to find nonobviousness.³⁴ A challenged patent combined elements well known in the prior art by substituting magnesium for zinc and cuprous chloride for silver chloride in an existing wet battery design—a mere substitution of one material for another similar to the porcelain doorknobs in *Hotchkiss*.³⁵ Nevertheless, the Court upheld the patent because the prior art actually taught away from trying the substitution.³⁶ Evidence on record showed those skilled in the art did not believe this combination practical and continued to disbelieve it even after the inventor perfected it.³⁷ Further, the prior art warned of risk of fire and explosion when using magnesium in wet batteries.³⁸ Despite the factual similarity of substitution of one material for another as in *Hotchkiss*, here the important factor was the principle of predictability of the combination of elements to one of ordinary skill in the art. An invention is obvious when it combines known elements in a predictable way. But the wet battery design behaved in an *unpredictable* way, since a person skilled in the art would have predicted fire and explosion rather than a functional battery.³⁹

It is difficult to extract general rules from other nonobviousness cases. In *Dann v. Johnston* the Supreme Court found a patent claim obvious because it applied a known technique to a known device to yield predictable results.⁴⁰ The patent claimed a banking system that kept computer records in a certain way using checks, magnetic ink, and category numbers. The prior art revealed a general technique of using identifying numbers on transactions with a computer-based data processing system, and the Court accordingly found the patent claim obvious.⁴¹ The Court did little to explain its rationale besides stating that “gap between the prior art and the [patent holders]’s system is simply not so great as to render the system

33. *Id.*; see *KSR Int’l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1739-40 (2007) (claiming that neither Section 103 nor *Graham* “disturbed this Court’s earlier instructions” and citing *Anderson’s-Black Rock* and *Sakraida* as good law consistent with *Graham*).

34. 383 U.S. 39 (1966)

35. *Id.* at 51-52.

36. *Id.* at 48, 51-52.

37. *Id.*

38. *Id.*

39. *Id.*

40. 425 U.S. 219, 220 (1976).

41. *Id.* at 227.

nonobvious.”⁴² PTO guidelines use this case to illustrate that “[a]pplying a known technique to a known device (method, or product) ready for improvement to yield predictable results” can result in a finding of obviousness.⁴³

Finally, courts use the obvious-to-try doctrine to avoid making improper determinations in the nonobviousness inquiry. This doctrine is less of a *doctrine* and more of an *admonition* to decision makers on how *not* to find obviousness in two scenarios.⁴⁴ First, in fields where there are too many possibilities to try and only some of those possibilities will succeed, the precise combination cannot be held to be obvious without some specific suggestion that a *particular* combination would be successful, even when there existed a general technique of testing all of the combinations for success and a suggestion to do so.⁴⁵ In other words, when it is obvious one *could* try many possibilities in a field, but impractical to do so, courts may not find obviousness absent further evidence. Second, when a new approach or technology seems generally promising, obviousness cannot be found without some specific suggestion leading to a “reasonable expectation of success.”⁴⁶ These two formulations are two sides of a familiar coin: the degree of predictability of success of combining certain elements to one skilled in the art.⁴⁷ This doctrine is consistent with the basic motivating principle of nonobviousness—to reward those, and only those, who engage in productive behavior. The law should encourage efforts that solve problems where the prior art only suggests success among impracti-

42. *Id.* at 230.

43. Examination Guidelines for Determining Obviousness Under 35 U.S.C. 103 in View of Supreme Court Decision in *KSR International Co. v. Teleflex Inc.*, 72 Fed. Reg. 57,526, 57,529, 57,531 (Oct. 10, 2007).

44. *See In re O’Farrell*, 853 F.2d 894, 903 (Fed. Cir. 1988).

45. *Id.*

46. *Id.* at 903-04. This inquiry was adopted from early Court of Customs and Patent Appeals cases dating to the mid-sixties. *See id.* (citing *In re Tomlinson*, 363 F.2d 928, 931 (C.C.P.A. 1966)). In *Tomlinson*, Judge Rich explained the “obvious to try” test:

Slight reflection suggests, we think, that is usually an element of “obviousness to try” in any research endeavor, that it is not undertaken with complete blindness but rather with some semblance of a chance of success, and that patentability determinations based on that as the test would not only be contrary to statute but result in a marked deterioration of the entire patent system as an incentive to invest in those efforts and attempts which go by the name of “research.”

In re Tomlinson, 363 F.2d 928, 931 (C.C.P.A. 1966) (Rich, J.).

47. *See* Robert P. Merges, *Uncertainty and the Standard of Patentability*, 7 HIGH TECH. L.J. 1, 40-43 (1992) (arguing that these two obvious-to-try doctrines are a subset of the reasonable certainty of success standard).

cally large numbers of possibilities or general success in a field with many approaches.

The obvious-to-try doctrine has an illustrative effect in the biotechnology area, because sometimes “too many possibilities” can be numerically quantified. In *In re Bell*, the patent applicant claimed human gene sequences corresponding to a human protein.⁴⁸ The prior art suggested a mathematically enumerable, finite set of 10^{36} possible sequences, but it did not suggest which were the correct human sequences.⁴⁹ So while it was obvious that one could try every combination and be guaranteed of success, it was impractical to do so. Clearly some other cleverness was needed to isolate the useful genes.

C. The Federal Circuit Battles Hindsight Bias

In 1982, Congress created the Federal Circuit and gave it exclusive jurisdiction over all patent appeals.⁵⁰ The persistent theme in the Federal Circuit’s nonobviousness jurisprudence has been the court’s crusade to eliminate the so-called “hindsight bias” from the nonobviousness inquiry.⁵¹ Hindsight bias is the impermissible tendency to put the elements of an invention together like a “mosaic” using the patent disclosure as a blueprint.⁵² The Federal Circuit has accomplished its goal by layering an additional legal test over the existing *Graham* framework, known now as the “teaching, suggestion, or motivation” test. The early Federal Circuit formulations asked if the claim added something more than the prior art

48. 991 F.2d 781, 782 (Fed. Cir. 1993).

49. The claim at issue contained two gene sequences, the shorter of which was 35 groupings of three base pairs, known as triplets or codons. Though there are 64 base pair possibilities per codon (4 times 4 times 4), there are only 20 amino acids, so even when the amino acid sequence is in the prior art, there is uncertainty as to which three base pairs correspond to it. The parties stipulated that in this case, there were 10^{36} base pair possibilities for a given amino acid sequence. *Id.* at 784. That calculation is surely something of a simplification, since some amino acids have up to six codings, and some have only one. See BENJAMIN LEWIN, GENES IX 191 (2008).

50. Subsequently, the Supreme Court has created a narrow exception to the Federal Circuit’s jurisdiction over patent disputes, holding that the Federal Circuit’s jurisdiction does not extend to cases where patent claims appear in a counterclaim, but not in the well-pleaded complaint. See *Holmes Group, Inc. v. Vornado Air Circulation Sys.*, 535 U.S. 826 (2002).

51. For an in-depth history of the development of the TSM test starting from the Court of Customs and Patent Appeals and continuing through the Federal Circuit, see Steven P. Smith & Kurt R. Van Thomme, *Bridge Over Troubled Water: The Supreme Court's New Patent Obviousness Standard in KSR Should Be Readily Apparent and Benefit the Public*, 17 ALB. L.J. SCI. & TECH. 127, 166-69 (2007).

52. *W.L. Gore & Assocs., Inc. v. Garlock, Inc.*, 721 F.2d 1540, 1552 (Fed. Cir. 1983).

“suggested” to a person of ordinary skill in the art, but this suggestion could be either expressly stated in the prior art or reasonably inferred from the prior art.⁵³ By 1990, the court stressed that it required *evidence* of a “teaching, suggestion, or incentive” to combine the elements of the prior art before invalidating a patent claim for obviousness.⁵⁴ The source of this evidence is discussed in greater detail below, but it most often comes from printed prior art, particularly patents.⁵⁵ By 1998, the test was reformulated into the now familiar teaching, suggesting, or motivation (TSM) test.⁵⁶

Before discussing the substance of the TSM test, it is helpful to examine the terminology used in the case law. Indeed, a substantial amount of oral argument in *KSR* was spent on discussing the precise meaning of the three words, “teaching,” “suggestion,” and “motivation.”⁵⁷ However, Federal Circuit case law does not attribute any great significance to the choice of words, except for “teaching,” which is generally reserved for that which is contained explicitly in the prior art.⁵⁸ The court regularly uses the words together without distinction—particularly motivation and suggestion—and sometimes casually swaps the words for one another.⁵⁹ Furthermore, before TSM became the standard formulation, the Federal Circuit sometimes

53. See *In re Sernaker*, 702 F.2d 989, 994 (Fed. Cir. 1983).

[Obviousness depends on] (a) whether a combination of the teachings of all or any of the references would have suggested (expressly or by implication) the possibility of achieving further improvement by combining such teachings along the line of the invention in suit, and (b) whether the claimed invention achieved more than a combination which any or all of the prior art references suggested, expressly or by reasonable implication.

Id. (extracting this formulation from several Court of Customs and Patent Appeals cases).

54. *N. Telecom, Inc. v. Datapoint Corp.*, 908 F.2d 931, 934-35 (Fed. Cir. 1990).

55. *KSR* itself is a good example, detailing around a dozen prior art patents and only one on-sale product. *KSR Int'l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1735-37 (2007).

56. *C.R. Bard, Inc. v. M3 Systems, Inc.*, 157 F.3d 1340, 1351 (Fed. Cir. 1998).

57. Justice Breyer said, “I don’t understand, though I’ve read it about 15 or 20 times now . . . I just don’t understand what is meant by the term ‘motivation.’” Transcript of Oral Argument at 9, *KSR Int'l Co. v. Teleflex Inc.*, 127 S. Ct. 1727 (2007) (No. 04-1350). Later Justice Scalia said, “I—like Justice Breyer, I don’t understand what the . . . motivation element is.” *Id.* at 14. When Chief Justice Roberts asked what the motivation element was, counsel responded that it was difficult to distinguish between motivation and suggestion. *Id.* at 18. When counsel suggested that the Court did not understand motivation, Justice Scalia quipped that he was “right about that.” *Id.* at 28.

58. See, e.g., *In re Deuel*, 51 F.3d 1552, 1555-56 (Fed. Cir. 1995) (referring to the “teachings of [the] Bohlen [patent] and [the] Maniatis [patent]”).

59. See, e.g., *id.* at 1558 (using “motivation or suggestion,” “reason or motivation,” and “motivation” by itself); *Ruiz v. A.B. Chance Co.*, 357 F.3d 1270, 1274-75 (Fed. Cir. 2004) (using “reason, suggestion, or motivation,” “suggestion or motivation,” and “motivation” by itself).

used the word “incentive”⁶⁰ or even the more general word “reason.”⁶¹ As is common in Federal Circuit opinions, this Note uses the word “motivation” as shorthand to refer to whatever evidence may be required to support a conclusion that a patent claim is obvious.

Finding motivation is a “pure question of fact.”⁶² The Federal Circuit’s TSM case law places a premium on printed documentation and is skeptical of “common sense” inferences unsupported by documentary evidence. The court has expressly refused to consider whether changes in a patent are trivial, but rather ends its inquiry after failing to find evidence of a suggestion to combine the prior art.⁶³ In *In re Lee*, the Federal Circuit determined that since the PTO is subject to the Administrative Procedure Act, ex parte appeals from patent examination proceedings require reviewing courts to overturn administrative rulings that are “unsupported by substantial evidence.”⁶⁴ When rejecting a patent application as obvious, the PTO is allowed to use common sense and common knowledge to select and assemble references, but like any other administrative agency, it must support its findings with substantial evidence.⁶⁵ In an adversarial proceeding, a patent has a presumption of validity that can only be overcome by clear and convincing evidence.⁶⁶ This leaves the distinction between law and fact a critical one, because if evidence is required to support the factual question of motivation, there is little room for common sense reasoning in finding motivation. In *KSR*, an amicus brief by several law professors complained that the TSM test was a “factual inquiry” that “swallows

60. *N. Telecom, Inc. v. Datapoint Corp.*, 908 F.2d 931, 935 (Fed. Cir. 1990).

61. *Pro-Mold & Tool Co. v. Great Lakes Plastics, Inc.*, 75 F.3d 1568, 1573 (Fed. Cir. 1996) (“It is well-established that before a conclusion of obviousness may be made based on a combination of references, there must have been a reason, suggestion, or motivation to lead an inventor to combine those references.”).

62. *In re Gartside*, 203 F.3d 1305, 1316 (Fed. Cir. 2000).

63. *N. Telecom, Inc.*, 908 F.2d at 935. (“Whether the changes from the prior art are ‘minor’, as Datapoint argues, the changes must be evaluated in terms of the whole invention, including whether the prior art provides any teaching or suggestion to one of ordinary skill in the art to make the changes that would produce the patentee’s method and device.”). A finding that there was some commercial success bolstered the holding. *Id.*

64. *See* 5 U.S.C. § 706(2)(E) (2000); 277 F.3d 1338, 1342-44 (Fed. Cir. 2002).

65. 277 F.3d at 1342-44.

66. 35 U.S.C. § 282 (2000); *SSIH Equip. S.A. v. U.S. Int’l Trade Comm’n*, 718 F.2d 365, 375 (Fed. Cir. 1983).

the legal inquiry.”⁶⁷ The brief sharply criticized *In re Lee* because it “hampers the PTO’s application of its expertise.”⁶⁸

In re Dembiczak demonstrates just how serious the Federal Circuit is in requiring evidentiary support even for claims that seem wholly within any layperson’s grasp.⁶⁹ The Federal Circuit reversed a finding of obviousness on a seemingly trivial patent claim—decorated garbage bags. The PTO cited children’s activity books and conventional trash bags as prior art,⁷⁰ but because they failed to provide clear and particular *evidence* of teaching, suggestion, or motivation to combine the references to create the patented invention, the court reversed the PTO’s invalidation for obviousness.⁷¹ The procedural and evidentiary aspects of this ruling are important. The *Dembiczak* court did not substantively find the patent nonobvious, but rather reversed due to the PTO’s total failure to address motivation to combine or to support such a conclusion with any evidence, explicit or inferential. The Federal Circuit repeated—in great detail—a theory of obviousness that the PTO put forth on appeal, only to reject the theory as not raised below.⁷² The court did this to “highlight the shortcomings” of the PTO proceedings and, presumably, to suggest how the PTO could find the invention obvious by following the proper procedure.⁷³ The court emphasized that a finding of motivation to combine may be found in the references *or by implication*, but that the PTO had failed to do either.⁷⁴ Notwithstanding these subtleties, in *KSR* oral arguments, Justice Alito asked counsel if he would dispute that “this TSM test [as applied in *Dembiczak*] seemed to ask for something quite explicit in the prior art?”⁷⁵ Counsel at-

67. Brief of Intellectual Property Law Professors as Amici Curiae in Support of Petitioner at 1-4, *KSR Int’l Co. v. Teleflex Inc.*, 127 S. Ct. 1727 (2006) (No. 04-1350), 2006 WL 2452369.

68. *Id.* Professor Cotropia argues that the TSM test has not changed the substance of the nonobviousness standard, but rather has changed the procedure by enacting a rule of evidence that requires more detailed testimony for more complex technologies. The Federal Circuit applies this rule not to change the underlying standard directly, but to reject holdings of nonobviousness on insufficient evidence. Christopher A. Cotropia, *Patent Law Viewed Through an Evidentiary Lens: The “Suggestion Test” as a Rule of Evidence*, 2006 B.Y.U. L. REV. 1517 (2006).

69. *In re Dembiczak*, 175 F.3d 994, 996 (Fed. Cir. 1999).

70. *Id.* at 997-98.

71. *Id.* at 1003.

72. *Id.* at 1001.

73. *Id.*

74. *Id.* at 1000.

75. Transcript of Oral Argument at 53, *KSR Int’l Co v. Teleflex Inc.*, 127 S. Ct. 1727 (2007) (No. 04-1350).

tempted to deflect the question by acknowledging there would always be “outliers” and “mistakes.”⁷⁶

Dembiczak and *Lee* are both part of a larger criticism of the Federal Circuit: that it has taken a formalist turn.⁷⁷ The central point of this criticism is that recent Federal Circuit opinions, in several areas of patent law including nonobviousness, have tended to value certainty over accuracy, to the detriment of innovation.⁷⁸ Professor Thomas argues this rule-oriented approach stems from “strong signals” sent by the Supreme Court’s 1998 decision in *Pfaff v. Wells Electronics, Inc.* to use contract rules instead of a totality of circumstances test in determining the on-sale bar.⁷⁹ Professor Dreyfuss, on the other hand, links this trend to the 1986 opinion *Dennison Manufacturing Co. v. Panduit Corp.*⁸⁰ *Dennison* reminded the Federal Circuit to use the clearly erroneous standard on the factual underpinnings of nonobviousness inquiries, which caused the Federal Circuit to shift its focus toward analytic methodologies or rules of evidence—like the TSM test.⁸¹

Whatever the pragmatic accuracy of these criticisms, at the time *KSR* went to the Supreme Court, some doctrinal flexibility remained in Federal Circuit TSM case law—namely the ability to find a motivation to combine by implication, rather than express evidence. The notion of finding motivation by implication has existed since the early *In re Sernaker* formulation of the rule: it allowed a showing of motivation “expressly or by reasonable implication.”⁸² The next sections discuss three instances when courts can use “reasonable implication” to find motivation to combine. First, courts can infer motivation to combine from the nature of the problem to be solved.⁸³ Second, they can infer the motivation from the knowl-

76. *Id.*

77. See John R. Thomas, *Formalism at the Federal Circuit*, 52 AM. U.L. REV. 771 (2002/2003).

78. See Rochelle Cooper Dreyfuss, *In Search of Institutional Identity: The Federal Circuit Comes of Age*, BERKELEY TECH. L.J. (forthcoming Fall 2008) (surveying the problems of, and proposed solutions to, Federal Circuit formalism).

79. 525 U.S. 55 (1998); Thomas, *supra* note 77, at 780-81.

80. 475 U.S. 809 (1986) (per curiam).

81. Dreyfuss, *supra* note 78.

82. *In re Sernaker*, 707 F.2d 989, 994 (Fed. Cir. 1983).

83. See, e.g., *Pro-Mold & Tool Co. v. Great Lakes Plastics, Inc.*, 75 F.3d 1568, 1573 (Fed. Cir. 1996); *Ashland Oil, Inc. v. Delta Resins & Refractories, Inc.*, 776 F.2d 281, 297 n.24 (Fed. Cir. 1985); *Ruiz v. A.B. Chance Co.*, 357 F.3d 1270, 1276 (Fed. Cir. 2004).

edge of one skilled in the art. The third, least common approach is to infer motivation from a trend in the prior art.⁸⁴

1. *Implied Motivation from the Nature of the Problem*

In *Pro-Mold & Tool Co. v. Great Lake Plastics, Inc.*, the Federal Circuit adopted a rule allowing an inference to combine from the nature of the problem to be solved.⁸⁵ The patent claimed a metal card holder which could hold a single collector sports card but was sized so that it would fit in a conventional collector storage box.⁸⁶ The claim combined known elements, but changed the size of the card holder.⁸⁷ The court inferred motivation to combine two pieces of prior art in this way because the problem to be solved—making the card holder fit in the storage box—made it obvious to resize the card holder to just the right size.⁸⁸

In *In re Rouffet*, the Federal Circuit held that to infer a motivation to combine from the nature of the problem or from knowledge of one skilled in the art, the PTO cannot merely rely on high level knowledge of one skilled in the art.⁸⁹ In that case, two references tried to effect “handover minimization” in satellites—the goal being to reduce the number of times a receiver on the ground had to change satellites as they orbited overhead. One did so by using an elliptical beam instead of a circular beam and the other reference accomplished its goal by changing the way the satellite orbited the earth.⁹⁰ The court affirmed that even if possible to infer motivation from the nature of the problem, the PTO did not articulate any reason why one skilled in the art would be motivated to combine the references, other than to invoke the high level of skill that would be ordinary in the field of satellite technology.⁹¹ *Rouffet* is also cited for the point that the PTO (or a patent challenger) must not only show motivation to combine the references as a whole, but also show motivation to select the elements from the references and to combine them in the manner claimed.⁹²

84. *See, e.g.*, *Monarch Knitting Mach. Corp. v. Sulzer Morat GmbH*, 139 F.3d 877, 881-82 (Fed. Cir. 1998); *In re Gartside*, 203 F.3d 1305, 1321 (Fed. Cir. 2000).

85. *Pro-Mold*, 75 F.3d at 1573. This rule, adopted from a 1976 Court of Customs and Patent Appeals case, is dicta since the court invalidated the summary judgment ruling on other grounds, but the rule is often cited.

86. *Id.* at 1570-71.

87. *Id.*

88. *Id.*

89. *In re Rouffet*, 149 F.3d 1350, 1356-59 (Fed. Cir. 1998).

90. *Id.*

91. *Id.*

92. *Teleflex Inc. v. KSR Int'l Co.*, 119 F. App'x 282, 286 (Fed. Cir. 2005).

Ruiz v. A.B. Chance, Co. presents a rare case where the Federal Circuit affirmed a finding of motivation to combine inferred from the nature of the problem to be solved.⁹³ The court considered two references that dealt with simple mechanical devices to anchor a house foundation to the ground. One disclosed a screw anchor by itself and another disclosed a metal bracket attaching a different kind of anchor to a foundation.⁹⁴ The court held these two could be combined even absent an express motivation to do so, because the two references were solving the exact same problem of “underpinning existing structural foundations.”⁹⁵ (This characterization of “the” problem solved by the references would become an important issue in the *KSR* litigation.⁹⁶) In addition to the fact that the references solved the same problem, the record in *Ruiz* met the Federal Circuit’s evidence requirements because there was concrete evidence that persons skilled in the art knew that (1) screw anchors improved upon the prior art, and (2) screw anchors need some method to attach to the foundation.⁹⁷

2. *Implied Motivation from the Knowledge of Those Skilled in the Art*

The Federal Circuit has held that evidence of *actual* knowledge of an *actual* person skilled in the art can be evidence sufficient to imply motivation to combine for an *objective* person skilled in the art. In *Novo Nordisk A/S v. Becton Dickinson and Co.*, the defendant presented uncontradicted expert testimony of general knowledge among those skilled in the art that smaller needles for medical injections reduce pain.⁹⁸ This evidence of general knowledge was enough to support a jury verdict inferring motivation to modify⁹⁹ the prior art with smaller needles.¹⁰⁰ In *Cable Electric Products, Inc. v. Genmark, Inc.*, the Federal Circuit upheld summary judgment of obviousness even though the district court made no particular reference to motivation.¹⁰¹ The district court did, however, take each element of the patent claim and show that there were several instances of the

93. *Ruiz v. A.B. Chance Co.*, 357 F.3d 1270, 1277 (Fed. Cir. 2004). The court added that inferring motivation to combine is “particularly relevant with simpler mechanical technologies.” *Id.* at 1276.

94. *Id.*

95. *Id.*

96. *See infra* Section IV.A.

97. *Ruiz*, 357 F.3d at 1276.

98. 304 F.3d 1216, 1218-19 (Fed. Cir. 2002).

99. The word “modify” is sometimes used when the patent claims a collection of elements in the prior art, with the dimensions of one element altered.

100. *Id.*

101. 770 F.2d 1015, 1025 (Fed. Cir. 1985).

elements in the prior art.¹⁰² The Federal Circuit deemed this sufficient evidence of widespread knowledge of the elements.¹⁰³ Similarly, in *Cross Medical Products, Inc. v. Medtronic Sofamor Danek, Inc.*, the Federal Circuit reversed the district court for discounting evidence that showed the existence of general knowledge of a problem which would have motivated one skilled in the art to combine certain references.¹⁰⁴ The claim was for a medical device, and the patent challenger introduced a paper from a clinical trial performed by a team of surgeons.¹⁰⁵ The paper documented that surgeons had difficulty with an older device, recognized the problem with it, and requested changes.¹⁰⁶ The Federal Circuit held this sufficient evidence to support a jury verdict finding obviousness.¹⁰⁷

3. *Implied Motivation from a Trend in the Prior Art*

At least twice the Federal Circuit allowed an inference of motivation from a “trend” in the prior art. In *Monarch Knitting Machinery Corp. v. Sulzer Morat GmbH*, the court recognized that a trend in the art “might very well” imply a motivation to combine.¹⁰⁸ The patent claim at issue involved combining different length needles with technology to prevent breakage at high speeds in commercial weaving machinery.¹⁰⁹ The district court found a trend in four commercial knitting needles with dimensions that decreased in length over time and thus inferred motivation to combine.¹¹⁰ Although the Federal Circuit found other genuine issues of material fact and reversed the summary judgment ruling, it clearly condoned the notion of using a trend to support an inference of motivation to combine.¹¹¹ Likewise, in *In re Gartside*, the court upheld a PTO finding of obviousness by inferring motivation from a trend in the prior art. The patent concerned a chemical processes to refine oil.¹¹² Two prior art patents showed a trend toward “lower residence times” to minimize “undesired cracking reactions.”¹¹³ The court reasoned that one skilled in the art trying to reduce cracking reactions would be motivated to combine the first two

102. *Id.*

103. *Id.*

104. 424 F.3d 1293, 1320-22 (Fed. Cir. 2005).

105. *Id.*

106. *Id.*

107. *Id.*

108. 139 F.3d 877, 881-82 (Fed. Cir. 1998).

109. *Id.*

110. *Id.*

111. *Id.*

112. *In re Gartside*, 203 F.3d 1305, 1321 (Fed. Cir. 2000).

113. *Id.*

patents with a third patent that disclosed the actual residence times used in the patent claim.¹¹⁴

III. FACTS AND HISTORY OF THE *KSR* LITIGATION

A. Background

The technology at issue in *KSR* allows drivers of automobiles to adjust gas pedals up and down for the comfort of different sized drivers. The pedals require several design decisions, including the type of linkage to the engine (mechanical or electronic), the amount of force required to depress the pedals, the location of the pivot, and the cost and complexity of the device.¹¹⁵

Mechanical linkage pedals consist of a cable attached directly from the throttle of the car to the gas pedal.¹¹⁶ As the driver pushes the pedal, valves open to allow more fuel and air into the engine, thereby causing the car to accelerate.¹¹⁷ Conversely, the valves close as the driver lets off the pedal.¹¹⁸ During the 1990s, computer-controlled fuel injectors replaced carburetors.¹¹⁹ These injectors use an electronic sensor to determine the position of the pedal, eliminating the need for mechanical linkage, and allowing electronic sensors to be placed directly in the pedal mechanism.¹²⁰

Over a dozen pieces of prior art were presented in the *KSR* litigation, but only a few were ultimately important. Early art disclosed an adjustable pedal with an electronic sensor in the footpad,¹²¹ but the wiring suffered from chafing because the sensor was not located in a fixed location.¹²² The “Smith” patent disclosed that this chafing could be avoided by placing the sensor on a fixed part of the pedal assembly rather than in the footpad.¹²³ The prior art also disclosed modular electronic sensors that could be purchased off the shelf and which had actually been used in vehicle pedals.¹²⁴

Pedals located in deep footwells may require shorter drivers to move the seat uncomfortably forward to reach the pedal. To overcome this prob-

114. *Id.*

115. *KSR Int’l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1735-36 (2007).

116. *Id.*

117. *Id.*

118. *Id.*

119. *Id.*

120. *Id.* at 1735-36.

121. U.S. Patent No. 5,819,593 (filed Aug. 17, 1995).

122. *KSR*, 127 S. Ct. at 1735-36.

123. U.S. Patent No. 5,063,811 (filed July 9, 1990).

124. *Teleflex Inc. v. KSR Int’l Co.*, 298 F. Supp. 2d 581, 589 (E.D. Mich. 2003) (noting as prior art a Chevrolet manufactured electronic sensor pedal).

lem, adjustable pedals allow for adjustment of the resting point of the pedal in relation to the driver.¹²⁵ The “Asano” patent—perhaps the most significant piece of prior art in the dispute—disclosed an adjustable pedal that allowed the footpad to be adjusted while maintaining a fixed pivot location.¹²⁶

Teleflex owned a patent containing all of the elements of the Asano patent but with the mechanical linkage mechanism replaced with an electronic sensor attached to the fixed pivot point.¹²⁷ Teleflex’s claim placed the electronic sensor at the pedal’s pivot point, thus providing the benefits of the electronic sensors without the wire chafing problems of the Smith patent.¹²⁸

KSR owned a patent for an adjustable pedal with mechanical linkage similar to that of Asano.¹²⁹ KSR later attached a modular electronic sensor to their pedal system.¹³⁰ In response, Teleflex attempted to license its patent to KSR.¹³¹ After licensing negotiations broke down, Teleflex filed suit for infringement against KSR in the Eastern District of Michigan.¹³²

B. The District Court

On motion for summary judgment, the district court invalidated Teleflex’s asserted claim for obviousness.¹³³ The district court did not find explicit motivation in the prior art to combine the Asano patent with modular electronic sensors.¹³⁴ However, the court cited *Pro-Mold* for the proposition that motivation to combine can be reasonably *inferred* from the nature of the problem to be solved.¹³⁵ Teleflex’s asserted claim was an improvement on prior art pedals which suffered from complexity and wire chafing.¹³⁶ But the prior art expressly taught that placing the sensor on a fixed portion of the pedal assembly could solve the chafing problem.¹³⁷ Furthermore, during the mid-90s, electronic pedal position sensors became increasingly common along with the increased use of electronically man-

125. *KSR*, 127 S. Ct. at 1735-36.

126. U.S. Patent No. 5,010,782 (filed July 28, 1989).

127. U.S. Patent No. 6,237,565 (filed Aug. 22, 2000).

128. *Id.* at 1735-36.

129. U.S. Patent No. 6,151,976 (filed July 16, 1999).

130. *KSR*, 127 S. Ct. at 1736.

131. *Id.*

132. *Teleflex Inc. v. KSR Int’l Co.*, 298 F. Supp. 2d 581, 585 (E.D. Mich. 2003).

133. *Id.* at 596.

134. *Id.* at 593-94.

135. *Id.*

136. *Id.*

137. *Id.*

aged engines.¹³⁸ Thus, the district court reasoned it would be obvious to one skilled in the art to combine the Asano patent with modular electronic sensors that were well known in the field, thereby solving the wire chafing problem.¹³⁹ The court added that references relating to the same art—in this case vehicle pedal systems—*factor* into suggesting their combination.¹⁴⁰

C. The Federal Circuit

The Federal Circuit reversed the district court's grant of summary judgment, holding that the district court incompletely applied the TSM test and that genuine issues of material fact remained.¹⁴¹

The Federal Circuit found that the district court improperly inferred motivation to combine because each of the prior art references did not address precisely the same problem.¹⁴² Like the district court, the Federal Circuit carefully considered how to characterize the problem each piece of prior art tried to solve. The Federal Circuit found that the objective of the asserted claim was “to design a smaller, less complex, and less expensive electronic pedal assembly,” whereas the Asano patent intended to solve the “constant ratio problem.”¹⁴³ The Federal Circuit's characterization contrasts sharply with that of the district court, which characterized all the prior art references as generally being in the field of “vehicle pedal systems.”¹⁴⁴ Because the Asano patent did not solve *precisely* the same problem as that of Teleflex's patent, the Federal Circuit held that the district court erred in ruling for summary judgment without some other—presumably explicit—evidence supporting a teaching, motivation, or suggestion to combine.¹⁴⁵ Furthermore, the district court would have to make specific findings of motivation not only to combine the adjustable pedal assembly of Asano with the modular electronic sensor, but also to place the sensor at the pivot point.¹⁴⁶

138. *Id.*

139. *Id.*

140. *Id.*

141. *Teleflex Inc. v. KSR Int'l Co.*, 119 F. App'x 282, 290 (Fed. Cir. 2005).

142. *Id.* at 287-89.

143. *Id.* (citing to the Asano patent application).

144. *Teleflex*, 298 F. Supp. 2d at 594.

145. *Teleflex Inc. v. KSR Int'l Co.*, 119 F. App'x 282, 288 (Fed. Cir. 2005) (“[T]he district court was required to make specific findings as to a suggestion or motivation to attach an electronic control to the support bracket of the Asano assembly.”). Another prior art patent also suffered from wire chafing problems, and therefore did not solve the same problem as Teleflex's patent. *Id.* Confusingly, the court here refers to a non-existent '595 patent which appears nowhere in the opinions of this dispute. *Id.* at 289.

146. *Id.* at 287-89.

D. The Supreme Court

The Supreme Court granted certiorari on the question of whether a patent can be held obvious without some “proven ‘teaching, suggestion, or motivation.’”¹⁴⁷ The Court reversed the Federal Circuit and reinstated the district court’s finding of invalidity.¹⁴⁸

The Supreme Court found three errors in the Federal Circuit’s opinion below. First, the Federal Circuit too narrowly limited the scope of prior art that could be used to infer motivation to combine.¹⁴⁹ Second, the Federal Circuit erred in allowing only combination of prior art elements solving the same problem.¹⁵⁰ Finally, the appellate court over-estimated the threat of hindsight bias and applied the TSM test so rigidly as to deny “factfinders recourse to common sense.”¹⁵¹ The Supreme Court held that the TSM test is useful but should not be applied rigidly and is not mandatory.¹⁵² Returning to its own jurisprudence under *Hotchkiss* and *Graham*, the Court held that Teleflex’s claimed invention was obvious.¹⁵³

IV. THE EFFECT OF KSR ON NONOBVIOUSNESS

Although some have hailed *KSR* as the most significant patent decision in the last twenty-five years,¹⁵⁴ the equivocal language of the opinion has proven pliable in the hands of later courts. The Court may have intended

147. Petition for a Writ of Certiorari, *KSR Int’l Co. v. Teleflex Inc.*, 127 S. Ct. 1727 (No. 04-1350).

148. *KSR Int’l Co. v. Teleflex Inc.*, 127 S. Ct. 1727 (2007).

149. *Id.* at 1742.

150. *Id.*

151. *Id.* at 1742-43.

152. *Id.*

153. *Id.* at 1735.

154. Actually, Professor Duffy writes that this view “underestimates” *KSR*’s importance. John F. Duffy, Commentary, *KSR v. Teleflex: Predictable Reform of Patent Substance and Procedure in the Judiciary*, 106 MICH. L. REV. FIRST IMPRESSIONS 34 (2007), <http://www.michiganlawreview.org/firstimpressions/vol106/duffy.pdf>. Similarly, Harold Wegner sees *KSR* as the single most important obviousness opinion in the forty-one years since *Graham*. Harold C. Wegner, Commentary, *Making Sense of KSR and other Patent Cases*, 106 MICH. L. REV. FIRST IMPRESSIONS 39 (2007), <http://www.michiganlawreview.org/firstimpressions/vol106/wegner.pdf>. On the other hand, Professor Eisenberg argues that as long as the Supreme Court remains a “non-custodial” parent and the Federal Circuit does not overtly contradict Supreme Court precedent, the high court is unlikely to have much influence. Indeed, the affirmation of obviousness as a question of law puts the Federal Circuit firmly in the driver’s seat. Rebecca Eisenberg, Commentary, *The Supreme Court and the Federal Circuit: Visitation and Custody of Patent Law*, 106 MICH. L. REV. FIRST IMPRESSIONS 28 (2007), <http://www.michiganlawreview.org/firstimpressions/vol106/eisenberg.pdf>.

to create such pliability. The *KSR* Court's substantive discussion begins by "rejecting the rigid approach of the Court of Appeals," but the Court does not enact any new rule or framework.¹⁵⁵ This and several other factors suggest that *KSR* may not result in large-scale change in the TSM doctrine. After the Supreme Court sought the Solicitor General's comments on *KSR*'s request for certiorari,¹⁵⁶ the Federal Circuit started issuing opinions emphasizing the implicit prong¹⁵⁷ of the TSM test.¹⁵⁸ Chief Judge Michel of the Federal Circuit is on record stating that "not much has changed" regarding the TSM test post-*KSR* and that the test "simply got a new name."¹⁵⁹ As discussed below, early cases confirm a tendency of the Federal Circuit to maintain the pre-*KSR* doctrine with selective citations to the hedged language in the Supreme Court's opinion.

KSR impacts the doctrine of nonobviousness in several ways. First, the Supreme Court faulted the Federal Circuit's decision below for refusing to consider combining references without explicit evidence to do so unless the references were intended to solve exactly the same problem. This aspect of the Federal Circuit's opinion is arguably inconsistent with the Federal Circuit's own precedent, making it possible to cabin much of *KSR*'s effect on the TSM doctrine to a rejection of the Federal Circuit's unusual analysis.¹⁶⁰ Second, the *KSR* Court's emphasis on common sense and creativity alter evidentiary burdens of obviousness to a degree that remains to be fleshed out by the lower courts. This Note argues that lower courts should interpret *KSR* as a mandate to *allow more* evidence, not as an excuse to *require less*.¹⁶¹ Third, the Supreme Court incorrectly characterized the Federal Circuit's application of the obvious-to-try doctrine. While this language in *KSR* suggests a change in the law, the Supreme Court in fact restates conditions totally consistent with the doctrine as it has always been.¹⁶² Fourth, *KSR* may affect the ability to create a genuine issue of material fact via expert testimony.¹⁶³ Finally, a later Federal Circuit case

155. *KSR*, 127 S. Ct. at 1739.

156. *KSR Int'l Co. v. Teleflex Inc.*, 546 U.S. 808 (2005).

157. *See supra* Sections II.C.1-II.C.3.

158. *See In re Kahn*, 441 F.3d 977, 986-87 (Fed. Cir. 2006); *DyStar Textilfarben GmbH & Co. Deutschland KG v. C.H. Patrick Co.*, 464 F.3d 1356, 1367 (Fed. Cir. 2006); *Alza Corp. v. Mylan Labs., Inc.*, 464 F.3d 1286, 1291 (Fed. Cir. 2006).

159. Chief Judge Paul R. Michel, U.S. Court of Appeals for the Federal Circuit, Remarks at BNA-ABA Conference: Patent Obviousness: The Still-Evolving Standard, or Is It Back to the Future? (Oct 1, 2007).

160. *See infra* Section IV.A.

161. *See infra* Section IV.B.

162. *See infra* Section IV.C.

163. *See infra* Section IV.D.

used *KSR* to justify a rule that could substantially impact the validity of a certain class of claims. This rule would create a prima facie case of obviousness for broad claims that merely substitute electronics for mechanical parts without adding some other distinguishing technology.¹⁶⁴

A. The Federal Circuit's "Straightforward" Error

Two of the three errors the *KSR* Court attributed to the Federal Circuit were part of the "rigid approach of the [Federal Circuit]" that the Supreme Court rejected.¹⁶⁵ The two errors were: (1) too narrowly limiting the scope of prior art that could be used to infer combination; and (2) only allowing inferred combination of those elements of the prior art that solve the same problem.¹⁶⁶ Both of these errors are due to the way the Federal Circuit used the characterization of the problem solved by the references as a threshold test; if the references did not solve precisely the precise problem as the patent claim at issue, the court ceased any inquiry into implied inference of motivation to combine.¹⁶⁷ Applying this test, no inference from the "nature of the problem" was possible with the Asano patent because it was directed at the "constant ratio problem," whereas Teleflex's asserted patent addressed making a smaller, less complex pedal.

The Federal Circuit cited both *Rouffet* and *Ruiz* in support of its analysis, but a close reading of those cases does not support the rule as applied.¹⁶⁸ Although the courts in both cases considered the similarity of the problem the references addressed as compared to that of the invention at issue, the cases actually defined the "nature of the problem" not as the characterization of the specific problem *each reference* was trying to solve but rather used a more general inquiry into what background factors may have motivated a person skilled in the art to combine them.¹⁶⁹ The PTO Board in *Rouffet* did not provide *any* evidence of motivation to combine references beyond ascertaining a high level of skill in the art. The court reached the opposite holding in *Ruiz* because the record showed two critical facts: a persons skilled in the art would actually know of the claimed improved method of anchoring things to the ground (a screw anchor), and the nature of the problem would lead them to realize they needed a way to

164. *See infra* Section IV.E.

165. *KSR Int'l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1741-42 (2007).

166. *Id.*

167. *Teleflex Inc. v. KSR Int'l Co.*, 119 F. App'x 282, 288-89 (Fed. Cir. 2005).

168. *Id.* (citing *Ruiz v. A.B. Chance Co.*, 357 F.3d 1270 (Fed. Cir. 2004); *In re Rouffet*, 149 F.3d 1350 (Fed. Cir. 1998)).

169. *Id.*

attach the screw anchor to the foundation (using a bracket).¹⁷⁰ The *KSR* district court's characterization of the similarity of the problem addressed by the prior art references to the asserted patent claims as a *factor* in the inquiry is a better supported interpretation of *Ruiz* and *Rouffet*. Therefore the district court's broad classification of all references into the general area of "vehicle pedal systems" supported a finding of obviousness.¹⁷¹

The Supreme Court in *KSR* found error in foreclosing the possibility of combining references to support obviousness if the references do not solve precisely the same problem.¹⁷² The Court explained that the Federal Circuit's emphasis on the problem the patentee tried to solve was erroneous—courts should look more broadly at whether a person skilled in the art would find it obvious to combine references using "any need or problem known in the field of endeavor at the time of invention and addressed by the patent [as] a reason for combining the elements in the manner claimed."¹⁷³

Moreover, it follows that courts need not require each *element* of a reference to solve the same problem the patentee tried to solve in order to combine the reference with others.¹⁷⁴ The Asano patent tried to solve the constant ratio problem, thus the Federal Circuit concluded that there was no reason to consider putting an electronic sensor on the Asano pedal.¹⁷⁵ But, as the Court explained, a "person of ordinary skill is also a person of ordinary creativity, not an automaton."¹⁷⁶ The Asano patent disclosed an adjustable pedal with a fixed pivot point, and the Federal Circuit erred in assuming that a patentee hoping to make an adjustable electronic pedal would not consider it.¹⁷⁷

Thus, the Supreme Court's admonition against rigidity and broad instruction to consider prior art addressed at "any need or problem" can be understood as a rejection of the Federal Circuit's apparent adoption of problem-characterization as a threshold test for implied motivation to combine. In *In re Translogic*, a post-*KSR* case, the Federal Circuit itself adopted this view of *KSR*, characterizing the threshold test as a "rather straightforward error" which overlooked the "fundamental proposition that

170. *See supra* Section II.C.1. Note, the standard of review is slightly different in each case.

171. *Teleflex Inc. v. KSR Int'l Co.*, 298 F. Supp. 2d 581, 594 (E.D. Mich. 2003)

172. *KSR Int'l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1741-42 (2007).

173. *Id.*

174. *Id.*

175. *Id.*

176. *Id.*

177. *Id.*

obvious variants of prior art references are themselves part of the public domain.”¹⁷⁸

B. Is the Factual Question of TSM in the Dustbin? The Impact of Common Sense and Creativity

The *KSR* Court pointedly used common sense and creativity to explain its opinion. However, allowing common sense back into the obviousness inquiry could have tremendous impact on the evidentiary burden. Prior to *KSR*, the Federal Circuit required an evidence-supported showing of motivation to combine references,¹⁷⁹ where motivation was a question of fact.¹⁸⁰ The Supreme Court’s rejection of “preventative rules that deny factfinders recourse to common sense” could be interpreted to eviscerate any meaningful requirement of evidentiary support to combine references for simpler inventions.¹⁸¹ The other, better supported interpretation is that common sense should remind judges that a person of ordinary skill is not an “automaton” and accordingly would consider diverse sources of information when attempting to solve a problem.

Some language in the Court’s opinion does in fact support the interpretation of reduced evidentiary requirements. The Supreme Court disapprovingly characterized the TSM test as a “rigid and *mandatory* formula[.]”¹⁸² The PTO has interpreted this to mean that the TSM test is not required in the nonobviousness analysis, but is simply one potential rationale for finding obviousness (or nonobviousness) alongside others like the synergy test or the teaching-away test.¹⁸³ The Court also stated that “the analysis need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ.”¹⁸⁴ This language can be read to offer more leeway to reject or invalidate claims as obvious using far less evidence of motivation to combine the prior art than before.

However, this interpretation is undermined by the Court’s consistent citation to supporting evidence in the form of market pressure, design

178. *In re Translogic Tech., Inc.*, 504 F.3d 1249, 1261 (Fed. Cir. 2007).

179. *In re Lee*, 277 F.3d 1338, 1342-44 (Fed. Cir. 2002); *see supra* notes 62-68 and accompanying text.

180. *In re Gartside*, 203 F.3d 1305, 1316 (Fed. Cir. 2000).

181. *KSR Int’l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1742 (2007).

182. *Id.* at 1741 (emphasis added).

183. *See Examination Guidelines for Determining Obviousness Under 35 U.S.C. 103 in View of Supreme Court Decision in KSR International Co. v. Teleflex Inc.*, 72 Fed. Reg. 57526 (2007).

184. *KSR*, 127 S. Ct. at 1741.

pressure, or technological developments as its justification for finding the asserted claim obvious.¹⁸⁵ The Court repeatedly emphasized the fact that cars were moving towards electronic throttle control.¹⁸⁶ This use of evidence on the record does not support the notion that a judge's (or the PTO's) unsubstantiated notions of common sense should replace the evidentiary standard established in *In re Lee*, where the Federal Circuit rejected the use of common sense in place of evidence.¹⁸⁷ Rather, the Supreme Court used common sense as a justification to discard the Federal Circuit's rigid threshold test—a test which *excluded* evidence from consideration.¹⁸⁸ The Court cited external pressures that motivate combining references half a dozen times, in every substantive exposition of what the obviousness inquiry should be and how it should be applied.¹⁸⁹ The Court's consistent reliance on market pressure—a fact on the record—undermines the suggestion that evidence supporting motivation to combine can be wholly replaced with common sense.

Furthermore, full replacement of evidence of motivation to combine with common sense is likely contra-statutory. Section 103 requires that the invention not be obvious “at the time the invention was made.”¹⁹⁰ The Federal Circuit has explained that its TSM test is an evidentiary requirement that ensures that the obviousness inquiry is made at the *time of invention*, using only available prior art and then-conventional wisdom.¹⁹¹

And though nonobviousness as a whole is a legal standard, post-*KSR* the Federal Circuit continues to require evidence guarding against hindsight bias. In *Takeda Chemical Industries, Ltd. v. Alphapharm Pty., Ltd.*, the Federal Circuit refused to reverse a pre-*KSR* district court bench trial upholding a patent as nonobvious.¹⁹² The district court did not commit reversible error in refusing to apply what it dubbed a “presumption of motivation.”¹⁹³ At least in cases of new chemical compounds, “it remains necessary to identify some reason that would have led a chemist to modify a

185. *Id.* at 1740-44.

186. *Id.*

187. *In re Lee*, 277 F.3d 1338, 1342-45 (Fed. Cir. 2002); *see supra* notes 62-68 and accompanying text.

188. *KSR*, 127 S. Ct. at 1742.

189. *Id.* at 1742-1745 (citing “market pressure,” “design need,” and “[t]echnological developments” as possible reasons to make a modification or combination).

190. 35 U.S.C. § 103(a) (2000).

191. *In re Dembiczak*, 175 F.3d 994, 999 (Fed. Cir. 1999).

192. *Takeda Chem. Indus., Ltd. v. Alphapharm Pty., Ltd.*, 492 F.3d 1350, 1360 (Fed. Cir. 2007).

193. *Id.*

known compound in a particular manner.”¹⁹⁴ Replacing the word “reason” in this quotation with “teaching, suggestion, or motivation” yields the familiar TSM test. If replacing “motivation” with “reason” is all that is required to meet the *KSR* Court’s demands, then the TSM test is alive and well.¹⁹⁵ Indeed, *Takeda* shows just how pliable the opinion is: a rigid application of TSM is forbidden on the one hand, but on the other it can be important to identify a “reason” that would have “prompted” combination, and TSM provides a “helpful insight” into the obviousness inquiry.¹⁹⁶ The *Takeda* opinion even analyzes verb tense in the *KSR* opinion to bolster the continuing reliance on § 103 as support for anti-hindsight evidence.¹⁹⁷

In another recent case, *In re Translogic*, the Federal Circuit interpreted *KSR*’s use of common sense to extend the use of “customary knowledge” in the obviousness inquiry.¹⁹⁸ The question was whether it was obvious to use a particular type of multiplexer circuit (a “TGM”) as a component of a larger device (described in the “Gorai” reference). The lower court pointed to a contemporaneous textbook that disclosed TGMs. Because an inventor could create the patent claim by selecting the “well-known” TGM and this option was within the technical grasp of one of ordinary skill, the Federal Circuit upheld the Board’s finding of obviousness.¹⁹⁹ There is, however, a notable difference in the court’s reasoning from its pre-*KSR* opinions: the court only discusses the fact that one skilled in the art “could have” or “would have been able” to combine the references.²⁰⁰ The opinion appears to turn on the fact that the replacement circuit was “well-known” and that one skilled in the art would have selected some kind of multiplexer circuit to combine with Gorai, and TGMs would have been an obvious choice (if not *the* obvious choice).

C. The Obvious-to-Try Doctrine

Next the Supreme Court attacked the obvious-to-try doctrine. This doctrine states that prior art suggesting an impractically large set of possible solutions does not support a finding of obviousness, even when the claimed invention is one of the suggested possibilities.²⁰¹ In its *KSR* opin-

194. *Id.* at 1358.

195. In oral argument on *KSR*, the Justices seemed almost infuriated by the word “motivation.” *See supra* note 57.

196. 492 F.3d 1350, 1356-57 (Fed. Cir. 2007).

197. *Id.* at 1357 n.2.

198. *In re Translogic Tech., Inc.*, 504 F.3d 1249, 1260 (Fed. Cir. 2007).

199. *Id.* at 1262.

200. *Id.*

201. *KSR Int’l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1742 (2007); *see supra* Section II.B.

ion, the Federal Circuit mentioned the obvious-to-try doctrine²⁰² only briefly when discussing expert testimony suggesting that “an electronic control ‘could have been’ mounted on the support bracket of a pedal assembly.”²⁰³ It does not seem controversial that evidence of a *possibility* of combination would not *necessarily* suffice for a finding of obviousness. But the Supreme Court noted it is possible to find obviousness when a combination is merely obvious to try “[w]hen there is a design need or market pressure to solve a problem and there are a finite number of identified, predictable solutions, a person of ordinary skill has good reason to pursue the known options within his or her technical grasp.”²⁰⁴ When this situation leads to anticipated success, courts may find a claimed invention obvious.²⁰⁵

Regardless of the Court’s and commentators’²⁰⁶ pronouncements, the obvious-to-try doctrine remains fully intact, cautioning courts against finding obviousness without sufficient evidence of motivation to choose a particular solution. It neither provides a positive conclusion of obviousness like an explicit teaching in the prior art, nor does it provide a positive conclusion of nonobviousness like the teaching away doctrine.²⁰⁷ The doctrine merely identifies evidentiary scenarios that fail to rise to the level of proof necessary to sustain a conclusion of obviousness. While *KSR* results in more evidentiary scenarios that could support obviousness,²⁰⁸ these scenarios were not previously foreclosed by the obvious-to-try doctrine.²⁰⁹ Although the Supreme Court found motivation to try a certain solution when presented with a “finite number of identified, predictable solutions,” nothing in the opinion suggests that the Supreme Court contemplated a case like *In re Bell*, in which there were an astronomical (though finite) number of possibilities.²¹⁰ The other typical application of the obvious-to-try doctrine is where there is a general indication of success in some field of endeavor without any specific direction—again different from the Supreme Court’s enumerated conditions. In short, the Supreme Court de-

202. See, e.g., *In re Deuel*, 51 F.3d 1552 (Fed. Cir. 1995).

203. *Teleflex*, 119 F. App’x at 289.

204. *KSR*, 127 S. Ct. at 1732.

205. *In re O’Farrell*, 853 F.2d 894, 903 (Fed. Cir. 1988).

206. See Matthew J. Down et. al., *KSR International Co. v. Teleflex Inc.: Another Small issue for Nanotechnology?*, 4 NANOTECHNOLOGY L. & BUS. 293, 299 (2007) (“*KSR* breathes new life into the argument that, if it was simply obvious to try to make the claimed invention, then the invention is not patentable.”).

207. See *supra* Section II.B.

208. See *supra* Section IV.B.

209. See *supra* Section IV.A.

210. *In re Bell*, 991 F.2d 781 (Fed. Cir. 1993).

scribed a scenario for which the obvious-to-try doctrine would never be applicable and then proceeded to call it an exception to the doctrine.

A possibly related concept from *KSR* is the notion of the “objective reach” of a patent claim, which apparently describes two situations.²¹¹ First, the *KSR* Court refers to the objective reach of a claim as that which is obvious in light of the wide variety of problems that would be known to the inventor.²¹² This notion stands in contrast to the narrow set of problems the Federal Circuit considered in its obviousness inquiry, comprising only those variants that are obvious with respect to the stated problem a given reference attempts to solve.²¹³ Second, the Federal Circuit used the term in a post-*KSR* case in connection with possibilities that are obvious to try.²¹⁴ There, the objective reach of a reference is that which is obvious to try *and* which, because of the limited number of possibilities, is also obvious. This sense of the word illuminates the problem with the obvious-to-try doctrine: being obvious to try sheds no light on the obviousness inquiry. Thus, only obvious modifications or combinations fall into the objective reach of a prior art reference.

D. Removing a Barrier for Summary Judgment of Obviousness

In a somewhat oblique and brief portion of *KSR*, the Supreme Court appeared to make it easier to obtain a summary judgment of obviousness over conflicting expert testimony. This holding arose because the Federal Circuit had vacated the district court’s summary judgment ruling on the alternate grounds that conflicting expert testimony had created a genuine issue of material fact.²¹⁵

KSR’s expert testified that the industry trend towards electronic throttle control would have motivated one skilled in the art to combine the references.²¹⁶ Two Teleflex experts emphasized that the *location* of the sensor at the pivot was “simple, elegant, and novel combination,”²¹⁷ in contrast to one prior patent, which had placed its electronic sensor in the pedal housing rather than at the pivot, thus causing wire-chafing problems for its

211. *KSR Int’l Co v. Teleflex Inc.*, 127 S. Ct. 1727, 1742 (2007).

212. *Id.*

213. *Id.*

214. *Takeda Chem. Indus., Ltd. v. Alphapharm Pty., Ltd.*, 492 F.3d 1350, 1359 (Fed. Cir. 2007).

215. *Teleflex*, 119 F. App’x at 289-90.

216. *Id.*

217. *Id.*

claimed device.²¹⁸ The Federal Circuit held this “credibility determination” between the experts rendered summary judgment inappropriate.²¹⁹

The Federal Circuit’s holding illustrates the essence of the evidentiary nature of the TSM test. Though it would not be surprising if conflicting expert testimony on one of the *Graham* factual inquiries foreclosed summary judgment, the expert testimony in *KSR* concerned the mental processes of a person of ordinary skill. This is entirely consistent with Federal Circuit precedent: the court has stressed that there must be motivation not only to choose the references but also to combine them in the particular way of the patent claim,²²⁰ and that motivation is a question of fact.²²¹ This part of *KSR* illustrates the criticism that the Federal Circuit allowed a question of fact to “swallow” a question of law.²²²

The Supreme Court disagreed that there remained any genuine issue of fact. A “conclusory affidavit addressing the question of obviousness” should not prevent summary judgment because the ultimate judgment of obviousness is a legal determination.²²³ If the *Graham* factors are not in material dispute and obviousness is “apparent” in light of the factors, summary judgment is appropriate.²²⁴

Some commentators anticipate an increase in summary judgment on obviousness due to *KSR*.²²⁵ Professor John Duffy writes that *KSR* is the “Holy Grail” for “an efficient method for challenging questionable patents,” causing a “sea change in procedure.”²²⁶ However, one post-*KSR* Federal Circuit opinion casts doubt on this assertion. In *Omegaflex, Inc. v. Parker-Hannifin Corp.*, the court reversed a grant of summary judgment of nonobviousness because of conflicting expert testimony similar to that

218. *Id.*

219. *Id.* at 290.

220. *In re Rouffet*, 149 F.3d 1350, 1356-67 (Fed. Cir. 1998).

221. *In re Gartside*, 203 F.3d 1305, 1316 (Fed. Cir. 2000).

222. Brief of Intellectual Property Law Professors *supra* note 67, at 1-4.

223. *KSR Int’l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1745 (2007) (citing *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1, 17 (1966)).

224. *Id.* at 1745-46.

225. Compare Judge T. S. Ellis, U.S. District Court, E.D. Va., Remarks at BNA-ABA Conference: Patent Obviousness: The Still-Evolving Standard, or Is It Back to the Future? (Oct 1, 2007) (anticipating more summary judgment motions and grants) with Chief Judge Paul R. Michel, U.S. Court of Appeals for the Federal Circuit, Remarks at BNA-ABA Conference: Patent Obviousness: The Still-Evolving Standard, or Is It Back to the Future? (Oct 1, 2007) (anticipating more grants of judgments as a matter of law but not more grants of summary judgment).

226. John F. Duffy, Commentary, *KSR v. Teleflex: Predictable Reform of Patent Substance and Procedure in the Judiciary*, 106 MICH. L. REV. FIRST IMPRESSIONS 34, 37 (2007), <http://www.michiganlawreview.org/firstimpressions/vol106/duffy.pdf>.

in *KSR*.²²⁷ The OmegaFlex patent was a device designed to make snug pipe fittings in hard-to-reach areas and used a “locating sleeve” to accomplish this task.²²⁸ The alleged infringer’s expert testified that person of ordinary skill in the art would have “recognized the importance of proper alignment” and thus would have been motivated to add the locating sleeve to the prior art. The Federal Circuit found that this testimony created a genuine issue of material fact sufficient to defeat summary judgment of validity and infringement.²²⁹

Of course, the posture in *Omegaflex* differs from that in *KSR*, where the Supreme Court found the patent claim *obvious* on summary judgment. However, the differences only highlight the evidentiary standard applied by the Federal Circuit in *Omegaflex*, because patents are presumed valid under 35 U.S.C. § 282; if anything, it should be more difficult to invalidate a patent (as in *KSR*) than to hold it valid (as the district court had done in *Omegaflex*). In fact, the Supreme Court held that there were *no* factual issues from this kind of testimony, so neither motions for validity and invalidity should be foreclosed from summary judgment.²³⁰ While it is reasonable to imagine that a dispute over historical fact in a *Graham* factual inquiry could foreclose summary judgment, it is hard to square the idea that testimony that goes directly to a conclusion of obviousness can create a genuine issue of material fact with the holding in *KSR*.²³¹

E. The Emergence of the *Dann* Rule

One final effect of *KSR* is its use as a justification in an emerging post-*KSR* doctrine. The Federal Circuit appears now to be more ready to overturn broad patents that merely replace some existing mechanical element with electronics.

This rule finds roots in the 1976 Supreme Court case of *Dann v. Johnson*.²³² In *Dann*, the Supreme Court refused to uphold a broadly worded patent claim that added the idea of using computers in a very generic way

227. *Omegaflex, Inc. v. Parker-Hannifin Corp.*, 243 F. App’x 592, 597 (Fed. Cir. 2007) (non-precedential).

228. *Id.* at 593-94.

229. *Id.* at 596.

230. *KSR*, 127 S. Ct. at 1745.

231. As the terms are used here, historical facts are assertions of who did what, e.g., whether someone ran a red light. Ultimate facts are applications of the law to the historical facts, e.g., whether running the light constituted negligence. See Martin B. Louis, *Allocating Adjudicative Decision Making Authority Between the Trial and Appellate Levels: A Unified View of the Scope of Review, the Judge/Jury Question, and Procedural Discretion*, 64 N.C. L. REV. 993, 993 n.3 (1986).

232. 425 U.S. 219 (1976); see *supra* Section II.B.

to existing banking technology.²³³ At *KSR* oral argument, *KSR*'s counsel stressed an analogous idea that only claim 4 of the patent was obvious because it was an "enormous verbal abstraction" in contrast with claims 1 and 3 which contained much more detail about the structure of the invention (and of course did not read on *KSR*'s device).²³⁴ The judgment of *KSR* is thus consistent with the *Dann* Court's skepticism of adding electronic technology in a general way to existent technology.

Two post-*KSR* cases fully develop the new rule. In *Leapfrog Enterprises, Inc. v. Fisher-Price, Inc.*, the Federal Circuit upheld a bench trial finding of obviousness.²³⁵ The claim at issue disclosed replacing the mechanical mechanism of a children's toy with an electronic mechanism.²³⁶ As in *KSR*, the claim was broad and unspecific.²³⁷ Just as the Supreme Court saw market pressure as providing motivation to improve the Asano pedal, the *Leapfrog* court viewed market pressure as motivation to improve the old children's toy. The *Leapfrog* court further noted that "[a]pplying modern electronics to older mechanical devices has been commonplace in recent years."²³⁸ It concluded that "the adaptation of an old idea . . . using newer technology that is commonly available and understood in the art" is obvious.²³⁹ Again, like in *KSR*, the claims of the patent were quite general and the electronics added to the old toy did not suggest any new technologies, besides presumably off-the-shelf components: a "reader," a "sound production device," and "switches."²⁴⁰

Finally, the *Comiskey* court stated the rule plainly: the "routine addition of modern electronics to an otherwise unpatentable invention typically creates a prima facie case of obviousness."²⁴¹ Though this rule is dicta, *Comiskey* extracts the principle from *Dann*, *KSR*, and *Leapfrog* and will presumably be followed by later Federal Circuit panels.²⁴² Like the other cases, the patent claim in *Comiskey* added computers in a very general way to existing techniques: it claimed using a computer for collecting

233. *Id.*

234. Transcript of Oral Argument at 16-17, *KSR Int'l Co. v. Teleflex Inc.*, 127 S. Ct. 1727 (2007) (No. 04-1350).

235. *Leapfrog Enterprises, Inc. v. Fisher-Price, Inc.*, 485 F.3d 1157 (Fed. Cir. 2007).

236. *Id.* at 1158-59.

237. *Id.* at 1161.

238. *Id.* It was not mentioned in the opinion whether this statement was based on the factual record.

239. *Id.* at 1162.

240. *Id.* at 1158.

241. *In re Comiskey*, 499 F.3d 1365, 1380 (Fed. Cir. 2007) (dicta).

242. *Id.* at 1380 n.16.

and storing data in an otherwise typical dispute resolution process.²⁴³ If the Federal Circuit follows *Comiskey*, this rule could provide a convenient expedient to invalidate many low quality claims that generate criticism of the patent system.

V. CONCLUSIONS

The Federal Circuit has long offered a flexible version of the TSM test that allows evidence of motivation from various sources, including clinical trials, expert testimony, trends in the prior art or in industry, and evidence that the possible choices in a given problem are limited. Common sense should be used to expand the possible evidentiary inputs, but it should not be used as a catch-all recourse to invalidate claims when no evidence of motivation to combine references is presented.

Motivation to combine should take its place as a kind of fourth *Graham* factual inquiry supporting the *statutory* mandate that nonobviousness be determined at the time of invention. The Federal Circuit, however, had made motivation so large a component of the obviousness inquiry that it practically displaced all other considerations. In its quest to protect against hindsight bias, the Federal Circuit allowed a question of fact to “swallow” a question of law.²⁴⁴ *KSR* ensures that nonobviousness remains a question of law supported by fact, by, for example, ensuring that conclusory expert testimony does not defeat summary judgment. But the sweeping statements in the Supreme Court’s opinion should not be understood to lower the evidentiary burden protecting against hindsight bias. It is not too much to ask that parties support their positions with fact.

Nonobviousness is undoubtedly a knotty problem in patent law. Even the Supreme Court has at times been unable to articulate their judgments other than to conclude that the “gap between the prior art and the [patent holders]’s system is simply not so great as to render the system nonobvious.”²⁴⁵ The Federal Circuit’s general thrust towards evidentiary rigor was move in the right direction, and *KSR* as interpreted by the Federal Circuit should enrich the kind of evidence used in the nonobviousness inquiry.

243. *Id.* at 1368-70.

244. Brief of Intellectual Property Law Professors, *supra* note 67, at 1-4.

245. *Dann v. Johnston*, 425 U.S. 219, 230 (1976).

IN RE SEAGATE TECHNOLOGY LLC: A CLEAN SLATE FOR WILLFULNESS

By Danny Prati

Several recent Supreme Court decisions make it more difficult for patentees to enforce their patent rights.¹ In *In re Seagate*, the Federal Circuit followed this trend in addressing two principal issues.² First, the court drastically altered the willfulness standard in patent infringement cases, from a standard akin to negligence to one of recklessness.³ Second, the court narrowed the scope of the waiver of attorney-client privilege and work product protection created by the “advice of counsel” defense in patent infringement suits.⁴ Although both changes putatively favor alleged infringers, the Federal Circuit left future courts with wide latitude to define the contours of patent law’s new willfulness doctrine.

A patentee whose patent rights are infringed is entitled to adequate compensation.⁵ Additionally, § 284 of the Patent Act allows the court to treble damages depending on the infringer’s conduct.⁶ Although the statute does not enumerate circumstances that trigger enhanced damages, a finding of willful infringement is a *de facto* requirement for enhanced dam-

© 2008 Danny Prati.

1. *See, e.g.*, *KSR Int’l Co. v. Teleflex Inc.*, 127 S. Ct. 1727 (2007) (relaxing the obviousness standard in some cases); *Microsoft Corp. v. AT&T Corp.*, 127 S. Ct. 1746 (2007) (precluding infringement for foreign reproduction of U.S. patented software); *MedImmune, Inc. v. Genentech, Inc.*, 127 S. Ct. 764 (2007) (relaxing jurisdictional requirements for declaratory judgment actions); *eBay Inc. v. MercExchange, L.L.C.*, 547 U.S. 388 (2006) (making it more difficult to obtain an injunction); *See also* Justin Lee, Note, *How KSR Broadens (Without Lowering) the Evidentiary Standard of Nonobviousness*, 23 *BERKELEY TECH. L.J.* 15 (2008) (noting that some patents will be harder to enforce); Sean Fernandes, Note, *Microsoft Corp. v. AT&T: A Welcome Return to Patent Law’s Tradition of Territoriality*, 23 *BERKELEY TECH. L.J.* 75 (2008); Jennifer R. Saionz, Note, *Declaratory Judgment Actions in Patent Cases: The Federal Circuit’s Response to MedImmune v. Genentech*, 23 *BERKELEY TECH. L.J.* 161 (2008) (arguing that *MedImmune* creates an incentive for infringers to file suit first and ask for a settlement license later). Reasons or motivations for the trend are outside the scope of this Note.

2. *In re Seagate Tech., LLC*, 497 F.3d 1360, 1365 (Fed. Cir. 2007) (en banc), *cert. denied*, 2008 U.S. LEXIS 2153 (Feb. 25, 2008).

3. *Id.* at 1371 (referring to the affirmative duty established in *Underwater Devices Inc. v. Morrison-Knudsen Co.*, 717 F.2d 1380 (Fed. Cir. 1983)).

4. *Id.* at 1374-76.

5. *See* 35 U.S.C. § 284 (2000).

6. *Id.*

ages under Federal Circuit precedent.⁷ In developing the willfulness doctrine, the Federal Circuit imposed an affirmative duty of “due care” on a potential infringer to determine whether it infringes after learning of another’s patent.⁸ Breach of that duty could result in a finding of willfulness. Although the willfulness doctrine has evolved through Federal Circuit jurisprudence, the affirmative duty has remained relatively unchanged for over twenty years.⁹

Prior to *Seagate*, as part of the affirmative duty, parties would retain competent legal advice to evaluate potential infringement.¹⁰ Favorable legal advice provided a defense to willfulness, commonly known as the advice of counsel defense.¹¹ Under this defense, an infringer who reasonably relies on competent legal advice does not “willfully” infringe if the legal advice concludes that the patent is invalid, unenforceable or not infringed. However, when a party asserts the advice of counsel defense, it waives attorney-client privilege and work product immunity.¹² The scope of these waivers varies from case to case. Prior to *Seagate*, some courts extended the waivers to trial counsel while others only extended the waivers to opinion counsel.¹³

In *Seagate*, the Federal Circuit, sitting *en banc*, held that a patentee must show at least “objective recklessness” to prove willfulness.¹⁴ As a result of this new willfulness standard, the court explicitly abandoned the affirmative duty on potential infringers.¹⁵ The court also held that, in general, the waiver of attorney-client privilege and work product protection resulting from the advice of counsel defense does not extend to trial counsel.¹⁶

7. *See, e.g.,* Beatrice Foods Co. v. New Eng. Printing & Lithographing Co., 923 F.2d 1576, 1578 (Fed. Cir. 1991).

8. *Underwater Devices*, 717 F.2d at 1389.

9. *See* Knorr-Bremse Sys. Fuer Nutzfahrzeuge GmbH v. Dana Corp., 383 F.2d 1337, 1344 (Fed. Cir. 2004) (*en banc*).

10. *Underwater Devices*, 717 F.2d at 1390.

11. *See, e.g., In re Seagate Tech., LLC (Seagate)*, 497 F.3d 1360, 1365 (Fed. Cir. 2007).

12. 7 DONALD S. CHISUM, CHISUM ON PATENTS § 20.03[4][b][v][J] (2007).

13. *Seagate*, 497 F.3d at 1373; *see, e.g.,* Intex Recreation Corp. v. Team Worldwide Corp., 439 F. Supp. 2d 46, 52-53 (D.D.C. 2006) (extending waiver to trial counsel with limitations); *Informatica Corp. v. Bus. Objects Data Integration, Inc.*, 454 F. Supp. 2d 957, 959 (N.D. Cal. 2006) (extending waiver to trial counsel); *Collaboration Props., Inc. v. Polycom, Inc.*, 224 F.R.D. 473, 476-77 (N.D. Cal. 2004) (declining to extend waiver to trial counsel).

14. *Seagate*, 497 F.3d at 1371.

15. *Id.*

16. *Id.* at 1374-76.

Part I of this Note introduces the willfulness doctrine and the waiver associated with the advice of counsel defense. Part II describes the *Seagate* decision and Part III discusses its probable implications. Finally, Part IV presents issues that remain post-*Seagate* and offers suggestions for resolving those issues in the future.

I. INTRODUCTION

A. Enhanced Damages in Patent Law

A patentee who has prevailed at patent litigation is entitled to compensatory damages in the form of lost profits or reasonable royalties.¹⁷ The Patent Act also allows courts to treble these damages but does not specify conditions that trigger enhanced damages.¹⁸ Most significantly, the statute does not explicitly mention willful infringement. In the absence of statutory guidance, courts have formulated the willfulness doctrine to determine when enhanced damages should be awarded.

1. Purposes of Enhanced Damages

The Federal Circuit primarily uses enhanced damages to serve punitive goals such as punishing and deterring flagrant infringement.¹⁹ For this reason, the Federal Circuit views the egregiousness of the defendant's conduct as the paramount consideration.²⁰ Without enhanced damages, a knowing infringer would be more likely to risk infringement and less likely to negotiate a license.

Enhanced damages may also serve a compensatory purpose, but the Federal Circuit has not generally accepted that purpose.²¹ In cases where actual damages are difficult or impossible to prove, a court might increase

17. See 35 U.S.C. § 284 (2000).

18. See *id.* The statute does, however, prohibit enhanced damages for provisional rights.

19. *Beatrice Foods Co. v. New England Printing & Lithographing Co.*, 923 F.2d 1576, 1580 (Fed. Cir. 1991); See also *CHISUM*, *supra* note 12, § 20.03[4][b][v] (“The Federal Circuit’s decisions have reinforced the notion that multiple damages is primarily a punitive provision to deter willful infringement of patents.”).

20. *Read Corp. v. Portec, Inc.*, 970 F.2d 816, 826 (Fed. Cir. 1992) (“The paramount determination in deciding to grant enhancement and the amount thereof is the egregiousness of the defendant’s conduct based on all the facts and circumstances.”).

21. *Seagate*, 497 F.3d at 1378-79 (Gajarsa, J., concurring) (“We have recognized a remedial aspect of such damages in at least three precedential opinions.”); *id.* at 1384 (“To be sure, the majority rule has been that an award of enhanced damages pursuant to section 284 requires a finding of willfulness.”).

damages to help properly compensate the patentee.²² Also, a court might compensate a patentee with enhanced money damages rather than granting a permanent injunction.²³ Such increased monetary relief may be appropriate when the court determines a permanent injunction is not necessary to avoid manifest injustice or a multiplicity of suits. However, courts are reluctant to refuse to grant an injunction because it directly impinges on a patentee's statutory right to exclude.²⁴

2. *Willfulness in Patent Law*

Patent infringement is a strict liability offense requiring no proof of intent, culpability, or motivation.²⁵ However, the Federal Circuit requires demonstrated culpability, typically in the form of willful infringement, to merit an award of enhanced damages.²⁶ The standard for willfulness before *Seagate* required a court to “find by clear and convincing evidence in view of the totality of the circumstances that [the infringer] acted in disregard of the [patentee's] patent and lacked a reasonable basis for believing it had a right to do what it did.”²⁷

A finding of willfulness allows, but does not require, a court to award enhanced damages.²⁸ Once willfulness is established, courts have broad discretion in deciding by how much to increase damages, if at all.²⁹ In

22. *Trio Process Corp. v. L. Goldstein's Sons, Inc.*, 638 F.2d 661, 663 (3d Cir. 1981) (“Because it is often difficult in patent litigation to measure with mathematical precision a patentee's damages, the enhancement provision of the statute is designed to permit, inter alia, adequate compensation for an infringement where strict legal rules would not afford it.”).

23. *Seagate*, 497 F.3d at 1378 (Gajarsa, J., concurring) (“[I]n order to avoid manifest injustice, a multiplicity of suits, etc., the district court might reasonably determine that monetary relief in the form of enhanced damages is more appropriate than an injunction.”); see also *eBay Inc. v. MercExchange, L.L.C.*, 547 U.S. 388, 391 (2006).

24. See generally *eBay*, 547 U.S. 388; see also 35 U.S.C. § 271 (2000).

25. *Jurgens v. CBK, Ltd.*, 80 F.3d 1566, 1570 n.2 (Fed. Cir. 1996) (“Infringement itself . . . is a strict liability offense, . . . and a court must award ‘damages adequate to compensate for the infringement,’ 35 U.S.C. § 284, regardless of the intent, culpability or motivation of the infringer.”).

26. *Beatrice Foods Co. v. New Eng. Printing & Lithographing Co.*, 923 F.2d 1576, 1579 (Fed. Cir. 1991) (“Under our cases, enhanced damages may be awarded only as a penalty for an infringer's increased culpability, namely willful infringement or bad faith.”).

27. *Amsted Indus. v. Buckeye Steel Castings Co.*, 24 F.3d 178, 181 (Fed. Cir. 1994).

28. *Read Corp. v. Portec, Inc.*, 970 F.2d 816, 826 (Fed. Cir. 1992) (“[A] finding of willful infringement does not mandate that damages be enhanced, much less mandate treble damages.”).

29. *Id.*

Read Corp. v. Portec, Inc., the Federal Circuit offered nine factors courts can use to evaluate an infringer's culpability and determine whether to enhance damages.³⁰ However, not all of the *Read* factors apply on the facts of every case and there exists no consistent or predictable method that courts use to enhance damages.³¹

Willfulness as a prerequisite to enhanced damages is not unique to patent law. Under the Copyright Act, a copyright owner who elects to receive statutory damages can also receive enhanced damages for willful infringement.³² Similarly, a defendant in violation of the Fair Credit Reporting Act (FCRA) may be civilly liable for punitive damages if the failure to comply is willful.³³ Unlike the Patent Act, however, both the Copyright Act and the FCRA contain the term "willful" in the statute.

Prior to *Seagate*, the Federal Circuit's standard for willfulness in patent law was inconsistent with the general understanding of willfulness in the other contexts.³⁴ The typical minimum standard for punitive damages in other areas of civil law is recklessness.³⁵ In the FCRA context, for example, the Supreme Court stated that the recklessness standard for willfulness comports to the common law usage "which treated actions in 'reckless disregard' of the law as 'willful' violations."³⁶ Likewise, *Black's Law Dictionary* defines recklessness as "[c]onduct whereby the actor does not desire harmful consequence but nonetheless foresees the possibility and consciously takes the risk."³⁷

In contrast, prior to *Seagate*, an accused infringer had an affirmative duty of due care, and breach of that duty could result in a finding of will-

30. *Id.* at 827-28. The factors include: (1) whether the infringer deliberately copied the ideas or design of another; (2) whether the infringer, when he knew of the other's patent protection, investigated the scope of the patent and formed a good faith belief that it was invalid or that it was not infringed; (3) the infringer's behavior as a party to the litigation; (4) the defendant's size and financial condition; (5) the closeness of the case; (6) the duration of defendant's misconduct; (7) the remedial action by the defendant; (8) the defendant's motivation for harm; and (9) whether defendant attempted to conceal its misconduct. *Id.*

31. *See, e.g., Datascope Corp. v. SMEC, Inc.*, 14 U.S.P.Q.2d 1071, 1074 (D.N.J. 1990) (finding that willful, but not blatant infringement justified a 50% increase in damages); *see also Chisum v. Brewco Sales & Mfg.*, 726 F. Supp. 1499, 1514 (W.D. Ky. 1989) (holding that lost profits should be doubled rather than trebled because the infringement was not egregious enough).

32. 17 U.S.C. § 504(c)(2) (2000).

33. 15 U.S.C. § 1681n(a) (2000).

34. *Seagate*, 497 F.3d at 1371.

35. *Id.* at 1371.

36. *Safeco Ins. Co. of Am. v. Burr*, 127 S. Ct. 2201, 2208 (2007).

37. BLACK'S LAW DICTIONARY 1298 (8th ed. 2004).

fulness, which is more akin to negligence. In his part concurring, part dissenting opinion, Judge Dyk of the Federal Circuit, in *Knorr-Bremse Systeme Fuer Nutzfahrzeuge GmbH v. Dana Corp.*, expressed his view that enhanced damages for failing to satisfy the duty of due care was inconsistent with Supreme Court precedent and possibly raised a Constitutional issue.³⁸ Against this backdrop, in *Seagate*, the Federal Circuit modified the willfulness doctrine—perhaps preemptively to avoid this Constitutional issue—to be more consistent with other areas of the law.

Although the Federal Circuit used the pre-*Seagate* willfulness standard for over twenty years, many criticized the use of the standard. For example, in a concurring opinion to *Seagate*, Judge Gajarsa expressed his opinion that the court should have taken the opportunity to reevaluate the enhanced damages clause of the Patent Act and eliminate the *de facto* willfulness requirement.³⁹ In Judge Gajarsa's opinion, willfulness may be sufficient for awarding enhanced damages but it should not be necessary.⁴⁰ Instead, Judge Gajarsa believes that district court judges should award enhanced damages at their discretion rather than only for exceptional circumstances.⁴¹

In spite of such criticism, the willfulness doctrine plays a significant role in patent law. Then-Professor Kimberly Moore (now a Federal Circuit Judge) conducted an empirical study on willful infringement and found that plaintiffs plead willfulness 92.3% of the time.⁴² Of the cases where the issue of willfulness was actually decided, slightly more than half resulted in a willfulness finding.⁴³ When a jury found willfulness, judges

38. *Knorr-Bremse Sys. Fuer Nutzfahrzeuge GmbH v. Dana Corp.*, 383 F.3d 1337, 1348 (Fed. Cir. 2004) (Dyk, J., dissenting) (“There is a substantial question as to whether the due care requirement is consistent with the Supreme Court cases holding that punitive damages can only be awarded in situations where the conduct is reprehensible. . . . [T]he majority properly refrains from addressing this constitutional issue . . .”).

39. *Seagate*, 497 F.3d at 1376-77.

40. *Id.* at 1381.

41. *Id.* at 1377.

42. Kimberly A. Moore, *Empirical Statistics on Willful Patent Infringement*, 14 FED. CIR. B.J. 227, 232 (2004). The empirical study began by collecting all patent infringement cases that terminated during litigation from 1999-2000—totaling 4254 cases. From that dataset, the researchers selected 2100 cases, which was then reduced to 1721 after declaratory judgment actions and appeals from the USPTO were eliminated. *Id.* at 230-31.

43. *Id.* at 236. Of the 4,254 cases in the two year study, the issue of willfulness was determined by the fact-finder in only 143 cases. In bench trials, judges found the infringer willful in 60.4% of the cases compared to juries finding the infringer willful in 56% of the cases. *Id.*

enhanced the damages 36.8% of the time.⁴⁴ Not surprisingly, judges enhanced damages much more often (87%) when willfulness was found during a bench trial.⁴⁵ Few enhanced damage awards approached the statutory maximum of treble damages,⁴⁶ but few willfulness findings were reversed on appeal.⁴⁷ Therefore, although willfulness is not an issue in every patent infringement suit, the substantial possibility of enhanced damages makes willfulness a significant aspect of patent litigation.

B. Advice of Counsel as a Defense to Willfulness

Congress created the Federal Circuit in 1982 to exercise exclusive appellate jurisdiction over cases arising under the patent laws.⁴⁸ At the time, “widespread disregard for patent rights was undermining the national innovation incentive.”⁴⁹ In 1983, the Federal Circuit’s *Underwater Devices* decision established that as part of a party’s affirmative duty upon receiving actual notice of another’s patent rights, the party must retain competent legal advice before taking part in potentially infringing activity.⁵⁰ Potential infringers commonly seek this advice in the form of opinion letters.⁵¹ Opinion letters typically conclude that the patent is invalid, unenforceable, and/or not infringed⁵² and therefore may serve as a defense to a charge of willfulness. Although willfulness is determined using a totality of the circumstances test, the advice of counsel defense is central in determining willful infringement.⁵³

In 1986, in *Kloster Speedsteel AB v. Crucible Inc.*, the Federal Circuit held that courts could infer bad faith if an accused infringer did not obtain a legal opinion.⁵⁴ This so-called “adverse inference” allowed courts to presume that the accused infringer 1) knew that it was infringing and intentionally chose not to obtain an opinion, or 2) was acting with willful igno-

44. *Id.* at 237.

45. *Id.*

46. *Id.* (“Judges only trebled damages in 8.7% of the cases where they found willfulness.”).

47. *Id.* at 236-38.

48. CHISUM, *supra* note 12, § 20.03[4][b][v].

49. *Knorr-Bremse Sys. Fuer Nutzfahrzeuge GmbH v. Dana Corp.*, 383 F.2d 1337, 1343 (Fed. Cir. 2004).

50. *Underwater Devices Inc. v. Morrison-Knudsen Co.*, 717 F.2d 1380, 1389-90 (Fed. Cir. 1983).

51. *Seagate*, 497 F.3d at 1369.

52. *Id.* In other words, typically, only favorable opinions are committed to paper.

53. *Id.*; *see also* Carol Johns, Note, *Knorr-Bremse Systeme Fuer Nutzfahrzeuge GmbH v. Dana Corp.: A Step in the Right Direction for Willful Infringement*, 20 BERKELEY TECH. L.J. 69, 74 (2005).

54. 793 F.2d 1565, 1580 (Fed. Cir. 1986).

rance.⁵⁵ If an accused infringer had obtained an opinion but refused to produce it at trial, the court could conclude that the opinion was incriminating.⁵⁶

The Federal Circuit recently eliminated the adverse inference from the willfulness inquiry in *Knorr-Bremse*,⁵⁷ but did not overrule the affirmative duty set out in *Underwater Devices*.⁵⁸ Taken together, an accused infringer remained under an affirmative duty of due care, but no adverse inference could be drawn from failure to obtain legal advice or refusal to produce legal advice at trial.⁵⁹ Despite the overruling of the adverse inference in *Knorr-Bremse*, accused infringers continued to seek the advice of counsel to thwart enhanced damages.⁶⁰

The remaining *Underwater Devices* affirmative duty created two undesirable results. First, potential infringers incurred large costs by obtaining the advice of counsel.⁶¹ Because the duty under *Underwater Devices* did not begin until the potential infringer had “actual notice” of another’s patent rights, patentees would often send “charge letters” to potential infringers.⁶² The letters were motivated by a desire to trigger the duty, which could lead to enhanced damages if a court later found infringement. After receiving such a letter, potential infringers might spend \$20,000-\$100,000 on a legal opinion to, in part, secure the advice of counsel defense.⁶³ Some

55. *Id.*; see also Johns, *supra* note 53, at 76.

56. *Kloster*, 793 F.2d at 1580.

57. *Knorr-Bremse Sys. Fuer Nutzfahrzeuge Gmbh v. Dana Corp.*, 383 F.2d 1337, 1341 (Fed. Cir. 2004).

58. *Id.* at 1345-46 (“Although there continues to be ‘an affirmative duty of due care to avoid infringement of the known patent rights of others,’ *L.A. Gear, Inc. v. Thom McAn Shoe Co.*, 988 F.2d 1117, 1127 (Fed. Cir. 1993), the failure to obtain an exculpatory opinion of counsel shall no longer provide an adverse inference or evidentiary presumption that such an opinion would have been unfavorable.”); *Underwater Devices*, 717 F.2d at 1389-90.

59. *Knorr-Bremse*, 383 F.3d at 1344.

60. *Seagate*, 497 F.3d at 1369.

61. *Knorr-Bremse*, 383 F.3d at 1351 (Dyk, J., dissenting) (The duty resulted in “substantial legal costs on companies seeking to introduce innovative products . . .”).

62. See Susan M. Gerber & John C. Evans, *In re Seagate: The Federal Circuit Scuttles Underwater Devices and Narrows Privilege/Immunity Waiver*, Jones Day Commentaries, Sept. 5, 2007, http://www.jonesday.com/pubs/pubs_detail.aspx?pubID=S4554 (last visited Mar. 23, 2008).

63. Mathew D. Powers & Steven C. Carlson, *The Evolution and Impact of the Doctrine of Willful Patent Infringement*, 51 SYRACUSE L. REV. 53, 102 (2001). In addition to the advice of counsel defense, legal opinions may serve to aid a potential infringer in making informed business decisions. *Id.*

large companies receive hundreds of charge letters a year.⁶⁴ Second, the *Underwater Devices* duty created a disincentive for potential infringers to search for patents because actual notice triggered the duty.⁶⁵ Such deliberate ignorance is counterproductive in a system that is intended to promote the progress of science. Initially, the affirmative duty was implemented to strengthen protection for patent rights, but over time, it resulted in a system that partially encourages potential infringers to ignore patent rights.⁶⁶

Although the advice of counsel defense is widely viewed as central to the willfulness inquiry,⁶⁷ empirical data shows that the importance of opinion letters varies greatly between bench and jury trials. During bench trials, infringers who present favorable legal opinions are found willful 44.8% of the time, compared to 84.2% for those without opinions.⁶⁸ In jury trials, 55.8% of infringers who present legal opinions are found willful compared to 56.1% for those without opinions.⁶⁹ Thus, opinions appear to make a significant difference in the eyes of a judge but almost no difference in front of a jury.

C. Waivers Resulting from the Advice of Counsel Defense

The attorney-client privilege is intended “to encourage full and frank communication between attorneys and their clients and thereby promote broader public interests in the observance of law and administration of justice.”⁷⁰ In patent litigation, assertion of the advice of counsel defense automatically waives this privilege.⁷¹ The waiver helps ensure fairness because an accused infringer cannot disclose favorable communications while asserting the privilege for unfavorable ones.⁷² Similarly, work prod-

64. Matthew Leary, *Adverse to What?: The Increasing value of Patent Opinions After Knorr-Bremse*, 25 CARDOZO ARTS & ENT. L.J. 271, 273 (2007).

65. *Knorr-Bremse*, 383 F.3d at 1351 (Dyk, J., dissenting) (“[T]he due care requirement has fostered a reluctance to review patents for fear that the mere knowledge of a patent will lead to a finding of lack of due care . . .”).

66. *See id.*

67. Moore, *supra* note 42, at 228 (“Most patent practitioners and scholars believe that willful infringement determinations turn on the attorney opinion letter.”).

68. *Id.* at 239.

69. *Id.*

70. *Upjohn Co. v. United States*, 449 U.S. 383, 389 (1981). A client may of course waive the privilege.

71. *In re Echostar Commc’ns Corp. (Echostar)*, 448 F.3d 1294, 1299 (Fed. Cir. 2006).

72. *Fort James Corp. v. Solo Cup Co.*, 412 F.3d 1340, 1349 (Fed. Cir. 2005) (“The waiver extends beyond the document initially produced out of concern for fairness, so that a party is prevented from disclosing communications that support its position while simultaneously concealing communications that do not.”).

uct immunity is also waived when the advice of counsel defense is used.⁷³ The scope of these waivers, however, has been a source of intense dispute in patent litigation.⁷⁴

The scope of the waiver of attorney-client privilege that results from the advice of counsel defense typically extends to “all other communications relating to the same subject matter.”⁷⁵ Opinion letters, which are communications with the client, typically advise the client on issues of infringement, validity, and enforceability. As a result, some patentees argue that the waiver should extend to communications with trial counsel on these issues.⁷⁶ However, courts have discretion in defining the scope of the waiver, and no bright-line rules exist.⁷⁷ Courts “weigh the circumstances of the disclosure, the nature of the legal advice sought and the prejudice to the parties of permitting or prohibiting further disclosures.”⁷⁸ To prevent “sword and shield” tactics wherein an accused infringer waives the privilege with respect to favorable sections of an opinion while asserting the privilege for unfavorable sections, courts typically apply a broad waiver.⁷⁹

The work product doctrine is related to, but distinct from, the attorney-client privilege.⁸⁰ Work product protection prevents the discovery of documents and tangible things prepared in anticipation of litigation that are both non-privileged and relevant.⁸¹ Such protection balances the needs of an adversarial process.⁸² It allows an attorney to prepare for litigation without sharing information with the opposing side,⁸³ but also facilitates the discovery of material facts necessary to resolve the dispute.⁸⁴ Unlike the attorney-client privilege, work product protection may be overcome by

73. *Seagate*, 497 F.3d at 1375; see also *Echostar*, 448 F.3d at 1303 (“The overarching goal of waiver in such a case is to prevent a party from using the advice he received as both a sword, by waiving privilege to favorable advice, and a shield, by asserting privilege to unfavorable advice. . . . To the extent the work-product immunity could have such an effect, it is waived.”).

74. See generally Jared Goff, *The Unpredictable Scope of the Waiver Resulting from the Advice-of-Counsel Defense to Willful Patent Infringement*, 1998 BYU L. REV. 213 (1998).

75. *Fort James*, 412 F.3d at 1349.

76. See *Seagate*, 497 F.3d at 1367.

77. *Fort James*, 412 F.3d at 1349-50.

78. *Id.*

79. *In re Echostar Commc’ns Corp.*, 448 F.3d 1294, 1301 (Fed. Cir. 2006).

80. *Id.* at 1300.

81. *Id.*; FED. R. CIV. P. 26(b)(3).

82. *Seagate*, 497 F.3d at 1375 (quoting *In re Martin Marietta Corp.*, 856 F.2d 619 (4th Cir. 1988)).

83. *Id.*

84. *Id.*

substantial need for the information together with undue hardship in obtaining the information elsewhere.⁸⁵ Also unlike the attorney-client privilege, work product immunity provides varying levels of protection for different types of work product; mental impressions enjoy stronger protection than factual information.⁸⁶

Like waiver of the attorney-client privilege, work product immunity is waived when the advice of counsel is asserted. This avoids “sword and shield” tactics.⁸⁷ But unlike waiver of the attorney-client privilege, which extends broadly to all communications relating to the same subject matter, waiver of the work product immunity only extends to “factual” or “non-opinion” work product relating to common subject matter.⁸⁸ The line between factual and opinion work product may not be easily discernable, especially when the legal opinion contains the factual basis for the advice of counsel defense.⁸⁹ As a result, courts use discretion to define the extent of the waiver by balancing prevention of sword-and-shield litigation tactics against undermining the purposes of the work product doctrine.⁹⁰

Pre-*Seagate*, defendants considering the advice of counsel defense often faced the “defense’s dilemma.”⁹¹ The dilemma refers to a defendant’s difficult choice between 1) asserting the attorney-client privilege or work product doctrine to defend against *liability*, or 2) waiving these protections by producing advice of counsel in defense against *willfulness*.⁹² As mentioned supra, the attorney-client privilege and work product doctrine are important aspects of the adversarial process and facilitate the effective formation of litigation strategy.⁹³ But the advice of counsel defense may

85. FED. R. CIV. P. 26(b)(3); see also *Echostar*, 448 F.3d at 1302 (“This rule, however, only allows discovery of ‘factual’ or ‘non-opinion’ work product and requires a court to ‘protect against the disclosure of the mental impressions, conclusions, opinions, or legal theories of an attorney or other representative.’”).

86. See FED. R. CIV. P. 26(b)(3).

87. *Echostar*, 448 F.3d at 1302.

88. *Id.*

89. *Id.*

90. *Id.*

91. *Quantum Corp. v. Tandon Corp.*, 940 F.2d 642, 643-44 (Fed. Cir. 1991). The defense’s dilemma is sometimes called the “Quantum Dilemma,” which refers to the *Quantum* case, or a “Hobson’s choice,” which was the term used by Seagate’s counsel. Brief of Petitioner at 17, *In re Seagate*, No. 06-830 (Fed. Cir. Sep. 29, 2007). See also Leary, *supra* note 64, at 275-76.

92. *Quantum*, 940 F.2d at 643-44; see also Brief of the Petitioner, *supra* note 91, at 16-17 (“The Court’s Orders force Seagate to choose between reliance on advice of opinion counsel as a defense to willfulness and assistance of its trial counsel. This is an unacceptable choice . . .”).

93. See *supra* notes 70, 80-84 and accompanying text.

be crucial to defending against willfulness and enhanced damages.⁹⁴ Therefore, disclosing advice of counsel that helps defend against willfulness may hurt a defense against infringement. Conversely, opting to not disclose the advice of counsel may help defend against infringement (by maintaining the attorney-client privilege and work product immunity intact) but hurt the defense to willfulness. To relieve such concerns, the Federal Circuit has advised courts to use in camera review or bifurcated trials.⁹⁵ Unfortunately, these methods can be costly and onerous to courts and parties.⁹⁶

In *In re Echostar*, the accused infringer petitioned for a writ of mandamus after the district court held that the advice of counsel defense waived the attorney-client privilege and work product immunity with regard to advice of *any* counsel relating to infringement.⁹⁷ The Federal Circuit held that the district court abused its discretion by defining such a broad scope and limited the waiver to exclude work product that was not communicated to the accused infringer (or reflected such a communication).⁹⁸ Even though the Federal Circuit limited the district court's scope of waiver, language in *Echostar* nevertheless provided support for extremely broad waivers, which in some cases extended to trial counsel.⁹⁹

Waivers that extend to trial counsel are detrimental to the adversarial system.¹⁰⁰ In order to best serve the client's interests, a lawyer must be able to prepare for trial without concern of the peering eye of his or her adversary.¹⁰¹ Although a waiver is sometimes justified as being necessary to ascertain the truth, "[i]n most cases, the demands of our adversarial system of justice will far outweigh any benefits of extending waiver to trial counsel."¹⁰²

94. *See supra* text accompanying note 60.

95. *Seagate*, 497 F.3d at 1369.

96. *Id.*

97. *In re Echostar Commc'ns Corp.*, 448 F.3d 1294, 1297 (Fed. Cir. 2006).

98. *Id.* at 1305.

99. *Id.* at 1304 ("[W]hen an alleged infringer asserts its advice-of-counsel defense regarding willful infringement of a particular patent, it waives its immunity for any document or opinion that embodies or discusses a communication to or from it concerning whether that patent is valid, enforceable, and infringed by the accused."); *Seagate*, 497 F.3d at 1372-73.

100. *See Hickman v. Taylor*, 329 U.S. 495, 510 (1947) ("[I]t is essential that a lawyer work with a certain degree of privacy, free from unnecessary intrusion by opposing parties and their counsel.").

101. *Id.* at 511.

102. *Seagate*, 497 F.3d at 1373.

II. SEAGATE CASE SUMMARY

A. Background

Convolve, Inc. and the Massachusetts Institute of Technology (collectively “Convolve”) sued Seagate Technology LLC (“Seagate”) for patent infringement on three patents relating to optimizing dynamics in hard drives.¹⁰³ Prior to the lawsuit, Seagate retained counsel to produce a written opinion concerning Convolve’s patents.¹⁰⁴ Seagate’s opinion counsel ultimately produced three written opinions and Seagate received all three opinions after the suit was filed.¹⁰⁵ For trial, Seagate retained separate trial counsel which at all times operated separately and independently of its opinion counsel.¹⁰⁶

During discovery, Seagate notified Convolve of its intention to use the opinion as a defense to willfulness.¹⁰⁷ Convolve in turn moved to compel discovery of any communications and work product concerning the subject matter of the opinion, including infringement, validity and enforceability.¹⁰⁸ Furthermore, Convolve sought this information from all counsel, including trial counsel.¹⁰⁹ The district court granted the motion and held that the waiver lasted from the time Seagate first learned of the patents until the time the alleged infringement ceased.¹¹⁰ After unsuccessful motions for a stay and certification of an interlocutory appeal, Seagate petitioned the Federal Circuit for a writ of mandamus.¹¹¹

Although Seagate’s petition dealt solely with the district court’s discovery orders, the Federal Circuit “recognize[ed] the functional relationship between [its] willfulness jurisprudence and the practical dilemmas faced in the areas of attorney-client privilege and work product protection[.]”¹¹² Therefore, the court *sua sponte* ordered *en banc* review of the petition and presented three issues: (1) whether a party’s assertion of the advice of counsel defense to willful infringement should extend waiver of the attorney-client privilege to communications with that party’s trial counsel; (2) the effect of any such waiver on work-product immunity; and

103. *Id.* at 1366. The patents at issue were U.S. Patents 4,916,635; 5,638,267; and 6,314,473. *Id.*

104. *Id.*

105. *Id.*

106. *Id.*

107. *Id.*

108. *Id.*

109. *Id.*

110. *Id.* at 1367.

111. *Id.*

112. *Id.*

(3) whether the court should reconsider the decision in *Underwater Devices* and the duty of care standard itself.¹¹³

B. The *En Banc* Decision

1. *New Willfulness Standard: Objective Recklessness*

In *Seagate*, the Federal Circuit sitting *en banc* held that proof of willful infringement, which permits the granting of enhanced damages, requires at least a finding of objective recklessness.¹¹⁴ The court also overruled *Underwater Devices* and explicitly abolished the affirmative duty of due care for potential infringers upon actual notice of another's patent rights.¹¹⁵ The Federal Circuit promulgated its new willfulness standard because the previous standard "fail[ed] to comport with the general understanding of willfulness in the civil context . . . and allow[ed] for punitive damages in a manner inconsistent with Supreme Court precedent[.]"¹¹⁶ Without explaining why the new standard is better suited to achieving the goals of enhanced damages for patent infringement, the court simply noted that the new standard is more consistent with other areas of the law.¹¹⁷

A patentee must establish two elements to prove willful infringement under the new objective recklessness standard. First, the "patentee must show by clear and convincing evidence that the infringer acted despite an objectively high likelihood that its actions constituted infringement of a valid patent."¹¹⁸ Because the standard is objective, "[t]he state of mind of the accused infringer is not relevant to . . . [the] inquiry."¹¹⁹ Second, the patentee must show that the infringer knew or should have been aware of the risk of infringement.¹²⁰

The Federal Circuit acknowledged that the term reckless is not self-defining and left it to future courts to develop the standard.¹²¹ Although the court did not specify factors for determining whether a defendant was reckless, it noted that the "standards of commerce" might be relevant.¹²²

113. *See id.*

114. *Id.* at 1371.

115. *Id.* ("[W]e overrule the standard set out in *Underwater Devices* and hold that proof of willful infringement permitting enhanced damages requires at least a showing of objective recklessness.").

116. *Id.*

117. *Id.*

118. *Id.*

119. *Id.*

120. *Id.*

121. *Id.*

122. *Id.* at 1371 n.5. It is unclear if the factors listed in *Read* are overruled. The *Read* factors informed an inquiry under the old willfulness standard and its duty of due care,

The court did not apply the new willfulness standard to Seagate's conduct because the district court had not yet found on infringement, much less willfulness.¹²³

2. *Waiver Generally Does Not Extend to Trial Counsel*

The *Seagate* court also ruled that the scope of a waiver of the attorney-client privilege associated with the advice of counsel defense generally does not extend to trial counsel.¹²⁴ The court gave three reasons for this: (1) opinion counsel and trial counsel serve two separate roles; (2) the demands of the adversarial system outweigh the benefit of extending the waiver to trial counsel; and (3) a willfulness inquiry should focus on prelitigation conduct.¹²⁵

First, the Federal Circuit noted that opinion counsel and trial counsel serve separate and distinct roles.¹²⁶ Thus, it is unfair to require a defendant to waive communications with trial counsel because of reliance on advice from opinion counsel.¹²⁷ Second, the *en banc* court explained that the adversarial process would suffer if trial counsel's thoughts could be discovered by the opposing party, stating that "[i]n most cases, the demands of our adversarial system of justice will far outweigh any benefits of extending waiver to trial counsel."¹²⁸

Finally, the Federal Circuit noted that the attorney-client privilege waiver should not extend to trial counsel because trial counsel is usually not involved with a defendant's prelitigation conduct.¹²⁹ Willfulness must be pleaded in good faith in the original complaint, and its determination is ordinarily based solely on the accused infringer's prelitigation conduct.¹³⁰ Although willful conduct can continue after a complaint is filed, the court reasoned that a preliminary injunction generally provides an adequate remedy for post-filing infringement. Thus, a patentee who does not argue for an injunction should not be allowed to accrue enhanced damages.¹³¹ Further, the court posited that if a patentee fails to secure a preliminary

but the court was silent on whether they should serve any purpose under the new standard. *See id.* at 1371-72.

123. *Id.* at 1371.

124. *Id.* at 1374.

125. *Id.* at 1373-74.

126. *Id.* at 1373.

127. *Id.*

128. *Id.*

129. *Id.* at 1374.

130. *Id.* (citing FED. R. CIV. P. 8, 11(b)).

131. *Id.*

injunction, the patentee will probably fail to establish willfulness.¹³² However, if a preliminary injunction is denied for reasons not related to a patentee's likelihood of success on the merits, a court must determine, on a case-by-case basis, whether to sustain a willfulness claim based solely on post-litigation conduct.¹³³

The *Seagate* court also held that waiver of work product immunity does not generally extend to trial counsel, like waiver of the attorney-client privilege.¹³⁴ The court explained that the same rationales apply "with even greater force . . . because of the nature of the work product doctrine."¹³⁵ The work product doctrine promotes an efficient adversarial system.¹³⁶ However, as with the attorney-client privilege waiver, under special circumstances district courts may extend the work product waiver to trial counsel.¹³⁷

III. IMPLICATIONS OF *SEAGATE*

A. The New Willfulness Standard

The elimination of the *Underwater Devices* duty of care is a significant change in patent law—the duty was part of Federal Circuit precedent for over twenty years and was recently re-affirmed.¹³⁸ Although the *Seagate* court promulgated a new objective recklessness standard, future litigation is left to define the contours of the new willfulness standard.

The objective recklessness standard for willful infringement is more consistent with Supreme Court precedent in other civil contexts.¹³⁹ The previous standard resulted in findings of willfulness for acts of infringement inconsistent with the egregious conduct typically associated with punitive damages.¹⁴⁰ Further, because there is no longer a duty of due care,

132. *Id.*

133. *Id.*

134. *Id.* at 1376.

135. *Id.* at 1375.

136. *Id.*

137. *Id.* at 1376 ("Again, we leave open the possibility that situations may arise in which waiver may be extended to trial counsel, such as if a party or his counsel engages in chicanery.").

138. *Knorr-Bremse Sys. Fuer Nutzfahrzeuge Gmbh v. Dana Corp.*, 383 F.2d 1337, 1343-44 (Fed. Cir. 2004).

139. *See, e.g., Safeco Ins. Co. of Am. v. Burr*, 127 S. Ct. 2201 (2007) (defining willfulness in Fair Credit Reporting Act context); *McLaughlin v. Richland Shoe Co.*, 486 U.S. 128 (1988) (defining willfulness in Fair Labor Standards Act context).

140. *See Seagate*, 497 F.3d at 1371 ("This standard . . . allows for punitive damages in a manner inconsistent with Supreme Court precedent[.]"); *Richland Shoe*, 486 U.S. at

the burden of proof for the willfulness inquiry is no longer effectively put on the infringer.¹⁴¹

The new two-part standard allows courts to punish and deter culpable conduct but maintains fairness for non-willful infringers. The first part of the test requires that the infringer have acted despite an objectively high likelihood of infringement, thus moving the focus from the infringer's state of mind to the infringer's acts alone.¹⁴² As of *Seagate*, an infringer is willful only if his acts were reckless, regardless of his state of mind.¹⁴³

The second prong of the test examines whether the infringer had the required intent to justify enhanced damages.¹⁴⁴ Because enhanced damages are mainly punitive, an infringing party should be punished only if it knew (or should have known) that its actions were reckless.¹⁴⁵ However, the *Seagate* willfulness standard may result in a situation where an infringing party knew it was infringing yet was not willful because its actions were not objectively reckless.¹⁴⁶ For example, such a situation could arise when questions of either validity or infringement present a truly close case.¹⁴⁷ In a close case, the likelihood of enhanced damages decreases and

133 (“The word ‘willful’ . . . is generally understood to refer to conduct that is not merely negligent.”).

141. *See Knorr-Bremse*, 383 F.3d at 1349 (Dyk, J., dissenting) (“But a potential infringer’s mere failure to engage in due care is not itself reprehensible conduct. To hold that it is effectively shifts the burden of proof on the issue of willfulness from the patentee to the infringer, which must show that its infringement is not willful by showing that it exercised due care.”).

142. *See Seagate*, 497 F.3d at 1371 (“The state of mind of the accused infringer is not relevant to this objective inquiry.”).

143. An analogy might help clarify the importance of the independent objective inquiry. If a driver knowingly drives a car at 56 miles per hour in a 55 zone, he is violating the speed limit (infringement), but his actions do not rise to the level of recklessness (no willfulness). However, if the driver was driving at 56 mph but thought he was driving through a 20 mph zone, he may have been subjectively reckless, but his actions were not objectively reckless. Under the old willfulness standard, the driver in the latter situation would probably have been willful because he: 1) violated the speed limit (infringed the patent), and 2) did not have a reasonable basis for thinking that he had a right to do what he did. Under the new standard the driver would fail the first prong and avoid willfulness altogether.

144. *See, e.g., Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1250 (Fed. Cir. 1989) (“Willfulness of behavior is a classical jury question of intent.”).

145. *See supra* text accompanying notes 19 & 20.

146. For example, an infringer who deliberately copied a patent would satisfy the second prong of the test. However, if at trial there are serious doubts as to the validity of the patent and, hence, there was not an *objectively high likelihood* of infringement, the infringer would fail to satisfy the first prong of the test. Therefore, an infringer may knowingly infringe a patent without willfully infringing.

147. *See infra* note 170 and accompanying text.

therefore the risk of infringement decreases. A potential benefit of a decreased risk for close cases is that potential infringers may be more likely to practice questionable patents, which may not deserve patent protection. However, the validity of patents and issues of infringement are often unpredictable before litigation.

The objective standard for willfulness presents a higher bar than the previous negligence-like standard and should result in fewer findings of willfulness. However, the new standard's effect on enhanced damage awards is not so clear. Under the old standard, not all willful infringers were required to pay enhanced damages.¹⁴⁸ Therefore, assuming that egregious infringers would be found willful under both the old and new willful standards, the number of enhanced damage awards may remain substantially unaffected by the new standard.

Because *Seagate's* willfulness inquiry focuses on prelitigation conduct, defendants are less likely to obtain legal opinions for post-filing conduct. Although the cost of an opinion would be dwarfed by the high cost of patent litigation,¹⁴⁹ post-filing opinions would probably be of little use in most patent infringement defenses.¹⁵⁰ However, if a court denies an injunction, a post-filing opinion may be useful.¹⁵¹ In that case, the injunction would not be available to provide an adequate remedy for post-filing willful infringement and a legal opinion could help disprove willful infringement after litigation commences.¹⁵²

Another result of *Seagate's* new willfulness standard is that patentees who fail to move for preliminary injunction may forfeit their right to enhanced damages for post-filing willful infringement.¹⁵³ The Federal Circuit held that a patentee who does not attempt to get a preliminary injunction "should not be allowed to accrue enhanced damages based *solely* on the infringer's post-filing conduct."¹⁵⁴ At first glance, it appears that the court might allow a patentee to accrue enhanced damages post-filing as long as the willful conduct began *before* the complaint was filed. The court reasoned, however, that a preliminary injunction generally provides

148. See *supra* notes 28-29 and accompanying text.

149. See, e.g., Thomas Banks, *A Few Tips to Help Ensure a Win in Patent Litigation*, BOSTON BUS. J., June 2, 2006, available at <http://www.bizjournals.com/boston/stories/2006/06/05/focus2.html>. Cost of litigation through trial can exceed \$5 million when more than \$25 million is at stake. *Id.* See also *supra* note 64 and accompanying text.

150. See *supra* note 131 and accompanying text.

151. For example, a court might deny an injunction to prevent manifest injustice.

152. See *supra* text accompanying note 133.

153. *Seagate*, 497 F.3d at 1374.

154. *Id.* (emphasis added).

adequate remedy for post-filing willful infringement.¹⁵⁵ As a result, there seems little reason to distinguish between cases where the willful infringement began before or after the complaint.¹⁵⁶ Patentees who do not move for a preliminary injunction are likely precluded from receiving enhanced damages for post-filing willful infringement, regardless of when the infringement started.

Finally, *Seagate* may affect the average settlement amount in future cases. Post-*Seagate*, preliminary injunctions are a patentee's main source of remedy for post-filing infringement. However, preliminary injunctions in patent cases are likely more difficult to obtain after the Supreme Court's decision in *eBay*.¹⁵⁷ The combined effect of *Seagate* and *eBay* may be a reduction in the average expected value of patent infringement cases and a concomitant reduction in the average cost of settlement.

B. The Well Defined, Narrower Scope of Waiver

The newly defined scope of waiver resulting from the advice of counsel defense brings certainty to patent litigation because the waiver rarely extends to trial counsel.¹⁵⁸ This rule is clear and easy to apply, thus benefiting future defendants who assert the defense. Trial counsel is also more able to communicate with clients without fear of having to share information with the opposing side. Consequently, the goals of the attorney-client privilege and work product immunity are furthered by this more defined—and narrower—scope of waiver.

Because waivers will not generally extend to trial counsel, defendants no longer face the defense's dilemma.¹⁵⁹ Defendants will not be forced to choose between the advice of counsel defense and the attorney-client privilege—they can have both. Although the new scope of waiver is clearly an advantage to most patent infringement defendants, the full extent of the benefit is yet unclear. Future cases will show whether the defendants are more likely to use the advice of counsel defense because they no longer face the possibility of waiving the attorney-client privilege and work product doctrine with respect to trial counsel. One possible limitation to *Seagate*'s new scope of waiver standard is that the waiver may ex-

155. See *supra* text accompanying note 131.

156. See *Seagate*, 497 F.3d at 1374. An example of willful infringement that begins only after the complaint is filed is a situation where the complaint itself provides the infringer with notice of the patentee's rights.

157. See *eBay Inc. v. MercExchange, L.L.C.*, 547 U.S. 388 (2006).

158. See *supra* Section II.B.2.

159. Under exceptional circumstances, such as when a defendant engages in chicanery, a court may extend the waiver to trial counsel and, therefore, the defendant could face the defense's dilemma. *Supra* note 137 and accompanying text.

tend to trial counsel if opinion counsel and trial counsel do not operate separately and independently. However, most defendants already obtain separate opinion counsel and trial counsel and this limitation should have little impact in practice.

In contrast, plaintiffs now have less access to trial defense information related to the advice of counsel defense, which may make it more difficult for patentees to prove liability as well as willfulness.¹⁶⁰ However, any benefit to a patentee's case on infringement liability gleaned from the defendant's trial counsel is probably an unfair advantage. Waiver of the attorney-client privilege and work product immunity is necessary with respect to opinion counsel but not for trial counsel.¹⁶¹ Although *Seagate* unilaterally benefits defendants, it does so by presumably making patent litigation fairer.

IV. UNRESOLVED ISSUES AND SUGGESTIONS

As with any new and undeveloped legal standard, the Federal Circuit's *Seagate* decision leaves many issues unresolved. This Part presents three such issues and provides suggestions on how they might be resolved in the future.

A. What Does "Objectively Reckless" Signify for Patent Law?

In other areas of law, such as in copyright law and the FCRA context, the meaning of recklessness is well established.¹⁶² However, there is no settled meaning for recklessness in patent law. Rather, *Seagate* explicitly "[left] it to future cases to further develop the application of this standard."¹⁶³ Is an infringer who did not obtain an opinion objectively reckless? Can an infringer who obtained a detailed exculpatory opinion from highly regarded IP counsel be held liable for "act[ing] despite an objectively high likelihood that its actions constituted infringement"?¹⁶⁴ Does an unsuccessful attempt to design around a patent automatically satisfy the second prong (knew or should have known)? Does a charge letter always satisfy the second prong? These and many other questions remain.

160. Moore, *supra* note 42, at 232-33 (Patentee's allege willfulness, in part, because "piercing the attorney—client privilege in order to gain access to the opinions the infringer relied upon provides the patentee significant insight into the infringer's substantive defenses early in the litigation process.").

161. *See supra* notes 124 & 134 and accompanying text.

162. *See supra* Section II.B.2.

163. *Seagate*, 497 F.3d at 1371.

164. *Id.*

Although the *Read* factors were developed under the old willfulness standard, they shed light on both prongs of the new standard—the objectively high likelihood of infringement and the accused infringer’s knowledge of infringement.¹⁶⁵ Thus, courts should look to past application of the *Read* factors for future guidance. Some of these factors apply to the first prong of the *Seagate* willfulness standard while others are more applicable for the second prong. As shown in the chart below, the fact finder might consider a combination of the factors for each prong.

	Prong 1 of <i>Seagate</i> — Objectively high likelihood	Prong 2 of <i>Seagate</i> — Knew or should have known
Factor 1 Deliberate copying	✓	✓
Factor 2 Investigation of scope	✓	✓
Factor 3 Behavior in litigation		
Factor 4 Defendant’s size and resources		✓
Factor 5 Closeness of the case	✓	
Factor 6 Duration of misconduct		✓
Factor 7 Defendant’s remedial action	✓	✓
Factor 8 Defendant’s motivation for harm		
Factor 9 Defendant attempted to conceal		✓

In evaluating willfulness, it is important to keep in mind that the patent is determined valid and infringed before the *Read* factors are applied. These considerations only help determine whether the infringer’s conduct warrants punitive damages.

165. *See supra* note 30.

Factor 1, whether the defendant deliberately copied, serves both prongs. It helps establish the objective prong because deliberate copying generally suggests an objectively high likelihood of infringement. This factor also helps establish the second prong because an infringer that deliberately copied probably knew or should have known of the infringement. Of course, it is possible that an infringer deliberately copied an invention believing it had a right to copy.¹⁶⁶ In such a case, the outcome of Factor 1 may depend on the reasonableness of the infringer's belief.

Factor 2 also applies to both prongs of the standard. A legal opinion may help determine if there is an objectively high likelihood of infringement. It could shed light on possible weaknesses in the patent or provide reasons why the patent may not have been infringed. Of course, most opinions will have similar conclusions and it would be up to the fact finder to determine the reliability of such information.¹⁶⁷ Also, because the first prong is determined from the record developed at trial¹⁶⁸ the finder of fact may have access to more objective sources than an opinion commissioned by the defense. However, if the first prong is established, a legal opinion may also help establish the second prong. An opinion may help convince the finder of fact that the infringing party did not believe it was infringing.

Factor 3, the defendant's behavior in litigation, is mostly irrelevant because the willfulness inquiry should, in most cases, focus on prelitigation conduct.¹⁶⁹ Therefore, the infringer's behavior as part of the litigation should not weigh into the willfulness inquiry.

Factor 4, which considers the size and financial condition of the infringer, can serve to establish the second prong. A court may reasonably presume that a large corporation with a large budget (and perhaps a team of intellectual property lawyers) is more likely to know of its potential infringement than a small company without such resources. A presumption based on size and financial condition also makes sense from a policy perspective to encourage large corporations with legal resources to use those resources to avoid infringement.

Factor 5, the closeness of the case, is important in determining the first prong. It is hard to imagine that a truly close case on infringement, enforceability or validity could result in an objectively high likelihood of infringement. For example, the U.S. District Court for the Eastern District

166. For example, the accused party may have: 1) obtained an opinion that the patent is almost certainly invalid, 2) not known about the patent, or 3) thought it had obtained permission to practice the invention (e.g., a license).

167. *See supra* note 52 and accompanying text.

168. *Seagate*, 497 F.3d at 1371.

169. *See supra* note 130 and accompanying text.

of Texas overturned a jury finding of willfulness because the issue of infringement “was, at best, a very close question.”¹⁷⁰ A close case should fail the first prong because, by definition, there is not an objectively high likelihood of infringement.

Difference in time between the infringer’s conduct and the willfulness inquiry poses a possible difficulty in applying Factor 5. Willfulness generally focuses on the infringer’s conduct at the time of infringement, whereas infringement, enforcement, and validity are determined at trial. It is possible that newly discovered prior art or other evidence may only affect the closeness of a case at trial, long after infringement has occurred. For example, if a court determines *at trial* that the issue of validity presents a close case, an infringer probably fails to satisfy the first prong of the willfulness inquiry, regardless of what the infringer thought about the validity of the patent at the time of infringement. Although using the benefit of hindsight results in a fairer outcome *ex post*, it does little for deterring future infringement (*ex ante*). A potential infringer can only speculate the outcome of an infringement trial and therefore cannot tailor its conduct accordingly.

An interesting aspect of Factor 5 is that, presumably, all patent cases that make it through trial are close cases in some respect (infringement, validity or enforceability). Patent infringement suits can cost several million dollars¹⁷¹ and few, if any, litigants will see a trial through to verdict if there is little chance of success. A district court judge can plausibly always find a close case and therefore such a finding would probably survive an abuse of discretion review. Thus, Factor 5 may have the largest affect on the willfulness doctrine in future cases by giving district courts wide latitude in deciding when *not* to enhance damages.

Factor 6 looks at the duration of a defendant’s misconduct and can help determine the second prong of the willfulness inquiry. If infringement took place over a long period of time, a finder of fact might reasonably infer a higher likelihood that the infringer knew or should have known of the infringement.

170. TGIP, Inc. v. AT&T Corp., No. 2:06-CV-105, 2007 U.S. Dist. LEXIS 79919, at *37 (E.D. Tex. Oct. 29, 2007). It is not clear from the opinion whether the closeness of the case was used to determine the first or the second prong because the two are not discussed separately. The opinion simply states: “[r]easonable persons, properly instructed and exercising impartial judgment, could not find by clear and convincing evidence that AT&T acted in the face of an unjustifiably high risk of harm that was either known, or so obvious that it should have been known.” *Id.*

171. See *supra* note 149.

Factor 7, the remedial action of the defendant, might contribute to both prongs of the willfulness inquiry. Remedial actions may weigh on the first prong because an infringing party might attempt to design around a patent. If the defendant determined that the expense of a design around was warranted there was at least a *subjectively* high likely of infringement. A fact finder may then determine whether the subjectively held belief was objectively reasonable. Factor 7 may also help establish the second prong of the inquiry. If an infringer attempted to design around a patent, he or she knew of the risk of infringement. However, even after an unsuccessful design-around effort, it is possible that the infringer reasonably believed the infringement was cured. On the whole, the patent system benefits from design around attempts because they can lead to innovation.¹⁷² Therefore, although a design around effort may shed light on the defendant's knowledge, courts should be careful to not provide disincentives for attempts at designing around others' patents.

Factor 8, the defendant's motivation for harm, may be relevant for determining whether and by what amount to enhance damages, but will probably not aid in the willfulness inquiry. In *American Safety Table Co. v. Schreiber*, the original source of Factor 8 as described in *Read*, the court held that economic pressure to practice the patented invention was a mitigating factor in determining the perniciousness of the defendant's conduct.¹⁷³ Although knowledge may be inferred from motivation, the motivation for harm is best used to determine the culpability once willfulness has been established.

Finally, Factor 9 asks whether the infringer attempted to conceal his misconduct. This query can help establish the second prong of the willfulness inquiry. A court may reasonably infer knowledge of wrongdoing from attempts to conceal infringement.

Although the standard for willfulness has changed, some of the factors that courts have used in the past may continue to be helpful in a willfulness inquiry.¹⁷⁴ These factors have been proven in litigation and could

172. *See, e.g.*, *State Indus. v. A. O. Smith Corp.*, 751 F.2d 1226, 1236 (Fed. Cir. 1985) ("One of the benefits of a patent system is its so-called 'negative incentive' to 'design around' a competitor's products, even when they are patented, thus bringing a steady flow of innovations to the marketplace. It should not be discouraged by punitive damage awards except in cases where conduct is so obnoxious as clearly to call for them.").

173. 415 F.2d 373, 379 (2d Cir. 1969) ("[D]efendants' infringing acts, although deliberate and with knowledge of plaintiff's rights, could not be termed pernicious due to prevailing 'economic pressure in the form of customer dissatisfaction.'").

174. *See supra* note 122.

help avoid unpredictable or undesirable results while still effectuating the goals of the new standard.

B. What Role Will Advice of Counsel Play in Future Litigation?

Under the pre-*Seagate* willfulness standard, an accused infringer's reliance on favorable advice of counsel was crucial to the willfulness analysis.¹⁷⁵ Under the new standard, however, the role opinion of counsel is not clear. A favorable opinion will likely help establish whether the second prong of the willfulness inquiry—whether the infringer knew or should have known of the high likelihood of infringement. Nevertheless, the importance of an opinion letter in analyzing the first prong is less certain.

Courts may ascribe opinions of counsel varying evidentiary weight with regard to the objectively high likelihood of infringement for at least two reasons. First, opinions are most often obtained prior to litigation and thus before a district court has construed the claims at issue. Opinion counsel conclusions about likelihood of infringement may be somewhat suspect. Second, opinions typically conclude that the patent is invalid, unenforceable, and/or not infringed.¹⁷⁶ Thus, in determining the objective likelihood of infringement, courts may decline to consider evidence with such predictable conclusions.

Opinions obtained after litigation commences will be of little use for either prong.¹⁷⁷ The *Seagate* court stated that a willfulness inquiry should generally focus on prelitigation conduct because a preliminary injunction provides adequate remedy for post-filing infringement.¹⁷⁸ A defendant who successfully avoids a preliminary injunction will likely avoid enhanced damages. Nevertheless, defendants may continue to commission post-filing opinions when the relative costs of opinions and litigation are considered.¹⁷⁹

C. How Does a Patentee Establish a Good-Faith Basis for Alleging Willful Infringement?

Seagate established that the attorney-client privilege waiver and work product doctrine waiver do not extend to trial counsel in part because a patentee must have a good-faith basis for alleging willfulness at the time the complaint is filed.¹⁸⁰ Thus, willfulness focuses on prelitigation con-

175. *Seagate*, 497 F.3d at 1369.

176. *Id.*

177. *See supra* note 150 and accompanying text.

178. *See supra* Section III.A.

179. *See supra* note 149 and accompanying text.

180. *See supra* note 130 and accompanying text.

duct.¹⁸¹ The court cited Federal Rule of Civil Procedure 11(b), which requires every allegation in the complaint to be supported by evidence or, if specifically so identified, likely to be supported after reasonable discovery.¹⁸² Currently, over 90% of patentees allege willfulness.¹⁸³ After the *Seagate* court's reminder of Rule 11's good-faith requirement, courts in the future might scrutinize willfulness allegations more closely.¹⁸⁴

However, in a notice pleading system, it is difficult to imagine what type of evidence a court could require a patentee to produce to show a belief of willful infringement held in good faith.¹⁸⁵ One possibility is an offensive opinion letter. A *patentee* could commission independent legal counsel to evaluate the patent at issue and compare it to the allegedly infringing product or activity. Although the offensive opinion letter would have little to no probative value for the issues at trial, a patentee would have evidence of a good faith belief that its patent was willfully infringed. However, this tactic could be technology specific because predicting the likelihood of infringement prior to discovery is easier with certain types of technology than others. For example, an available mechanical system should be easier to examine for infringement than software, where only object code is available for evaluation prior to trial.

V. CONCLUSION

By eliminating the affirmative duty of due care and imposing an objective recklessness standard, *Seagate* creates a clean slate for future litigants and courts to develop a new willfulness doctrine. Given that the Supreme Court has denied *certiorari*,¹⁸⁶ litigants and courts can expect little additional guidance in the near future. Despite many unanswered questions that courts will address in the future, the newly defined scopes of waivers add needed certainty to patent litigation. The narrower scopes of waivers also help protect the attorney-client privilege and the work product doctrine, both of which are essential to our adversarial judicial system.

The *Underwater Devices* affirmative duty tipped the scales in favor of patentees at a time when there was a widespread disregard for patent rights. Since then, however, patent litigation has become more common and the risk of infringement liability has increased substantially. The af-

181. *Id.*

182. FED. R. CIV. P. 11(b).

183. *See supra* note 42 and accompanying text.

184. *See supra* note 130 and accompanying text.

185. *See* FED. R. CIV. P. 8(a)(2) (requiring a "short and plain statement of the claim showing that the pleader is entitled to relief").

186. 2008 U.S. LEXIS 2153 (Feb. 25, 2008).

firmative duty is no longer necessary to ensure that patent rights are properly respected. By eliminating the affirmative duty and making patent law's willfulness doctrine more consistent with Supreme Court precedent, *Seagate* tips the scales back in favor of defendants. Although the exact implications of *Seagate* will be uncertain for several years, *Seagate* is clearly good news for current and future patent infringement defendants.

MICROSOFT CORP. v. AT&T: A WELCOME RETURN TO PATENT LAW'S TRADITION OF TERRITORIALITY

By Sean Fernandes

I. INTRODUCTION

United States patent law stops at U.S. borders—with one exception. That exception, the “extraterritorial” provision codified in 35 U.S.C. § 271(f), imposes liability on domestic suppliers who export components of domestically patented inventions for final assembly abroad.¹ The liability attaches if the manufacturer intends that the components be combined outside the United States, in a manner that would constitute patent infringement if performed within the country.²

In *Microsoft Corp. v. AT&T Corp. (AT&T III)*, 127 S. Ct. 1746 (2007), the Supreme Court overruled a series of Federal Circuit decisions that expansively interpreted § 271(f) by applying it to the export of computer software. While acknowledging that “plausible arguments” supported the Federal Circuit’s position, the Supreme Court used the traditional presumption against extraterritoriality in U.S. patent law to justify a narrower interpretation of the statute.³ The Court did not expand on the history or reasoning behind this presumption, or explicitly consider the underlying policy arguments that may have motivated its decision. Hence, a surface reading of the opinion does not reveal whether the rationales underlying the principle of territoriality apply to the facts of this case, or whether the Court reached the result dictated by good public policy.

This Note attempts to answer these questions by analyzing the Court’s holding in *AT&T III* in light of the history of territoriality in U.S. law. Part II traces the development of the doctrine of territoriality. It explains why the pressures of globalization might favor extraterritorial application of U.S. law and reviews the history of territoriality in patent law. Part III details the rise and fall of extraterritoriality since the passage of § 271(f). It first examines the series of Federal Circuit decisions that broadly construed § 271(f) to expand the extraterritorial reach of U.S. patent law, and then examines the *AT&T III* decision partially reversing those decisions.

© 2008 Sean B. Fernandes.

1. 35 U.S.C. § 271(f) (2000).

2. *Id.*

3. *See id.* at 1758.

Part IV analyzes the arguments presented in *AT&T III*, and the implications of the decision. It reviews the underlying policy considerations to argue the Court reached the correct result. Finally, Part V concludes that *AT&T III* is a welcome return to patent law's tradition of territoriality. Although the decision may not apply territorial principles to the maximum extent possible, it limits expansive readings of §271(f) by the lower courts.

II. TERRITORIALITY IN U.S. PATENT LAW

A. Why Extraterritorial Application Can Be Attractive

Over the past quarter century, intellectual property assets have become a valuable source of competitive advantage and revenue generation for many U.S. businesses. With the decline of U.S. manufacturing prowess, intellectual property assets have displaced physical assets to become major components of corporate balance sheets.⁴ Profits in industries such as motion-picture entertainment or software development derive largely from the protection afforded by intellectual property rights, and violations of these rights can be costly. For example, one industry group estimates that software piracy costs U.S. software makers \$6.89 billion in revenue in 2005.⁵ Private firms and trade organizations have attempted to protect these valuable assets using informational campaigns, public education, litigation, and lobbying.⁶

At the same time, foreign markets have become increasingly important to U.S. corporations. The overseas operations of American multinational corporations are now responsible for a significant percentage of overall U.S. corporate profits.⁷ As a result, American businesses now have a major stake in effective foreign enforcement of intellectual property rights. However, developing countries often have few incentives to enforce these

4. See, e.g., KAMAL IDRIS, INTELLECTUAL PROPERTY — A POWER TOOL FOR ECONOMIC GROWTH 54 (World Intellectual Property Organization 2003) (claiming that between 1982 and 2000, physical assets decreased from 62% to 30% of overall U.S. corporate assets).

5. BUSINESS SOFTWARE ALLIANCE AND INTERNATIONAL DATA CORPORATION, THIRD ANNUAL BSA AND IDC GLOBAL SOFTWARE PIRACY STUDY 8 (2006), available at <http://www.bsa.org/globalstudy/upload/2005%20Piracy%20Study%20-%20Official%20Version.pdf>.

6. *Id.* at 10-11.

7. See, e.g., *Gross Domestic Product & Corporate Profits, 3rd Quarter 2007 Preliminary*, NEWS RELEASE (Bureau of Economic Analysis, U.S. Dep't of Commerce), Nov. 29, 2007, at t.12, <http://www.bea.gov/newsreleases/national/gdp/2007/pdf/gdp307p.pdf> (stating profits from foreign operations in 2006 were \$257.3 billion or 16.56% of overall U.S. corporate profits).

rights.⁸ For example, in the case of computer software, the benefits of strengthened protections accrue to the rights-holders, often U.S. corporations.⁹ Meanwhile, enforcement raises costs for the segment of the developing country's population that rely on access to cheap software and can impose substantial costs on the state.¹⁰

Trade groups have lobbied the U.S. government to take action against countries, such as China, that do not provide the desired level of protection.¹¹ In turn, the U.S. government has sought to strengthen foreign recognition and enforcement of intellectual property rights.¹² The government has pursued this goal through multiple channels, including the negotiation of trade agreements, the undertaking of diplomatic efforts, and WTO dispute settlement processes.¹³

B. The Principle of Territoriality

As an alternative to inducing foreign governments to change their laws or increase enforcement efforts, the United States could enforce its laws abroad.¹⁴ For example, the government could create domestic liability for the foreign infringement of U.S. patents.¹⁵ This option might initially appear attractive. U.S. law is already familiar to the many multinational corporations that originated in America or have a presence in the large U.S. domestic market. In addition, U.S. patent laws are often more protective of

8. See, e.g., Kenneth Shadlen et al., *The Political Economy of Intellectual Property Protection: The Case of Software*, 49 (1) INT'L STUD. Q. 45 (2005).

9. See *id.* at 46 (noting that approximately 75% of packaged software is produced in the United States).

10. One reason is that many countries classify software piracy as a criminal offense, thus requiring expensive state involvement in law enforcement. See *id.*; J. Michael Finger & Philip Schuler, *Implementation of Uruguay Round Commitments: The Development Challenge* (World Bank Trade Group, Working Paper No. 2215, 1999) (claiming that for many developing countries increased intellectual property protections result in net fiscal losses).

11. See, e.g., National Association of Manufacturers, *National Association of Manufacturers' Recommendations on Special 301 Out-of-Cycle Review of China* (2005), http://www.nam.org/s_nam/doc1.asp?CID=164&DID=233159 (recommending that in the absence of a pronounced decrease in counterfeiting in China, the U.S. government should file a dispute settlement case before the World Trade Organization).

12. See generally NAT'L INTEL. PROP. LAW ENFORCEMENT COORDINATION COUNCIL, REPORT TO THE PRESIDENT AND CONGRESS ON COORDINATION OF INTELLECTUAL PROPERTY ENFORCEMENT AND PROTECTION (2006), available at http://www.commerce.gov/opa/press/Secretary_Gutierrez/2006_Releases/September/2006%20IP%20report.pdf.

13. See *id.* at 31-39.

14. Curtis Bradley, *Territorial Intellectual Property Rights in an Age of Globalism*, 37 VA. J. INT'L L. 505, 506 (1997).

15. *Id.*

patentee rights than those of other countries.¹⁶ U.S. law favors the plaintiff, entertains broad discovery, and allows for significant damages upon a finding of infringement.¹⁷

However, enforcement of laws abroad through domestic liability is not widely practiced. The major objection is the principle of territoriality: to avoid clashes between the laws of nations, the law of the territory where protection is sought should govern the conditions of that protection. This principle is found in U.S. law as a canon of statutory interpretation, as a presumption against extraterritoriality.¹⁸ The canon instructs courts to construe ambiguous statutes to have as little extraterritorial effect as possible. Although the Supreme Court has determined that the Constitution gives Congress the power to legislate extraterritorially,¹⁹ the Court has stated that in the absence of clear evidence of contrary legislative intent, courts should construe “legislation of Congress . . . to apply only within the territorial jurisdiction of the United States.”²⁰

Although the boundaries of the doctrine have changed over time, U.S. courts have long applied the principle of territoriality.²¹ Two cases that illustrate the evolution of the doctrine are *United States v. Palmer*²² and *American Banana Co. v. United Fruit Co.*²³ *Palmer*, an opinion by Chief Justice John Marshall, exemplifies the Supreme Court’s reluctance to provide statutes with extraterritorial effect since 1818. The issue in *Palmer* was whether a federal anti-piracy statute applied to a robbery committed by foreign citizens, on a foreign ship sailing in international waters.²⁴ The Court asserted that Article I of the Constitution clearly gives Congress au-

16. *Id.* at 506-07.

17. *See id.* at 507 n.3; *see generally* Geoffrey C. Hazard, Jr., *Discovery and the Role of the Judge in Civil Law Jurisdictions*, 73 NOTRE DAME L. REV. 1017 (1998) [hereinafter Hazard, *Discovery*]; Geoffrey C. Hazard, Jr., *From Whom No Secrets are Hid*, 76 TEX. L. REV. 1665 (1998) [hereinafter Hazard, *Secrets*].

18. *See* *Foley Bros., Inc. v. Filardo*, 336 U.S. 281, 285 (1949) (explaining that the presumption is a valid canon of statutory construction); *McCulloch v. Sociedad Nacional de Marineros de Honduras*, 372 U.S. 10, 20-22 (1963) (explaining that the presumption is intended to prevent unintended clashes with the laws of other nations that could lead to international discord).

19. *See* *Foley Bros.*, 336 U.S. at 284 (citing *Blackmer v. United States*, 284 U.S. 421 (1932)).

20. *EEOC v. Arabian Am. Oil Co.*, 499 U.S. 244, 248 (1991) (quoting *Foley Bros.*, 336 U.S. at 285).

21. *See generally* Bradley, *supra* note 14, at 510-17 (tracing the historical development of the doctrine and analyzing common justifications for territoriality).

22. 16 U.S. (3 Wheat.) 610 (1818).

23. 213 U.S. 347 (1909).

24. *United States v. Palmer*, 16 U.S. (3 Wheat.) 610, 626-27 (1818).

thority to regulate such conduct.²⁵ Hence, the case turned on a question of statutory interpretation: whether Congress had intended the anti-piracy statute to apply in those circumstances.

The plain language of the statute favored a broad interpretation: it did not contain territorial limitations and applied to “any person or persons.”²⁶ However, the Chief Justice interpreted the statute so as not to apply to the conduct in question. He reasoned that Congress might not have intended the statute to reach actions of foreign citizens committed outside U.S. borders because such conduct would already be punishable under the laws of a foreign nation.²⁷ Hence, without explicit direction, the Court could not presume that Congress intended the statute to apply extraterritorially.²⁸ Rather, “no general words of a [federal] statute ought to be construed” to have extraterritorial application over the conduct of foreigners.²⁹

If the principle of territoriality extended only to the acts of foreigners, its application in American courts would be very circumscribed. However, nearly a century after *Palmer, American Banana* expanded the principle of territoriality to encompass the foreign acts of American citizens. There, the Supreme Court held the Sherman Act inapplicable to the acts of American companies in foreign markets because the statute did not explicitly provide for extraterritorial application.³⁰ The Court declared that, “in case of doubt,” courts should confine a statute’s operational effect “to the territorial limits over which the lawmaker has general and legitimate power.”³¹ Consequently, courts should construe statutes to apply only within U.S. territorial borders, even those containing universal provisions such as “every person.”³²

The Court justified this reasoning on two grounds: practicality and comity. First, American courts do not have territorial jurisdiction by default in foreign countries. No power of enforcement is available and the law cannot depend on voluntary submission to jurisdiction.³³ Second, under the then-prevailing choice of law theory for torts, *lex loci delicti*, the classification of any conduct as wrongful must be “determined wholly by

25. *See id.* at 630; U.S. CONST. art. I, § 8, cl. 10 (“Congress shall have Power . . . to define and punish Piracies . . . committed on the high Seas . . .”).

26. *Palmer*, 16 U.S. (3 Wheat.) at 626.

27. *See id.* at 632.

28. *See id.* at 631-32.

29. *Id.* at 632-33.

30. *Am. Banana Co. v. United Fruit Co.*, 213 U.S. 347, 357 (1909).

31. *Id.*

32. *Id.*

33. *See id.* at 356-57.

the law of the country where the act is done.”³⁴ Violating this rule would be tantamount to interference with the authority of another sovereign, and would be contrary to the “comity of nations.”³⁵

Although almost a century has passed since this decision, the underlying rationales for territoriality offered by the *American Banana* court still prevail. International law continues to limit the ability of nations to impose domestic law beyond their own borders.³⁶ Moreover, while *lex loci delicti* is no longer the conflict-of-law rule in most American states,³⁷ comity still advises respect for the sovereignty of other nations and their freedom to create and enforce their own laws. In addition, commentators have pointed out a third rationale that the *American Banana* Court did not make explicit: self-interest.³⁸ After all, no country wishes to discriminate against its own citizens by restricting their behavior abroad.³⁹ The continuing relevance of these rationales may be one reason why the Supreme Court reaffirmed, in its 1991 *Aramco* decision, the presumption against extraterritoriality as a canon of statutory interpretation.⁴⁰

In recent years, commentators have attacked territoriality on the basis that it is no longer relevant in an age of globalization.⁴¹ However, the tradition of applying the principle as a canon of statutory interpretation has survived for two centuries since *Palmer*. Furthermore, *Aramco* and *AT&T III* indicate that the Supreme Court does not agree with critics of territoriality. The doctrine retains its bite.

34. *Id.* at 356.

35. *Id.*

36. See Bradley, *supra* note 14, at 514 nn.39-40.

37. See Symeon C. Symeonides, *Choice of Law in the American Courts in 2006: Twentieth Annual Survey*, 54 AM. J. COMP. L. 697, 712 tbl.1 (2006) (finding only ten states that continue to use *lex loci delicti* as the governing conflict-of-law rule in tort claims).

38. See James Farrand, *Territoriality and Incentives under the Patent Laws: Over-reaching Harms U.S. Economic and Technological Interests*, 21 BERKELEY TECH. L.J. 1215, 1217-18 (2006).

39. See *id.*

40. *EEOC v. Arabian Am. Oil Co.*, 499 U.S. 244, 248 (1991).

41. See generally Gary B. Born, *A Reappraisal of the Extraterritorial Reach of U.S. Law*, 24 LAW & POL'Y INT'L BUS. 1 (1992); Jonathan Turley, “When in Rome”: *Multinational Misconduct and the Presumption Against Extraterritoriality*, 84 NW. U. L. REV. 598 (1990) (arguing that courts should reverse the presumption when constructing statutes). *But see* Bradley, *supra* note 14, at 550-66 (arguing that the presumption is justified on separation-of-powers grounds).

C. Territoriality in Patent Law

The *AT&T III* Court declared that the principle of territoriality applies with particular force to patent law.⁴² Patent law embodies a nation's policy judgments about incentives to spur innovation within its borders.⁴³ Such judgments differ from nation to nation. Hence, comity, the respect for the freedom of other nations to create their own laws, is especially applicable to the realm of patent law.

Territorial principles have limited the scope of infringement liability in U.S. patent law from the time Congress enacted the first Patent Act in 1790.⁴⁴ The 1790 Act limited infringement to prohibited conduct that occurs "within these United States."⁴⁵ The Act thus drew an important distinction between foreign and domestic conduct. This distinction resurfaces in later statutes and decisions, including *AT&T III*.⁴⁶

The Supreme Court first explicitly restricted the territorial scope of a U.S. patent in *Brown v. Duchesne*, an 1856 decision by Chief Justice Roger Taney.⁴⁷ Like *AT&T III*, *Duchesne* turned on a distinction between the domestic and foreign supply of an infringing device.⁴⁸ The issue in *Duchesne* was whether the unauthorized presence of a U.S.-patented nautical device on board a foreign vessel docked in Boston gave rise to infringement liability.⁴⁹ There were two potential sources of infringement liability: from use of the device while in international waters; or from use of the device within U.S. territorial boundaries, while the vessel was entering or leaving American waters.⁵⁰ The *Duchesne* Court rejected both sources of liability and found no infringement.⁵¹ It reasoned that use of the device at sea did not constitute patent infringement because patent rights

42. Microsoft Corp. v. AT&T Corp. (*AT&T III*), 127 S. Ct. 1746, 1758 (2007).

43. *Id.*

44. Patent Act of 1790, Ch. 7, § 4, 1 Stat. 109, 111 (1790).

45. *Id.*

46. See, e.g., 35 U.S.C. § 271(f)(1) ("Whoever without authority supplies or causes to be supplied *in or from the United States*. . .") (emphasis added); *AT&T III*, 127 S. Ct. at 1751 (holding that Microsoft could not be liable for infringement under § 271(f) because it did not "supply" components from *within* the United States).

47. *Brown v. Duchesne*, 60 U.S. (19 How.) 183 (1856).

48. Compare *Duchesne*, 60 U.S. (19 How.) at 193-94, 198-99 (infringing device is sailing-vessel gaff; no infringement because device was supplied abroad) with *AT&T III*, 127 S. Ct. at 1750, 1757-58 (infringing device is computer running Microsoft Windows; no infringement because components were supplied abroad).

49. *Duchesne*, 60 U.S. (19 How.) at 194.

50. *Id.* at 196.

51. *Id.* at 198-99.

do not operate beyond the borders of the United States.⁵² The Court also carved out an exception for potentially infringing use on the vessel while entering or leaving American waters, based on foreign policy concerns.⁵³ It found no infringement where defendant placed the device on the vessel “in a foreign port”—i.e., when the device was not supplied domestically.⁵⁴

Half a century after *Duchesne*, the Supreme Court again refused to give extraterritorial effect to U.S. patents in *Dowagiac Manufacturing Co. v. Minnesota Moline Plow Co.*⁵⁵ The defendant in *Dowegiac* purchased infringing devices in the United States and later resold them in the United States and Canada.⁵⁶ The act of purchasing did not constitute patent infringement.⁵⁷ However, the patentee wished to recover damages for the defendant’s subsequent sales of infringing devices in the United States and Canada. The Court found the defendant liable for U.S. but not Canadian sales.⁵⁸ Although selling an infringing device in the United States was illegal and triggered infringement, patent law did not prohibit sales abroad.⁵⁹ As the Court explained, “[t]he right conferred by a patent under our law is confined to the United States and its Territories and infringement of this right cannot be predicated of acts wholly done in a foreign country.”⁶⁰ Because the Canadian sales took place outside the territorial boundaries of the United States, the Court refused to find liability under U.S. patent laws.

Commentator Donald Chisum notes that, unlike copyright and trademark law, patent law’s territoriality is found in the express language of the statute.⁶¹ Copyright law does not invoke or explicitly define territoriality.⁶² Trademark law applies to uses “in commerce,” which extends to “all commerce which may lawfully be regulated by Congress.”⁶³ In contrast, the statute defining the grant of rights to a patentee, 35 U.S.C. § 154(a)(1),

52. *Id.* at 195-96.

53. *Id.* at 198 (reasoning that patentees cannot interfere with the right of Congress to regulate commerce with foreign nations).

54. *Id.* at 198-99.

55. *Dowagiac Mfg. Co. v. Minnesota Moline Plow Co.*, 235 U.S. 641 (1915).

56. *Id.* at 642-44.

57. *Id.*

58. *Id.* at 650.

59. *Id.*

60. *Id.*

61. Donald S. Chisum, *Normative and Empirical Territoriality in Intellectual Property: Lessons from Patent Law*, 37 VA. J. INT’L L. 603, 605 (1997).

62. See 17 U.S.C. § 101 (2000).

63. 15 U.S.C. §§ 1125-1127 (2000).

explicitly makes patent rights territorial in nature.⁶⁴ The rights conferred by a patent—to exclude others from making, using, selling, offering for sale or importing the invention—are explicitly limited to the United States, its territories and possessions.⁶⁵

D. *Deepsouth* and the Enactment of § 271(f)

Although patent law includes a general presumption against extraterritoriality, § 271(f) of the current Patent Act is aimed at extraterritorial conduct.⁶⁶ Congress enacted the statute in response⁶⁷ to the Supreme Court's application of territoriality in *Deepsouth Packing Co. v. Laitram Corp.*⁶⁸

1. *The Deepsouth Case*

Laitram, the plaintiff in *Deepsouth*, held U.S. patents for a machine used to de-shell and de-vein shrimp.⁶⁹ Deepsouth Packing Co. infringed these patents by manufacturing the patented invention within U.S. borders. Laitram successfully sued for damages and obtained an injunction against continued manufacture.⁷⁰ However, Laitram's patent claimed only the combination of components of the machine, but not the individual components themselves.⁷¹

Deepsouth sought to skirt the injunction through a new manufacturing plan.⁷² Under the new plan, infringing combinations of components would not be made in the United States.⁷³ Instead, Deepsouth would manufacture individual components for export. Foreign customers could assemble an infringing machine from the exported components in less than an hour.⁷⁴

64. See 35 U.S.C. § 154(a)(1) (2000) (“Every patent shall contain a short title . . . of the right to exclude others from making, using, offering for sale, or selling the invention throughout the United States or importing the invention into the United States”) (emphasis added). The territorial nature of patent rights is also explicit in the statutes governing infringement. For example, § 271(a) provides that infringing acts occur “within the United States” 35 U.S.C. § 271(a) (2000) (emphasis added).

65. See 15 U.S.C. §§ 1125-1127 (2000); 35 U.S.C. § 100(c) (2000).

66. 35 U.S.C. § 271(f) (2000).

67. See 130 Cong. Rec. H10,525 (daily ed. Oct. 1, 1984), reprinted in 1984 U.S.C.C.A.N. 5827, 5828 (statement of Sen. Kastenmeier) (“This proposal responds to the United States Supreme Court decision in *Deepsouth Packing Co. v. Laitram Corp.*, 406 U.S. 518(1972) [sic] concerning a need for a legislative solution to close a loophole in patent law.”).

68. *Deepsouth Packing Co. v. Laitram Corp.* (*Deepsouth*), 406 U.S. 518 (1972).

69. *Id.* at 519-21.

70. See *Laitram Corp. v. Deepsouth Packing Co.*, 301 F. Supp. 1037 (D. La. 1969).

71. See *Deepsouth*, 406 U.S. at 520-21.

72. See *Laitram Corp. v. Deepsouth Packing Co.*, 310 F. Supp. 926 (D. La. 1970).

73. *Deepsouth*, 406 U.S. at 523-24.

74. *Id.* at 524.

The issue for the Court was whether minimal final assembly abroad of components manufactured in the United States involved “making” or “selling” the patented invention in the United States.⁷⁵

A narrow 5-4 majority of the Court found no infringement. “Making” or “selling” an infringing machine required final assembly in the United States, and Deepsouth did not intend domestic assembly.⁷⁶ Thus, Deepsouth did not infringe Laitram’s patents.⁷⁷

Both the majority and the dissenting opinions discussed the policy concerns underlying their differing constructions of the Patent Act. The majority, citing *Dowegiac* and *Duchesne*, clung to the traditional view that U.S. patent law applies only within U.S. borders. In the majority’s opinion, the plaintiff’s patent secured patent protection only on the U.S. market.⁷⁸ The plaintiff had the option of pursuing foreign patents to secure protection in foreign markets.⁷⁹ In contrast, the dissent stressed the unfairness of using a narrow statutory interpretation to reward the defendant’s “iniquitous” behavior that deprived the plaintiff of profit from foreign sales.⁸⁰ It argued that this deprivation reduced the incentives for future innovation.⁸¹

2. Congress Enacts § 271(f) in Response to Deepsouth

Concerns about increasing competition from foreign manufacturers who leveraged U.S. inventions and research led to a strong pro-patent swing beginning in the late 1970s.⁸² Pressure from proponents of stronger patent protection eventually led to the enactment of § 271(f) of the Patent Act in 1984.⁸³

Section 271(f) attempted to close the *Deepsouth* “loophole” by creating liability for manufacturers who produce unpatented components in the United States and export the components for combination abroad in a

75. *Id.* at 522-23.

76. *Id.* at 527-31.

77. *Id.*

78. *Id.* at 527.

79. *Id.* at 523.

80. *Id.* at 532-33 (Blackmun, J., dissenting).

81. *Id.* at 534 (Blackmun, J., dissenting). The minority’s reasoning assumed that the competition faced by American innovators selling patented products in foreign markets would arise from other American manufacturers, rather than from foreign competitors.

82. *See, e.g.*, FEDERAL TRADE COMMISSION, TO PROMOTE INNOVATION: THE PROPER BALANCE OF COMPETITION AND PATENT LAW AND POLICY 14-23 (2003), available at <http://www.ftc.gov/os/2003/10/innovationrpt.pdf> (describing how, for much of the twentieth century, antitrust and patent law have traded ascendancy and how patent law has been ascendant since 1980).

83. 35 U.S.C. § 271(f) (2000).

manner that would infringe a U.S. patent.⁸⁴ It specifies two ways a manufacturer can be held liable, the first analogous to inducement under § 271(b) and the second analogous to contributory infringement under § 271(c).

First, a manufacturer can be liable for supplying from within the United States all or a substantial portion of the components of a patented invention for assembly and distribution overseas:

(1) Whoever without authority supplies or causes to be supplied in or from the United States all or a substantial portion of the components of a patented invention, where such components are uncombined in whole or in part, in such manner as to actively induce the combination of such components outside of the United States in a manner that would infringe the patent if such combination occurred within the United States, shall be liable as an infringer.⁸⁵

Second, a manufacturer can be liable for supplying from the United States any component of a patented invention that is either specially made or specially adapted for use in the invention, but is not a staple article or commodity of commerce suitable for substantial non-infringing use:

(2) Whoever without authority supplies or causes to be supplied in or from the United States any component of a patented invention that is especially made or especially adapted for use in the invention and not a staple article or commodity of commerce suitable for substantial noninfringing use, where such component is uncombined in whole or in part, knowing that such component is so made or adapted and intending that such component will be combined outside of the United States in a manner that would infringe the patent if such combination occurred within the United States, shall be liable as an infringer.⁸⁶

Section 271(f) is somewhat ambiguous because it does not clearly delineate its scope or provide definitions for key terms such as “component.” However, two important aspects of the statute are immediately clear. First, § 271(f) does not purport to directly regulate extraterritorial conduct. Rather, it regulates domestic conduct undertaken with the intent to induce or contribute to acts performed abroad that would be infringing if performed within the United States. Foreign conduct alone cannot give rise to § 271(f) liability. Hence, the statute seeks *indirect* extraterritorial

84. *Id.*; see also Chisum, *supra* note 61, at 607.

85. 35 U.S.C. § 271(f) (2000).

86. 35 U.S.C. § 271(f)(2) (2000).

impact through its express limitations on domestic conduct. Second, both prongs of the statute limit liability to acts of supply “in or from” the United States. Hence, a domestic component manufacturer, such as the *Deepsouth* plaintiff, could locate manufacturing facilities abroad to evade liability under § 271(f). As a result, § 271(f) does not effectively close the “loophole” for which it was intended.

III. THE RISE AND FALL OF EXTRATERRITORIALITY

This Part details the rise and fall of extraterritoriality since the passage of § 271(f). Section III.A examines the ambiguous wording of the statute and discusses its early lack of use. Section III.B reviews a series of Federal Circuit decisions that broadly construed § 271(f) to expand the extraterritorial reach of U.S. patent law. Section III.C examines the Supreme Court’s opinion in *AT&T III* that partially reversed the Federal Circuit decisions.

A. Early Lack of Use

Relatively few cases were brought under § 271(f) in the decade after its passage.⁸⁷ The ambiguous wording of the statute may have led litigants to assume it only applied to a subset of patents that did not involve method claims or intangible components.

1. Inherent Ambiguity

Legislative history supports the view that Congress intended § 271(f) to apply only to components of manufactured products, as in *Deepsouth*.⁸⁸ A number of statements in the record indicate that Congress also assumed the components and the foreign-produced invention would be tangible items.⁸⁹

Nevertheless, § 271(f) lends itself to broader application than the facts of *Deepsouth*. First, the statute sets a very low threshold for liability: the supply of a single component.⁹⁰ Second, Congress did not define key

87. See Farrand, *supra* note 38, at 1232.

88. See, e.g., 130 Cong. Rec. H10,529 (daily ed. Oct. 1, 1984) (statement of Sen. Kastenmeier) (“[A] product’s patent protection cannot be avoided through the manufacture of component parts.”)

89. See Farrand, *supra* note 38, at 1231 n.32 (citing the repeated use in the legislative record of terms that connote physical objects, the use of the term “manufacturing” as the activity Congress intended to regulate, and the multiple references to the fact pattern of *Deepsouth* involving physical components of a mechanical invention).

90. 35 U.S.C. § 271(f)(2) (2000) (“Whoever without authority supplies or causes to be supplied in or from the United States *any* component . . .”) (emphasis added). In contrast, the defendant in *Deepsouth* manufactured all of the multiple components of the

terms used in the statute or explicitly limit the statute's scope.⁹¹ As a result, it is possible to construe § 271(f) to apply to method patents, or those involving intangible components.

This possibility arises because § 271(f) does not explicitly require that the "component" or resulting "patented invention" are tangible.⁹² Consequently, the courts could interpret "components" to refer to intangibles, such as computer software. In addition, they can interpret "patented invention" to refer to an intangible process. Thus, disregarding the legislative history of § 271(f), a court could read the statute to encompass method patents or other intangible "components."

Because patent holders did not rely much on § 271(f) for a decade or so after its passage, courts did not have the opportunity to interpret the statute until the 1990s.⁹³ Nevertheless, the statute's flaws were apparent upon enactment, drawing criticism from Donald Chisum as an "ill-conceived" legislative attempt to close the supposed loophole created by *Deepsouth*.⁹⁴ The statute imposed liability on U.S. manufacturers who competed in foreign markets by selling components supplied "in or from the United States."⁹⁵ The unintended consequence, Chisum argued, was an incentive for U.S. manufacturers to move component-manufacturing facilities abroad to escape liability.⁹⁶

2. Early Interpretation

Early constructions of the statute yielded a mix of outcomes, some contrary to commentators' expectations. For instance, in 1997, Donald Chisum thought it clear that § 271(f) was limited to mechanical components of manufactured products.⁹⁷ He believed that § 271(f) did not extend to the export of chemical components that were combined abroad to produce a mixture that would have infringed a composition of matter patent, had the combination taken place within the United States.⁹⁸ However, this view was rejected by the courts. Several later district court decisions held that for the purposes of § 271(f), chemical ingredients are "components"

infringing invention in the United States. *Deepsouth Packing Co. v. Laitram Corp.*, 406 U.S. 518, 523-24 (1972).

91. See 35 U.S.C. § 271(f) (2000).

92. See *id.*

93. See Farrant, *supra* note 38, at 1232 (discussing § 271(f)'s early lack of use).

94. See Chisum, *supra* note 61, at 607.

95. 35 U.S.C. § 271(f)(1)-(2).

96. See Chisum, *supra* note 61, at 607; *infra* Section IV.B.2 (analyzing § 271(f)'s adverse economic effects).

97. See Chisum, *supra* note 61, at 617.

98. *Id.*

of a resulting patented mixture.⁹⁹ Hence, export of chemical “components” for combination abroad created liability under the statute.

Commentators also initially assumed that § 271(f) did not apply to method claims or intangibles.¹⁰⁰ The legislative history discouraged the application of § 271(f) to method claims,¹⁰¹ and the statute itself did not employ common method claim terminology such as “act,” “process,” or “step.”¹⁰² Early cases aligned with these expectations. For example, in *Standard Havens v. GenCor Indus.*, 953 F.2d 1360 (Fed. Cir. 1991), the Federal Circuit found that § 271(f) did not apply to method or process patents. *Standard Havens* concerned an infringement action based, in part, on the export of an unclaimed apparatus to perform a patented process. The court found § 271(f) inapplicable on the facts but did not explain its reasoning.¹⁰³

Two later District Court decisions, *Enpat, Inc. v. Microsoft Corp.*, 6 F. Supp. 2d 537 (E.D. Va. 1998), and *Synaptic Pharmaceuticals Corp. v. MDS Panlabs, Inc.*, 265 F. Supp. 2d 452 (D.N.J. 2002), followed *Standard Havens*. Both *Enpat* and *Synaptic* involved the export of components used in method patents. In *Enpat*, the plaintiff alleged that certain Microsoft Corp. (“Microsoft”) software infringed its method patent and sought damages from Microsoft under § 271(f)(2) for foreign sales resulting from Microsoft’s export of the software.¹⁰⁴ Microsoft moved for partial summary judgment, arguing that § 271(f) was inapplicable to method patents because method patents do not have “components.”¹⁰⁵ The court agreed with Microsoft, finding that the language and legislative history of § 271(f) proved the statute did not apply to method patents.¹⁰⁶

Similarly, in *Synaptic*, the plaintiff brought a § 271(f) action based on a method patent for biological testing.¹⁰⁷ The defendant had shipped vari-

99. See, e.g., *Lubrizol Corp. v. Exxon Corp.*, 696 F. Supp. 302, 323-25 (N.D. Ohio 1988); *W.R. Grace & Co. v. Interacat, Inc.*, 60 F. Supp. 2d 316 (D. Del. 1999).

100. See, e.g., Chisum, *supra* note 61, at 607; Dan L. Burk, *Patents in Cyberspace: Territoriality and Infringement on Global Computer Networks*, 68 TUL. L. REV. 1, 67 n.263 (1993) (claiming that “the selling of an item for extraterritorial use in a patented process is not actionable”).

101. See *supra* Section III.A.1.

102. See Farrand, *supra* note 38, at 1232-24; 35 U.S.C. § 271(f)(1)-(2) (2006).

103. *Standard Havens*, 953 F.2d at 1374 (“Finally, we do not find the provisions of 35 U.S.C. § 271(f) (1988) implicated.”).

104. *Enpat, Inc. v. Microsoft Corp.*, 6 F. Supp. 2d 537 (E.D. Va. 1998).

105. *Id.* at 538.

106. *Id.* at 539-40.

107. See *Synaptic Pharm. Corp. v. MDS Panlabs, Inc.*, 265 F. Supp. 2d 452, 454-55 (D.N.J. 2002).

ous supplies used in the patented method to a foreign affiliate that performed the testing.¹⁰⁸ Citing *Standard Havens* and *Enpat*, the court found no liability under § 271(f).¹⁰⁹

B. The Rise: District Courts and the Federal Circuit Broaden § 271(f)

The first case giving § 271(f) broader scope was *Imageexpo, L.L.C. v. Microsoft Corp.*¹¹⁰ The plaintiff, a maker of network workflow software, alleged that Microsoft violated § 271(f) by exporting certain software code on “golden master” disks to distributors abroad.¹¹¹ The foreign distributors replicated the code, and combined the resulting copies with other components to form an apparatus that would have infringed the plaintiff’s patent if made within the United States. Microsoft moved to bar damages for foreign sales on the theory that § 271(f) was inapplicable because the golden masters were not a “component” of the protected apparatus.¹¹² The court denied Microsoft’s motion.¹¹³ Although it implicitly acknowledged that § 271(f) did not apply to pure method patents,¹¹⁴ the court held that Microsoft’s golden master disks with software code were “components” within the meaning of § 271(f) because the patent in question was not for a pure method claim but for a physical apparatus—a computer running the software to perform a certain task.¹¹⁵

1. Expansion to All Types of Claims and Components: Eolas

Although *Imageexpo* was a major break with tradition, the Federal Circuit, in *Eolas Technologies, Inc. v. Microsoft Corp.*, did not attempt to distinguish the prior case law.¹¹⁶ Although this expansive interpretation was a major break with tradition, the *Eolas* court did not attempt to distinguish the prior case law.¹¹⁷ The decision presaged several Federal Circuit cases that successively expanded the scope of § 271(f), including *Union*

108. *Id.*

109. *Id.* at 463-64.

110. *Imageexpo, L.L.C. v. Microsoft Corp.*, 299 F. Supp. 2d 550 (E.D. Va. 2003).

111. *Id.* at 551-52.

112. *Id.* at 552.

113. *Id.* at 553.

114. *Id.* at 552-553 (distinguishing earlier cases finding § 271(f) inapplicable to method patents, because *Imageexpo*’s patent was for an apparatus).

115. *Id.*

116. 399 F.3d 1325 (Fed. Cir. 2005).

117. *See Eolas Techs., Inc. v. Microsoft Corp. (Eolas)*, 399 F.3d 1325, 1338-40 (Fed. Cir. 2005) (finding § 271(f) applicable to all types of components and patents, based on statutory construction and patent policy rationales, without addressing the contrary *Standard Havens* line of cases).

Carbide Chemicals & Plastics Technology Corp. v. Shell Oil Co.,¹¹⁸ and *AT&T Corp. v. Microsoft Corp. (AT&T II)*.¹¹⁹

Eolas involved a patent held by Eolas Technologies, Inc. (“Eolas”) on the automatic display of objects by software running on a computer. Eolas alleged that Microsoft infringed its patent when a user executed Microsoft’s Internet Explorer software.¹²⁰ Eolas alleged infringement of a product and a method claim, but the case focused on the product claim because Eolas also alleged that the product claim embodied the method claim.¹²¹ Eolas sought damages under § 271(f) for golden master disks containing Internet Explorer that Microsoft shipped abroad to foreign manufacturers. The foreign manufacturers replicated the disks and used the copies to install Internet Explorer on computers overseas.¹²² In affirming a lower court finding that the Internet Explorer code on the golden master disks was a “component” for the purposes of § 271(f), the *Eolas* court found § 271(f) applicable to all types of components and claims.¹²³

The court began its analysis by noting that the issue of whether software is a component under § 271(f) turns on the interpretation of the phrase “any component of a patented invention” in the statute.¹²⁴ Because the statute contained no express limitation to structural or physical components, the Federal Circuit held that “component” encompassed intangible items.¹²⁵ Similarly, it interpreted “patented invention” to encompass method claims because the statute was not expressly limited to “machines” or “physical structures.”¹²⁶ The court reasoned that excluding method claims from the reach of § 271(f) would impermissibly discriminate among types of inventions contrary to the 1994 TRIPS agreement.¹²⁷ Hence, it interpreted § 271(f) to apply to “every component of every form” and “every form of invention.”¹²⁸ Under this view, the statute extended to method claims and to claims involving intangible components such as computer software. Although *Eolas* conflicted with *Standard Havens*, *Enpat* and *Imageexpo*, the Federal Circuit panel did not discuss those opinions.

118. 425 F.3d 1366 (Fed. Cir. 2005).

119. 414 F.3d 1366 (Fed. Cir. 2005).

120. *See Eolas Techs. v. Microsoft Corp.*, 274 F. Supp. 2d 972 (N.D. Ill. 2003).

121. *See Eolas*, 399 F.3d at 1331.

122. *Id.*

123. *Id.* at 1341.

124. *Id.* at 1340.

125. *Id.* at 1341.

126. *Id.* at 1339.

127. *See id.* at 1339.

128. *Id.* at 1338-39.

2. *Expansion to Method Patents: Union Carbide*

Strictly speaking, the *Eolas* court's extension of § 271(f) to method claims was dictum. The finding was not required for the resolution of the case because the claim at issue was a product claim. However, in *Union Carbide* the Federal Circuit relied on *Eolas* to apply § 271(f) to a method claim.¹²⁹ Union Carbide Corp. ("Union Carbide") claimed that Shell Oil Co. ("Shell") infringed its patented process for the manufacture of ethylene oxide using catalysts.¹³⁰ At trial, a jury found that Shell contributorily infringed Union Carbide's patent by selling catalysts to third parties who used the patented process to manufacture the chemical.¹³¹ However, the court excluded Shell's sales to foreign third-party buyers from damage calculations because it believed that damages for foreign sales were not available for method claims under § 271(f).¹³² The Federal Circuit overruled the district court's damages calculations by finding § 271(f) applicable to method claims.¹³³ The *Union Carbide* court relied heavily on *Eolas*, even though the claim at issue in *Eolas* was not a method claim,¹³⁴ and the *Eolas* court had not explicitly addressed precedent finding § 271(f) inapplicable to method claims.¹³⁵

3. *Expansion of Liability: AT&T II*

The Federal Circuit's *AT&T II* decision represents the peak of extraterritoriality in modern U.S. patent law.¹³⁶ AT&T Corporation ("AT&T") owned a patent on an apparatus for digitally encoding and compressing recorded speech.¹³⁷ Microsoft's Windows operating system incorporated software code that enabled a computer to process speech in the manner claimed by AT&T's patent.¹³⁸ Microsoft distributed Windows code to foreign computer manufacturers, either by shipping golden master disks containing Windows object code, or by transmitting the code electronically.¹³⁹

129. Union Carbide Chems. & Plastics Tech. Corp. v. Shell Oil Co. (*Union Carbide*), 425 F.3d 1366, 1380 (Fed. Cir. 2005).

130. *Union Carbide*, 425 F.3d at 1369.

131. See Union Carbide Chems. v. Shell Oil Co., 2004 WL 1305849, at *1 (D. Del. June 9, 2004).

132. See *Union Carbide*, 425 F.3d at 1369.

133. See *id.* at 1380.

134. The claim at issue in *Eolas* was a product claim that embodied a process claim. See *Eolas Techs., Inc. v. Microsoft Corp.*, 399 F.3d 1325, 1331 (Fed. Cir. 2005).

135. See *Eolas*, 399 F.3d at 1338-41 (finding § 271(f) applicable to method claims without distinguishing prior case law).

136. *AT&T Corp. v. Microsoft Corp. (AT&T II)*, 414 F.3d 1366 (Fed. Cir. 2005).

137. *Id.* at 1368.

138. *Id.*

139. *Id.*

The foreign manufacturers made copies of the master disks, and used the copies to install Windows on computers sold in foreign markets.¹⁴⁰

In *AT&T Corp. v. Microsoft Corp. (AT&T I)*,¹⁴¹ the decision on appeal in *AT&T II*, the district court found Microsoft liable for foreign sales of Windows under § 271(f). On appeal, Microsoft presented two main arguments. First, it argued that it was not liable for foreign sales because its software was not a “component” of the patented invention within the meaning of § 271(f).¹⁴² Second, Microsoft argued that foreign parties made and distributed the disks—i.e., Microsoft did not “supply” Windows from within the United States.¹⁴³ Microsoft also offered a policy consideration: finding Microsoft liable under these circumstances would hurt the domestic software industry because U.S. software manufacturers would move their operations offshore to escape similar liability.¹⁴⁴

The Federal Circuit rejected all of Microsoft’s arguments. The court first relied on *Eolas* to hold that software was a “component” of a patented invention within the meaning of § 271(f), because the statute is not limited to physical machines or physical structures.¹⁴⁵ Then, it broadly interpreted “supply,” for the purposes of § 271(f), to include the act of providing a master component from which copies are made abroad.¹⁴⁶ Hence, the single act of supplying a master disk to a foreign manufacturer, who then made copies, would be sufficient to create § 271(f) liability for all of the multiple acts of infringement that arise from the use of the copies. Finally, the Federal Circuit rejected Microsoft’s policy consideration. The court disclaimed responsibility for any adverse economic outcome by noting that it was merely carrying out Congressional will.¹⁴⁷

The Federal Circuit also rejected the proposition that, for purposes of § 271(f) liability, software sent by electronic transmission should be treated differently from software shipped on disks. It reasoned that such a distinction amounted to the “exaltation of form over substance.”¹⁴⁸ The court buttressed its reasoning with a policy argument: “Section 271(f), if it is to remain effective, must therefore be interpreted in a manner that is ap-

140. *Id.*

141. 71 U.S.P.Q. 2d (BNA) 1118 (2004).

142. *See AT&T II*, 414 F.3d at 1368-69.

143. *Id.*

144. *Id.* at 1372.

145. *Id.* at 1370-71.

146. *Id.* at 1371-72.

147. *Id.* The legislative history of § 271(f) does not appear to support the Federal Circuit’s interpretation of Congressional will. *See supra* Section III.A.1.

148. *AT&T II*, 414 F.3d at 1370.

propriate to the nature of the technology at issue.”¹⁴⁹ In other words, advancement of replication technologies since the drafting of § 271(f) should not be allowed to defeat the purpose of the statute.

C. The Fall: The Supreme Court Reverses in *AT&T III*

The extraterritorial reach of patent law engendered by the *Eolas* line of cases was short-lived. In *AT&T III*, the Supreme Court reversed the Federal Circuit’s *AT&T II* decision.¹⁵⁰ The Court’s conclusion was driven by the “exceptional” nature of § 271(f).¹⁵¹ Extraterritoriality is not the general rule in U.S. patent law but is a limited exception created by Congress to resolve a specific issue.¹⁵² The Court recognized that plausible arguments could be made to extend § 271(f) liability to Microsoft’s conduct, but concluded that the exceptional nature of § 271(f) warranted judicial restraint in interpretation.¹⁵³

As a result, the Supreme Court found Microsoft not liable under § 271(f) because Microsoft did not supply components from the United States within the meaning of the statute.¹⁵⁴ Section 271(f) provides that infringement occurs only when one “supplies . . . from the United States, for combination abroad, a patented invention’s components.”¹⁵⁵ The Court reached its conclusion by narrowly interpreting the words “component” and “supply.”

First, the Court held that software in the abstract could not be a “component” of a tangible invention for the purposes of § 271(f).¹⁵⁶ Both prongs of the statute, §§ 271(f)(1) and 271(f)(2), refer to “components” amenable to “combination.” Abstract software code is an idea that cannot be “combined” with other components, much like a blueprint or design, and hence is not within the scope of the statute.¹⁵⁷ The Court held that to turn this abstraction into a component, an extra step is required: the encoding of the software instructions onto a physical medium that can be read

149. *AT&T II*, 414 F.3d at 1370.

150. *Microsoft Corp. v. AT&T Corp. (AT&T III)*, 127 S. Ct. 1746, 1751 (2007).

151. *Id.* at 1750.

152. *See id.* at 1751.

153. *Id.*

154. *Id.*

155. 35 U.S.C. § 271(f)(1) (2000) (emphasis added).

156. The Court analogized abstract software to the notes of Beethoven’s Ninth Symphony, whereas tangible software is like the score to Beethoven’s Ninth Symphony encoded on a CD-ROM. *AT&T III*, 127 S. Ct. at 1754. The Court noted that if § 271(f) applies to method patents (an issue on which it expressed no opinion), software in the abstract might qualify as a component under those circumstances. *See id.* at 1756 n.13.

157. *See id.* at 1755.

by a computer and used to create an infringing product.¹⁵⁸ Although this extra step may be easy to perform, no violation occurs in its absence.¹⁵⁹ Congress included components within the scope of § 271(f) but did not include “information, instructions, or tools from which those components readily may be generated.”¹⁶⁰ Hence, only the physical embodiments containing the code actually used to create an infringing product are § 271(f) “components.”¹⁶¹

Second, the Court held that U.S. exporters of master components do not “supply” components within the meaning of § 271(f), in the case where foreign manufacturers make copies of these components abroad and then use the copies to assemble infringing products.¹⁶² The Court made a distinction between the activities of Microsoft and the foreign manufacturers.¹⁶³ Although Microsoft supplied the original master disk, the foreign manufacturers supplied the copies used to assemble the infringing products. Microsoft was not responsible for these downstream activities.¹⁶⁴

The Court rejected the Federal Circuit’s reasoning that no distinction exists between the activities of Microsoft and the foreign manufacturers because the copies were easy to create from the original disks supplied by Microsoft.¹⁶⁵ The “absence of anything addressing copying in the statutory text” weighed against the Federal Circuit.¹⁶⁶ The Court also noted that Congress was aware of the ease of electronic replication and had acted to address the issue in copyright law by passing the Digital Millennium Copyright Act.¹⁶⁷ The Court reasoned that Congress, not the judiciary, was the appropriate actor to make similar alterations to patent law.¹⁶⁸

Finally, the Supreme Court resolved doubts about Microsoft’s conduct by relying on the presumption against extraterritoriality.¹⁶⁹ In the absence

158. *See AT&T III*, 127 S. Ct. at 1748.

159. *Id.*

160. *Id.* at 1756.

161. *See id.*; *see also id.* at 1754 n.8 (explaining that operational software exists in object code format, and that the master disks and electronic transmissions sent abroad by Microsoft contained object code).

162. *See id.* at 1748-49.

163. *See id.*

164. *See AT&T III*, 127 S. Ct. at 1748-49.

165. *Id.* at 1757.

166. *Id.*

167. *Id.* at 1760. The Digital Millennium Copyright Act, 17 U.S.C. § 1201, provides legal sanctions for copyright owners to protect their works from piracy engendered by new copying and distribution technologies.

168. *AT&T III*, 127 S. Ct. at 1760.

169. *See id.* at 1758.

of any explicit Congressional direction, the Court chose to avoid the expansive reading of § 271(f) required to sanction Microsoft's conduct.¹⁷⁰

IV. ANALYSIS

This Part discusses the mechanics and outcome of the Supreme Court's *AT&T III* opinion. Section IV.A examines the legal arguments of the parties and the rationales chosen by the Court to explain its holdings. Section IV.B reviews the underlying policy considerations of the decision.

A. Legal Reasoning and Impact of Decision

1. *AT&T's Argument*

AT&T faced a major obstacle. AT&T's two main issues before the Supreme Court related to each other such that it had to win both. The threshold issue was whether, for the purposes of § 271(f), software in the abstract is a "component" of a patented invention. The secondary issue was whether Microsoft "supplied" components from the United States.

Microsoft sent golden master disks containing software to foreign manufacturers, who made and installed copies.¹⁷¹ The golden master disks alone could not be considered § 271(f) "components" because the foreign manufacturers used the copies to practice the invention.¹⁷² Accordingly, if the abstract software encoded on the disks was not a § 271(f) "component," the secondary issue of Microsoft "supplying" components was moot.¹⁷³ For the purposes of the statute, Microsoft would have "supplied" nothing.¹⁷⁴

AT&T framed the case primarily around the threshold issue: whether abstract object code is a "component" under § 271(f).¹⁷⁵ It noted that the statutory text does not contain a physicality requirement and argued that, unlike a blueprint, manufacturers incorporate software into a patented invention. However, AT&T's strongest argument arose not from the statutory language but from the structure of software technology itself.¹⁷⁶ Even several *amici* who advocated reversal of AT&T's victory at the Federal Circuit conceded that, for all practical purposes, abstract object code is a

170. *See id.*

171. *Id.* at 1753.

172. *Id.*

173. *See id.* at 1754.

174. *AT&T III*, 127 S. Ct. at 1754.

175. Brief for Respondent at 3, *Microsoft Corp. v. AT&T Corp. (AT&T III)*, 127 S. Ct. 1746 (No. 05-1056).

176. *Id.* at 19-21.

component of a modern computer system.¹⁷⁷ Computer systems consist of several layers of technology, some intangible and others not.¹⁷⁸ If object code is not a component, § 271(f) would not apply to the entire software industry.¹⁷⁹ If § 271(f) extends beyond the facts of *Deepsouth*, it makes little sense to limit its scope because the product in question incorporates intangible components.¹⁸⁰

On the other hand, as noted by the Federal Circuit dissent in *AT&T II*, a ruling in AT&T's favor would violate the presumption against extraterritoriality by making domestic liability turn on foreign acts.¹⁸¹ Although a defendant could incur liability by sending even a single golden master disk encoded with object code abroad, the magnitude of this liability would depend on the number of foreign copies produced.¹⁸² Any attempt to assess damages would require the observation and measurement of foreign manufacturing activities.

AT&T argued that the presumption against extraterritoriality does not apply to § 271(f) because Congress specifically enacted the statute to extend the reach of U.S. patent law.¹⁸³ The Supreme Court disagreed, stating that even when a statute addresses an issue of extraterritorial application, the presumption against extraterritoriality remains instructive in determining the *extent* of the statutory exception.¹⁸⁴ Hence, the presumption applied and worked against the expansive interpretation of "component" required for AT&T's victory.¹⁸⁵

177. See, e.g., Brief of American Intellectual Property Law Association as Amicus Curiae Supporting Neither Party at 4-11, *Microsoft Corp. v. AT&T Corp. (AT&T III)*, 127 S. Ct. 1746 (No. 05-1056); Brief of Intellectual Property Professors as Amici Curiae Supporting Reversal at 1, *Microsoft Corp. v. AT&T Corp. (AT&T III)*, 127 S. Ct. 1746 (No. 05-1056).

178. Brief for Respondent, *supra* note 175, at 4-6.

179. Brief for Respondent, *supra* note 175, at 4 ("Having so far failed in these legislative efforts, the same alliance urges this Court to strip Section 271(f) of all meaning in the software industry.").

180. Brief for Respondent, *supra* note 175, at 14 ("And because that provision indisputably applies in contexts far removed from the facts of *Deepsouth*, it would be nonsensical to rely on those facts as a basis for reading artificial limitations into the statutory language.").

181. See *AT&T Corp. v. Microsoft Corp. (AT&T II)*, 414 F.3d 1366, 1372-74 (Fed. Cir. 2005) (Rader, J., dissenting).

182. *Id.*

183. Brief for Respondent, *supra* note 175, at 22-24.

184. *Microsoft Corp. v. AT&T Corp. (AT&T III)*, 127 S. Ct. 1746, 1758 (2007).

185. *Id.*

2. *Microsoft's Argument*

A win on the threshold issue—whether software is a “component” supplied under § 271(f)—was all Microsoft needed to succeed at litigation. However, Microsoft’s status as a major software producer constrained its arguments that it supplied no § 271(f) “components.”

For example, Microsoft could have argued, as an amicus brief advocated, that its software is not a “component” of a patented invention under § 271(f) because software itself is not patentable subject matter under 35 U.S.C. § 101.¹⁸⁶ However, the adoption of this position would have been contrary to Microsoft’s own business interests. Instead, Microsoft admitted that software could be a component of a patented invention.¹⁸⁷ Moreover, it acknowledged that physical media containing object code would infringe AT&T’s patent when combined with a computer to perform speech coding.¹⁸⁸

Nor did Microsoft raise a defense based on claim construction. Microsoft could have argued that the golden master disks were not § 271(f) components based on a favorable construction of the claim language.¹⁸⁹ However, Microsoft’s brief only touched on claim language and it did not advance arguments based on claim construction.¹⁹⁰ This may be because Microsoft’s dominant financial position makes potential plaintiffs view the company as an attractive defendant. A win on factual issues would have left unresolved the critical legal issue of whether software is a “component” under § 271(f), leaving the door open for similar lawsuits in the future.

Microsoft circumvented these limitations by arguing that its object code, as supplied to foreign distributors via disks or electronic transmissions, could not be a component of a claimed invention under § 271(f) because the material supplied was never physically combined to create an infringing device.¹⁹¹ In addition, the abstract object code could not be a

186. Brief of Software Freedom Law Center as Amicus Curiae Supporting Petitioner at 3-4, *Microsoft Corp. v. AT&T Corp.* (*AT&T III*), 127 S. Ct. 1746 (No. 05-1056).

187. Brief for Petitioner at 34 n.9, *Microsoft Corp. v. AT&T Corp.* (*AT&T III*), 127 S. Ct. 1746 (No. 05-1056).

188. *Id.*

189. For example, the AT&T patent did not include any obviously problematic claims such as a Beauregard claim, which is a product claim for a computer-readable medium containing a set of instructions a computer can execute. The claim is named after *In re Beauregard*, 53 F.3d 1583 (Fed. Cir. 1995). A legitimate Beauregard claim on AT&T’s patent would have been a problem for Microsoft because the very creation of the golden master disk would have infringed the claim.

190. See Brief for Petitioner, *supra* note 188, at 3-4.

191. Brief for Petitioner, *supra* note 188, at 35-36.

component because, lacking tangibility, it was incapable of being “combined” with anything to practice the invention.¹⁹² The code was design information used to create the infringing device, not a component of the device itself.¹⁹³ This line of argument had several advantages. It did not require any general pronouncement on the patentability of software, an issue the Supreme Court has consistently avoided. Moreover, the argument was not specific to AT&T’s claim. Thus, a favorable holding would immunize Microsoft from future liability for shipping object code to foreign manufacturers.

3. *The Supreme Court’s Analysis*

The Supreme Court’s finding of non-infringement for Microsoft was unsurprising. Even Justice Stevens’ dissent acknowledged strong policy arguments in favor of the decision.¹⁹⁴ However, by adopting Microsoft’s narrow analysis and relying on the presumption against extraterritoriality, the Court only partially reversed Federal Circuit precedent expansively construing § 271(f). *Eolas* is no longer good law because there is now a physicality requirement for “components” of a tangible invention.¹⁹⁵ However, the Court reserved its opinion as to whether an intangible method or process qualifies as a “patented invention” under § 271(f).¹⁹⁶ Hence, § 271(f) might still apply to process patents as in *Union Carbide*.¹⁹⁷ In the event that § 271(f) does extend to process patents, software in the abstract may well qualify as a “component.”¹⁹⁸ In addition, *AT&T III* is unlikely to affect other provisions of § 271. Under *AT&T III*, for example, the provision of a “golden master” disk to a foreign Original Equipment Manufacturer, containing code that when executed on a computer infringes a domestic patent, does not result in § 271(f) liability. However, the provision of such a disk to a *domestic* manufacturer may still result in contributory infringement under § 271(c).¹⁹⁹

192. *Id.*

193. The transmission abroad of design information or a blueprint does not incur § 271(f) liability. *Pellegrini v. Analog Devices, Inc.*, 375 F.3d 1113, 1117-19 (Fed. Cir. 2004).

194. *See Microsoft Corp. v. AT&T Corp. (AT&T III)*, 127 S. Ct. 1746, 1762 (2007) (Stevens, J., dissenting); *infra* Section IV.B (discussing policy arguments).

195. *See supra* Section III.C (explaining the *AT&T III* holding).

196. *AT&T III*, 127 S. Ct. at 1756 n.13 (“We need not address whether software in the abstract, or any other intangible, can *ever* be a component under § 271(f).” (emphasis in original)).

197. *See supra* Section III.B (analyzing the *Union Carbide* holding).

198. *See AT&T III*, 127 S. Ct. at 1756 n.13.

199. *See, e.g., Lucent Techs., Inc. v. Gateway, Inc.*, 509 F. Supp. 2d 912, 929-30 (S.D. Cal. 2007) (finding *AT&T III*’s reasoning inapplicable to domestic cases of con-

Even had the Supreme Court held that abstract code is a component of a patented invention under § 271(f), Microsoft could have prevailed on the grounds that the “component” in the infringing device was not itself supplied from the United States, but was only a copy made abroad. This view was advocated by several amicus briefs²⁰⁰ and by the United States during oral argument as amicus curiae supporting Microsoft.²⁰¹ When the United States raised this argument, Justice Breyer noted that the Court never decided that software in the abstract is patentable.²⁰² The United States responded that the argument did not assume the patentability of software in the abstract, because the components of patented inventions need not themselves be patentable.²⁰³ As a result, a finding that Microsoft’s abstract software was a component of AT&T’s patented invention had no implications for the patentability of software itself.

The Court did not adjudicate this issue instead reasoning that abstract software could not be a “component” of a patented product for the purposes of § 271(f) because intangible components are not amenable to combination with physical components.²⁰⁴ However, it makes little sense to condition § 271(f) liability on whether a component is replicated inside the United States or abroad. Such a holding would make § 271(f) liability for an industry turn on the arbitrary fact of whether components could be easily replicated outside U.S. borders.

B. Policy Considerations

The changing international environment and adverse economic effects favor limiting the scope of § 271(f).²⁰⁵ The counter argument that broad

tributory infringement under § 271(c) because it was driven by concerns regarding the extraterritorial application of patent law).

200. See, e.g., Brief of American Intellectual Property Law Association as Amicus Curiae Supporting Neither Party at 3-4, *Microsoft Corp. v. AT&T Corp. (AT&T III)*, 127 S. Ct. 1746 (No. 05-1056).

201. Transcript of Oral Argument at 22, *Microsoft Corp. v. AT&T Corp. (AT&T III)*, 127 S. Ct. 1746 (No. 05-1056).

202. *Id.* Because the Supreme Court has refrained from directly addressing the issue of software patentability, any argument predicated on that issue’s resolution would have a lesser chance of success.

203. *Id.* at 22-23.

204. The Court left open the possibility that abstract software might constitute a § 271(f) component of a patented *process*. See *supra* note 156 and accompanying text (discussing applicability of § 271(f) to process patents).

205. See Virginia Zaunbrecher, Note, *Eolas, AT&T, & Union Carbide: The New Extraterritoriality Of U.S. Patent Law*, 21 BERKELEY TECH. L.J. 33, 51-56 (2006) (discussing changes in the global economy and the international intellectual property protection regime that argue in favor of a narrow reading of § 271(f)).

scope can reduce the costs of patent infringement, by allowing plaintiffs to consolidate their litigation into a single forum, turns out to be illusory.

1. *Changed Environment*

There have been substantial changes in the international intellectual property regulatory environment since the passage of § 271(f), making it easier for U.S. inventors to enforce their patent rights abroad. The passage of TRIPS²⁰⁶ in 1994 established minimum baseline standards for patent law and an international dispute resolution tribunal for all WTO member countries.²⁰⁷ In addition, the Patent Cooperation Treaty (“PCT”) now enables innovators filing a patent application in the United States to preserve priority rights in over 130 member countries and postpone their decision to file foreign patent applications for thirty months.²⁰⁸

Foreign patents provide more protection than § 271(f). For example, foreign patents provide protection for the full patent term in the countries where patents are obtained.²⁰⁹ Unlike the limited protection conferred by § 271(f), this protection exists against any competitor.²¹⁰

Easier access to foreign patents and the greater strength of international patent protection regimes have thus achieved the original purpose of § 271(f): the protection of U.S. patent holders in international markets. The goal of patent law is to encourage innovation by creating financial incentives to invent.²¹¹ Because inventors can better protect their patent rights abroad through other mechanisms, § 271(f) is less necessary.

2. *Adverse Economic Effects*

There have been major changes in the international economy in the two decades since the passage of § 271(f), including a decline in U.S. manufacturing. The rise of Asia as a center of low-cost manufacturing and the continued globalization of international trade has led to substantial

206. Agreement on Trade-Related Aspects of Intellectual Property Rights vol. 31, Apr. 15, 1994, 33 I.L.M. 81 [hereinafter TRIPS Agreement].

207. See generally Rochelle Cooper Dreyfuss & Andreas F. Lowenfeld, *Two Achievements of the Uruguay Round: Putting TRIPS and Dispute Settlement Together*, 37 VA. J. INT'L L. 275 (1997).

208. See WORLD INTELLECTUAL PROPERTY ORGANIZATION, PCT APPLICANT'S GUIDE - NATIONAL PHASE - NATIONAL CHAPTER (2007), available at <http://www.wipo.int/pct/guide/en/gdvol2/annexes/us.pdf>.

209. See Farrand, *supra* note 38, at 1263-64.

210. See *id.*

211. U.S. patent law is based on the constitutional provision authorizing patent grants to promote “the Progress of Science and useful Arts.” U.S. CONST. art. I, § 8, cl. 8.

losses of competitive advantage for U.S. manufacturers.²¹² Section 271(f) has offered little or no protection against these changing market dynamics. In fact, analysis reveals that § 271(f) has actually created disincentives to innovation.²¹³

Although the statute attempts to protect U.S. patentees operating in foreign markets from competitors selling infringing products, it operates in effect to discriminate against domestic producers.²¹⁴ The statute confers protection through the imposition of liability on domestic component providers who supply foreign manufacturers with components used to make the infringing device. However, since foreign manufacturers can source their products from outside the United States, the actual protection provided is minimal.²¹⁵ Instead, the statute discriminates against manufacturers with operations within the United States, thereby encouraging them to move their operations offshore. Thus, instead of creating incentives for innovation and investment in line with the goals of patent law, § 271(f) creates “perverse incentives.”²¹⁶

*Pellegrini v. Analog Devices*²¹⁷ presents an example of the disincentives created by the statute. The defendant, Analog Devices, created drive circuits abroad that would have infringed a Pellegrini patent if created within the United States. Analog sent blueprints and manufacturing instructions from its U.S. headquarters to manufacturing centers in Ireland and Taiwan.²¹⁸ Analog had U.S. customers, but it never manufactured drive circuits domestically.²¹⁹ Pellegrini sued for patent infringement. The district court granted Analog’s motion for partial summary judgment to exclude foreign sales, on the theory that § 271(f) applies only when the components destined for infringing use are manufactured within the United States.²²⁰ The Federal Circuit affirmed, interpreting § 271(f) to apply only in cases of domestic manufacture.²²¹ The case demonstrates that foreign manufacturers are never liable and domestic manufacturers can avoid § 271(f) by moving their manufacturing operations offshore.

212. See, e.g., Alan W. Wolff, *China’s Drive Toward Innovation*, ISSUES IN SCI. & TECH., Spring 2007, available at <http://www.issues.org/23.3/wolff.html>.

213. See Farrand, *supra* note 38, at 1216 (analyzing disincentives created by the statute).

214. *Id.* at 1260-61.

215. *Id.*

216. *Id.*

217. 375 F.3d 1113 (Fed. Cir. 2004).

218. *Pellegrini v. Analog Devices*, 375 F.3d 1113, 1118 (Fed. Cir. 2004).

219. *Id.*

220. *Id.*

221. *Id.* at 1119.

In contrast to the decline in traditional manufacturing industries, the U.S. software industry and allied knowledge industries have experienced rapid growth to become an important part of the national economy.²²² Expanding the scope of § 271(f) to domestic software producers would create perverse incentives to relocate operations abroad to escape liability.²²³ In addition to the immediate harm, long-term economic damage could result because of the strategic importance of the software sector to the national economy.

However, the perverse incentives created by § 271(f) might not operate in the software industry to the same extent that they operate in other industries. The software development process differs from traditional production methods in many respects. For example, traditional software development consists of several related phases that software producers could relocate abroad without significant disruption to the finished product.²²⁴ As a result, domestic producers might escape liability by relocating only part of their software development operations. Hence, the adverse economic impacts may be limited through the retention of some production phases in the United States.

Nevertheless, the disincentives could still have a substantial negative effect on the economy. It would be ironic if a statute intended for the protection of U.S. manufacturing was instead used to discriminate against domestic producers—in one of the few areas where domestic producers still enjoy a dominant market position.

3. *Inefficiency in Patent Enforcement*

Although the PCT process makes it easier to obtain foreign patents, enforcement of patent rights requires a patentee to file suit in each jurisdiction where infringing acts are alleged. Such a course of action is inconvenient and expensive. One argument favoring the broad application of § 271(f) is that it promotes economic efficiency, by allowing a patent

222. The contributions to U.S. GDP in 2006 from domestic investment in computer software exceeded U.S. \$200 billion. *See* Bureau of Economic Analysis, U.S. Dep't of Commerce, Gross Domestic Product & Corporate Profits, 3rd Quarter 2007 Preliminary, Nov. 29, 2007, at t.3, <http://www.bea.gov/newsreleases/national/gdp/2007/pdf/gdp307p.pdf>.

223. Microsoft argued to the Federal Circuit that such a reading of § 271(f) would cause software manufacturers to relocate their development facilities overseas, leading to job losses and other harms to the domestic software industry. *See AT&T Corp. v. Microsoft Corp. (AT&T II)*, 414 F.3d 1366, 1372 (Fed. Cir. 2005).

224. *See generally* TANDY GOLD, OFFSHORE SOFTWARE DEVELOPMENT: MAKING IT WORK (2004) (discussing the changes required to a traditional software development process for the successful integration of offshore development teams).

holder to collect damages in a single proceeding for domestic and foreign acts of infringement.²²⁵

This argument is attractive because of the prohibitive expense of obtaining relief in a patent infringement action.²²⁶ Because of this cost, suits in multiple forums may not be a viable option for many plaintiffs. For plaintiffs with limited financial resources, a law allowing a patent holder to consolidate multiple infringing acts in a single suit might not just save money; such a suit might be the only means for the patent holder to obtain redress.

Unfortunately, the broad application of § 271(f) to reach this result may have unintended consequences that counsel against this approach. First, broadly applying the statute might hurt plaintiffs more than it helps. For example, using § 271(f) to regulate foreign acts would lead to results that the principle of territoriality seeks to avoid—loss of comity, potential interference with foreign law, and problems with the enforcement of judgments. These issues might increase legal costs for some litigants, should the attempt to obtain extraterritorial jurisdiction result in international conflicts-of-law. Second, since the statute is only available against U.S. businesses, such litigation would discriminate against domestic producers.

A few patent infringement plaintiffs have attempted to avoid interference with foreign law by bringing suit in the United States under U.S. law for domestic acts of infringement but under foreign law for foreign acts of infringement.²²⁷ There are no constitutional problems with jurisdiction since general diversity and supplemental jurisdiction statutes are available.²²⁸ However, in the few cases where plaintiffs have attempted this strategy, district courts have declined to hear the foreign law claims.²²⁹ Given the practical complications at such a proceeding, one can hardly blame the courts for refusing to embark on this enterprise. U.S. courts have little experience interpreting foreign laws. In addition, U.S. trial procedure with its broad discovery provisions differs in important respects not

225. See Farrand, *supra* note 38, at 1281.

226. See AM. INTELL. PROP. LAW ASS'N, REPORT OF ECONOMIC SURVEY 2003 84-85 (2003) (finding the median cost of trying a patent case with \$1 million to \$25 million at risk to be \$2 million).

227. See Farrand, *supra* note 38, at 1282-83 (discussing options available to plaintiffs).

228. See 28 U.S.C. § 1332 (2006) (diversity jurisdiction); 28 U.S.C. § 1367(a) (2006) (supplemental jurisdiction).

229. See Farrand, *supra* note 38, at 1282-83 n.163 (reviewing the rationales that U.S. courts have used to reject such suits).

just from the procedure in civil law jurisdictions but also from the procedures of other common law nations.²³⁰

On the other hand, the difficulties attending redress for acts of patent infringement that span multiple jurisdictions are surmountable. Given the changes in the international legal environment making it easier to acquire foreign patent protection, U.S. companies are better positioned to recover for foreign acts of infringement than they were in 1984 when § 271(f) was enacted.²³¹ Although firms pursuing foreign patent protection incur additional costs, they can control expenses through careful portfolio planning. In addition, financial losses stemming from infringing acts may be concentrated in only a few jurisdictions, thus lowering litigation costs.²³²

V. CONCLUSION

The Supreme Court's application of the principle of territoriality to resolve *AT&T III* was justified by comity, practicality, and self-interest. The outcome also reached the correct economic result. Due to international economic and legal changes since its passage, § 271(f) is no longer needed to create incentives for innovation. On the contrary, the statute has adverse economic effects on U.S. manufacturers in foreign markets. The Court sensibly declined to affirm the Federal Circuit's decision in *AT&T II*, that, *inter alia*, made the extent of § 271(f) liability for domestic suppliers turn on the number of copies made by manufacturers abroad.²³³

However, the Supreme Court did not limit § 271(f) to the maximum extent possible. The principle of territoriality counsels that statutes receive the most restrictive extraterritorial interpretation. In the case of § 271(f), this would restrict the statute to tangible components of product patents.²³⁴ Such a construction would have overruled not only *Eolas*, but also *Union Carbide*, wherein the Federal Circuit expanded the scope of § 271(f) to include method claims.

The Court had several grounds to limit § 271(f) to product claims. For example, it could have interpreted § 271(f) in accordance with the statute's legislative history instead of, or in addition to, reliance on the presumption

230. See Hazard, *Discovery*, *supra* note 17, at 1018-20 (noting that civil law jurisdictions have no concept of pre-trial discovery procedures and that the American system of wide-ranging discovery is unique among common-law jurisdictions).

231. See *supra*, Section IV.B.1.

232. See Farrand, *supra* note 38, at 1281-82 (discussing why expenses for suits in multiple jurisdictions might not be as high as expected).

233. See *AT&T Corp. v. Microsoft Corp. (AT&T II)*, 414 F.3d 1366, 1371-72 (Fed. Cir. 2005).

234. See *supra* Section III.A.1.

against extraterritoriality. Although Congress intended § 271(f) to close the *Deepsouth* manufacturing loophole, there is no evidence Congress intended the statute to apply beyond the manufacturing context of that case.²³⁵ Even if Congress wanted § 271(f) to extend beyond manufacturing, it is not clear that the statute should apply to process patents. The statute itself contains none of the terms commonly used to describe process patents.²³⁶ However, the Court did not issue such a restrictive holding. One possible reason is that the precise issue of the applicability of § 271(f) to method claims was not clearly before it.

Instead, the Supreme Court issued a narrower holding by using the presumption against extraterritoriality to partially limit the reach of § 271(f).²³⁷ Although the Court left open the question of whether the statute applies to method claims,²³⁸ the Court's use of the presumption contrasts sharply with the Federal Circuit's expansive interpretations of § 271(f).²³⁹ Hence, this decision should limit any future tendency of the lower courts to expand the scope of § 271(f).

235. See *supra* note 89 (explaining why the Congressional record supports the view that the statute was intended to apply only to the facts of *Deepsouth*).

236. See 35 U.S.C. § 271(f) (2006).

237. See *Microsoft Corp. v. AT&T Corp.* (*AT&T III*), 127 S. Ct. 1746, 1748-50 (2007).

238. Indeed, assuming § 271(f) encompasses method claims, the Court noted that it may be possible for software in the abstract to be a “component” under § 271(f) because an intangible invention can have intangible components. See *AT&T III*, 127 S. Ct. at 1756 n.13.

239. See *supra* Section III.B (reviewing relevant Federal Circuit cases).

INTEGRA LIFESCIENCES I, LTD. v. MERCK KGAA:
RE-EXAMINING THE BROAD SCOPE OF THE
§ 271(E)(1) SAFE HARBOR

By Daniel Wobbekind

I. INTRODUCTION

In the 1984 case *Roche Products, Inc. v. Bolar Pharmaceutical Co.*,¹ the Federal Circuit found patent infringement where a generic drug manufacturer experimented on a patented drug solely for the purpose of obtaining U.S. Food and Drug Administration (FDA) approval for commercial sale of a generic drug equivalent once the patent expired.² This holding provided patent holders with a *de facto* patent extension while generic manufacturers sought regulatory approval for their generic drug equivalents. In response, Congress passed the Drug Price Competition and Patent Term Restoration Act (the 1984 Act). The 1984 Act added 35 U.S.C. § 271(e)(1), which extinguished the *de facto* patent extension by exempting from infringement uses of patented inventions that are “reasonably related to the development and submission of information” to the FDA.³

Although Congress intended § 271(e)(1) to provide a straightforward answer to *Roche*, the imprecise drafting of § 271(e)(1) has engendered a number of Supreme Court and Federal Circuit cases interpreting the plain language of the statute. The result of these cases is a statutory interpretation that stretches the limits of § 271(e)(1) protection as far as the statute’s plain language will tolerate, and perhaps beyond the original scope intended by Congress.

The most recent series of Supreme Court and Federal Circuit cases addressing the scope of § 271(e)(1) protection, *Integra Lifesciences I, Ltd. v.*

© 2008 Daniel Wobbekind.

1. 733 F.2d 858 (Fed. Cir. 1984).

2. *Id.* at 860-61, 865.

3. 35 U.S.C. § 271(e)(1) (2000) (“It shall not be an act of infringement to make, use, offer to sell, or sell within the United States or import into the United States a patented invention (other than a new animal drug or veterinary biological product (as those terms are used in the Federal Food, Drug, and Cosmetic Act and the Act of March 4, 1913) which is primarily manufactured using recombinant DNA, recombinant RNA, hybridoma technology, or other processes involving site specific genetic manipulation techniques) solely for uses reasonably related to the development and submission of information under a Federal law which regulates the manufacture, use, or sale of drugs or veterinary biological products.”); see H.R. Rep. No. 98-857, pt. I, at 45-46 (1984), as reprinted in 1984 U.S.C.C.A.N. 2647, 2678-79.

Merck KGaA (Integra I),⁴ *Merck KGaA v. Integra Lifesciences I, Ltd. (Merck)*,⁵ and *Integra Lifesciences I, Ltd. v. Merck KGaA (Integra II)*,⁶ addressed whether § 271(e)(1) protects pre-clinical experimentation on potential drug candidates. Scripps Research Institute (Scripps) and Merck KGaA (Merck) discovered potential anti-cancer properties in peptides patented by Integra Lifesciences I, Ltd. (Integra)⁷ and performed pre-clinical experiments on the peptides to evaluate their suitability as potential cancer drug candidates.⁸ Integra sued Merck and Scripps for patent infringement for the unauthorized pre-clinical experimentation with the patented peptides and Merck answered that the Scripps-Merck studies fell under the § 271(e)(1) safe harbor.⁹

In *Integra I*, the Federal Circuit attempted to narrow the scope of § 271(e)(1) protection by holding that it did not apply to pre-clinical experiments that failed to supply information for FDA submissions.¹⁰ In *Merck*, the Supreme Court reversed and reaffirmed the broad scope of § 271(e)(1) by holding that the statute protects pre-clinical experimentation “as long as there is a reasonable basis for believing that the experiments will produce” information relevant to an FDA filing.¹¹ On remand, the Federal Circuit held that § 271(e)(1) protected the Scripps-Merck pre-clinical experiments because those experiments yielded information concerning efficacy, pharmacology, pharmacokinetics, and mechanism of action and, as a result, were “reasonably related to the development and submission of information” to the FDA.¹²

This Note addresses three important problems that lurk in the shadows of *Integra I*, *Merck*, and *Integra II*. First, the broad scope of § 271(e)(1) protection creates: 1) clarity problems for researchers looking to the statute for guidance; and 2) administrability problems for courts attempting to apply the safe harbor. Second, some research uses that would benefit from protection, such as understanding or improving upon patented subject matter, may fall outside the protection of both § 271(e)(1) and the research use exemption under the common law. Finally, the status of research tools under § 271(e)(1) remains uncertain, but the broad scope of § 271(e)(1) pro-

4. 331 F.3d 860 (Fed. Cir. 2003).

5. 545 U.S. 193 (2005).

6. 496 F.3d 1334 (Fed. Cir. 2007).

7. *Integra I*, 331 F.3d at 863.

8. *Merck*, 545 U.S. at 198.

9. *Id.* at 200.

10. *Integra I*, 331 F.3d at 865.

11. *Merck*, 545 U.S. at 208.

12. *Integra Lifesciences I, Ltd. v. Merck KGaA (Integra II)*, 496 F.3d 1334, 1348 (Fed. Cir. 2007).

tection might protect uses of patented research tools that should not be protected.

This Note suggests that an approach modeled after Judge Newman's dissent in *Integra I* and the statutory schemes in Germany and the United Kingdom would solve these three problems. Judge Newman advocates creating an expanded research use exemption where uses of a patented invention during *research* could receive protection, but not uses during *development* and commercialization. Judge Newman further refines this approach by splitting "research" into protectable *research on* the patented subject matter, and unprotectable *research with* the patented subject matter. This approach would solve the clarity and administrability problems inherent to the broad construction of § 271(e)(1) by narrowing the statute's focus to activities related to the regulatory approval process as Congress presumably intended. Newman's approach would also provide protection for those beneficial uses under-protected by the current scheme, while denying protection to research uses of patented research tools.

Part II of this Note introduces the common law research use exemption. Part III outlines the enactment and subsequent interpretation of § 271(e)(1). Part IV summarizes the facts, case history, and holdings of *Integra II*. Part V analyzes the potential problems lurking after *Integra II* and proposes Judge Newman's approach as an appropriate solution.

II. THE COMMON LAW RESEARCH USE EXEMPTION

In the United States, the common law research use exemption provides an affirmative defense to patent infringement if the allegedly infringing use of the patented invention is for research purposes. This exemption originated in 1813 in a pair of opinions by Justice Joseph Story.¹³ In *Whittemore v. Cutter*,¹⁴ Justice Story stated, "it could never have been the intention of the legislature to punish a man, who constructed such a machine merely for philosophical experiments, or for the purpose of ascertaining the sufficiency of the machine to produce its described effects."¹⁵ In *Sawin v. Guild*,¹⁶ Story elaborated that patent infringement involves "the making [of a patented machine] with an intent to use for profit, and not for the mere purpose of philosophical experiment, or to ascertain the verity and exactness of the specification."¹⁷

13. *Integra I*, 331 F.3d at 874-75.

14. 29 Fed. Cas. 1120 (C.C.D. Mass. 1813).

15. *Id.* at 1121.

16. 21 Fed. Cas. 554 (C.C.D. Mass. 1813).

17. *Id.* at 555 (emphasis added).

In line with *Sawin v. Guild*, the Federal Circuit has reinforced the non-commercial focus of the common law research use exemption.¹⁸ In its most recent decision involving the common law research use exemption, *Madey v. Duke University*,¹⁹ the Federal Circuit appeared to further erode the “very narrow and strictly limited experimental use defense.”²⁰ In *Madey*, Dr. Madey used his own patented laser technology in his lab at Duke University.²¹ After Madey resigned from Duke, Duke continued to use Madey’s patented laser technology without his approval and Madey sued.²² The district court found that the common law research use exemption protected Duke’s use of the lasers because Duke used the laser technology in teaching and research that lacked a definite commercial purpose.²³ The Federal Circuit reversed, holding that Duke’s uses of the patented technology, while educational in purpose, still furthered Duke’s legitimate business objectives as a major research university and were “not solely for amusement, to satisfy idle curiosity, or for strictly philosophical inquiry.”²⁴ The Federal Circuit’s holding makes it clear that the common law research use exemption will not protect uses of patented inventions that further the alleged infringer’s legitimate business objectives, whether or not the uses are commercial in nature.

III. HISTORY OF 35 U.S.C. § 271(e)(1)

At the same time that the Federal Circuit was narrowing the common law research use exemption, the Federal Circuit’s *Roche Products, Inc. v. Bolar Pharmaceutical Co.* decision²⁵ prompted Congress to enact 35 U.S.C. § 271(e)(1) in order to allow generic drug companies to test patented drugs for regulatory purposes prior the expiration of the patent.²⁶

18. *See Embrex, Inc. v. Service Eng’g Corp.*, 216 F.3d 1343, 1346-47, 1349 (Fed. Cir. 2000) (holding that the defendant’s testing of the patented invention in order to design around was expressly for commercial purposes and, therefore, not covered by the experimental use exemption); *Roche Prods., Inc. v. Bolar Pharm. Co.*, 733 F.2d 858, 863 (Fed. Cir. 1984) (holding that the experimental use exemption will not apply when the intended experimental use “has definite, cognizable, and not insubstantial commercial purposes”).

19. 307 F.3d 1351 (Fed. Cir. 2002).

20. *Id.* at 1361-63.

21. *Id.* at 1352.

22. *Id.* at 1352-53.

23. *Id.* at 1355.

24. *Id.* at 1361-63.

25. 733 F.2d 858 (Fed. Cir. 1984).

26. *See* H.R. Rep. No. 98-857, pt. I, at 45-46 (1984), *as reprinted in* 1984 U.S.C.C.A.N. 2647, 2678-79.

Following this enactment, the Supreme Court and the Federal Circuit construed the imprecise language of § 271(e)(1) broadly, to protect additional uses of patented inventions that are arguably beyond the scope of the Congressional intent.

A. The Need for an FDA Regulatory Submission Exemption in *Roche*

In *Roche*, the Federal Circuit found patent infringement where a generic drug manufacturer experimented on a patented drug prior to the expiration of the patent, solely for the purpose of obtaining FDA approval for the commercial sale of a generic drug equivalent once the patent expired.²⁷ Roche Products, Inc. (Roche) held a patent for a sleeping pill containing flurazepam hydrochloride.²⁸ Bolar Pharmaceutical Co. (Bolar), a generic drug manufacturer, wanted to market a generic equivalent of the patented drug shortly after Roche's patent expired.²⁹ Because the FDA approval process can take at least two years, Bolar began experimenting on flurazepam hydrochloride to obtain data required for FDA approval prior to the expiration of Roche's patent.³⁰ Roche brought an infringement action against Bolar seeking to enjoin Bolar from using the patented drug for any purpose during the life of the patent.³¹

The Federal Circuit held that Bolar's use of flurazepam hydrochloride infringed Roche's patent under 35 U.S.C. § 271(a), which states, "whoever without authority makes, uses, or sells any patented invention, within the United States . . . during the patent term therefor, infringes the patent."³² The court noted that this decision would result in a *de facto* monopoly for a drug patent owner for at least two years after the patent's expiration because it would take generic drug manufacturers that long to complete the FDA approval process.³³ However, the court further noted that this *de facto* monopoly was offset by the fact that the effective life of a pioneer drug patent is as low as seven years, after accounting for the seven to ten years required for the development and approval of a pioneer drug.³⁴ The Federal Circuit concluded its opinion by urging Congress to

27. *Roche Prods., Inc. v. Bolar Pharms. Co.*, 733 F.2d 858, 860-61, 865 (Fed. Cir. 1984).

28. *Id.* at 860.

29. *Id.*

30. *Id.*

31. *Id.*

32. *Id.* at 861, 865.

33. *Id.* at 864.

34. *Id.*

enact legislation addressing the societal and economic problems at issue in this case.³⁵

B. Congress Responds with the 1984 Act

Congress reacted promptly to *Roche* and resultant lobbying efforts by generic drug companies. Mere months after *Roche* was decided, Congress enacted the Drug Price Competition and Patent Term Restoration Act, also referred to as the Hatch-Waxman Act.³⁶ The 1984 Act addressed the two distortions created by the requirement that certain products undergo pre-market regulatory approval that the Federal Circuit noted in *Roche*.³⁷ First, Congress attempted to alleviate the loss of seven to ten years of marketability under patents on pioneer drugs due to the development and approval process through the provisions in § 201 of the 1984 Act.³⁸ Section 201, codified at 35 U.S.C. § 156, provides a patent term extension of up to five years for patents on products requiring a regulatory review period prior to commercial marketing or use.³⁹ Covered products include: 1) human drug products (defined as the active ingredient of a new drug, antibiotic drug, or human biological product); and 2) any medical devices, food additives, or color additives subject to regulation under the Federal Food, Drug, and Cosmetic Act (FDCA).⁴⁰

Second, Congress addressed the patent owner's *de facto* patent monopoly of two years or more after the patent's expiration through § 202 of the 1984 Act.⁴¹ Section 202 added 35 U.S.C. § 271(e)(1), which states:

It shall not be an act of infringement to make, use, offer to sell, or sell within the United States or import into the United States a patented invention . . . solely for uses reasonably related to the development and submission of information under a Federal law which regulates the manufacture, use, or sale of drugs.⁴²

35. *Id.* at 863-65.

36. Janice M. Mueller, *No "Dilettante Affair": Rethinking the Experimental Use Exception to Patent Infringement for Biomedical Research Tools*, 76 WASH. L. REV. 1, 25 (2001).

37. *Eli Lilly & Co. v. Medtronic, Inc.*, 496 U.S. 661, 669 (1990).

38. H.R. Rep. No. 98-857, pt. I, at 17-18, 37 (1984), as reprinted in 1984 U.S.C.C.A.N. 2647, 2650-51, 2670; *Eli Lilly*, 496 U.S. at 669-70.

39. 35 U.S.C. § 156(a) (2000); H.R. Rep. No. 98-857, pt. I, at 15, 37 (1984), as reprinted in 1984 U.S.C.C.A.N. 2647, 2648, 2670; *Eli Lilly*, 496 U.S. at 671.

40. 35 U.S.C. § 156(f) (2000); *Eli Lilly*, 496 U.S. at 670-71.

41. H.R. Rep. No. 98-857, pt. I, at 45-46 (1984), as reprinted in 1984 U.S.C.C.A.N. 2647, 2678-79; *Eli Lilly*, 496 U.S. at 671.

42. 35 U.S.C. § 271(e)(1) (2000).

The § 271(e)(1) safe harbor legislation effectively overturned *Roche* by allowing competitors to engage in otherwise infringing activities prior to the expiration of a patent, so long as such activities are “reasonably related” to the development and submission of information for FDA approval.⁴³

Thus, the 1984 Act achieved two important goals. The Act removed barriers to bringing generic drugs to market, thereby accelerating competition and providing the public with lower consumer costs for drugs and insurance, while simultaneously preserving incentives for pioneer drug companies to develop new drugs.⁴⁴

C. Courts Construe the Language of § 271(e)(1)

Although the Congressional intent in promulgating the 1984 Act seemed fairly straightforward, the imprecise drafting of the § 271(e)(1) safe harbor provision⁴⁵ spawned a number of Supreme Court and Federal Circuit cases wrangling over the terms “patented invention,” “reasonably related,” and “a Federal law.”

1. *The Supreme Court Interprets the Phrases “Patented Invention” and “a Federal law”*

In *Eli Lilly & Co. v. Medtronic, Inc.*,⁴⁶ the Supreme Court extended the § 271(e)(1) safe harbor provision to exempt an alleged infringer’s use of a patented Class III medical device⁴⁷ for the purpose of obtaining regulatory approval under the FDCA.⁴⁸ Eli Lilly & Co. (Eli Lilly) owned patents on an implantable cardiac defibrillator.⁴⁹ Medtronic, Inc. (Medtronic) performed testing on its own implantable cardiac defibrillator, which was covered by two of Eli Lilly’s patents, in order to develop and submit information required under the FDCA for pre-market approval of the medical device.⁵⁰ Eli Lilly filed suit to enjoin Medtronic from testing the medi-

43. H.R. Rep. No. 98-857, pt. I, at 45-46 (1984), as reprinted in 1984 U.S.C.C.A.N. 2647, 2678-79; *Eli Lilly*, 496 U.S. at 671.

44. Marlan D. Walker, *The Patent Research Tool Problem After Merck v. Integra*, 14 TEX. INTELL. PROP. L.J. 1, 20 (2005).

45. See *Eli Lilly*, 496 U.S. at 679 (“No interpretation we have been able to imagine can transform § 271(e)(1) into an elegant piece of statutory draftsmanship.”).

46. 496 U.S. 661 (1990).

47. Class III medical devices require pre-market approval to assure the device is safe and effective. 21 C.F.R. § 860.3 (2007).

48. *Eli Lilly*, 496 U.S. at 663-64, 679.

49. *Id.* at 664.

50. *Id.*

cal device and Medtronic defended on the ground that the § 271(e)(1) safe harbor protected its activities.⁵¹

In order to evaluate Medtronic's defense, the Court first found that the phrase "patented invention" in § 271(e)(1) includes all inventions, not just drug-related inventions.⁵² The Court then interpreted the phrase "a Federal law" in § 271(e)(1) to refer to the entirety of any Act (including the FDCA), not just the individual provisions of federal laws that regulate drugs.⁵³ Thus, the Court broadly held that § 271(e)(1) exempts uses of *any* patented inventions, such as cardiac defibrillators, reasonably related to the development and submission of information for regulatory approval under *any* federal act (such as the FDCA).⁵⁴

The Court also provided a narrower justification for its holding by finding that §§ 201 and 202 of the 1984 Act were meant to be complimentary, acting together to eliminate the pre-market regulatory approval distortions caused at both ends of the patent period.⁵⁵ Thus, the Court found that all products eligible for patent term extension under § 201 (new drugs, antibiotic drugs, human biological products, *medical devices*, food additives, and color additives) were also subject to the § 271(e)(1) safe harbor provided by § 202.⁵⁶ This finding further justified the Court's holding that the Class III medical device at issue in this case was subject to the § 271(e)(1) safe harbor.

2. *The Federal Circuit Applies Eli Lilly*

Relying on the Supreme Court's *Eli Lilly* decision, in *AbTox, Inc. v. Exitron Corp.*⁵⁷ the Federal Circuit held that the § 271(e)(1) safe harbor also applies to Class II medical devices, which are not subject to pre-market regulatory approval.⁵⁸ *AbTox, Inc.* (*AbTox*) owned a patent for a plasma sterilizer, a Class II medical device.⁵⁹ Prior to the expiration of *AbTox's* patent, *MDT Corp.* (*MDT*) developed a plasma sterilizer that

51. *Id.*

52. *Id.* at 665.

53. *Id.* at 665-66.

54. *Id.* at 666-69.

55. *Id.* at 670, 675.

56. *Id.* at 673.

57. 122 F.3d 1019 (Fed. Cir. 1997).

58. *Id.* at 1029. Class II medical devices may be marketed without pre-market approval, but manufacturers must comply with certain federal performance regulations. *See* 21 C.F.R. § 860.3 (2007). Class II devices enjoy an abbreviated approval process that is far less rigorous than the pre-market approval necessary for Class III devices. *AbTox*, 122 F.3d at 1028.

59. *Id.* at 1027.

was covered by the AbTox patent and conducted limited tests on the device to collect data necessary for FDA approval of its Class II medical device.⁶⁰ AbTox alleged that MDT's activity constituted patent infringement, and MDT moved for partial summary judgment on the basis that its activities fell under the § 271(e)(1) safe harbor.⁶¹ AbTox argued that § 271(e)(1) did not apply to Class II medical devices.⁶²

In determining whether § 271(e)(1) applied to Class II medical devices, the Federal Circuit considered two parts of *Eli Lilly*. First, the court cited the Supreme Court's narrow reasoning that all products eligible for patent term extension under § 201 of the 1984 Act are also subject to the § 271(e)(1) safe harbor provided by § 202.⁶³ Under this reasoning, the Federal Circuit stated that § 271(e)(1) would only apply to Class III medical devices because Class II medical devices are ineligible for patent term extension under § 201.⁶⁴ Second, however, the court held that the Supreme Court's broad holding "that section 271(e)(1) applies to any use reasonably related to regulation under the FDCA" would certainly include Class II devices.⁶⁵

Thus, *AbTox* makes it clear that the Federal Circuit will apply the Supreme Court's broad interpretation of § 271(e)(1) despite the "potential conflict with [the Supreme Court's] own reasoning" that §§ 201 and 202 of the 1984 Act were meant to complement and offset each other.⁶⁶

3. *The Federal Circuit Affirms a District Court Test for "Reasonably Related"*

In *Intermedics, Inc. v. Ventritex, Inc.*,⁶⁷ the U.S. District Court for the Northern District of California suggested a test for "reasonably related." The court noted that Congress included the phrase "reasonably related" to provide potential infringers with "latitude in making judgments about the nature and extent of the otherwise infringing activities they would engage in as they sought to develop information to satisfy the FDA," and to avoid punishing potential infringers because their "otherwise infringing 'uses' either failed to generate information in which the FDA was interested or

60. *Id.* at 1027.

61. *Id.*

62. *Id.*

63. *Id.* at 1029.

64. *Id.*

65. *Id.* at 1028.

66. *Id.* at 1029.

67. 775 F. Supp. 1269 (N.D. Cal. 1991), *aff'd*, 991 F.2d 808 (Fed. Cir. 1993).

generated more information than turned out to be necessary to secure FDA approval.”⁶⁸ The court set forth a test for “reasonably related”:

[W]ould it have been reasonable, objectively, for a party in defendant’s situation to believe that there was a decent prospect that the “use” in question would contribute (relatively directly) to the generation of kinds of information that was likely to be relevant in the processes by which the FDA would decide whether to approve the product?⁶⁹

The Federal Circuit affirmed.⁷⁰

D. The Research Tools Question: Cause for Concern?

The expansive protection under § 271(e)(1) resulting from the foregoing Supreme Court and Federal Circuit construction has created concerns about the status of patent protection for a valuable set of laboratory resources known as research tools. The issue is that research tools are often difficult to define and categorize because the same resource can have multiple applications in several different contexts. For instance, the same molecule could have utility as a component of a screening assay and as a therapeutic drug. A further complication is that research tools are extremely valuable to researchers, who use research tools to make new discoveries and work more efficiently, and to research-tool makers, who derive economic value from these tools. Because research tools are so difficult to characterize, research tool patentees fear that the broad construction of § 271(e)(1) set forth in Supreme Court and Federal Circuit precedent could exempt infringing uses of their patented research tools, thereby diminishing the economic value of those tools and the incentives to create new tools.⁷¹ These issues came to light when a U.S. District Court in the Southern District of New York, applying the broad construction of § 271(e)(1), held that § 271(e)(1) exempted some infringing uses of patented research tools.⁷²

68. *Id.* at 1280.

69. *Id.*

70. *Intermedics, Inc. v. Ventritex, Inc.*, 991 F.2d 808 (Fed. Cir. 1993).

71. Brief for Invitrogen Corp. et al. as Amici Curiae in Support of Respondents at 6-7, *Merck KGaA v. Integra Lifesciences I, Ltd. (Merck)*, 545 U.S. 193 (2005) (No. 03-1237) [hereinafter *Invitrogen Brief*].

72. *Bristol-Myers Squibb Co. v. Rhone-Poulenc Rorer, Inc.*, No. 95 Civ. 8833(RPP), 2001 WL 1512597, at *1, *4 (S.D.N.Y. Nov. 28, 2001).

1. NIH's Definition of Research Tools

The National Institutes of Health (NIH) defines the term “research tools” to “embrace the full range of resources that scientists use in the laboratory, while recognizing that from other perspectives the same resources may be viewed as ‘end products.’”⁷³ The NIH elaborates that “research tools” “include cell lines, monoclonal antibodies, reagents, animal models, growth factors, combinatorial chemistry libraries, drugs and drug targets, clones and cloning tools (such as PCR), methods, laboratory equipment and machines, databases and computer software.”⁷⁴ However, establishing whether a biotechnological discovery is a research tool is not always straightforward because many biotechnological discoveries, including pharmaceutical drugs, DNA sequences, and cell lines, may serve dual purposes as therapeutic or diagnostic end products for sale to customers, or as basic tools to assist in research.⁷⁵

2. Research Tools Require Protection

The research tool industry has played a major role in the rapid evolution of the pharmaceutical industry. Over the past thirty years, innovations in the research tool industry have made it possible to identify drug targets, such as previously undiscovered genes involved in major diseases, identify drug candidates matching those targets, and develop accurate procedures for testing those candidates.⁷⁶

In addition, advancements in the research tools field have led to more efficient research. For instance, high throughput technologies now allow thousands of proteins or genetic sequences to be assayed at once, reducing what previously took weeks or months of research into hours or minutes.⁷⁷ Also, advances in laboratory software have halved the time pharmaceutical companies need to screen potential drug candidates.⁷⁸ Such efficiencies lead to time-savings and lower costs for research tool users.⁷⁹

Developing biotechnology research tools is risky and costly.⁸⁰ Patent protection partially mediates the risks and costs by allowing biotech com-

73. Report of the National Institutes of Health (NIH) Working Group on Research Tools, Background (1998), <http://www.nih.gov/news/researchtools/index.htm> (last visited Apr. 5, 2008).

74. *Id.*

75. Jian Xiao, *Carving Out A Biotechnology Research Tool Exception to the Safe Harbor Provision of 35 U.S.C. § 271(e)(1)*, 12 TEX. INTELL. PROP. L.J. 23, 48 (2003).

76. Invitrogen Brief, *supra* note 71, at 10.

77. *Id.*

78. *Id.* at 10-11.

79. *Id.* at 11.

80. Xiao, *supra* note 75, at 59.

panies to profit from their research tools, primarily through licensing, and assuring that they can prevent potential users and competitors from making or using the patented invention during the lifetime of the patent.⁸¹

3. *A District Court Applies § 271(e)(1) to Research Tools*

In *Bristol-Myers Squibb Co. v. Rhone-Poulenc Rorer, Inc.*,⁸² the U.S. District Court for the Southern District of New York held that the § 271(e)(1) safe harbor may apply to patented intermediates used in early-stage drug discovery.⁸³ Bristol-Myers Squibb Co. (Bristol) used intermediates patented by Rhône-Poulenc Rorer, S.A. (RPR) in research and development activities relating to the preparation of taxol analogs, the development of a structure-activity relationship (SAR) database, and the identification of potential drug candidates.⁸⁴ RPR sued Bristol for patent infringement and Bristol maintained that its activities were exempt under § 271(e)(1).⁸⁵ RPR alleged that Bristol's uses were "outside of the scope of the 271(e)(1) exemption because 1) the intermediates were not a patented invention within the meaning of 271(e)(1), and [2]) Bristol's uses were not 'reasonably related to the development and submission of information under a Federal law which regulates the manufacture, use or sale of drugs.'"⁸⁶

The district court applied the broad interpretation of "patented invention" in *Eli Lilly* and *AbTox*, which includes "all patented inventions and discoveries, not merely those that are covered by Section 156," and held that RPR's patented intermediates were "patented inventions" for the purposes of § 271(e)(1).⁸⁷ The court then applied the "reasonably related" test from *Intermedics*.⁸⁸ The court found that while many of Bristol's uses of the patented intermediates did not directly result in information that could be submitted to the FDA or the filing of an FDA application, the uses "relat[ed] to a preliminary activity that may facilitate or be useful in generating information that could be submitted to the FDA," and were "made in order to determine whether or not an application for approval would be sought."⁸⁹ Thus, the court held that Bristol's uses were "reasonably related

81. *See id.*

82. No. 95 Cov. 8833(RPP), 2001 WL 1512597 (S.D.N.Y. Nov. 28, 2001).

83. *Id.* at *4.

84. *Id.*

85. *Id.* at *1.

86. *Id.* at *2.

87. *Id.* at *3.

88. *Id.*

89. *Id.* at *7.

to the development and submission of information under a Federal law,” and were thereby exempt from infringement under § 271(e)(1).⁹⁰

For research tool patent holders, this decision was cause for concern. Invoking the broad construction of § 271(e)(1) under Supreme Court and Federal Circuit precedent, the district court extended protection to otherwise infringing uses of patented research tools only tenuously related to obtaining FDA approval. Here, Bristol’s allegedly infringing research activities 1) involved *research with* the patented inventions, using the inventions for their intended purpose to identify drug candidates, not *research on* the subject matter of patented inventions themselves⁹¹ and 2) were conducted before the identification of a compound for which FDA approval would be sought, and far up-stream of the FDA approval process. The Federal Circuit did not take long to attempt to quell the concerns of research tool patent holders.

IV. THE FEDERAL CIRCUIT ATTEMPTS TO NARROW § 271(e)(1) AND THE SUPREME COURT REVERSES

In *Integra I*, the Federal Circuit attempted to narrow the expanding scope of § 271(e)(1) by holding that the safe harbor did not apply to pre-clinical experiments which only identified drug candidates for future testing under FDA processes and failed to supply information for FDA submissions.⁹² The Supreme Court reversed in *Merck*, holding that pre-clinical experimentation was “protected under § 271(e)(1) as long as there is a reasonable basis for believing that the experiments will produce ‘the types of information that are relevant to an IND or NDA.’”⁹³ On remand in *Integra II*, the Federal Circuit held that the challenged Scripps experiments were exempt from infringement under § 271(e)(1) because such ex-

90. *Id.* at *8.

91. In contrast, the allegedly infringing research activities in *Roche*, *Eli Lilly*, and *AbTox* all involved *research on* the subject matter of the patented invention. *Eli Lilly & Co. v. Medtronic, Inc.*, 496 U.S. 661, 664 (1990) (stating that Medtronic’s allegedly infringing activities were research on the subject matter of Eli Lilly’s patented cardiac defibrillator to obtain information for regulatory approval); *AbTox, Inc. v. Exitron Corp.*, 122 F.3d 1019, 1027 (Fed. Cir. 1997) (noting that MDT’s allegedly infringing activities were research on the subject matter of AbTox’s patented plasma sterilizer to obtain information for regulatory approval); *Roche Prods., Inc. v. Bolar Pharm. Co.*, 733 F.2d 858, 860 (Fed. Cir. 1984) (establishing that Bolar’s allegedly infringing activities were research on the subject matter of Roche’s patented sleeping pill to obtain information for regulatory approval).

92. *Integra Lifesciences I, Ltd. v. Merck KGaA (Integra I)*, 331 F.3d 860, 865-68 (Fed. Cir. 2003).

93. *Merck KGaA v. Integra Lifesciences I, Ltd. (Merck)*, 545 U.S. 193, 208 (2005).

perimentation, “if successful, would be appropriate to include in a submission to the FDA.”⁹⁴ This Part explains this course of litigation.

A. Background

Integra Lifesciences I, Ltd. (Integra) owns five patents⁹⁵ issued between 1988 and 1997 relating to RGD peptides, short tri-peptide segments of fibronectin having the sequence arginine (R)—glycine (G)—aspartic acid (D).⁹⁶ RGD peptides promote cell adhesion by attaching to cell surface receptors known as $\alpha_v\beta_3$ integrins.⁹⁷ Integra’s patented inventions relate to ways of using the RGD peptides to promote, block, and disrupt cell attachment.⁹⁸

In 1988, Merck KGaA (Merck) began funding research conducted at the Scripps Research Institute (Scripps).⁹⁹ In the early 1990’s, Dr. David Cheresh, a scientist at Scripps, discovered that blocking $\alpha_v\beta_3$ integrins could halt tumor growth by inhibiting angiogenesis (the process of new blood vessel formation) in tumor cells.¹⁰⁰ Recognizing the importance of Dr. Cheresh’s findings, Merck extended its collaboration with Scripps during the mid-1990s for Dr. Cheresh to identify potential drug candidates for blocking $\alpha_v\beta_3$ integrins.¹⁰¹ Merck also agreed to fund the “necessary experiments to satisfy the biological bases and regulatory (FDA) requirements for the implementation of clinical trials” for any potential drug candidates.¹⁰² From 1995 to 1998, Scripps performed experiments on several RGD peptides provided by Merck to evaluate their suitability as potential drug candidates.¹⁰³ The Scripps-Merck experiments included pre-clinical testing in animals to evaluate efficacy, specificity, toxicity, mechanism of action and pharmacokinetics.¹⁰⁴ In 1997, Scripps chose to pursue RGD peptide EMD 121974 in clinical development and initiated the regulatory

94. *Integra Lifesciences I, Ltd. v. Merck KGaA (Integra II)*, 496 F.3d 1334, 1348 (Fed. Cir. 2007).

95. U.S. Patent Nos. 4,988,621 (’621 patent), 4,792,525 (’525 patent) 5,695,997 (’997 patent), 4,879,237 (’237 patent), and 4,789,734 (’734 patent).

96. *Integra I*, 331 F.3d at 862, 873.

97. *Id.* at 862.

98. *Integra II*, 496 F.3d at 1336.

99. *Merck*, 545 U.S. at 197.

100. *Integra I*, 331 F.3d at 863.

101. *Merck*, 545 U.S. at 198.

102. *Integra I*, 331 F.3d at 863.

103. *Merck*, 545 U.S. at 198.

104. *Id.* at 198-99.

approval process in the United States and Europe.¹⁰⁵ In 1998, an Investigational New Drug application (IND) was filed for EMD 121974.¹⁰⁶

On July 18, 1996, Integra filed a patent infringement suit against Merck and Scripps in the U.S. District Court for the Southern District of California.¹⁰⁷ Integra alleged that Merck willfully infringed Integra's patents and induced others to infringe by supplying the RGD peptides to Scripps, and that Scripps infringed by experimenting with the RGD peptides.¹⁰⁸ Merck answered that the Scripps-Merck studies on RGD peptides were protected from patent infringement by either the § 271(e)(1) safe harbor or the common law research use exemption.¹⁰⁹

At trial, the jury found that the 1995-98 Scripps-Merck activities infringed Integra's five patents.¹¹⁰ The district court sustained the verdict, finding that the connection between the 1995-98 Scripps-Merck experiments and the FDA review process was "insufficiently direct to qualify" for the § 271(e)(1) exemption.¹¹¹ In regards to the common law research use exemption, the district court found that all but one of Scripps's pre-1995 activities relating to RGD peptides constituted basic scientific research and were protected by the common law research use exemption, but that none of the 1995-98 activities were protected by the common law research use exemption.¹¹²

B. The Federal Circuit Affirms in *Integra I*

Merck appealed to the Federal Circuit on the grounds that the 1995-98 activities were covered under the § 271(e)(1) safe harbor.¹¹³ The court assessed whether the 1995-1998 pre-clinical experiments conducted under the Scripps-Merck agreement were "solely for uses reasonably related to the development and submission of information" to the FDA so as to qualify for the safe harbor.¹¹⁴ Based on the legislative history of the 1984 Act, the court reasoned that § 271(e)(1) was narrowly tailored to have a *de*

105. *Integra I*, 331 F.3d at 863.

106. *Merck*, 545 U.S. at 199.

107. *Id.* at 200.

108. *Id.*

109. *Integra Lifesciences I, Ltd. v. Merck KGaA (Integra II)*, 496 F.3d 1334, 1336-37 (Fed. Cir. 2007).

110. *Integra I*, 331 F.3d at 863. The district court granted Merck's motion for summary judgment of invalidity of claim 2 of the '621 patent. *Id.* at 862.

111. *Integra II*, 496 F.3d at 1338.

112. *Id.* at 1337.

113. The issue of whether the 1995-98 Scripps-Merck experiments were protected by the common law research use exemption was not presented on appeal. *Id.*

114. *Integra I*, 331 F.3d at 866.

minimis impact on the patentee's right to exclude even though it exempts from infringement a generic drug company's "pre-expiration activities 'reasonably related' to acquiring FDA approval of a [generic version of a] drug already on the market."¹¹⁵ In light of the legislative history, the court held that § 271(e)(1) would not "encompass drug development activities far beyond those necessary to acquire information for FDA approval of a [generic version of a] patented pioneer drug already on the market."¹¹⁶ The court concluded that:

§ 271(e)(1) simply does not globally embrace all experimental activity that at some point, however attenuated, may lead to an FDA approval process. . . . Extending § 271(e)(1) to embrace all aspects of new drug development activities would ignore its language and context with respect to the 1984 Act in an attempt to exonerate infringing uses only potentially related to information for FDA approval.¹¹⁷

Accordingly, a split panel of the Federal Circuit affirmed the district court's ruling that the § 271(e)(1) safe harbor did not apply to the 1995-98 Scripps-Merck experiments because those pre-clinical experiments "did not supply information for submission to the [FDA], but instead identified the best drug candidate to subject to future clinical testing under the FDA processes."¹¹⁸ This holding appeared to limit the expanding scope of infringing patent uses protected by § 271(e)(1).

1. *The Federal Circuit Addresses the Research Tools Issue*

The Federal Circuit cautioned that interpreting § 271(e)(1) to "include the Scripps Merck activities would effectively vitiate the exclusive rights of patentees owning biotechnology tool patents."¹¹⁹ The court noted that patent owners often use research tools in early-stage research to identify drug candidates and in later-stage safety and efficacy experiments on those drugs.¹²⁰ The court assumed that the use of research tools in the later-stage safety and efficacy-related experiments would fall within the § 271(e)(1) safe harbor, leaving the only remaining commercial value of these research tools in their early-stage research uses.¹²¹ The court concluded that holding § 271(e)(1) to apply to such early-stage research, like the Scripps-

115. *Id.* at 867.

116. *Id.*

117. *Id.*

118. *Id.* at 865, 868.

119. *Id.* at 867.

120. *Id.*

121. *Id.*

Merck activities, would eliminate this remaining commercial value and “swallow the whole benefit of the Patent Act for some categories of biotechnological inventions.”¹²² Such an effect would run counter to Congress’s intent in drafting § 271(e)(1) to maintain a *de minimis* impact on the patentee’s rights.¹²³

2. Judge Newman Dissents

In dissent, Judge Newman argued that the challenged Scripps-Merck activities were “discovery-based research” that should be protected either by § 271(e)(1) or the common law research use exemption.¹²⁴ Judge Newman agreed with the panel majority that § 271(e)(1) should not “reach back down the chain of experimentation to embrace development and identification of new drugs,” but she argued that where the reach of § 271(e)(1) ends, the common law research use exemption should begin, and that either exemption could protect the Scripps-Merck experiments.¹²⁵

Judge Newman did not agree that the Scripps-Merck activities should automatically fall outside of the common law research use exemption simply because the ultimate goal of the Scripps-Merck research was commercializing a cure for cancer.¹²⁶ Instead, she advocated a shift away from the non-commercial focus of the common law research use exemption and towards “recogniz[ing] the exemption for research conducted in order to understand or improve upon or modify the patented subject matter.”¹²⁷ She remarked that this “is how the patent system has always worked: the patent is infringed by and bars activity associated with *development* and commercialization of infringing subject matter, but the *research* itself is not prohibited, nor is comparison of the patented subject matter with improved technology or with designs whose purpose is to avoid the patent.”¹²⁸

Judge Newman also argued that the research tools problem raised by the panel majority is a misperception.¹²⁹ She stated that “[t]here is a fundamental distinction between research into the science and technology disclosed in patents, and the use in research of patented products or meth-

122. *Id.*

123. *Id.*

124. *Integra Lifesciences I, Ltd. v. Merck KGaA (Integra I)*, 331 F.3d 860, 873 (Fed. Cir. 2003) (Newman, J., concurring in part, dissenting in part).

125. *Id.* at 877.

126. *Id.* at 876.

127. *Id.*

128. *Id.* (emphasis added).

129. *Id.* at 877.

ods, the so-called ‘research tools.’”¹³⁰ She noted that investigation into, or *research on*, patented inventions has always been permitted, whereas investigation using, or *research with*, patented inventions has never been permitted.¹³¹ She maintained that the Scripps-Merck syntheses and evaluations of new RGD peptides was *research on* the RGD peptides, not *research with* the Integra products as research tools.¹³²

C. The Supreme Court Reverses in *Merck*

Merck petitioned the case to the Supreme Court, who then granted certiorari on the question of “whether uses of patented inventions in preclinical research, the results of which are not ultimately included in a submission to the Food and Drug Administration (FDA), are exempted from infringement by 35 U.S.C. § 271(e)(1).”¹³³

The Federal Circuit, in *Integra I*, relied on the legislative history to narrow the scope of § 271(e)(1) to exclude Scripps’s early-stage drug discovery experimentation.¹³⁴ However, the Supreme Court responded that the “statutory text makes clear that [§ 271(e)(1)] provides a wide berth for the use of patented drugs in activities related to the federal regulatory process.”¹³⁵ The Court stated that the § 271(e)(1) exemption “extends to all uses of patented inventions that are reasonably related to the development and submission of *any* information under the FDCA” regardless of the “phase of research in which [such information] is developed or the particular submission in which [such information] could be included.”¹³⁶ The Court then stated that the “reasonably related” requirement, properly construed:

leaves adequate space for experimentation and failure on the road to regulatory approval: At least where a drugmaker has a reasonable basis for believing that a patented compound may work, through a particular biological process, to produce a particular physiological effect, and uses the compound in research that, if successful, would be appropriate to include in a submission to the FDA.¹³⁷

130. *Id.* at 877-78.

131. *Id.* at 878 n.10.

132. *Id.* at 878.

133. *Merck KGaA v. Integra Lifesciences I, Ltd. (Merck)*, 545 U.S. 193, 195 (2005).

134. *Integra I*, 331 F.3d at 866-67.

135. *Merck*, 545 U.S. at 202.

136. *Id.* (emphasis in original).

137. *Id.* at 207.

The Court held that “the use of patented compounds in preclinical studies is protected under § 271(e)(1) as long as there is a reasonable basis for believing that the experiments will produce ‘the types of information that are relevant to an IND or NDA.’”¹³⁸ The Court vacated the judgment and remanded the case to the Federal Circuit.¹³⁹

The Supreme Court explicitly left the research tools question undecided. Although the Federal Circuit was concerned that “expansion of § 271(e)(1) to include the Scripps-Merck activities would effectively vitiate the exclusive rights of patentees owning biotechnology tool patents,”¹⁴⁰ the Supreme Court declined to address the issue. In a footnote, the Court reasoned that Integra never argued that Scripps used the RGD peptides as research tools and that the record indicated that the RGD peptides were not used as research tools.¹⁴¹ The Court concluded: “We therefore need not—and do not—express a view about whether, or to what extent, § 271(e)(1) exempts from infringement the use of ‘research tools’ in the development of information for the regulatory process.”¹⁴²

D. Federal Circuit’s Decision on Remand (*Integra II*) and Judge Rader’s Dissent

On remand, the Federal Circuit reversed its previous holding of infringement from *Integra I*.¹⁴³ The court found that all the Scripps-Merck experiments implicated in the case, which were conducted after the discovery that RGD peptides could inhibit angiogenesis, yielded information concerning efficacy, pharmacology, pharmacokinetics, and mechanism of action that would be appropriate to include in an IND application to the FDA.¹⁴⁴ Following *Merck*, the Federal Circuit held that the challenged Scripps experiments were “reasonably related to research that, if successful, would be appropriate to include in a submission to the FDA” and thereby exempt from infringement under § 271(e)(1).¹⁴⁵

Judge Rader dissented on the grounds that the panel majority’s decision on remand expanded the § 271(e)(1) exemption beyond the scope dictated by the Supreme Court and effectively eliminated patent protection

138. *Id.* at 208.

139. *Id.*

140. *Integra I*, 331 F.3d at 867.

141. *Merck*, 545 U.S. at 205 n.7.

142. *Id.*

143. *Integra Lifesciences I, Ltd. v. Merck KGaA (Integra II)*, 496 F.3d 1334, 1348 (Fed. Cir. 2007).

144. *Id.* at 1345, 1347.

145. *Id.* at 1348.

for research tools.¹⁴⁶ Judge Rader maintained that the Supreme Court construed the § 271(e)(1) exemption to cover “the *use of patented drugs* in activities related to the federal regulatory process,” but the Court did not address research tools, such as patented methods or processes, that “measure, analyze, and assess the characteristics of those compounds during experimentation and development.”¹⁴⁷ Judge Rader noted that two of the patents-in-suit, the ’237 and ’734 patents, were not for patented drugs, but rather for research tools with no application outside of the laboratory.¹⁴⁸ The ’237 patent covers “[a] method for detaching animal cells from a substrate,” and the ’734 patent covers “[a] method of isolating cell surface receptors utilizing a short peptide sequence bound to an affinity column.”¹⁴⁹ Both patents claim only methods, or research tools, for use in laboratory settings.¹⁵⁰

Judge Rader provided a hypothetical example to illustrate the danger of including research tools within the § 271(e)(1) exemption. Suppose an inventor obtains a patent for a research tool that does not itself fight cancer but can test pharmaceutical compounds for cancer-fighting characteristics.¹⁵¹ The tool is therefore useful to the pharmaceutical industry and beneficial the public.¹⁵² Although the patent system “would wish to protect this invention and give incentives for more investment in developing this kind of valuable research tool,” including research tools within the § 271(e)(1) exemption “could obliterate all value for the hypothetical invention discussed above and with it the incentives for development of these inventions outside of the pharmaceutical industry itself.”¹⁵³

V. ANALYSIS

In light of the Supreme Court and Federal Circuit precedents, the status of common law and § 271(e)(1) protection from infringement liability for uses of a patented invention in drug research remains unclear. The common law research use exemption is extremely narrow and rarely applied, while the statutory language of the § 271(e)(1) safe harbor has been interpreted and applied broadly. This dichotomy generates clarity and administrability issues for researchers and courts, and potentially overpro-

146. *Id.* (Rader, J., dissenting in part and concurring in part).

147. *Id.* at 1349 (emphasis in original).

148. *Id.* at 1350.

149. *Id.* at 1350-51.

150. *Id.* at 1350.

151. *Id.* at 1352.

152. *Id.*

153. *Id.*

protects uses of patented research tools while under-protecting other beneficial research uses.

This Part highlights holes in standing precedent regarding the common law research use exception and the § 271(e)(1) safe harbor, and suggests an alternative course of action. Section V.A addresses problems inherent in Supreme Court and Federal Circuit precedent. Section V.B first suggests that Judge Newman's proposal to create a broad research use exemption and apply § 271(e)(1) narrowly as a regulatory approval exemption would alleviate these problems. Then, Section V.B illustrates that both Germany and the United Kingdom have statutory schemes that reflect Newman's approach.

A. Problems With the Current Supreme Court and Federal Circuit Precedents Regarding § 271(e)(1) and the Common Law Research Use Exemption

The current precedent raises three key concerns. First, the broad scope of § 271(e)(1) is unclear and provides minimal guidance to researchers and administrability problems for courts attempting to apply the statute. Second, taken together, § 271(e)(1) and the common law research use exemption may fail to provide a safe harbor for some beneficial research uses, such as experimentation to better understand, improve upon, and explore new uses for patented subject matter. Third, the status of research tools under § 271(e)(1) remains undecided, but the broad scope of § 271(e)(1) may improperly exempt from infringement other uses of patented research tools, thereby reducing economic incentives to further develop beneficial research tools.

1. The Application of § 271(e)(1) is Unclear for Researchers and Difficult for Courts to Administer

Despite the Supreme Court's broad construction of § 271(e)(1), the statute's focus on "the development and submission of information" for regulatory approval makes it unclear exactly which uses of a patented invention, especially uses in early stage research activities, fall under the safe harbor. The Federal Circuit held that the § 271(e)(1) exemption "does not globally embrace all experimental activity that at some point, however attenuated, may lead to an FDA approval process."¹⁵⁴ The Supreme Court agreed, but shifted the focus of the analysis to the researcher's intent, stating that "[b]asic scientific research on a particular compound, performed without the *intent* to develop a particular drug or a reasonable belief that

154. *Integra Lifesciences I, Ltd. v. Merck KGaA (Integra I)*, 331 F.3d 860, 867 (Fed. Cir. 2003).

the compound will cause the sort of physiological effect the researcher intends to induce, is surely not ‘reasonably related to the development and submission of information’ to the FDA.”¹⁵⁵ The Supreme Court further held that § 271(e)(1) applies as long as the researcher has a “reasonable basis for believing” that the experiments will produce information relevant to a regulatory submission.¹⁵⁶

These holdings fail to clearly define the scope of § 271(e)(1). As a result, researchers and drug companies will find it difficult to know exactly when uses of a patented invention amount to infringement, especially in the early stages of research where the development of information may not be directed towards any sort of regulatory approval process. Such uncertainty makes it difficult for researchers to properly plan a course of experimentation and efficiently allocate resources when choosing between purchasing a pricey patent license for potentially protected activities and facing litigation if their activities are not protected. Moreover, an intent-based test that focuses on a researcher’s “reasonable basis for believing” that his experiments will produce information relevant to a regulatory submission will prove difficult for courts to administer, due to the complicated nature of an inquiry into the objective and subjective reasonability of the researcher’s belief and intent during the research in question.

2. *Taken Together, § 271(e)(1) and the Common Law Research Use Exemption May Fail to Protect Some Experimental Uses that Merit Protection*

The Supreme Court’s approach may also fail to protect some socially beneficial research uses. Examples include early-stage experimentation conducted to understand, improve upon, or explore new uses for the patented subject matter. Such early stage experiments are socially beneficial, but often do not generate data useful for submission to the FDA and are not conducted with the “reasonable basis for believing” that the experiments would produce information relevant to a regulatory submission, thereby pushing these types of uses beyond the protection of § 271(e)(1).

The pre-1995 Scripps-Merck experiments illustrate the types of beneficial basic research potentially unprotected under the current safe harbor. Through this experimentation, Dr. Cheresch established that RGD peptides could halt tumor growth by binding to $\alpha_v\beta_3$ integrins and inhibiting angiogenesis. This capability was unknown to Integra, the RGD peptide patent holder. Without experimentation like Dr. Cheresch’s, novel, socially bene-

155. Merck KGaA v. Integra Lifesciences I, Ltd. (*Merck*), 545 U.S. 193, 205-06 (2005) (emphasis added).

156. *Id.* at 208.

ficial uses of patented inventions, like the power to halt tumors, could go undiscovered.

Fortunately for Scripps and Merck, the district court held that the common law research exception protected all but one of the pre-1995 Scripps-Merck activities relating to RGD peptides.¹⁵⁷ Although the Federal Circuit did not consider this issue on appeal, the court could easily have applied its holding in *Madey*, finding that these early Scripps-Merck activities were both conduct “in keeping with the alleged infringer’s legitimate business” as a research institute and funded by Merck with a commercial purpose in mind.¹⁵⁸ Such a finding would push Dr. Cheresh’s activities outside the protection of the narrow common law research use exemption. Moreover, Dr. Cheresh may have lacked the “reasonable basis for believing” that the pre-1995 experimentation would produce information relevant to a regulatory submission, leaving it outside the protection of § 271(e)(1). This result would leave this type of beneficial experimentation (experimentation done to understand, improve upon, or explore new uses for the patented subject matter) liable for infringement.

In sum, focusing on a researcher’s “reasonable basis for believing” that experiments will produce information relevant to a regulatory submission indicates that more experimental and uncertain research is less likely to be protected under § 271(e)(1). Coupled with the very limited application of the common law research use exemption, this may mean that some socially beneficial experimental uses fall outside the safe harbor protection afforded by § 271(e)(1) and the common law research use exemption.

3. *The Status of Research Tools is Left Unclear*

As Judge Rader vigorously argues in his *Integra II* dissent, the Federal Circuit’s decision leaves open the question of whether certain unauthorized uses of patented research tools could be exempt from patent infringement and receive protection from § 271(e)(1). Extending the § 271(e)(1) safe harbor to unauthorized uses of patented research tools could severely impact the economic incentives to further develop beneficial research tools.

a) *The Current Statutory Interpretation of § 271(e)(1) Improperly Protects Research Uses of Patented Research Tools*

Under the Supreme Court’s interpretation of the plain language of § 271(e)(1), one can derive the following rule: § 271(e)(1) exempts from infringement *all* uses of a *patented* invention (defined to include *all* inven-

157. *Integra II*, 496 F.3d at 1337.

158. *See Madey v. Duke Univ.*, 307 F.3d 1351, 1362 (Fed. Cir. 2002).

tions, not just drug-related inventions) reasonably related to the process of developing *any* information for submission under *any* federal law regulating the manufacture, use, or distribution of drugs; regardless of the phase of research in which the information is developed, the particular submission in which the information could be included, or whether such information is ever actually submitted.¹⁵⁹ Thus, the Supreme Court has construed § 271(e)(1) as broadly as the plain language of the statute allows.

Without any limits on the type of use or the category of invention, the Court's construction suggests that any use of a research tool, during any phase of research, to develop information that could potentially be submitted to the FDA, would be exempt from infringement under § 271(e)(1). Such an interpretation could eliminate incentives to develop research tools by diminishing the research tool manufacturers' ability to recover high development costs.¹⁶⁰

Some comfort stems from the Supreme Court's acknowledgement of the Federal Circuit's suggestion that "a limited construction of § 271(e)(1) is necessary to avoid depriving so-called 'research tools' of the complete value of their patents." The Court further declined to "express a view about whether, or to what extent, § 271(e)(1) exempts from infringement the use of 'research tools' in the development of information for the regulatory process" because the respondents failed to put forth such an argument.¹⁶¹ Nevertheless, given the Court's strict adherence to the plain statutory language, the use of research tools to develop information for the FDA could easily fall under the § 271(e)(1) exemption.

b) Congress Did Not Intend the Use of Patented Research Tools to be Protected under § 271(e)(1)

Although the current Supreme Court interpretation of § 271(e)(1) may encompass research tools, the text and legislative history of the 1984 Act indicate that Congress did not intend § 271(e)(1) to apply to research tools. As noted in *Eli Lilly*, the 1984 Act attempted to correct distortions to both ends of the patent term caused by the regulatory approval process.¹⁶² Congress enacted § 271(e)(1) to allow generic drug companies to test patented drugs for regulatory approval purposes prior to patent expiration and

159. See *Merck*, 545 U.S. at 202, 206-07; *Eli Lilly & Co. v. Medtronic, Inc.*, 496 U.S. 661, 665 (1990).

160. Jonathan McPherson, Note, *The Impact of the Hatch-Waxman Act's Safe Harbor Provision on Biomedical Research Tools after Merck v. Integra Lifesciences I, Ltd.*, 10 MICH. ST. U. J. MED. & L. 369, 376 (2006).

161. *Merck*, 545 U.S. at 205 n.7.

162. *Eli Lilly*, 496 U.S. at 669.

to prevent the *de facto* term extension at the end of the life of the patent. Further, § 156 provided a term extension to the pioneer patent holder to correct for the regulatory approval process at the beginning of the patent's lifetime.¹⁶³ While § 271(e)(1) does not explicitly define the meaning of "patented invention," § 156 covers human drug products, and any medical devices, food additives, or color additives subject to regulation under the FDCA.¹⁶⁴ Given the congressional intent behind the 1984 Act, one can logically conclude that the term "patented invention" in § 271(e)(1) refers only to those inventions explicitly listed in § 156.¹⁶⁵ Accordingly, research tools, which are not listed in § 156 and are not the subject of regulatory approval, should not fall under the § 271(e)(1) safe harbor.¹⁶⁶

Moreover, as noted in Judge Rader's *Integra II* dissent, Congress explicitly stated that under the 1984 Act, the "nature of the interference with the rights of the patent holder" would not be "substantial," but "*de minimus* [sic]."¹⁶⁷ Unlike patented drugs, which are ultimately sold to the general public, the predominant commercial market for research tools is researchers and drug developers. Thus, sweeping research tools under the § 271(e)(1) exemption would allow many research tool users to infringe those patents in uses that generate data for the FDA. As Judge Rader's majority opinion in *Integra I* concluded, this result would "vitate the exclusive rights of patentees owning biotechnology tool patents" and "swallow the whole benefit of the Patent Act for some categories of biotechnological inventions."¹⁶⁸ Such a conclusion stands contrary to the stated intention of Congress in the legislative history to the 1984 Act.

B. Judge Newman's Approach as a Potential Alternative

In her *Integra I* dissent, Judge Newman proposes expanding the common law research use exemption to provide broad protection for beneficial research uses of patented inventions. This protection would thus be achieved without requiring courts to stretch the limits of § 271(e)(1) protection as far as the statute's plain language will tolerate. As a result, courts could apply § 271(e)(1) narrowly as the regulatory approval exemp-

163. *Id.* at 670-71.

164. 35 U.S.C. § 156(f) (2000); *Eli Lilly*, 496 U.S. at 670-71.

165. The Supreme Court followed a similar analysis in *Eli Lilly* to find that medical devices are covered by § 271(e)(1). *See Eli Lilly*, 496 U.S. at 669-73.

166. Walker, *supra* note 44, at 38.

167. *Integra Lifesciences I, Ltd. v. Merck KGaA (Integra II)*, 496 F.3d 1334, 1350 (Fed. Cir. 2007) (Rader, J., dissenting in part and concurring in part) (citing 1984 U.S.C.C.A.N. at 2692, 2714).

168. *Integra Lifesciences I, Ltd. v. Merck KGaA (Integra I)*, 331 F.3d 860, 867 (Fed. Cir. 2003).

tion that Congress originally intended. Such an approach would achieve the same results as the *Integra II* decision without the creating the same problems addressed above.

Judge Newman advocates shifting away from the current non-commercial determinant for protection under the common law research use exemption, and moving towards “recogniz[ing] the exemption for research conducted in order to understand or improve upon or modify the patented subject matter.”¹⁶⁹ Judge Newman suggests drawing the line for the research use exemption between the *research* phase and the *development* phase of the drug development pipeline.¹⁷⁰ She remarks that this “is how the patent system has always worked: the patent is infringed by and bars activity associated with *development* and commercialization of infringing subject matter, but the *research* itself is not prohibited, nor is comparison of the patented subject matter with improved technology or with designs whose purpose is to avoid the patent.”¹⁷¹ Judge Newman also suggests this approach removes the “limbo” between protection under the common law exemption and protection under the § 271(e)(1) exemption. Instead, “the statutory immunity of § 271(e)(1) takes effect wherever the research exemption ends.”¹⁷²

In addition to the *research/development* distinction, Judge Newman further refines *research* to distinguish between *research on* and *research with* the patented subject matter. She finds “a fundamental distinction between research into the science and technology disclosed in patents, and the use in research of patented products or methods, the so-called ‘research tools.’”¹⁷³ She states that investigation into, or *research on*, patented things with a goal to understand, improve upon, or modify the patented subject matter has always been permitted and should not constitute infringement because this activity provides the public with improvements and competition in the marketplace.¹⁷⁴ On the other hand, she argues that investigation using, or *research with*, patented things for their intended purpose in research has never been permitted and should constitute infringement because such activities eliminate the value in these patented things.¹⁷⁵

169. *Id.* at 876 (Newman, J., concurring in part, dissenting in part).

170. *Id.*

171. *Id.* (emphasis added).

172. *Id.* at 876-77.

173. *Id.* at 877-78.

174. *Id.* at 878 n.10.

175. *Id.*

1. *Judge Newman's Approach Solves the Problems Created by Supreme Court and Federal Circuit Precedent*

First, Judge Newman's approach solves some of the administrability and clarity problems arising under the current statutory interpretation of § 271(e)(1). Currently, the focus of the § 271(e)(1) analysis is on determining what qualifies as "development and submission of information" for regulatory approval and whether the researcher has a "reasonable basis for believing" that the experiments will produce information relevant to a regulatory submission. These determinations provide unclear guidance to researchers as to whether experimentation amounts to infringement and force judges to make inherently difficult determinations regarding reasonableness of belief and researcher intent. Judge Newman's approach, on the other hand, shifts the focus to the more concrete question of whether the activities in question constitute *research*, whereby such activities are protected by the common law research use exemption, or *development*, whereby such activities are protected under § 271(e)(1).

Judge Newman's approach also protects the beneficial experimental uses of patented inventions that may be left unprotected under the current § 271(e)(1) and common law research use exemption precedent. As applied to the pre-1995 Scripps-Merck experiments, the current precedent would likely leave this basic and socially beneficial research unprotected due to the narrow non-commercial application of the common law research use exemption and § 271(e)(1)'s focus on the researcher's intent and the experiments' usefulness to FDA submissions. However, using Judge Newman's *research/development* distinction, the pre-1995 Scripps-Merck experimentation clearly constitutes research that would be protected under the research use exemption.

Finally, Judge Newman's distinction between *research on* the patented subject matter and *research with* the patented subject matter would ensure that *research on* a patented research tool with a goal to understand, improve upon, or modify the patented subject matter would be exempt from infringement, while *research with* a patented research tool for its intended purpose in research would constitute infringement. This approach would prevent § 271(e)(1) from protecting *research with* research tools and thereby preserve the value of those tools.¹⁷⁶

176. The dissenting opinion of Judge Rader also proposes adopting the distinction between research *into*, or research on a patented invention and research *using*, or research with a patented invention. *Integra Lifesciences I, Ltd. v. Merck KGaA (Integra II)*, 496 F.3d 1334, 1353 (Fed. Cir. 2007) (Rader, J. concurring in part and dissenting in part). Judge Rader notes that many international statutes and court decisions protect research

2. Validation for Judge Newman's Approach

Judge Newman's approach is not new. More than a decade before *Integra I*, Congress considered a similar research use exemption in the Patent Competitiveness and Technological Innovation Act of 1990 (the 1990 Act).¹⁷⁷ That proposed legislation embraced the *research/development* distinction and the *research on/research with* distinction later proposed by Judge Newman. Moreover, both Germany and the United Kingdom have broad statutory research use exemptions that hinge on the *research on/research with* distinction coupled with narrower regulatory approval exemptions.

a) Judge Newman's Approach as Foreshadowed in the Patent Competitiveness and Technological Innovation Act of 1990

In the 1990 Act, Congress considered a research use exemption similar to the approach Judge Newman advocated in *Integra I*. That bill would have amended § 271, adding:

(j) It shall not be an act of infringement to make or use a patented invention solely for research or experimentation purposes unless the patented invention has a primary purpose of research or experimentation. If the patented invention has a primary purpose of research or experimentation, it shall not be an act of infringement to manufacture or use such invention to study, evaluate, or characterize such invention or to create a product outside the scope of the patent covering such invention. This subsection does not apply to a patented invention to which [§ 271](e)(1) applies.¹⁷⁸

The committee report accompanying this legislation further elucidated how the act was meant to function:

The easiest method of limiting and describing the 'experimental use of research exception' is to differentiate between experimentation on a patented invention and experimentation using a patented invention in order to accomplish another purpose, the former type of experimentation constituting the scope of the exception. Under this approach the following acts would not constitute patent infringement:

tool inventions "when used for their intended purpose while allowing experimentation to improve the tool itself" or to learn its method of operation. *Id.*

177. H.R. Rep. No. 101-960, pt. I (1990).

178. *Id.* at 47.

- (1) testing an invention to determine its sufficiency or to compare it to prior art;
 - (2) tests to determine how the patented invention works;
 - (3) experimentation on a patented invention for the purpose of improving on it or developing a further patentable invention;
 - (4) experimentation for the purpose of ‘designing around’ a patented invention;
 - (5) testing to determine whether the invention meets the tester's purposes in anticipation of requesting a license; and
 - (6) academic instructional experimentation with the invention.
- Business testing is clearly not an experimental use, and would not be authorized by Title IV.¹⁷⁹

Thus, the proposed act embraced the *research/development* distinction later proposed by Judge Newman, by attempting to codify a statute that would create a broad exemption for uses of patented inventions in research or experimentation. Moreover, like Judge Newman, Congress also recognized the *research on/research with* distinction and attempted to limit its research use exemption to research on patented inventions and not for research using patented inventions.

The proposed act was never brought to a vote and did not move beyond the House of Representatives.¹⁸⁰

- b) Both Germany and the United Kingdom Employ Broad Research Use Exemptions Similar to Judge Newman’s Approach

Both Germany and the United Kingdom have adopted statutory research use provisions pursuant to Article 31 of the European Community Patent Convention of 1976.¹⁸¹ Both countries’ research use provisions focus on the distinction between *research on* and *research with*.

German Patent Law Section 11, the German experimental use provision, specifies that “[t]he effects of a patent shall not extend to (1) acts done privately and for non-commercial purposes; (2) acts done for experimental purposes relating to the subject matter of the patented inven-

179. *Id.* at 30.

180. Walker, *supra* note 44, at 30.

181. Sean O’Connor, *Enabling Research or Unfair Competition? De Jure and De Facto Research Use Exceptions in Major Technology Countries*, in *COMPARATIVE PATENT LAW: A HANDBOOK OF CONTEMPORARY RESEARCH* (Toshiko Takenaka & Rainer Moufang eds., Edward Elgar forthcoming 2008) (manuscript at 10, on file with author), available at <http://ssrn.com/abstract=1069222>.

tion; . . .”¹⁸² Under the plain language of this statute, German patent law allows *research on* a patented invention (“relating to the subject matter of the patented invention”) regardless of whether it is private or non-commercial, while *research with* a patented invention is allowed only where the research is private and non-commercial.¹⁸³ The German Supreme Court confirmed and expanded this interpretation in *Klinische Versuche I*,¹⁸⁴ holding that § 11 of the German Patent Act:

exempts all experimental acts as long as they serve to gain information and thus to carry out scientific research into the subject-matter of the invention, including its use. There are then included, for example, utilization acts for experimental purposes undertaken with the subject-matter of the invention in order to discover the effects of a substance or possible new uses hitherto unknown. Since the provision makes no limit, either qualitative or quantitative, on the experimental acts, it cannot matter whether the experiments are used only to check the statements made in the patent or else to obtain further research results, and whether they are employed for wider purposes, such as commercial interests.¹⁸⁵

Like German Patent Law Section 11, U.K. Patents Act Sections 60(5)(a) and (b) state that “[a]n act which . . . would constitute an infringement of a patent for an invention shall not do so if—(a) it is done privately and for purposes which are not commercial; (b) it is done for experimental purposes relating to the subject matter of the invention; . . .”¹⁸⁶ U.K. Patents Act Section 60(5)(a) permits either *research on* or *research with* the patented invention so long as the research is private and non-commercial, while § 60(5)(b) also permits *research on* the patented invention (“relating to the subject matter of the invention”) where such research is experimental.¹⁸⁷

Additionally, in response to a 2004 directive from the European Union, both Germany and the U.K. amended their research use provisions to

182. German Patent Law § 11, THE NEW GERMAN PATENT LAW (1981) IN ENGLISH AND GERMAN 24-27 (Dr. Hermann Kinkeldey & Dr. Wilfried Stockmair trans., 1981).

183. O’Connor, *supra* note 181, at 10-11.

184. *Klinische Versuche I*, [1997] R.P.C. 623 (German Supreme Court).

185. *Id.* at 639.

186. Patents Act, 1977, c.37, 60(5) (U.K.)

187. O’Connor, *supra* note 181, at 13.

include a regulatory approval exemption similar to § 271(e)(1).¹⁸⁸ The amended German Patent Law Section 11 No. 2b, states:

The rights conferred by a patent shall not extend to . . . studies and trials and the consequential practical requirements necessary for obtaining an authorization to market a drug in the European Union or for obtaining an authorization to market a drug in the Member States of the European Union or in other countries.¹⁸⁹

U.K. Patents Act Section 60(5)(i) reads:

An act which, apart from this subsection, would constitute an infringement of a patent for an invention shall not do so if . . . it consists of—(i) an act done in conducting a study, test or trial which is necessary for and is conducted with a view to the application of [the regulatory approval processes of various EU Directives], or (ii) any other act which is required for the purpose of the application of those paragraphs [of the Directives].¹⁹⁰

Thus, statutory systems in both Germany and the U.K. parallel Judge Newman's proposed approach. Both countries use broad research use exemptions based on the distinction between *research on* and *research with* patented subject matter. Additionally, both countries have enacted separate, narrow regulatory approval exemptions that function much as § 271(e)(1) would in the context of Newman's approach.

VI. CONCLUSION

Despite the Federal Circuit's recent *Integra II* decision, the status of protection from infringement liability for uses of a patented invention in drug research remains uncertain. Problems remain between the narrow and rarely-applied common law research use exemption and the broadly-interpreted and oft-applied § 271(e)(1) regulatory submission exemption. These include: 1) administrability and clarity problems for courts and researchers in the application § 271(e)(1); 2) potential under-protection of

188. *Id.* at 17-18. In 2004, the European Union passed Directive 2004/27/EC which amended Article 10(6) of Directive 2001/83/EC to read: "Conducting the necessary studies and trials with a view to [satisfying the abbreviated regulatory approval process for generic medicines] and the consequential practical requirements shall not be regarded as contrary to patent rights or to supplementary protection certificates for medicinal products." *Id.* at 17.

189. *Id.* at 17-18.

190. U.K. Patents Act 1977, § 60(5), available at <http://www.ipo.gov.uk/patentsact1977.pdf>; O'Connor, *supra* note 181, at 17.

beneficial early stage research; and 3) potential over-protection of research tool uses that should not be protected.

One potential solution to these problems is to create an expanded research use defense similar to the one proposed in Judge Newman's dissent in *Integra I* and employed in other countries' statutory schemes. This research use defense could either be created judicially by expanding the exceedingly narrow U.S. common law research use exemption or legislatively by enacting statutes modeled after those in Germany and the United Kingdom. Such a defense would allow *research* using patented inventions, but restrict *development* using patented inventions; and would allow *research on* patented inventions, but restrict *research with* patented inventions. This approach would provide clarity and administrative ease by narrowing § 271(e)(1)'s application to activities related to the regulatory approval process as Congress initially intended. This approach also provides protection for those beneficial uses that might be unprotected under the current scheme, while ensuring that research tool uses would not be protected.

The courts have tried to use a broad statutory interpretation of § 271(e)(1) to overcome the limitations posed by the narrow common law research use exemption, but this is an inefficient and inappropriate way to achieve the desired results. Instead, either the legislature should step in to craft an appropriately broad statutory research use exemption and a limited § 271(e)(1) regulatory approval exemption, or the courts should attempt to accomplish similar means by expanding the common law research use exemption.

BITING OFF MORE THAN YOU CAN CHEW: THE NEW LAW OF ENABLEMENT

By Jason Romrell

I. INTRODUCTION

In the recent decisions of *Liebel-Flarsheim Co. v. Medrad, Inc.*¹ and *Automotive Technologies International, Inc. v. BMW of North America, Inc.*,² the U.S. Court of Appeals for the Federal Circuit significantly strengthened the enablement requirement for inventions in the “predictable arts.” Predictable arts comprise mechanical and electrical inventions that rely upon well understood scientific principles where experimental results are consistent and repeatable.³ Because of this predictability and the depth of knowledge of those having ordinary skill in such arts, the Federal Circuit has traditionally allowed inventors to fully enable multiple embodiments of inventions in these arts without reciting all of those embodiments in the specification. In contrast, the Federal Circuit has applied a stringent standard of enablement to patents involving “unpredictable arts.”⁴ These patents include many biotechnology and chemical inventions that rely on developing scientific principles where results are often inconsistent and unreliable.⁵ In *Medrad* and *BMW*, the Federal Circuit adopted this stringent enablement standard for the predictable arts, insisting that the specification contain a “reasonable enablement of the scope of the range”⁶ of the claims.

© 2008 Jason Romrell.

1. 481 F.3d 1371 (Fed. Cir. 2007).

2. 501 F.3d 1274 (Fed. Cir. 2007).

3. See ROBERT P. MERGES & JOHN F. DUFFY, PATENT LAW AND POLICY: CASES AND MATERIALS 680 (4th ed. 2007) (explaining that in fields “such as mechanic, electronics, and even computer programming, the effect of modifying or combining features may be more predictable [than in chemistry and pharmaceutical research]”).

4. See Margaret A. Sampson, Note, The Evolution of the Enablement and Written Description Requirements Under 35 U.S.C. § 112 in the Area of Biotechnology, 15 BERKELEY TECH. L.J. 1233 (2000).

5. See MERGES & DUFFY, *supra* note 3 (“[S]ome fields, especially chemistry and pharmaceutical research, are known to be highly unpredictable. Indeed, these fields are sometimes called ‘the unpredictable arts’ because slight changes in a chemical composition can lead to vastly different reactions.”).

6. *Medrad*, 481 F.3d at 1380 (citing *AK Steel Corp. v. Sollac & Ugine*, 344 F.3d 1234, 1244 (Fed. Cir. 2003)).

The Federal Circuit's new enablement standard may even go beyond that needed for one skilled in the art to practice the invention.⁷ The *BMW* court required that all novel aspects of an invention be enabled in the patent specification, regardless of whether one of skill in the art needs such a disclosure to practice the invention.⁸ However, requiring disclosure beyond what is necessary to practice an invention has traditionally been the burden of the written description requirement.⁹ Thus, this approach to enablement further blurs the respective roles of enablement and written description.

Part II of this Note briefly describes the enablement requirement, its European counterpart, and how the U.S. enablement standard has varied according to the technological field of invention. Part III summarizes the recent *Medrad* and *BMW* decisions addressing issues of enablement in the predictable arts. Part IV discusses how these decisions alter the enablement standard for patents in the predictable arts by requiring a degree of enablement beyond what is necessary for one skilled in the art to practice an invention without undue experimentation. Part IV also discusses how the Federal Circuit's stricter enablement analysis unnecessarily complicates the division between the written description requirement and the enablement requirement, thus leaving patentees uncertain as to what constitutes an adequate disclosure. Finally, Part IV cautions patentees asserting broad claims, which can now easily be invalidated for lack of enablement, even in the predictable arts. Although an overly strict disclosure requirement has the potential to stifle research and development,¹⁰ a balanced and well-defined enablement requirement can prevent unwarranted extension of claim scope and therefore promote innovation from second-generation inventors.

II. THE EVOLUTION OF THE ENABLEMENT REQUIREMENT

The enablement and written description requirements are set forth in the first paragraph of Section 112 of the Patent Act of 1952 ("§ 112").

7. *BMW*, 501 F.3d at 1283.

8. *See id.* ("Although the knowledge of one skilled in the art is indeed relevant, the novel aspect of an invention must be enabled in the patent.").

9. *See In re Gosteli*, 872 F.2d 1008, 1012 (Fed. Cir. 1989) (explaining that to fulfill the written description requirement, the patent specification "must clearly allow persons of ordinary skill in the art to recognize that [the inventor] invented what is claimed.").

10. *See generally* Limin Zheng, Note, *Purdue Pharma L.P. v. Faulding Inc.*, 17 BERKELEY TECH. L.J. 97 (2002) (arguing that stricter specification requirements inevitably stifle research and development, especially in biotechnology).

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor of carrying out his invention.¹¹

The Federal Circuit interprets § 112 as mandating three distinctive requirements: (1) the written description requirement; (2) the enablement requirement; and (3) the best mode requirement.¹² Although the best mode requirement is designed to prevent a patentee from concealing part of the invention while obtaining patent protection for the whole,¹³ the written description and the enablement requirements serve to guard against overly broad patent rights.

This Part discusses the purpose behind the enablement requirement and the differences between enablement and written description. This Part also discusses the European Patent Office's disclosure requirements and compares the European approach to that of the United States. Finally, this Part analyzes the more lenient approach typically applied to enablement in the predictable arts as opposed to the stricter approach taken in the unpredictable arts.

A. Defining the Written Description and Enablement Requirements

The current disclosure requirement in the United States has separate enablement and written description requirements. Written description ensures that the inventor was actually in possession of the claimed invention at the time of filing.¹⁴ Enablement certifies that one of ordinary skill in the art can practice a claimed invention without undue experimentation.¹⁵ Analysis of whether a patent disclosure is enabling consists of several factors, including the predictability of the technology at issue. The dividing line between written description and enablement is at best, a blurry one.

11. 35 U.S.C. § 112, ¶ 1 (2006).

12. *See* *Vas-Cath, Inc. v. Mahurkar*, 935 F.2d 1555 (Fed. Cir. 1991).

13. *See In re Gay*, 309 F.2d 769, 772 (C.C.P.A. 1962) (“[T]he sole purpose of [the best mode] requirement is to restrain inventors from applying for patents while at the same time concealing from the public preferred embodiments of their inventions which they have in fact conceived.”).

14. *Vas-Cath, Inc. v. Mahurkar*, 935 F.2d 1555, 1563-64 (Fed. Cir. 1991).

15. *In re Wright*, 999 F.2d 1557, 1561 (Fed. Cir. 1993).

Although the relationship between the written description requirement and the enablement requirement of § 112¹⁶ has been the subject of debate,¹⁷ written description and enablement represent distinct requirements under current law.¹⁸ The doctrine of enablement has been embedded in U.S. law at least since 1832,¹⁹ but the written description requirement is a relative newcomer to the playing field. This latter requirement appeared in limited case law dating back to the early 1970s,²⁰ but was initially “met with a cool reception” and “had faded almost completely from subsequent decisions in the late 1970’s and 1980’s.”²¹ Beginning in the late 1990’s, however, the Federal Circuit resurrected and strengthened the written description requirement.²² The Federal Circuit sought to prevent overreaching claims through excessive amendment practice and to prohibit patentees from later claiming what they did not possess at the time they filed their applications by requiring a patent disclosure to “convey with reasonable clarity to those skilled in the art that, as of the filing date sought, [that the patentee] was in possession of the invention.”²³

Unlike the written description requirement, which exists mainly to prevent a patentee from claiming more than she possesses at the time of filing, the enablement requirement “helps ensure that a person of ordinary skill in the art will be able to practice the full scope of the invention.”²⁴ Society thereby receives the information necessary to practice the invention in exchange for granting exclusive rights during the patent term. To be enabling, the patent specification must teach those skilled in the art

16. 35 U.S.C. § 112, ¶ 1 (2000).

17. See Denise W. DeFranco & Ashley A. Weaver, *Written Description and Enablement: One Requirement or Two?*, 15 FED. CIR. B.J. 101, 113-114 (2006) (arguing that even though the requirements remain distinct, several judges have suggested that there is no statutory basis for separating them).

18. *Id.* at 101.

19. See *Grant v. Raymond*, 31 U.S. 218, 241-42 (1832) (“The public yields nothing which it has not agreed to yield; it receives all which it has contracted to receive. The full benefit of the discovery. . .”).

20. See, e.g., *In re DiLeon*, 436 F.2d 1404, 1405 n.1 (C.C.P.A. 1971) (“[Consider a case] where the specification discusses only compound A and contains no broadening language of any kind. This might very well enable one skilled in the art to make and use compounds B and C; yet the class consisting of A, B and C has not been described.”).

21. See *MERGES & DUFFY*, *supra* note 3, at 302.

22. See *id.*

23. *Vas-Cath, Inc. v. Mahurkar*, 935 F.2d 1555, 1563-64 (Fed. Cir. 1991).

24. Andrea G. Reister, *Enablement & Written Description: We Know It When We See It and a Word About Obviousness*, in *PATENT LITIGATION 2007*, at 479, 487 (PLI Pats., Copyrights, Trademarks, & Literary Prop., Course Handbook Series No. 11589, 2007).

“how to make and use the full scope of the claimed invention without undue experimentation.”²⁵ The first paragraph of § 112²⁶ further demands that “the scope of the claims must bear a reasonable correlation to the scope of enablement provided by the specification to persons of ordinary skill in the art.”²⁷

In *In re Wands*, the Federal Circuit set forth a list of factors to consider in determining whether the disclosure requires “undue experimentation.”²⁸ These include:

(1) the quantity of experimentation necessary, (2) the amount of direction or guidance presented, (3) the presence or absence of working examples, (4) the nature of the invention, (5) the state of the prior art, (6) the relative skill of those in the art, (7) *the predictability or unpredictability of the art*, and (8) the breadth of the claims.²⁹

Although the *Wands* factors are “illustrative, not mandatory,”³⁰ they provide a basis for defining the boundaries of undue experimentation. As discussed in Section II.C below, the predictability or unpredictability of the art is especially important in analyzing claims spanning multiple embodiments.

Despite the resurgence of the written description requirement, the necessity of two separate disclosure doctrines—enablement *and* written description—is unclear. Several scholars and judges have called for a single unified disclosure doctrine,³¹ and the Federal Circuit has acknowledged that to the “uninitiated,” a separate written description requirement within 35 U.S.C. § 112 may seem “anomalous.”³² Nothing in the language of 35 U.S.C. §112 suggests the need for a separate written description requirement beyond enablement. The statutory language requires written descrip-

25. *In re Wright*, 999 F.2d 1557, 1561 (Fed. Cir. 1993).

26. 35 U.S.C. § 112, ¶ 1 (2000).

27. *Plant Genetic Sys., N.V. v. DeKalb Genetics Corp.*, 315 F.3d 1335, 1339-40 (Fed. Cir. 2003); *In re Fisher*, 427 F.2d 833, 839 (C.C.P.A. 1970).

28. *See In re Wands*, 858 F.2d 731 (Fed. Cir. 1988).

29. *Id.* at 737 (emphasis added).

30. *Amgen, Inc. v. Chugai Pharm. Co.*, 927 F.2d 1200, 1213 (Fed. Cir. 1991).

31. See Mark D. Janis, *On Courts Herding Cats: Contending with the “Written Description” Requirement (and Other Unruly Patent Disclosure Doctrines)*, 2 WASH. U. J.L. & POL’Y 55, 62-69 (2000) (arguing that the distinction made by the Federal Circuit between written description and enablement is artificial); DeFranco, *supra* note 17, at 101.

32. *Vas-Cath, Inc. v. Mahurkar*, 935 F.2d 1555, 1560 (Fed. Cir. 1991) (“To the uninitiated, it may seem anomalous that the first paragraph of 35 U.S.C. § 112 has been interpreted as requiring a separate ‘description of the invention.’”).

tion sufficient to enable the claimed invention.³³ If a patent disclosure enables claims as filed or as amended during prosecution, then further disclosure that satisfies the judicially created written description requirement seems superfluous. Unfortunately, the Federal Circuit has failed to develop a consistent rationale for perpetuating the written description requirement.³⁴ Because written description has little historical³⁵ or statutory justification, it is almost entirely reliant upon judicial construction. Without a tether to statutory limits, patentees might fear that a written description requirement controlled solely by the judiciary leads to uncertainty as to what constitutes sufficient disclosure.³⁶

B. Comparison With the European Standard of Enablement

This Section discusses the European Patent Office's (EPO) requirements for an enabling disclosure and analyzes a European doctrine similar to written description, but which is embedded within the enablement requirement.

European Patent Convention (EPC) Article 83 states that "[t]he European patent application shall disclose the invention in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art."³⁷ Although the EPO lacks a formally recognizable written description requirement,³⁸ Article 84 of the European Patent Convention provides that "[t]he claims shall define the matter for which protection is sought. They shall be clear and concise and be supported by the description."³⁹ For example, under the European system:

The invention must be sufficiently disclosed to enable it to be performed over the complete width of the claim. Disclosure of one [method of carrying out the invention] is only sufficient if it allows a person skilled in the art, using his common general

33. "The specification shall contain a *written description* of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art . . ." 35 U.S.C. § 112, ¶ 1 (emphasis added).

34. See Janis, *supra* note 31, at 62-69 (explaining that historical or logical rationales based on dissuading fortuitous enablement are incomplete and unconvincing).

35. See MERGES & DUFFY, *supra* note 3, at 302.

36. See Janis, *supra* note 31, at 80-81 (explaining that one consequence of an unrestricted written description requirement "is an unpredictable, and even arbitrary, application of the [written description] requirement, especially as a result of overzealous appellate review").

37. Convention on the Grant of European Patents, art. 83. Oct. 5, 1973, [hereinafter European Patent Convention].

38. J. Peter Paredes, *Written Description Requirement in Nanotechnology: Clearing a Patent Thicket?*, 88 J. PAT. & TRADEMARK OFF. SOC'Y 489, 503-04 (2006).

39. European Patent Convention, *supra* note 37, art. 84.

knowledge, to carry out the invention within the whole range that is claimed.⁴⁰

In addition, “the purpose of [Article 84 EPC] must be seen as safeguarding that the claims do not cover any subject-matter which, after reading the description, still would not be at the disposal of the skilled person.”⁴¹

The European Board of Appeals has suggested that the combined requirements of Article 83 and 84 may require more than an enabling disclosure:

Although the requirements of Article 83 and Article 84 are directed to different parts of the patent application, since Article 83 relates to the disclosure of the invention, whilst Article 84 deals with the definition of the invention by the claims, the underlying purpose of the requirement of sufficient disclosure is the same, namely to ensure that the patent monopoly should be justified by the actual technical contribution to the art. Thus, a claim may well be supported by the description in the sense that it *corresponds* to it, but still encompass subject matter which is not sufficiently disclosed within the meaning of Article 83 as it cannot be performed without undue burden, or vice versa.⁴²

Article 84 may create a *de facto* written description requirement that falls within the European enablement requirement, thus establishing an overall more rigid standard of enablement than the United States.⁴³ This is because Article 84 requires correspondence between the claims and the specification, but the U.S. enablement requirement currently does not. In the United States, correspondence between claim and specification is achieved through a judicially created written description requirement and not through statute.⁴⁴ Even though the combination of Article 83 and Arti-

40. IAN MUIR, MATTHIAS BRANDI-DOHRN & STEPHAN GRUBER, EUROPEAN PATENT LAW: LAW AND PROCEDURE UNDER THE EPC AND PCT 165 (2d ed. 2002) (citing T409/91 *Exxon/Fuel Oils* O.J. EPO 1994, 653; [1994] E.P.O.R. 149 and explaining that “stronger requirements for disclosure for broad claims have been set in more recent decisions”).

41. Gerald Paterson, *The European Patent System: The Law and Practice of the European Patent Convention* 350 (2d ed. 2001) (citing T26/81 *ICI/Containers* O.J. EPO 1982, 211; [1979-85] E.P.O.R.: B: 362).

42. *See* Janis, *supra* note 31, at 92-93 (quoting T409/91-6 and explaining that the EPO has confronted the same issues as the United States in grappling with two separate disclosure requirements) (emphasis added).

43. Paredes, *supra* note 38, at 503-04.

44. *See* *Vas-Cath, Inc. v. Mahurkar*, 935 F.2d 1555, 1563-64 (Fed. Cir. 1991) (explaining that in order to prohibit patentees from later claiming what they did not possess

cle 84 creates a more demanding European enablement requirement, the EPO's overall enablement analysis is roughly similar to the U.S. Patent & Trademark Office's (PTO) written description and enablement criteria.⁴⁵

C. Different Requirements for Different Technologies

This Section discusses how the standard used to evaluate enablement depends in part on the predictability of the technology at issue. Traditionally, broad claims in the predictable arts may be fully enabled by disclosing a single embodiment.⁴⁶ Experimentation is less likely to be unduly extensive in a field of technology with a substantial and well understood history, e.g. mechanical or electrical arts, than with newer, less predictable technologies. The biotechnology and chemical fields have historically been considered "unpredictable" arts and have thus required a more detailed specification to fulfill the enablement requirement.⁴⁷

In unpredictable technologies, it is largely presumed that one of ordinary skill in the art would not have the expertise necessary to fill in the gaps left in a patent disclosure, especially gaps associated with novel subject matter.⁴⁸ For example, in *Genentech, Inc. v. Novo Nordisk A/S*, the Federal Circuit held that claims covering a cleavable fusion expression process for producing human growth hormone (hGH) were invalid due to lack of enablement.⁴⁹ The court reasoned that where the inventor claims the application of an unpredictable technology in the early stages of development (commonly referred to as nascent technology), an enabling description must provide those skilled in the art with a "specific and useful teaching."⁵⁰ The *Genentech* panel further explained that "[i]t is the specification, not the knowledge of one skilled in the art, that must supply the novel aspects of an invention in order to constitute adequate enable-

at the time they filed their applications, the written description requirement demands that the patent specification "convey with reasonable clarity to those skilled in the art that, as of the filing date sought, [that the patentee] was in possession of the invention").

45. See MERGES & DUFFY, *supra* note 3, at 294 (citing *Harvard/Onco-mouse*, V 0004/89-Examining Division, ¶ 11-11.2 (EPO July 14, 1989), available at <http://legal.european-patent-office.org/dg3/biblio/v890004ep1.htm>)

(establishing that the European Patent Office employs similar standards such as "undue experimentation" and "those skilled in the art").

46. See *Spectra-Physics, Inc. v. Coherent, Inc.*, 827 F.2d 1524, 1533 (Fed. Cir. 1987).

47. Jessica R. Wolff et al., *Update on Enablement and Written Description as Applied to Biotechnology Cases*, in PATENT LITIGATION 2007, at 573, 583 (PLI Pats., Copyrights, Trademarks, & Literary Property, Course Handbook Series No. 11589 (2007)).

48. See *id.*; see also *supra* notes 3-5 and accompanying text.

49. *Genentech, Inc. v. Novo Nordisk A/S*, 108 F.3d 1361 (Fed. Cir. 1997).

50. *Id.* at 1367-68.

ment.”⁵¹ Moreover, a specification in the unpredictable technologies must “teach those skilled in the art how to make and use the full scope of the invention.”⁵²

Similarly, in *AK Steel Corp v. Sollac & Ugine*, the Federal Circuit invalidated claims directed to a chemical method of coating stainless steel with an aluminum/silicon compound because the patent disclosure did not enable practice of the full claim scope.⁵³ Like *Genentech*, the chemical claims of *AK Steel* were directed toward an unpredictable field of technology.⁵⁴

In contrast, where the art is largely predictable and the skills of the artisan broad, knowledge of the prior art and routine experimentation have traditionally allowed claims to reach beyond the embodiments disclosed in the specification.⁵⁵ In *Spectra-Physics, Inc. v. Coherent, Inc.*, the Federal Circuit found that a claim directed to a means for attaching copper cups inside the ceramic tube of a laser was enabled to cover a TiCuSil brazing method that wasn’t specifically discussed in the patent disclosure.⁵⁶ The Federal Circuit concluded that a claim is not invalid for lack of enablement simply because it “reads on another embodiment of the invention which is inadequately disclosed.”⁵⁷

III. SUMMARY OF CASES

This Part examines two recent Federal Circuit decisions that signify a dramatic departure from the historically relaxed enablement standard for the predictable arts. In *Liebel-Flarsheim Co. v. Medrad, Inc.*, the Federal Circuit applied a strict standard of enablement to invalidate a mechanical claim where the full scope of the claim was not enabled within the patent specification. In *Automotive Technologies International, Inc. v. BMW of North America, Inc.*, the Federal Circuit extended this stringent analysis of enablement in the predictable arts by demanding that all novel aspects of

51. *Id.* at 1366.

52. *Id.* at 1365 (citing *In re Wright*, 999 F.2d 1561 (Fed. Cir. 1993)).

53. 344 F.3d 1234, 1244 (Fed. Cir. 2003).

54. *See id.* at 1244 (holding that using Type 2 instead of Type 1 Aluminum is not within the scope of ordinary skill in the art); *AK Steel Corp. v. Sollac & Ugine*, 234 F. Supp. 2d 711, 719 (S.D. Ohio 2002) (explaining that the district court rejected the argument that “adjustments that may be required to switch from Type 2 to Type 1 [Aluminum] were known, and their effects predictable, based on the information published in the relative field and the . . . specification”).

55. *Spectra-Physics, Inc. v. Coherent, Inc.*, 827 F.2d 1524, 1533 (Fed. Cir. 1987).

56. *Id.*

57. *Id.*

an invention be enabled within the specification without relying on the knowledge available to one of ordinary skill in the art. The stricter standard of enablement in the predictable arts is now poised to invalidate claims that have a broad scope *even if* one of ordinary skill in the art could practice the full invention.

A. Liebel-Flarsheim Co. v. Medrad, Inc.

In *Medrad*, Liebel brought an action against Medrad alleging infringement of four medical device patents owned by Liebel.⁵⁸ Two of the patents, referred to as the “front-loading patents,” were directed to a front-loading fluid injector with a replaceable syringe capable of withstanding high pressures.⁵⁹ Liebel learned of Medrad’s jacketless injector system during the prosecution of the front-loading patents and deleted all claim references to a pressure jacket in order to encompass Medrad’s product.⁶⁰ At trial, the district court found that Liebel’s patent claims did not cover a jacketless injector system.⁶¹ The Federal Circuit reversed and remanded, determining that the front-loading patent claims *did* in fact cover a jacketless injector system.⁶²

Despite Liebel’s success on claim construction at the Federal Circuit, the district court once again found that Medrad was not liable for infringement of the front-loading patents because the claims were invalid under the written description and enablement requirements.⁶³ The district court emphasized that all of Liebel’s tests of jacketless systems were unsuccessful.⁶⁴ Furthermore, Liebel’s engineers testified that “one skilled in the art would not know how to make a jacketless system.”⁶⁵ Liebel appealed the finding of invalidity.⁶⁶

This time the Federal Circuit affirmed,⁶⁷ relying solely upon the enablement requirement while declining to address written description.⁶⁸ The

58. Liebel-Flarsheim Co. v. Medrad, Inc., 481 F.3d 1371, 1373 (Fed. Cir. 2007).

59. *Id.* The front-loading patents are U.S. Patent No. 5,456,669 (the ‘669 patent) and U.S. Patent No. 5,658,261 (the ‘261 patent). *Id.*

60. *Id.* at 1374.

61. *Id.*

62. *Id.*

63. *Id.* at 1375.

64. *Id.*; *see also In re Wands*, 858 F.2d 731, 737 (Fed. Cir. 1988). Liebel’s unsuccessful testing of a jacketless system would be particularly damaging in assessing the first three *Wands* factors: 1) the quantity of experimentation necessary; 2) the amount of direction or guidance presented; and 3) the presence or absence of working examples.

65. *Medrad*, 481 F.3d at 1375.

66. *Id.* at 1377.

67. *Id.* at 1378.

court rejected Liebel's comparisons to *Spectra-Physics*, which would have permitted a lower enablement standard, instead comparing Liebel's situation to that in *AK Steel*, wherein a chemical process patent was held invalid for not enabling the full scope of its claims.⁶⁹ When it applied the *AK Steel* standard to Liebel's invention, the Federal Circuit noted that the front-loading patent specifications did not describe a disposable syringe without a pressure jacket.⁷⁰ Moreover, the specifications taught away from a disposable syringe without a pressure jacket by describing such a syringe as "impractical."⁷¹ Liebel's argument that its single embodiment could enable broad claim support failed in large part because of testimony from its own scientists who admitted to trying a jacketless pressure system without success.⁷² In sum, the Federal Circuit bluntly stated that:

The irony of this situation is that Liebel successfully pressed to have its claims include a jacketless system, but, having won that battle, it then had to show that such a claim was fully enabled, a challenge it could not meet. The motto, 'beware of what one asks for,' might be applicable here.⁷³

Medrad demonstrates decreasing willingness of the Federal Circuit to rely upon "ordinary skill in the art" to fill in the gaps of a disclosure simply because the invention is mechanical. Because Liebel's specifications did not disclose the exact configuration of a syringe device without a pressure jacket and even admitted impracticality of such a configuration, the Federal Circuit was unwilling to find sufficient support in the "ordinary skill" to enable the claims despite their mechanical nature. The Federal Circuit's explicit warning against asserting overly broad claims in the course of litigation is the most notable portion of the *Medrad* decision. Liebel's admitted difficulties in manufacturing a jacketless syringe may have proven too much for their claim to enablement; however, a subsequent case building upon the *Medrad* decision further indicates a tightening enablement standard in the mechanical arts.

68. *Id.* at 1380 ("Because we are resolving this issue on the enablement ground, we do not need to consider the written description holding of invalidity.")

69. *Id.* at 1380 (citing *AK Steel Corp. v. Sollac & Ugine*, 344 F.3d 1234, 1244 (Fed. Cir. 2003)). For more information about *AK Steel*, see *supra* Section II.C.

70. *Id.* at 1378.

71. *Id.* at 1379.

72. *Id.* However, "[a]ccording to Liebel, the testimony that the court relied upon only showed that additional work, not undue experimentation, was required to develop an injector without a pressure jacket." *Id.* at 1378.

73. *Id.* at 1380.

B. Automotive Technologies International, Inc. v. BMW of North America, Inc

In *Automotive Technologies International, Inc. v. BMW of North America, Inc.*, the plaintiff Automotive Technologies International (ATI) appealed a district court decision that invalidated 44 claims in its U.S. Patent 5,231,253 (the '253 patent) pertaining to side-impact vehicle air bag sensors.⁷⁴ The court found that the '253 patent specification enabled mechanical sensors, but did not enable a means-plus-function claim limitation encompassing *both* mechanical and electronic sensors.⁷⁵ The district court therefore granted summary judgment of invalidity to a host of defendants including BMW, DaimlerChrysler, Honda, Toyota, Mazda, Saab, Nissan, Kia, GMC, Ford, and Volkswagen.⁷⁶

The '253 patent specification includes a two-column description of the mechanical embodiment of the side impact sensors.⁷⁷ However, the description of the electrical embodiment of the side impact sensor consists of only a paragraph and a single figure.⁷⁸ On appeal, the Federal Circuit emphasized this difference, stating that “[i]f such a disclosure is needed to enable making and using a mechanical side impact sensor, why is not a similar disclosure needed to enable making and using an electronic side impact sensor, which is an essential aspect of the invention?”⁷⁹ Moreover, the inventor admitted that “he had never built an electronic sensor for side impact,” thereby supporting the finding that the electronic sensor was not enabled.⁸⁰

The Federal Circuit held that the electronic sensor invention was not enabled even if one skilled in the art could have practiced the electronic sensor invention based upon this short description.⁸¹ In reaching this conclusion, the Federal Circuit parroted its analysis in *Genentech v. Novo Nordisk A/S*, a case concerning the “unpredictable” art of nascent biotechnology.⁸² Citing *Genentech*, the Federal Circuit found that “it is the specification, not the knowledge of one skilled in the art, that must supply the

74. *Auto. Techs. Int'l, Inc. v. BMW of N. Am., Inc.*, 501 F.3d 1274, 1276 (Fed. Cir. 2007).

75. *Id.* at 1285.

76. *Id.* at 1274.

77. *Id.*

78. *Id.*

79. *Id.*

⁸⁰ *Id.*

81. *See id.* at 1285.

82. *See Genentech, Inc. v. Novo Nordisk A/S*, 108 F.3d 1361 (Fed. Cir. 1997). For more information about this case, see Section II.C, *supra*.

novel aspects of an invention in order to constitute adequate enablement.”⁸³

Applying *Genentech*, the Federal Circuit found that even if the knowledge readily available to one skilled in the art enabled the invention, the novel components still needed full disclosure in the specification.⁸⁴ Just as Liebel had argued for a broader interpretation of its claims to include jackless syringe systems, ATI argued for a broader interpretation of its claims to include electrical as well as mechanical sensors. Instead of permitting ATI's mechanical/electrical claims to be enabled by a detailed disclosure of a single embodiment⁸⁵ in accordance with prior case law, the Federal Circuit applied a strict, non-predictable arts approach to enablement and found the claims invalid for lack thereof.⁸⁶ Taken together, *Medrad* and *BMW* indicate a trend toward the limitation of the enabled “scope of the range” in electrical and mechanical patent specifications.⁸⁷

IV. DISCUSSION

This Part analyzes four ramifications of *Medrad* and *BMW*. First, both cases indicate that the Federal Circuit is moving away from a presumption of enablement in the predictable arts⁸⁸ towards a strict enablement standard resembling that traditionally reserved for biotechnology.⁸⁹ Second, *BMW* suggests that this stricter enablement standard requires disclosure beyond the information necessary to enable one skilled in the art to practice the invention without undue experimentation. Third, the expansion of the enablement requirement without explicit renunciation of the questionable written description requirement further blurs the line between these two disclosure doctrines. Fourth, even though the new Federal Circuit enablement standard may prevent unfair extension of patent scope, patentees may be left with a less predictable disclosure requirement that could impede future innovation.

83. *Auto. Techs. Int'l, Inc. v. BMW of N. Am., Inc.*, 501 F.3d 1274, 1283 (Fed. Cir. 2007) (citing *Genentech*, 108 F.3d at 1366).

84. *Id.*

85. *Id.* at 1281.

86. *Id.* at 1285 (emphasizing that the electrical sensor was a “distinctly different sensor compared with the well-enabled mechanical side impact sensor”).

87. *Id.* (citing *Liebel-Flarsheim Co. v. Medrad, Inc.*, 481 F.3d 1371, 1380 (Fed. Cir. 2007)).

88. *See Spectra-Physics, Inc. v. Coherent, Inc.*, 827 F.2d 1524, 1533 (Fed. Cir. 1987).

89. *See Genentech, Inc. v. Novo Nordisk A/S*, 108 F.3d 1361 (Fed. Cir. 1997).

A. New Enablement Standard for Predictable Arts

Medrad and *BMW* signal the Federal Circuit's departure from its lenient standard of enablement in the predictable arts. Broad claim scope for inventions in the predictable arts traditionally could be enabled without disclosing multiple embodiments, whereas the unpredictable arts have typically required a more thorough disclosure to satisfy enablement. *Medrad* and *BMW* suggest that the Federal Circuit will now require enablement of the entire claim scope even for predictable technologies.

Traditionally, the distinction between predictable and unpredictable arts has been crucial in establishing the level of disclosure required in a patent specification.⁹⁰ Where an inventive art is less predictable, the Federal Circuit has consistently established that the enablement of a single species within a genus is likely insufficient to enable that genus.⁹¹ Even when a specification outlines the theoretical application to a wide variety of organisms, the actual application of those principles is often unpredictable.⁹² For example, experts in *Enzo Biochem, Inc. v. Calgene, Inc.* testified that genetic antisense technology "is not universally applicable, it hasn't proven to be, and that's why it's such an interesting area of research, because scientists don't understand the rules."⁹³ In the unpredictable arts, the lack of stable governing scientific principles often requires undue experimentation to practices claims with broad scope where only a single embodiment is disclosed.

In contrast, the Federal Circuit in *Spectra-Physics* concluded that inventions in the mechanical and electrical arts typically rely on more predictable scientific principles that are better understood.⁹⁴ The *Spectra-Physics* court emphasized that an invention in the mechanical arts is *not* invalid for lack of enablement simply because it covers embodiments not specifically enabled by the patent specification because ordinary skill in the art can supply the missing information.⁹⁵

Although *Spectra-Physics* adopted a lenient approach to enablement in the mechanical arts, *Medrad* and *BMW* demand enablement of "the scope

90. See *supra* notes 3-5 and accompanying text.

91. See Sampson, *supra* note 4, at 1248.

92. See *id.*

93. See *id.* (citing *Enzo Biochem, Inc. v. Calgene, Inc.*, 188 F.3d 1362, 1371 (Fed. Cir. 1999)).

94. *Spectra-Physics, Inc. v. Coherent, Inc.*, 827 F.2d 1524, 1533 (Fed. Cir. 1987).

95. *Id.* (citing *In re Cook*, 439 F.2d 730, 735 (C.C.P.A. 1971); *In re Vickers*, 141 F.2d 522, 527 (C.C.P.A. 1944)).

of the range” covered by the claims.⁹⁶ To be sure, the *Medrad* court distinguished *Spectra-Physics* by emphasizing that one skilled in the art could practice the full scope of the claims asserted in the earlier case.⁹⁷ In contrast, the disclosure in *Medrad*, while enabling an injector system with a pressure jacket, “[did] not permit one skilled in the art to make and use the invention as broadly as it was claimed, including without a pressure jacket.”⁹⁸ However, both *Medrad* and *BMW* reflect the Federal Circuit’s unwillingness to give inventions in the traditional arts the benefits of assumed predictability.

In *Medrad*, the Federal Circuit relied heavily on testimony that Liebel’s inventors tried a jacketless pressure system without success, thus showing that a jacketless pressure system was beyond ordinary skill in the art.⁹⁹ This testimony proved crucial despite the mechanical nature of the syringe at issue. Although the Federal Circuit could have relied solely on this damning evidence to invalidate the patent, the panel nevertheless stated that “there must be reasonable enablement of *the scope of the range*” even for mechanical inventions.¹⁰⁰ This “scope of the range” language seemingly contradicts the Federal Circuit’s declaration in *Spectra-Physics* that “[i]f an invention pertains to an art where the results are predictable, e.g. mechanical as opposed to chemical arts, a broad claim can be enabled by disclosure of a single embodiment.”¹⁰¹

Similarly, in *BMW*, the Federal Circuit used a stricter enablement standard than in *Spectra-Physics*, giving specific attention to testimony regarding the state of the art at the time the invention was made.¹⁰² The *BMW* court concluded that testimony supporting the premise that undue experimentation was not necessary to practice the full scope of the invention was inadequate because the testimony did not provide specific examples of tests that could be used to adapt existing electronic sensors to the ’253 patent’s claimed invention.¹⁰³ Even though an electronic sensor em-

96. *Auto. Techs. Int’l, Inc. v. BMW of N. Am., Inc.*, 501 F.3d 1274, 1285 (Fed. Cir. 2007) (citing *Liebel-Flarsheim Co. v. Medrad, Inc.*, 481 F.3d 1371, 1380 (Fed. Cir. 2007)).

97. *Medrad*, 481 F.3d at 1379-80.

98. *Id.* at 1380.

99. *Id.* at 1379.

100. *Id.* at 1380 (quoting *AK Steel Corp. v. Sollac & Ugine*, 344 F.3d 1234, 1244 (Fed. Cir. 2003)) (emphasis added).

101. *See Spectra-Physics, Inc. v. Coherent, Inc.*, 827 F.2d 1524, 1533 (Fed. Cir. 1987).

102. *Auto. Techs. Int’l, Inc. v. BMW of N. Am., Inc.*, 501 F.3d 1274, 1284 (Fed. Cir. 2007).

103. *Id.*

bodiment was supported with a figure and cursory explanation of how an electronic sensory could be used.¹⁰⁴ the Federal Circuit panel questioned the adequacy of the disclosure.¹⁰⁵ As illustrated by the thorough analysis of testimony in *Medrad* and *BMW*, the Federal Circuit now appears less willing to allow the predictability of a technology to enable the breadth of a claim beyond the scope of disclosure.

B. Beyond Enabling One Skilled in the Art

The *BMW* decision requires applicants to disclose even *more* information than necessary to enable one skilled in the art to practice an invention in the predictable arts. In so holding, the Federal Circuit moved away from its own precedent and assumed a more active role in ascertaining undue experimentation in the predictable arts. The Federal Circuit declared that the knowledge of one skilled in the art is “relevant” to an enablement analysis, but in the end “the novel aspect of an invention must be enabled in the patent.”¹⁰⁶ Accordingly, a patent could violate the enablement requirement *even if* one skilled in the art could practice the full range of the claims. Although the *quid pro quo* structure of the patent system requires adequate disclosure, *BMW* overlooks the possibility that one of ordinary skill in the art might not need an elaborate disclosure to practice a novel embodiment.

The *BMW* standard of enablement is a direct affront to earlier Federal Circuit decisions holding that a patent specification need only disclose sufficient information to enable those skilled in the art to make and use the claimed invention.¹⁰⁷ Even in more recent biotechnology settings, the court only required disclosure beyond what was necessary for one skilled in the art “when there is no disclosure of any specific starting material or of any of the conditions under which a process can be carried out” and thus, “undue experimentation is required.”¹⁰⁸

In requiring a heightened standard of enablement, the Federal Circuit adopted a proactive role in defining “undue experimentation” in the predictable arts. For example, the *BMW* court reasoned that novel aspects of an invention are necessarily new to the art and thus require thorough explanation in the specification regardless of whether one skilled the art

104. *Id.* at 1277-78.

105. *Id.* at 1284.

106. *Id.* at 1283 (citing *Genentech, Inc. v. Novo Nordisk A/S*, 108 F.3d 1361, 1366 (Fed. Cir. 1997)).

107. *See Spectra-Physics, Inc. v. Coherent, Inc.*, 827 F.2d 1524, 1533 (Fed. Cir. 1987).

108. *See Genentech*, 108 F.3d at 1366.

needs such description to practice the invention.¹⁰⁹ Accordingly, novel aspects of an invention lacking adequate description in the actual patent require undue experimentation even if one skilled in the art can practice the invention as disclosed. Moreover, the *BMW* panel observed that the thorough description of a mechanical sensor provided stark contrast to the lack of description for the electrical embodiment.¹¹⁰ The panel reasoned that if both embodiments were truly novel, the electrical embodiment would require a similarly detailed disclosure to avoid the imposition of undue experimentation upon a practitioner.¹¹¹

Although a patent's exclusivity rights are understandably inappropriate when a patentee has not enabled one skilled in the art to practice a claimed invention, the Federal Circuit's reasoning in *BMW* sets aside this fundamental enablement concern. Instead of relying solely on testimony that adopting an electrical sensor was beyond ordinary skill in the art, the Federal Circuit complicated its enablement analysis by applying the reasoning of *Genentech*, a case involving biotechnology.¹¹² The *Genentech* panel held that "the novel aspect of an invention must be enabled in the patent,"¹¹³ but this statement was referring to the unpredictable art of nascent biotechnology, and involved a situation where the "specification provide[d] only a starting point, a direction for further research."¹¹⁴ The Federal Circuit in *BMW* similarly found that the ATI specification provided "only a starting point."¹¹⁵ But unlike *Genentech*, ATI included a figure in its specification and information that was clearly more than just a starting point: "[t]he motion of the sensing mass 202 can be sensed by a variety of technologies using, for example, optics, resistance change, capacitance change or magnetic reluctance change."¹¹⁶

Arguably, the predictability of the electrical arts, coupled with the mechanical *and* electrical examples in the ATI patent specification, should have provided enough information to enable one of ordinary skill in the art to practice an electrical sensor without undue experimentation. By de-

109. *Auto. Techs. Int'l, Inc. v. BMW of N. Am., Inc.*, 501 F.3d 1274, 1285 (Fed. Cir. 2007).

110. *Id.*

111. *Id.*

112. *Id.* at 1283 (citing *Genentech*, 108 F.3d at 1366).

113. *Genentech*, 108 F.3d at 1366.

114. *Id.* Specifically, the *Genentech* panel found that claim limitation requiring cleavage of a conjugate protein was merely "a direction for further research" because a method for cleaving the conjugate was not disclosed in the specification. *Id.*

115. *Auto. Techs. Int'l, Inc. v. BMW of N. Am., Inc.*, 501 F.3d 1274, 1284 (Fed. Cir. 2007).

116. U.S. Patent No. 5,231,253 col.10 ll.8-11 (filed June 2, 1992).

manding that enablement of novel embodiments stem entirely from the patent specification, the Federal Circuit effectively made this practical possibility a confusing legal impossibility.

C. Complicating the Written Description Dilemma

The stringent enablement standard epitomized in *Medrad* and *BMW* further obscures the line separating enablement from the written description requirement.¹¹⁷ Although the *Medrad* case provided ample opportunity to apply the written description requirement, the Federal Circuit instead chose to focus on enablement. In developing a rigorous enablement analysis based on novelty, the Federal Circuit could have created a viable alternative to the written description requirement that more closely resembles the European enablement standard. However, without the Federal Circuit explicitly stating this intention, the exact scope of the U.S. disclosure doctrine remains unclear.

As described above, commentators have long challenged the origin and scope of the written description requirement.¹¹⁸ *Gentry Gallery v. Berkline Corp.*¹¹⁹ exemplifies the often criticized expansion of the written description requirement. In *Gentry Gallery*, the patentee amended a claim to cover a competitor's product by expanding the placement of recliner-chair controls.¹²⁰ The Federal Circuit invalidated the claim because the broadened scope lacked sufficient written description in the specification as filed.¹²¹ Traditionally, the Federal Circuit afforded mechanical claims full claim scope even if the written description did not describe all species encompassed by the claims.¹²² In the wake of *Gentry Gallery*, patent applicants were left in "doubt over the ability of patent applicants to obtain claim protection any broader than the originally filed broadest claim."¹²³

Medrad presented the Federal Circuit with a straightforward opportunity to invalidate the claims using the written description analysis from *Gentry Gallery*. During prosecution, Liebel removed all references in the claims to a pressure jacket component, even though the claims included this limitation at the time of filing. Liebel introduced these broadening

117. See Janis, *supra* note 31, at 60-61.

118. For more information, see *supra* Section II.A.

119. *Gentry Gallery, Inc. v. Berkline Corp.*, 134 F.3d 1473 (Fed. Cir. 1998).

120. *Id.* at 1474-75.

121. *Id.* at 1480.

122. See Laurence H. Pretty, The Recline and Fall of Mechanical Genus Claim Scope under "Written Description" in the Sofa Case, 80 J. PAT. & TRADEMARK OFF. SOC'Y 469, 476 (1998).

123. *Id.* at 476-77.

amendments specifically to encompass Medrad's product.¹²⁴ Traditionally, such a maneuver represents exactly the kind of conduct that the written description requirement aims to prevent, namely the modification of claims to cover a competitor's embodiments that were not originally contemplated within the patent disclosure.¹²⁵ However, the Federal Circuit panel in *Medrad* did not resolve the issue based on the written description requirement and instead invalidated the claims for lack of enablement.¹²⁶

The *Medrad* decision demonstrates the plausibility of using enablement—rather than written description—to verify that the inventor possessed the claimed invention at the time of filing. The continuing debate among the Federal Circuit regarding the separate written description doctrine may be a contributing factor in the shift toward a more comprehensive enablement standard.¹²⁷ Consequently, this shift may help resolve the redundancy of the two disclosure doctrines.¹²⁸

Unfortunately, the Federal Circuit has not explicitly stated any intent to merge written description and enablement into a unified disclosure doctrine. Strengthening the enablement standard, however, may lead to a unified disclosure doctrine resembling that of the European Patent Office. As discussed earlier, the European enablement standard encompasses a *de facto* written description requirement *based in statute*.¹²⁹ In particular, EPO enablement analysis relies in part on the notion that “the patent monopoly should be justified by the actual technical contribution to the art.”¹³⁰ This standard may be difficult to apply, but it also avoids the problems associated with the written description requirement.¹³¹ The European standard may also resemble *BMW*'s requirement that the patent specifica-

124. *Liebel-Flarsheim Co. v. Medrad, Inc.*, 481 F.3d 1371, 1374 (Fed. Cir. 2007).

125. *See* Janis, *supra* note 31, at 60-61.

126. *Medrad*, 481 F.3d at 1380.

127. *See* *Lizardtech, Inc. v. Earth Res. Mapping, Inc.*, 433 F.3d 1373, 1376 (Fed. Cir. 2006) (Rader, J., dissenting) (stating that “[the] court’s written description jurisprudence has become opaque to the point of obscuring other areas of this court’s law”); DeFranco, *supra* note 17, at 113-14. Judge Rader, a known critic of the jurisprudence of written description, served on the *Medrad* and *BMW* panels.

128. *See* Harris A. Pitlick, *The Mutation on the Description Requirement Gene*, 80 J. PAT. & TRADEMARK OFF. SOC'Y 209, 222-23 (1998) (criticizing the *Eli Lilly* decision as the court “has lost sight of the real culprit—lack of enablement—and directed its ire at an innocent bystander—the description requirement . . . [and] takes description requirement jurisprudence in an unjustifiably new and reckless direction”).

129. *See* Section II.C, *supra*.

130. Janis, *supra* note 31, at 92-93 (quoting *T409/91-6* and explaining that the EPO has confronted the same issues as the United States in grappling with two separate disclosure requirements).

131. *See* Section II.A, *supra*.

tion enables novel aspects of an invention even if the novelties fall within the ordinary skill in the art. By using the enablement standard to limit unsupported claim scope added in post-filing amendments, the Federal Circuit could directly embrace a unified disclosure doctrine similar to that employed by the EPO and avoid the confusion of two competing disclosure doctrines.

Even though the enablement standard created in *Medrad* and *BMW* has the potential to maintain the *quid pro quo* exchange of the patent system in both predictable and unpredictable arts, the confusing analysis employed to achieve these results is difficult to reconcile with existing case law. Nevertheless, the Federal Circuit should overrule its written description precedent and replace it with an all-encompassing enablement requirement. As a result, patent applicants would enjoy a more predictable disclosure standard.

D. Be Careful What You Ask For

Under *Medrad* and *BMW*, a patentee who gains broad scope at claim construction risks having the same claims invalidated for lack of enablement. A strict enablement standard may thereby dissuade some inventors from seeking patent protection. Alternatively, the amount of technological innovation may increase and frivolous litigation could diminish.

In *Medrad*, the Federal Circuit sent a blunt message to litigants who argue for claim scope beyond their originally filed disclosures: “beware of what one asks for.”¹³² When faced with a challenge to the enablement of a patent, patentees face a critical dilemma. An assertion that one skilled in the art could practice the invention without undue experimentation may aid in circumventing an enablement attack, but also prove fatal in defending against an assertion of obviousness.

For example, in *BMW*, the Federal Circuit found that novel aspects of an invention, by definition, require enablement within the disclosure of a patent, even if one skilled in the art could practice the invention without further instruction.¹³³ The plaintiff, ATI, was thus placed in a precarious situation. The same testimony used to assert that the implementation of electronic sensors was well known in the prior art could be used against ATI as evidence that the embodiment was obvious. Similarly, if ATI were to assert that an electronic sensor was nonobvious and novel, then it possibly bears the burden of fully enabling the sensor within the patent specification without relying on the level of ordinary skill in the art to fill in the

132. *Liebel-Flarsheim Co. v. Medrad, Inc.*, 481 F.3d 1371, 1380 (Fed. Cir. 2007).

133. *Auto. Techs. Int’l, Inc. v. BMW of N. Am., Inc.*, 501 F.3d 1274, 1284 (Fed. Cir. 2007).

gaps. Reasonably, ATI is not entitled to all “means” for detecting side-impact crashes if it disclosed only one such means in detail and then admitted in the specification that the field is new. As one commentator noted, ATI “can’t have [its] non-obviousness cake and be enabled to eat it, too.”¹³⁴

The Federal Circuit’s new approach to enablement might deter some inventors from seeking patent protection. Empirical studies have shown that in research and development intensive industries such as the pharmaceutical industry, patent protection provides the second most effective mechanism for protecting intellectual property, closely trailing secrecy.¹³⁵ The same studies also indicate that many companies are dissuaded from filing a patent application for fear that the information disclosed allows a competitor to easily and legally invent around the patent.¹³⁶ As one chemical company executive asked, “[w]ill a patent teach our competitors and give the shop away?”¹³⁷ A stricter enablement requirement may prove to exacerbate this fear and encourage inventors to utilize trade secret protection rather than patents.

As an alternative to invalidating an entire claim for lack of enablement, the courts could limit a claim to enabled scope only. Superficially at least, this approach appears fair to the rights of the patentee inasmuch as he continues to enjoy the *quid pro quo* benefit of his contribution to society. However, the patentee would have nothing to lose in attempting to assert broad claim scope. Courts would subsequently face the time-consuming and expensive responsibility of rewriting claims to fit the scope of enablement. In addition, rewriting a claim to fit its enabled scope contradicts the axiom that claims are “the portion of the patent document that defines the patentee’s rights.”¹³⁸

On balance, the tightened enablement standard epitomized in *Medrad* and *BMW* has the potential to greatly benefit the patent system. A strong enablement requirement ensures that the *quid pro quo* structure of the patent system remains viable, whereas a weak enablement requirement would deter the second generation of research because second generation patents

134. Posting of Malcolm Mooney to Patently-O Blog, <http://www.patentlyo.com/patent/2007/09/extending-liebe.html#comments> (Sept. 7, 2007, 2:13 a.m.).

135. Wesley M. Cohen et al., Protecting Their Intellectual Assets: Appropriability Conditions and Why U.S. Manufacturing Firms Patent (or Not) 9-10 (Nat’l Bureau of Econ. Research, Working Paper No. 7552, 2000).

136. *Id.* at 15.

137. *Id.* at 14, n.31.

138. *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 372 (1996).

will be subservient to the overly broad claims of the first generation.¹³⁹ Because second generation patentees may be required to share royalties with first generation patentees, the incentive to innovate for later generation inventors will be reduced.¹⁴⁰ Furthermore, a stricter enablement requirement may actually stimulate research and development by diverting resources away from low value patents.¹⁴¹ Finally, the risk of complete claim invalidation under enablement law will arguably dissuade patentees from asserting overly broad claims, thus deterring frivolous patent litigation.

V. CONCLUSION

Traditionally, a more lenient standard of enablement was applied to inventions in the predictable arts as compared to the unpredictable arts. The recent Federal Circuit decisions in *Medrad* and *BMW* indicate a departure from this dichotomy. These decisions suggest that the Federal Circuit is tightening the enablement requirement in the predictable arts by demanding that all novel aspects of an invention contain adequate enablement within the specification.

The tightening of the enablement requirement for the predictable arts will deter applicants from asserting overly broad claims and may fuel the innovation of second generation inventors. Furthermore, the new standard has the potential to unite the doctrines of enablement and written description into a single disclosure doctrine. Unfortunately, the Federal Circuit has not explicitly overruled written description case law, and applicants are left with confusing and difficult to apply rules that blur the line between enablement and written description.

139. See MERGES & DUFFY, *supra* note 3 at 298-99.

140. See Robert P. Merges & Richard R. Nelson, *On the Complex Economics of Patent Scope*, 90 COLUM. L. REV. 839, 872-74 (1990).

141. See Robert M. Hunt, *Economics and the Design of Patent Systems*, 13 MICH. TELECOMM. & TECH. L. REV. 457, 464 (2007) (explaining that “firms that concentrated on obtaining software patents experienced a statistically and economically significant decline in their R&D intensity relative to other firms” and to remedy the situation, “[i]t is clearly most important to modify the patent process to ensure that there is a closer relationship between what a firm invents and the property rights . . . this may involve modification to patent law’s disclosure and enablement requirements”).

DECLARATORY JUDGMENT ACTIONS IN PATENT CASES: THE FEDERAL CIRCUIT'S RESPONSE TO *MEDIMMUNE V. GENENTECH*

By Jennifer R. Saionz

I. INTRODUCTION

The Declaratory Judgment Act¹ provides federal courts with the authority to “declare the rights and other legal relations of any interested party” where an “actual controversy” exists.² The term “actual controversy” is rooted in the Constitution³ and requires that actions for declaratory judgment meet the same test for case or controversy as conventional suits under Article III federal jurisdiction.⁴ Declaratory judgment actions are intended to provide relief for a first party facing potential liability where a second party with standing to bring a conventional suit might delay taking action, thereby leaving the first party—the declaratory judgment plaintiff—in a state of legal risk.⁵

The Court of Appeals for the Federal Circuit, responsible for all appeals in cases involving patent claims,⁶ promulgated the two-part reason-

© 2008 Jennifer R. Saionz.

1. Act of June 14, 1934, Pub. L. No. 73-343, 48 Stat. 955 (1934) (current version at 28 U.S.C. §§ 2201-2202 (2000)).

2. 28 U.S.C. § 2201(a) (2000).

3. U.S. CONST., art III, § 2.

4. *Aetna Life Ins. Co. v. Haworth*, 300 U.S. 227, 239-40 (1937) (“The Declaratory Judgment Act of 1934, in its limitation to ‘cases of actual controversy,’ manifestly has regard to the constitutional provision and is operative only in respect to controversies which are such in the constitutional sense. The word ‘actual’ is one of emphasis rather than of definition.”).

5. *See Arrowhead Indus. Water, Inc. v. Ecolochem, Inc.*, 846 F.2d 731, 734-35 (Fed. Cir. 1988) (comparing the interaction between the patent holder and the alleged infringer as a “*danse macabre*” where the patent holder “brandish[es] a Damoclean threat with a sheathed sword” and the Declaratory Judgment Act alleviates the “*in terrorem*” choice between the incurrence of a growing potential liability for patent infringement and abandonment of their enterprises”); *BP Chemicals Ltd. v. Union Carbide Corp.*, 4 F.3d 975, 977 (Fed. Cir. 1993) (“The purpose of the Act is to enable a person who is reasonably at legal risk because of an unresolved dispute, to obtain judicial resolution of that dispute without having to await the commencement of legal action by the other side.”); *see also* Lisa A. Dolak, *Declaratory Judgment Jurisdiction in Patent Cases: Restoring the Balance Between the Patentee and the Accused Infringer*, 38 B.C. L. Rev 903, 910-11 (1997).

6. Since its establishment in 1982, the Federal Circuit has had sole jurisdiction over appeals from federal district court decisions in cases where patent claims form part

able apprehension of suit (“RAS”) test to determine whether a federal court has jurisdiction for a declaratory judgment action in patent cases.⁷ Under the RAS standard, there must be (1) action by the patent holder that creates a reasonable apprehension of an infringement suit against the declaratory judgment plaintiff and (2) activity by the declaratory judgment plaintiff that could constitute infringement.⁸ In *MedImmune, Inc. v. Genentech, Inc.*, the Supreme Court signaled the demise of the RAS test.⁹ The Court replaced the Federal Circuit’s formalistic approach with a totality of the circumstances approach that inquires into the parties’ legal interests.¹⁰

The Federal Circuit has responded by providing signposts for circumstances under which declaratory judgment of a party’s legal rights is appropriate. In *SanDisk Corp. v. STMicroelectronics*, the Federal Circuit found jurisdiction in a declaratory judgment action over a cross-licensing dispute where licensing negotiations had not yet broken down.¹¹ In *Teva Pharmaceuticals USA, Inc. v. Novartis Pharmaceuticals Corp.*, the Federal Circuit found jurisdiction for a declaratory judgment action for noninfringement and invalidity by a generic pharmaceutical manufacturer where the branded drug manufacturer only sued for infringement on some of the patents relating to its product.¹²

The Federal Circuit’s RAS test focused on the legal connotations of the parties’ posturing.¹³ By returning to a declaratory judgment standard that requires inquiry into the actual legal interests of the parties, the Supreme Court set forth a standard for patent cases more in line with the purposes of the Declaratory Judgment Act. However, the Court also lowered the hurdle to establish jurisdiction in these cases, raising the question of whether a patent holder must take any affirmative action aside from obtaining the patent. The *MedImmune* opinion and the Federal Circuit’s ap-

of the well-pleaded complaint. See 28 U.S.C. §§ 1295(a)(1), (4), 1338 (2000). The Federal Circuit’s jurisdiction does not extend to cases where patent claims appear in a counterclaim, but not in the well-pleaded complaint. See *Holmes Group, Inc. v. Vornado Air Circulation Sys.*, 535 U.S. 826 (2002).

7. *C.R. Bard, Inc. v. Schwartz*, 716 F.2d 874, 879-880 (Fed. Cir. 1983).

8. See *infra* Section II.C.2.

9. *MedImmune, Inc. v. Genentech, Inc.*, 127 S. Ct. 764, 774 n.11 (2007).

10. *Id.* at 771.

11. *SanDisk Corp. v. STMicroelectronics, Inc.*, 480 F.3d 1372 (Fed. Cir. 2007).

12. *Teva Pharm. USA, Inc. v. Novartis Pharm. Corp.* 482 F.3d 1330 (Fed. Cir. 2007).

13. Courts were instructed to look for objective indications that the patentee intended to sue. The courts attempted to differentiate between negotiation stances and threats of litigation. See *infra* Section II.C.2.

plication of it in *SanDisk* and *Novartis* suggest that little is required of the patent holder beyond providing notice of the patent. Constructive notice alone would perhaps suffice. Another question raised is whether the declaratory judgment plaintiff must take any action toward actual infringement of the patent to establish a justiciable controversy. Neither the Supreme Court nor the Federal Circuit has clearly indicated the lengths the alleged infringer must go toward actual infringement. However, the conduct by and legal interests of the alleged infringer may become the most significant part of determining a justiciable controversy.

Part II of this Note reviews the legal background for establishing controversy in federal declaratory judgment actions, in particular declaratory judgment actions in patent cases. Part III describes the facts, procedural histories, and rulings of *MedImmune*, *SanDisk*, and *Novartis*. Part IV analyzes the new standards for establishing declaratory judgment in patent cases as set out by the Supreme Court and interpreted by the Federal Circuit, arguing that while the previous Federal Circuit jurisprudence under the RAS test favored the patentee at the expense of the alleged infringer, the new standards for declaratory judgment actions favor the alleged infringer. Part V concludes that although the alleged infringer's interests are adequately covered by the *MedImmune* standard for establishing a justiciable controversy, the patent holder's interests are not. The inquiry into the alleged infringer's actual legal interests in the activities allegedly covered by the patent-in-suit should be rigorous: both to prevent parties from seeking to invalidate patents that are merely inconvenient and to adequately protect the patent holder's interests.

II. BACKGROUND

This Part provides the legal background for finding a justiciable controversy in declaratory judgment actions. Section II.A presents an overview of federal declaratory judgment actions. Section II.B traces the Supreme Court case law concerning the controversy requirement for all federal declaratory judgment actions. Section II.C surveys the Supreme Court and Federal Circuit jurisprudence pertaining to establishing a justiciable controversy for declaratory judgment actions in patent cases.

A. Declaratory Judgment Act

Congress enacted the Declaratory Judgment Act in 1934.¹⁴ The Act provides that a federal court may “declare the rights and other legal rela-

14. Act of June 14, 1934, Pub. L. No. 73-343, 48 Stat. 955 (1934) (current version at 28 U.S.C. §§ 2201-2202 (2000)).

tions of any interested party seeking such declaration.”¹⁵ The Act does not expand jurisdiction; it applies only if the requirements for federal jurisdiction are fulfilled.¹⁶ Courts do not have jurisdiction to deliver advisory opinions on questions that are abstract or hypothetical in nature.¹⁷ Rather, the facts must be sufficiently developed to give rise to a real legal dispute rising to the level of an Article III controversy.¹⁸ In a declaratory judgment suit, the positions of the parties as plaintiff or defendant are reversed from that of a “conventional” suit, but the character of the controversy is identical.¹⁹ The decision by a court to hear declaratory judgment actions is discretionary, but the district court must have a sound basis to refuse jurisdiction over a declaratory judgment action.²⁰

The patentee is generally the declaratory judgment defendant in disputes relating to patent infringement, enforcement, and validity. Prior to *MedImmune*, the Federal Circuit promulgated the reasonable apprehension of suit (“RAS”) test, a two-part conjunctive test that requires that (1) the declaratory judgment defendant’s actions indicate an “intent to enforce its patent” and (2) the plaintiff’s actions might “subject it or its customers to suit for patent infringement.”²¹ Under the first prong, the patent holder’s actions must create in the alleged infringer a reasonable apprehension of

15. 28 U.S.C. § 2201(a).

16. *Skelly Oil Co. v. Phillips Petroleum Co.*, 339 U.S. 667, 671-72 (1950). The requirements applicable to conventional suits for entrance to federal courts also apply to declaratory judgment actions. The Supreme Court has defined the minimum constitutional requirements of standing:

[A] plaintiff must show (1) it has suffered an “injury in fact” that is (a) concrete and particularized and (b) actual or imminent, not conjectural or hypothetical; (2) the injury is fairly traceable to the challenged action of the defendant; and it is likely, as opposed to merely speculative, that the injury will be redressed by a favorable decision.

Friends of the Earth, Inc. v. Laidlaw Env'tl. Servs., (TOC) Inc., 528 U.S. 167, 180-81 (2000). *See also* *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 560-61 (1992).

17. *Aetna Life Ins. Co. v. Haworth*, 300 U.S. 227, 240 (1937).

18. *See infra* note 34 and accompanying text.

19. *Md. Cas. Co. v. Pac. Coal & Oil Co.*, 312 U.S. 270, 273 (1941).

20. *Wilton v. Seven Falls Co.*, 515 U.S. 277, 289-90 (1995). *See also* *Elecs. for Imaging, Inc. v. Coyle*, 394 F.3d 1341, 1345-46 (Fed. Cir. 2005); *Capo, Inc. v. Dioptrics Med. Prod., Inc.*, 387 F.3d 1352, 1357 (Fed. Cir. 2004) (“There must be a sound basis for refusing to adjudicate an actual controversy, for the policy of the [Declaratory Judgment] Act is to enable resolution of active disputes.”); *Genentech v. Eli Lilly & Co.*, 998 F.2d 931, 937 (Fed. Cir. 1993) (“When there is an actual controversy and a declaratory judgment would settle the legal relations in dispute and afford relief from uncertainty or insecurity, in the usual circumstance the declaratory action is not subject to dismissal.”).

21. *Arrowhead Indus. Water, Inc. v. Ecolchem, Inc.*, 846 F.2d 731, 737 (Fed. Cir. 1988).

an infringement suit.²² Express charges of infringement by the patent holder are sufficient, but not necessary, to create a reasonable apprehension of suit.²³ Under the second prong, the declaratory judgment plaintiff must be engaged in an activity that would be subject to an infringement charge or have made “meaningful preparation” for such an activity.²⁴ In *MedImmune*, the Supreme Court indicated in a footnote that the RAS test was inconsistent with Supreme Court precedent, overruling the first prong of the RAS test and potentially overruling the second prong as well.²⁵ In the void left by the Court’s opinion, the Federal Circuit has begun to resolve what acts by a patentee create a justiciable controversy.²⁶

B. “Actual Controversy” in Declaratory Judgment Actions

The Supreme Court first established the meaning of “actual controversy” under the Declaratory Judgment Act in *Aetna Life Insurance Co. v. Haworth*.²⁷ In *Aetna*, the declaratory judgment defendant, Haworth, had purchased life insurance policies from Aetna Life Insurance Company.²⁸ The policies provided that upon proof of total and permanent disability, the insured was no longer required to pay additional premiums, yet the insurance policies would remain in force.²⁹ Haworth allegedly ceased payment of premiums and provided Aetna with documentation of disability.³⁰ Haworth did not initiate suit against Aetna nor make any threats to do so.³¹ He simply had a cause of action against Aetna.³² Aetna sued Ha-

22. See *infra* Section II.C.2.

23. *Goodyear Tire & Rubber Co. v. Releasomers, Inc.*, 824 F.2d 953, 956 (1987).

24. *Arrowhead*, 846 F.2d at 736.

25. *MedImmune, Inc. v. Genentech, Inc.*, 127 S. Ct. 764, 774 n.11 (2007). See *SanDisk Corp. v. STMicroelectronics, Inc.*, 480 F.3d 1372, 1380 n.2 (Fed. Cir. 2007) (stating that the court would “leave to another day the effect of *MedImmune*, if any, on the second prong”).

26. *Micron Tech., Inc. v. MOSAID Techs. Inc.*, No. 2007-1080, 2008 U.S. App. LEXIS 4387 (Fed. Cir. Feb. 29, 2008); *Adenta GmbH v. OrthoArm, Inc.*, 501 F.3d 1364 (Fed. Cir. 2007); *Sony Elecs., Inc. v. Guardian Media Techs., Ltd.*, 497 F.3d 1271 (Fed. Cir. 2007); *Benitec Austl., Ltd. v. Nucleonics, Inc.*, 495 F.3d 1340 (Fed. Cir. 2007); *Teva Pharm. USA, Inc. v. Novartis Pharm. Corp.* 482 F.3d 1330 (Fed. Cir. 2007); *SanDisk Corp. v. STMicroelectronics, Inc.*, 480 F.3d 1372 (Fed. Cir. 2007).

27. *Aetna Life Ins. Co. v. Haworth*, 300 U.S. 227 (1937).

28. *Id.* at 237.

29. *Id.*

30. *Id.* at 237-38.

31. *Aetna Life Ins. Co. v. Haworth*, 84 F.2d 695, 696-97 (8th Cir. 1936).

32. *Id.* Further, the statute of limitations would not lapse on Haworth’s cause of action for ten years after his death. *Id.* at 699 (Woodrough, J., dissenting).

worth under the Declaratory Judgment Act, seeking to have the policies declared null and void for nonpayment.³³

The *Aetna* Court defined the limitation of “actual controversy” in the text of the Declaratory Judgment Act to mean controversies appropriate for judicial determination by an Article III court.³⁴ The Court stated that the controversy must be “definite and concrete, touching the legal relations of parties having adverse legal interests.”³⁵

The Court held that the *Aetna* dispute was an actual controversy, concluding that the question before the Court was for a determination of a “present right” in the face of established, rather than hypothetical, facts.³⁶ The Court reasoned that if the insured had a clear cause of action, the opposing party also had a cause of action: “[i]t is the nature of the controversy, not the method of its presentation or the particular party who presents it, that is determinative.”³⁷

The Supreme Court further delineated the meaning of “actual controversy” in *Maryland Casualty Co. v. Pacific Coal & Oil Co.*³⁸ The Court first noted the difficulty in defining an actual controversy because “the difference between an abstract question and a ‘controversy’ . . . is necessarily one of degree.”³⁹ The Court then restated the test for “actual controversy” as “whether the facts alleged, under all the circumstances, show that there is a substantial controversy, between parties having adverse le-

33. *Aetna*, 300 U.S. at 239.

34. *Id.* at 239-40 (“The Declaratory Judgment Act of 1934, in its limitation to ‘cases of actual controversy,’ manifestly has regard to the constitutional provision and is operative only in respect to controversies which are such in the constitutional sense. The word ‘actual’ is one of emphasis rather than of definition.”).

35. *Id.* at 240-41. The Court further specified:

A justiciable controversy is . . . distinguished from a difference or dispute of a hypothetical or abstract character; from one that is academic or moot. . . . It must be a real and substantial controversy admitting of specific relief through a decree of a conclusive character, as distinguished from an opinion advising what the law would be upon a hypothetical state of facts.

Id. (citations omitted)

36. *Id.* at 242.

37. *Id.* at 244.

38. *Md. Cas. Co. v. Pac. Coal & Oil Co.*, 312 U.S. 270 (1941). The declaratory judgment plaintiff, Maryland Casualty Company, was an insurance company that had issued a policy insuring against injuries caused by automobiles hired by the insured. *Id.* at 271. After a collision between an automobile driven by an employee of the insured and a third party, suit was brought by the injured third party seeking damages. *Id.* Maryland Casualty brought a declaratory judgment action against the insured and the third party, seeking to establish that Maryland Casualty was not liable under the policy because the automobile was not owned by the insured. *Id.* at 271-72.

39. *Id.* at 273.

gal interests, of sufficient immediacy and reality to warrant the issuance of a declaratory judgment.”⁴⁰

C. Declaratory Judgment in Patent Cases

In its initial treatment of patent cases where declaratory judgment claims were brought, the Supreme Court established several benchmarks to guide lower courts as to what circumstances result in a justiciable controversy. The focus of the Supreme Court’s analyses, discussed in Section II.C.1, rested on the independence of declaratory judgment claims from infringement claims. The Court also emphasized the importance of looking into the actual relations between the parties to determine if a justiciable controversy exists. The Federal Circuit attempted to formalize the inquiry into the parties’ relations by developing the RAS test, discussed in Section II.C.2, to decide jurisdiction over declaratory judgment actions in patent cases.

1. *The Supreme Court Holds Declaratory Judgment Claims of Invalidity Justiciable Where the Patent is Found Noninfringed*

In *Altvater v. Freeman*, the Supreme Court held a justiciable controversy existed between a licensee and licensor on invalidity counterclaims.⁴¹ The Court held that the controversy still existed despite a district court’s ruling that the license was terminated and that a device manufactured and sold in violation of the license agreement did not infringe the licensor’s patents.⁴²

The licensor a decade earlier successfully sued for infringement of a different device, also in violation of the license, and the licensee was still subject to an injunction compelling royalty payments from that first suit.⁴³ After the first suit, the licensor surrendered the original patent and obtained reissue patents that the licensor contended substituted for the original patent in the license agreement.⁴⁴ On appeal from the later suit involv-

40. *Id.*

41. *Altvater v. Freeman*, 319 U.S. 359 (1943).

42. *Id.* at 365-66.

43. *Id.* at 361. The terms of the license agreement permitted *Altvater*, the licensee, to manufacture and sell parts for use with machines relating to shoe manufacture, but did not license manufacture or sale of the patented machine itself. *Freeman v. Altvater*, 66 F.2d 506, 506 (8th Cir. 1933). *Altvater* was held liable for infringement after manufacturing and selling a machine covered by the patent, in contravention of the license, and ordered to pay royalties on the machine. *Altvater*, 319 U.S. at 361.

44. *Id.* at 362. A few years after the first *Altvater* infringement suit, *Freeman* sued a different party for infringement of his patent, but the patent was held invalid. *Premier Mach. Co. v. Freeman*, 84 F.2d 425 (1st Cir. 1936). *Freeman* filed the disclaimer with the

ing the reissue patents, the Eighth Circuit affirmed the district court and held that the questions of patent validity were made moot by the district court's holdings of noninfringement and that the license was terminated by the original patent's surrender.⁴⁵

In reversing the Eighth Circuit, the Supreme Court determined that a "controversy was raging" around the validity of the patents.⁴⁶ The now-resolved patent infringement issue involved only one patent claim out of the many claims in the reissue patents owned by the licensor.⁴⁷ The licensees were commercializing products allegedly covered by the licensor's patents in addition to the product absolved of infringement.⁴⁸ The royalty payments compelled by the injunction did not make the dispute hypothetical,⁴⁹ but instead factored into the finding of controversy.⁵⁰ The Court characterized the demand and receipt of the royalty payments as a "heavy hand of . . . tribute" that the declaratory judgment counterclaim was intended to "lift" from the business.⁵¹ Furthermore, a justiciable controversy existed "where the involuntary or coercive nature of the exaction preserves the right to recover the sums paid or to challenge the legality of the claim."⁵²

The Supreme Court more recently affirmed and clarified *Altwater* in *Cardinal Chemical Co. v. Morton International, Inc.*, in which it held that a court's finding of noninfringement does not make moot counterclaims for declaratory judgment of invalidity.⁵³ In *Cardinal Chemical*, the district court dismissed a suit for infringement, but granted the alleged infringer's

patent office covering all the invalidated claims. *Altwater*, 319 U.S. at 361-62. He then surrendered the patent and obtained the reissue patents. *Id.* at 362.

45. *Altwater*, 319 U.S. at 362. The district court held the royalties that Altwater had paid since the issuing of the reissue patents did not indicate acceptance of a new contract based on the reissue patents because the royalty payments were paid under protest and under the injunction for the first *Altwater* case. *Freeman v. Altwater*, 129 F.2d 494, 496 (8th Cir. 1942). The Eighth Circuit affirmed the district court's holding. *Id.* at 501. The Eighth Circuit's holdings of mootness were enunciated in a response to a petition for rehearing and motion to modify the opinion and decree. *Freeman v. Altwater*, 130 F.2d 763 (8th Cir. 1942).

46. *Altwater*, 319 U.S. at 364.

47. *Id.* at 364.

48. *Id.* at 364-65.

49. *Id.* at 364 ("The fact that royalties were being paid did not make this a 'difference or dispute of a hypothetical or abstract character.'" (quoting *Aetna Life Ins. Co. v. Haworth*, 300 U.S. 227, 240 (1937))).

50. *Id.* at 364-65.

51. *Id.* at 365.

52. *Id.*

53. *Cardinal Chem. Co. v. Morton Int'l, Inc.*, 508 U.S. 83 (1993).

declaratory judgment counterclaims for invalidity.⁵⁴ The Federal Circuit affirmed the ruling of noninfringement on appeal, but vacated the declaratory judgment on the grounds that once a court finds noninfringement, then no controversy exists between the parties.⁵⁵ Unlike in *Altvater*, the entirety of the *Cardinal Chemicals* parties' dispute centered on allegations of infringement and invalidity.⁵⁶ However, the Supreme Court distinguished an "unnecessary ruling on an affirmative defense" from "the necessary resolution of a counterclaim for a declaratory judgment."⁵⁷ The Court underscored that jurisdiction for a counterclaim for declaratory judgment is established independently from the claim of infringement.⁵⁸

2. *The Federal Circuit Establishes the "Reasonable Apprehension of Suit" Test for Finding Jurisdiction for Declaratory Judgment Actions*

C.R. Bard, Inc. v. Schwartz was one of the first cases in which the Federal Circuit addressed declaratory judgment standing in patent cases.⁵⁹ The court held that where a patent licensee had a reasonable apprehension of an infringement suit, the license did not need to be terminated before the licensee could bring a declaratory judgment action.⁶⁰ Schwartz sued C.R. Bard, Inc. (Bard), its licensee, in state court for failing to adhere to the terms of a patent license agreement.⁶¹ Bard countered with a declaratory action in federal court alleging that Schwartz's patent was invalid and unenforceable and that the license was void and unenforceable.⁶² In reversing the lower court's dismissal for lack of jurisdiction, the Federal Circuit focused on the availability of legal challenges to both the licensor and the licensee.⁶³ Bard had materially breached the license agreement, thus allowing Schwartz, although he had not yet done so, to terminate the license and bring an action in federal court for infringement.⁶⁴ The court

54. *Id.* at 86-87.

55. *Id.* at 87.

56. *Id.* at 86-87.

57. *Id.* at 93-94.

58. *Id.* at 96.

59. 716 F.2d 874 (Fed. Cir. 1983).

60. *Id.* at 880.

61. *Id.* at 875-76.

62. *Id.* at 876.

63. *Id.* at 878-82. The court reiterated the holding from *Lear v. Atkins* that a licensee is not estopped from asserting that a patent under license is invalid. *Id.* at 878 (citing *Lear v. Atkins*, 395 U.S. 653 (1969)).

64. *Id.* at 881. The court noted that "Schwartz could at any time take action against Bard by bringing an infringement suit. There was no action Bard could take to prevent such a lawsuit." *Id.*

stated the requirement of controversy to mean that the declaratory judgment plaintiff must have “sufficient interest in the controversy and that there is a reasonable threat that the patentee or licensor will bring an infringement suit against the alleged infringer.”⁶⁵ While the court characterized its examination as “the totality of the circumstances” approach, it focused on whether Bard had a “reasonable apprehension of an infringement suit.”⁶⁶

In *Arrowhead Industrial Water, Inc. v. Ecolochem, Inc.*, the Federal Circuit emphasized the policy rationales behind the Declaratory Judgment Act, placing the inquiry into the existence of a controversy into the context of conducting business.⁶⁷ The Federal Circuit found that where a patent holder’s conduct compelled an apprehension of potential liability for substantial damages, a district court possesses jurisdiction over declaratory judgment claims.⁶⁸

The *Arrowhead* court applied the RAS test: “First, the defendant’s conduct must have created on the part of plaintiff a reasonable apprehension that the defendant will initiate suit if the plaintiff continues the allegedly infringing activity. Second, the plaintiff must have actually have produced the device or have prepared to produce that device.”⁶⁹ Ecolochem, a competitor of Arrowhead Industrial Water, had filed infringement suits against other competitors, informed Arrowhead’s customers of their potential liability for infringement, and initiated correspondence with Arrowhead demanding cessation of infringing practices.⁷⁰ The Federal Cir-

65. *Id.* at 879.

66. *Id.* at 880.

67. *Arrowhead Indus. Water, Inc. v. Ecolochem, Inc.*, 846 F.2d 731, 734-35, 737 (Fed. Cir. 1988).

68. *Id.* at 739.

69. *Id.* at 736 (citing *Goodyear Tire & Rubber Co. v. Releasomers, Inc.*, 824 F.2d 953, 955 (Fed. Cir. 1987)).

70. *Id.* at 733. The parties at suit were competing water treatment service providers. *Id.* Soon after filing suit against a third party competitor for infringement of an Ecolochem patent, Ecolochem advised an Arrowhead customer of its potential liability were it to make use of Arrowhead’s allegedly infringing services. *Id.* A month later, Ecolochem initiated correspondence with Arrowhead demanding that Arrowhead cease any current or future practices infringing the Ecolochem patent and referred to Ecolochem’s past actions of enforcing its patent rights via litigation. *Id.* Upon commencement of services to Arrowhead’s customer, Arrowhead brought a declaratory judgment action against Ecolochem. *Id.* The district court dismissed for lack of actual controversy and Arrowhead filed a second complaint that was also dismissed on the same basis. *Id.* at 733-34. Between the filing of the first and second complaint, Ecolochem proposed a finding in the suit against the third party that both the third party and Arrowhead had practiced a process that infringed the patent at suit. *Id.* at 734.

cuit found that Ecolochem's conduct indicated its intent to enforce its patent.⁷¹ The court observed that to find otherwise would allow Ecolochem to enforce its patent rights extra-judicially by way of intimidation and defeat the purpose of the Declaratory Judgment Act⁷²: to prevent "uncertainty and insecurity" and the "*in terrorem* choice between the incurrence of growing potential liability . . . and abandonment of [business] enterprises."⁷³ The Federal Circuit also found that Arrowhead's conduct fulfilled the second prong of the declaratory judgment test.⁷⁴ Although the district court indicated that Arrowhead must establish identity between its process and the patented process to satisfy this the second prong, the Federal Circuit opined that such a requirement prevents declaratory judgment actions for noninfringement and only allows those to establish invalidity or unenforceability.⁷⁵ The court stated that a declaratory judgment plaintiff instead need only show "a real interest in an activity that *may*, potentially, be enjoined."⁷⁶

In more recent cases applying the RAS test, the Federal Circuit has elaborated on the types of conduct that lead to a justiciable controversy. The court has held that threatening statements made by a patentee in the context of licensing negotiations do not fulfill the first prong of the test.⁷⁷ The court has also required objective evidence that patent licensing negotiations had broken down before exercising jurisdiction over an alleged infringer's declaratory judgment action.⁷⁸

3. *Generic Pharmaceutical Cases*

Patent infringement suits between generic and branded pharmaceutical manufacturers are governed not only by the patent laws, but also by the Federal Food, Drug, and Cosmetic Act (FDCA).⁷⁹ The FDCA regulates the manufacture and distribution of pharmaceutical drugs. The Hatch-

71. *Id.* at 737.

72. *Id.*

73. *Id.* at 735.

74. *Id.* at 737.

75. *Id.* at 738 n.10.

76. *Id.*

77. *See, e.g.,* Shell Oil Co. v. Amoco Corp., 970 F.2d 885, 888-89 (Fed. Cir. 1992). Further, initiation of licensing negotiations by the alleged infringer was taken by the court as an indication that the patent holder might never have sued the alleged infringer. *Id.* at 889.

78. Phillips Plastics Corp. v. Kato Hatsujou Kabushiki Kaisha, 57 F.3d 1051, 1053-54 (Fed. Cir. 1995).

79. Federal Food, Drug, and Cosmetic Act of 1938, Pub. L. No. 75-717, 52 Stat. 1040 (codified as amended at 21 U.S.C. §§ 301-399 (2000 & Supp. IV 2004)).

Waxman Act Amendments to the FDCA provide generic pharmaceutical manufacturers a shortened approval process for marketing generic drugs.⁸⁰

The Abbreviated New Drug Application (ANDA) filed by generic manufacturers allows utilization of the safety and efficacy data submitted for the equivalent branded drug's previously filed New Drug Application (NDA).⁸¹ The ANDA process reduces both the time and cost of marketing generic pharmaceuticals. As an added incentive to produce generic drugs, the first company to file an ANDA for a particular drug is granted a 180-day period of market exclusivity before other generic manufacturers may enter the market.⁸² The 180-day period of market exclusivity begins to run either when the generic drug begins commercial marketing or when a court declares the patent covering the branded drug invalid.⁸³

An ANDA filing must include a certification concerning the status of patents listed in the Approved Drug Products with Therapeutic Equivalence Evaluations, also known as the Orange Book.⁸⁴ The Orange Book contains a list of patents covering drugs approved by the FDA. Filing an ANDA with a certification that patents related to the branded drug are either invalid or will not be infringed constitutes a constructive act of infringement.⁸⁵ The patent owner then has forty-five days to bring a patent infringement suit against the would-be generic manufacturer.⁸⁶ By filing the patent infringement suit, the patent owner gains a thirty-month stay on the approval of the generic drug unless the patent is found invalid.⁸⁷ If the patent owner fails to file a timely action after a certification of invalidity and/or noninfringement is filed, then the FDA will begin the ANDA ap-

80. The Drug Price Competition and Patent Term Restoration Act of 1984, Pub. L. No. 98-417, 98 Stat. 1585 (1984) (codified in relevant parts at 21 U.S.C. § 355 and 35 U.S.C. § 271(e) (2000 & Supp. III 2003)).

81. 21 U.S.C. § 355(j) (2000 & Supp. III 2003).

82. 21 U.S.C. § 355(j)(5)(B)(iv) (2000 & Supp. III 2003).

83. *Id.*

84. 21 U.S.C. § 355(j)(2)(A)(vii) (2000 & Supp. III 2003). The ANDA may (i) certify that there is no patent listed for the relevant pioneer drug, (ii) certify that the patent relating to the pioneer drug is expired, (iii) list the date on which the patent relating to the pioneer drug will expire, or (iv) certify that the patent relating to the pioneer drug is invalid or not infringed by the generic drug. 21 U.S.C. § 355(j)(2)(A)(vii)(I)-(IV) (2000 & Supp. III 2003). The approval by the FDA of an ANDA that certifies that there is no patent or that the patent is expired is effective immediately. 21 U.S.C. § 355(j)(5)(B)(i) (2000). The approval by the FDA of an ANDA that certifies the date upon which the patent expires is effective on the date the patent expires. 21 U.S.C. § 355(j)(5)(B)(ii) (2000).

85. 35 U.S.C. § 271(e)(2)(A) (2000).

86. 21 U.S.C. § 355(j)(5)(B)(iii) (2000 & Supp. III 2003).

87. *Id.*

proval process⁸⁸ and the generic manufacturer gains standing to bring a declaratory judgment action with respect to the patent that is subject to the certification.⁸⁹

In *Teva Pharmaceuticals USA, Inc. v. Pfizer Inc.*, the Federal Circuit addressed declaratory judgment jurisdiction in the context of ANDA patent litigation.⁹⁰ In *Pfizer*, a generic manufacturer submitted an ANDA for a Pfizer product.⁹¹ Pfizer filed an infringement suit against the ANDA filer and the parties settled.⁹² Because the senior patent associated with the drug had not been challenged in the ANDA as invalid or noninfringed,⁹³ the ANDA filer's 180-day exclusivity period was tolled until the expiration of that patent.⁹⁴ Three years after the settlement, Teva Pharmaceuticals USA, Inc. filed an ANDA for the same product.⁹⁵ However, Pfizer neither filed an infringement suit nor agreed to grant Teva a covenant not to sue.⁹⁶ Teva filed a declaratory judgment action, seeking to invalidate the patent.⁹⁷ Invalidating the patent would trigger the first ANDA applicant's 180-day exclusivity period and hasten Teva's entry into the market.⁹⁸

The Federal Circuit concluded that even though the statute permitted an ANDA filer to bring a declaratory judgment action after the pioneer drug maker declined to sue for infringement, the statute did not independently confer subject matter standing on the ANDA filer.⁹⁹ Instead, the would-be declaratory judgment plaintiff must still show actual controversy between the parties.¹⁰⁰ Teva conceded that Pfizer would not bring suit

88. *Id.*

89. 21 U.S.C. § 355(j)(5)(C)(i) (2000 & Supp. III 2003); 35 U.S.C. § 271(e)(5) (2000 & Supp. III 2003). These provisions were part of the changes to the Hatch-Waxman Amendments made in the Medicare Prescription Drug, Improvement, and Modernization Act of 2003, Pub. L. No. 108-173, 117 Stat. 2066 (2003).

90. *Teva Pharm. USA, Inc. v. Pfizer Inc.*, 395 F.3d 1324 (Fed. Cir. 2005).

91. *Id.* at 1330. The first ANDA filer submitted a paragraph III certification for one patent and a paragraph IV certification for the other patent listed in the Orange Book. *Id.*

92. *Id.*

93. In addition, the patent did not expire for several more years. *Id.* at 1329.

94. *Id.* at 1330.

95. *Id.* Like the first ANDA filer, Teva filed a paragraph III certification for one patent and a paragraph IV certification for the other patent listed in the Orange Book. *Id.*

96. *Id.* at 1330.

97. *Id.* at 1327.

98. *See supra* text accompanying notes 81-83.

99. *Pfizer*, 395 F.3d at 1334.

100. *Id.* at 1334, 1337. The court based its finding, in part, on the plain language of statute: "[T]he courts of the United States shall, to the extent consistent with the Constitution, have subject matter jurisdiction in any [declaratory judgment] action brought [by an ANDA filer]." 35 U.S.C. 271(e)(5) (2000 & Supp. III 2003) (emphasis added).

against Teva because that would expose Pfizer's patent to the risk of an invalidity or noninfringement finding.¹⁰¹ Pfizer had no need to sue Teva immediately because Teva's ANDA would not be granted approval until after the expiration of the 180-day exclusivity period.¹⁰² The court held that Teva failed to show an "actual controversy" under the RAS test because there was no apprehension that Pfizer would bring suit.¹⁰³

III. CASE SUMMARY

This Part summarizes recent developments in establishing a justiciable controversy for declaratory judgment actions in patent cases. Section III.A discusses the facts, procedural history and ruling of *MedImmune*. Section III.B discusses the Federal Circuit's application of the *MedImmune* opinion in its *SanDisk* and *Novartis* decisions.

A. *MedImmune v. Genentech*

In *MedImmune*, the Supreme Court examined whether a patent licensee who paid royalties, thereby ensuring that the licensor could not sue for infringement or breach of contract, could still maintain an action for declaratory judgment to dispute the terms of the contract.¹⁰⁴

1. *Facts & Procedural History*

In 1997, MedImmune entered into a license agreement with Genentech.¹⁰⁵ The agreement licensed an issued patent and a pending patent application, hereinafter referred to as the Cabilly I¹⁰⁶ and Cabilly II¹⁰⁷ patents, respectively.¹⁰⁸ When the Cabilly II patent issued in late 2001, Genentech informed MedImmune in writing that Cabilly II covered MedImmune's Synagis product and asserted that royalties were thus owed under the 1997 license agreement.¹⁰⁹

MedImmune believed that the Cabilly II patent was invalid and unenforceable, and that the Synagis product did not infringe the Cabilly II patent's claims.¹¹⁰ Continuing to fulfill the stated royalty obligations of the license agreement, MedImmune filed a declaratory judgment action in the

101. *Pfizer*, 395 F.3d at 1333-34.

102. *Id.* at 1334.

103. *Id.*

104. *MedImmune, Inc. v. Genentech, Inc.*, 127 S. Ct. 764 (2007).

105. *Id.* at 767-68.

106. U.S. Patent No. 4,816,567 (filed Apr. 8, 1983).

107. U.S. Patent No. 6,331,415 (filed June 10, 1988).

108. *MedImmune*, 127 S. Ct. at 768.

109. *Id.*

110. *Id.*

U.S. District Court for the Central District of California seeking a determination of invalidity and noninfringement of the Cabilly II patent.¹¹¹ MedImmune regarded Genentech's letter as a threat: if MedImmune did not pay the fees demanded for the Cabilly II patent, Genentech could terminate the license agreement and sue for infringement.¹¹² Loss in a patent litigation could result, in the worst-case scenario, in treble damages for willful infringement and an injunction against further sales of Synagis.¹¹³ Facing this risk, MedImmune continued to pay royalties under the license, thereby preventing Genentech from having an action for either breach of contract or infringement.

The district court granted Genentech's motion to dismiss the declaratory judgment claims for lack of subject-matter jurisdiction. The Federal Circuit affirmed.¹¹⁴ Both courts relied on the Federal Circuit's opinion in *Gen-Probe Inc. v. Vysis Inc.*, where the Federal Circuit held that there is no justiciable controversy where a licensee is in good standing because the licensee has no reasonable apprehension that the licensor will sue for infringement.¹¹⁵ The Federal Circuit held that a federal court does not have jurisdiction over a declaratory action for patent invalidity, unenforceability, or noninfringement where the plaintiff licensed the patents and is in full compliance with the license.¹¹⁶ Under these conditions, there is no apprehension of a suit for infringement.¹¹⁷

2. *The Supreme Court's Ruling*

The Supreme Court reversed the dismissal.¹¹⁸ The Court held that MedImmune could pay royalties to Genentech to eliminate the risk of an action for infringement, but still file suit for a declaratory judgment of noninfringement, invalidity, and unenforceability.¹¹⁹ The Court reasoned that Article III's justiciable controversy requirement did not support a standard that required an unwilling licensee to risk liability for infringe-

111. *MedImmune, Inc. v. Genentech, Inc.*, No. CV 03-2567, 2004 U.S. Dist. LEXIS 28680 (C.D. Cal. Apr. 29, 2004).

112. *MedImmune*, 127 S. Ct. at 768.

113. *Id.*

114. *MedImmune, Inc. v. Genentech, Inc.*, 427 F.3d 958 (Fed. Cir. 2005).

115. *MedImmune, Inc. v. Genentech, Inc.*, 127 S. Ct. 764, 768 (2007) (noting that both lower courts relied on *Gen-Probe Inc. v. Vysis Inc.*, 359 F.3d 1376 (Fed. Cir. 2004)).

116. *MedImmune, Inc. v. Genentech, Inc.*, 427 F.3d 958 (Fed. Cir. 2005).

117. *Id.* at 965.

118. *MedImmune, Inc. v. Genentech, Inc.*, 127 S. Ct. 764 (2007).

119. *Id.*

ment, with potential treble damages, before it could obtain a declaration of actively contested legal rights.¹²⁰

The Court stated the standard for an actual controversy in the context of declaratory judgment as “whether the facts alleged, under all the circumstances, show that there is a substantial controversy, between parties having adverse legal interests, of sufficient immediacy and reality to warrant the issuance of a declaratory judgment.”¹²¹ The Court noted that if MedImmune had ceased to pay the license fees, then there would have been no question that a justiciable controversy existed, but instead MedImmune’s “own acts . . . eliminate[d] the imminent threat of harm.”¹²² Thus, the Court considered whether the act of paying license fees prevented MedImmune from challenging the patents and the license agreement.

The Court first looked to cases where the adverse legal interests included a private party and the government. Where a declaratory judgment plaintiff seeks to challenge the constitutionality of a statute, the plaintiff is not required to violate the statute in question.¹²³ The Court characterized such a plaintiff’s conduct in avoiding prosecution and the risk of liability as eliminating a threat of harm.¹²⁴ The plaintiff does not have to choose between abandoning a claim of right or facing the threat of injury.¹²⁵

The Court next examined disputed legal claims between private parties. As above, the *MedImmune* Court stressed that a plaintiff should not be required to take actions that engender grave risks (to “bet the farm”) when such claims arise.¹²⁶ The Court’s reasoning relied on *Altwater*, where a licensee continued to pay royalties to the patent holder, but the requirements for a justiciable controversy were met for a dispute over the patents’ validity.¹²⁷ The Court interpreted *Altwater* to hold that a licensee retains the right to bring a declaratory judgment action when the licensee pays royalties under protest and because of injunction decree.¹²⁸ The Court pointed to the “involuntary” and “coercive” nature of the royalty payments

120. *Id.* at 775 (“The rule that a plaintiff must destroy a large building, bet the farm, or (as here) risk treble damages and the loss of 80 percent of its business, before seeking a declaration of its actively contested legal rights finds no support in Article III.”).

121. *MedImmune, Inc. v. Genentech, Inc.*, 127 S. Ct. 764, 771 (2007) (quoting *Md. Cas. Co. v. Pac. Coal & Oil Co.*, 312 U.S. 270, 273 (1941)).

122. *Id.* at 772.

123. *Id.* at 772-73.

124. *Id.* at 772.

125. *Id.* at 772-73.

126. *Id.* at 775.

127. *Id.* at 773. For discussion, see *supra* text accompanying notes 41-52.

128. *Id.* (citing *Altwater v. Freeman*, 319 U.S. 359 (1943)).

that the *Altvater* licensee made under the injunctive decree.¹²⁹ The Court reasoned that a party who makes royalty payments under an injunction, as in *Altvater*, is no different than a licensee in good standing who makes royalty payments based on fear of treble damages and injunctions.¹³⁰ However, in neither case would the party making royalty payments have standing to bring a declaratory judgment action under the Federal Circuit's RAS test.¹³¹

Ultimately, the Court never explicitly overruled the RAS test. Rather, the Court pronounced its death in a footnote by pointing out that the Federal Circuit's test conflicts with Supreme Court precedent,¹³² including *Aetna*,¹³³ *Maryland Casualty*,¹³⁴ and *Cardinal Chemical*.¹³⁵

B. The Federal Circuit's Response to *MedImmune*

Within three months of the *MedImmune* decision and the implicit overruling of the RAS test, the Federal Circuit began establishing new standards for declaratory judgment jurisdiction in patent cases. In *SanDisk Corp. v. STMicroelectronics, Inc.*, the Federal Circuit considered a dispute between competitors who had entered into negotiations over a cross-licensing agreement.¹³⁶ In *Teva Pharmaceuticals USA, Inc. v. Novartis Pharmaceuticals Corp.*, the Federal Circuit addressed a dispute similar to that in *Pfizer* between generic and brand name pharmaceutical companies.¹³⁷ The Federal Circuit created signposts in these cases for future litigants regarding the actions of patent holders that establish declaratory judgment jurisdiction.

1. *SanDisk v. STMicroelectronics*

SanDisk Corp. brought a declaratory judgment action against STMicroelectronics, Inc. (ST) in the United States District Court for the Northern District of California. SanDisk sought a declaration of invalidity

129. *Id.* (citing *Altvater v. Freeman*, 319 U.S. 359, 365 (1943)).

130. *Id.* at 774 n.11 (2007). The Court failed to acknowledge that a party might voluntarily enter into a license to gain access to another party's technology. See Sean M. O'Connor, *Using Stock and Stock Options to Minimize Patent Royalty Payment Risks after MedImmune v. Genentech*, 3 N.Y.U. J.L. & BUS. 381, 387-88 (2007).

131. *MedImmune*, 127 S. Ct. at 774 n.11.

132. *Id.*

133. See *supra* text accompanying notes 27-37.

134. See *supra* text accompanying notes 38-40.

135. See *supra* text accompanying notes 53-58.

136. *SanDisk Corp. v. STMicroelectronics, Inc.*, 480 F.3d 1372 (Fed. Cir. 2007).

137. *Teva Pharm. USA, Inc. v. Novartis Pharm. Corp.*, 482 F.3d 1330 (Fed. Cir. 2007). See *supra* text accompanying notes 90-103 for discussion of *Pfizer*.

and noninfringement of patents held by ST.¹³⁸ The district court held that it had no subject matter jurisdiction under the RAS test.¹³⁹ The Federal Circuit reversed in view of the recently decided *MedImmune* case.¹⁴⁰

a) Facts & Procedural History

SanDisk, a manufacturer of flash memory storage devices, was initially approached by ST, a recent entrant into the flash memory storage market, to discuss a cross-licensing agreement.¹⁴¹ Over the next several months, SanDisk and ST met to discuss patent cross-licensing and other unrelated business transactions.¹⁴² During the meetings, ST presented infringement analyses of SanDisk activities in relation to ST patents.¹⁴³ SanDisk made an analogous presentation to ST.¹⁴⁴ At first, the parties maintained that they had no intention to sue each other.¹⁴⁵ However, SanDisk eventually filed an action for infringement of its own patent and for declaratory judgment of invalidity and noninfringement of the ST patents.¹⁴⁶ The district court granted ST's motion to dismiss SanDisk's declaratory judgment claims for lack of subject matter jurisdiction, holding that SanDisk did not have an objectively reasonable apprehension of suit by ST.¹⁴⁷

b) The Federal Circuit's Ruling

In light of the recently decided *MedImmune* case, the Federal Circuit vacated the district court's dismissal of SanDisk's declaratory judgment action for lack of subject matter jurisdiction.¹⁴⁸ Under *MedImmune*, a fed-

138. *SanDisk Corp. v. STMicroelectronics, Inc.*, No. C 04-04379 JF, 2005 U.S. Dist LEXIS 44870 (N.D. Cal. Jan. 20, 2005).

139. *Id.*

140. *SanDisk Corp. v. STMicroelectronics, Inc.*, 480 F.3d 1372 (Fed. Cir. 2007).

141. *Id.* at 1374.

142. *Id.*

143. *Id.* at 1375. ST also provided SanDisk with detailed reverse engineering reports for some of SanDisk's products and diagrams explaining how ST's patent claims covered SanDisk's products. *Id.*

144. *Id.*

145. *Id.* at 1376.

146. *SanDisk Corp. v. STMicroelectronics, Inc.*, No. C 04-04379 JF, 2005 U.S. Dist LEXIS 44870, *16 (N.D. Cal. Jan. 20, 2005).

147. *Id.* at *27. The district court also held, in a footnote, that as an alternative basis for dismissal, even if the court had subject matter jurisdiction, it would use its discretion to decline jurisdiction. *Id.* at *33 n.30.

148. *SanDisk*, 480 F.3d 1372. In reversing the district court's alternative basis for dismissal, discretion to decline declaratory judgment jurisdiction, the Federal Circuit concluded that because the dismissal relied on the now-overruled RAS test, there was "little basis" for the discretionary refusal. *Id.* at 1383. The court instructed the district

eral court has subject matter jurisdiction for a declaratory judgment action where the plaintiff disagrees with the defendant's claim of right, but would risk grave injury if they did not comply.¹⁴⁹ Unlike the parties in *MedImmune*, SanDisk was not a licensee of ST, but instead was in discussions with ST over cross-licensing. The Federal Circuit focused its decision on the acts by ST demonstrating its belief that SanDisk was infringing ST patents.¹⁵⁰

The court held that a party can bring a declaratory judgment action before it receives explicit threats of litigation.¹⁵¹

We hold only that where a patentee asserts rights under a patent based on certain identified ongoing or planned activity of another party, and where that party contends that it has the right to engage in the accused activity without license, an Article III case or controversy will arise and the party need not risk a suit for infringement by engaging in the identified activity before seeking a declaration of its legal rights.¹⁵²

The court observed that this holding was consistent with *MedImmune* and other precedent regarding declaratory judgment jurisdiction in cases unconnected with patent licensing.¹⁵³ The Federal Circuit acknowledged that *MedImmune* thus overruled the first prong of the RAS test pertaining to acts by the patentee sufficient to confer jurisdiction.¹⁵⁴ However, the court observed that *MedImmune* did not address the second prong of the RAS test, concerning acts required by the declaratory judgment plaintiff, and stated that it would defer considering the effect of *MedImmune* on this prong.¹⁵⁵

court that, on remand, without additional facts in the record, the district court could not use its discretion to refuse jurisdiction. *Id.*

149. *Id.* at 1379 (citing *MedImmune, Inc. v. Genentech, Inc.*, 127 S. Ct. 764, 773 (2007)).

150. *Id.* at 1382.

151. *Id.* at 1381.

152. *Id.*

153. *Id.* at 1381-82.

154. *Id.* at 1380.

155. *Id.* at 1380 n.2 (“We therefore leave to another day the effect of *MedImmune*, if any, on the second prong.”). The second prong of the test asks whether declaratory judgment plaintiff has engaged in infringing activity or has meaningfully prepared to engage in infringing activity. See *Arrowhead Indus. Water, Inc. v. Ecolochem, Inc.*, 846 F.2d 731, 736 (Fed. Cir. 1988) (defining the second prong).

In a concurring opinion, Judge Bryson agreed that *MedImmune* compelled the *SanDisk* outcome.¹⁵⁶ However, he believed nothing in the facts of the licensing negotiation between SanDisk and ST indicated any difference between their negotiation and any other licensing negotiation.¹⁵⁷ Judge Bryson also voiced his concerns that *MedImmune*'s broadening of declaratory judgment jurisdiction in patent cases implied "no practical stopping point short of allowing declaratory judgment actions in virtually any case in which the recipient of an invitation to take a patent license elects to dispute the need for a license and then to sue the patentee."¹⁵⁸

2. *Teva Pharmaceuticals v. Novartis Pharmaceuticals*

Teva Pharmaceuticals USA brought a declaratory judgment action against Novartis Pharmaceuticals Corp. in the United States District Court for the District of New Jersey for a declaration of invalidity and noninfringement of patents held by Novartis.¹⁵⁹ As in *SanDisk*, the district court found that Teva lacked standing to bring suit under the RAS test,¹⁶⁰ and the Federal Circuit reversed under *MedImmune*.¹⁶¹

a) Facts & Procedural History

Novartis held an NDA¹⁶² for Famvir, a drug used in the treatment of herpes infections.¹⁶³ Novartis listed five patents covering Famvir in the Orange Book: one related to the active ingredient composition and four directed to methods of therapeutic use.¹⁶⁴ The composition patent was set to expire four to five years before the method patents.¹⁶⁵ Teva submitted

156. Judge Bryson disagreed with the majority's remand that disallowed the district court to exercise discretion in declining jurisdiction. *SanDisk*, 480 F.3d at 1385 n.2 (Bryson, J., concurring). He noted that the engagement of the parties in a parallel infringement action was an important factor for deciding whether to allow a declaratory judgment action to proceed and suggested that there was no reason why the district court could not decide, on the present facts in the record, to refuse jurisdiction. *Id.*

157. *Id.* at 1385.

158. *Id.*

159. *Teva Pharm. USA, Inc. v. Novartis Pharm. Corp.*, 482 F.3d 1330 (Fed. Cir. 2007).

160. *Teva Pharm. USA, Inc. v. Novartis Pharm. Corp.*, No. 05-2881 JLL, 2005 U.S. Dist. LEXIS 38649 (D.N.J. Dec. 12, 2005).

161. *Novartis*, 482 F.3d 1330.

162. *See supra* text accompanying notes 79-89.

163. *Novartis*, 482 F.3d at 1334.

164. *Id.*

165. *Id.*

an ANDA for a generic version of Famvir certifying that its drug did not infringe Novartis' patents or that the patents were invalid.¹⁶⁶

Novartis filed a timely suit against Teva for infringement of the composition patent, but not the method patents.¹⁶⁷ In a separate suit, Teva brought a declaratory judgment action for invalidity and noninfringement of the unasserted method patents.¹⁶⁸ Novartis filed a motion to dismiss, arguing that the district court lacked subject matter jurisdiction.¹⁶⁹ To determine whether it had jurisdiction, the district court applied the RAS test¹⁷⁰ with guidance from the Federal Circuit's opinion in *Teva Pharmaceuticals USA, Inc. v. Pfizer, Inc.*¹⁷¹ Because Novartis had not taken any actions or made any threats to enforce the method patents, the district court held that no justiciable controversy existed and that the court lacked subject matter jurisdiction.¹⁷²

b) Federal Circuit's Ruling

The Federal Circuit reversed the district court and held that Teva had a justiciable controversy under the *MedImmune* standard.¹⁷³ Freed from the formalism of the RAS test, the court looked at the totality of the circumstances under which Teva had brought suit. The court cited several circumstances that factored into its finding of a controversy.

First, the court pointed to Novartis' Orange Book listing of the five patents related to Famvir. The listing signaled Novartis' claim of right to file a patent infringement suit against anyone who manufactured, used, or sold a generic version of the drug without license.¹⁷⁴ Second, Teva's ANDA submission with certification of noninfringement or invalidity was a statutory act of infringement that provided Novartis with grounds to sue.¹⁷⁵ The court reasoned that where an action creates a justiciable con-

166. *Id.* Teva filed paragraph IV certifications under 21 U.S.C. § 355(j)(2)(A)(vii) for all five Novartis patents. *Id.* Paragraph IV certifications constitute technical infringement under 35 U.S.C. § 271(e)(1) (2000 & Supp. III 2003).

167. *Novartis*, 483 F.3d at 1334-35.

168. *Teva Pharm. USA, Inc. v. Novartis Pharm. Corp.*, No. 05-2881 JLL, 2005 U.S. Dist. LEXIS 38649 (D.N.J. Dec. 12, 2005).

169. *Id.* at *2-3.

170. *Id.* at *3.

171. *Id.* at *5-7 (comparing the facts to *Teva Pharm. USA, Inc. v. Pfizer, Inc.*, 395 F.3d 1324 (Fed. Cir. 2005)). *See supra* text accompanying notes 90-99.

172. *Id.* at *9.

173. *Teva Pharm. USA, Inc. v. Novartis Pharm. Corp.*, 482 F.3d 1330, 1340 (Fed. Cir. 2007).

174. *Id.* at 1341-42.

175. *Id.* at 1342 (applying *Md. Cas. Co. v. Pac. Coal & Oil Co.*, 312 U.S. 270, 273 (1941))

troverly for one party, that action should likewise support declaratory judgment for the other party to the dispute.¹⁷⁶

Next, the Federal Circuit looked to the declaratory judgment provisions in the Hatch-Waxman Act¹⁷⁷ and the intent that motivated the Act.¹⁷⁸ Congress intended those provisions to facilitate prompt judicial resolution of patent issues between generic pharmaceutical manufactures and patent holders of the branded drug.¹⁷⁹ The intent behind both the Hatch-Waxman Act, in general, and the provisions, in particular, was to accelerate the time to market for generic drugs.¹⁸⁰ The court interpreted Novartis' selective suit for infringement on only one of its patents as an attempt to "simultaneously leverage the benefits provided to a patentee under the Hatch-Waxman Act and avoid the patentee's accompanying responsibilities."¹⁸¹ By bringing a timely infringement action in response to Teva's ANDA filing, Novartis was granted a thirty-month stay on the approval of the ANDA under the Hatch-Waxman provisions.¹⁸² But, the statute requires that, in exchange for the stay, patentees must "reasonably cooperate in expediting" the underlying patent litigation.¹⁸³ Because Novartis selectively

176. *Id.* ("It logically follows that if [submitting an ANDA] creates a justiciable controversy for one party, the same action should create a justiciable declaratory judgment controversy for the opposing party.").

177. The declaratory judgment provisions were added in the 2003 amendments to the Hatch-Waxman Act to allow an ANDA applicant to file a declaratory judgment action against the brand pharmaceutical manufacturer who had not brought an infringement action within 45 days. Medicare Prescription Drug, Improvement, and Modernization Act of 2003, Pub. L. No. 108-173, 117 Stat. 2066 (2003).

178. *Novartis*, 482 F.3d at 1342 (citing "the combination of . . . 1) the 'civil action to obtain patent certainty' under 21 U.S.C. § 355(j)(5)(C); 2) the ANDA declaratory judgment provision under 35 U.S.C. § 271(e)(5); and 3) the purpose of the Hatch-Waxman Act").

179. *Id.* The court observed that the declaratory judgment provisions were "designed to prevent patentees from 'gaming' the Hatch-Waxman Act." *Id.* Congress sought to prevent parties on both sides from exploiting loopholes in the Act to delay generic competition. *Id.* at 1343 n.7 (citing 149 CONG. REC. S15885 (Nov. 25, 2003) (remarks of Senator Kennedy, Ranking Member, Senate Committee on Health, Education, Labor, and Pensions ("Senate HELP committee"))).

180. *Id.* at 1344 ("A central purpose of the Hatch-Waxman Act and the subsequent ANDA declaratory judgment [provisions] is 'to enable competitors to bring cheaper, generic . . . drugs to market as quickly as possible.'" (alteration in original) (citing 149 CONG. REC. S15885 (Nov. 25, 2003) (remarks of Senator Kennedy, Ranking Member, Senate HELP committee))).

181. *Id.* at 1343.

182. *Id.* at 1343. The approval of an ANDA where the patent holder brings a timely infringement suit is effective at the earlier time point of 30 months or resolution of the litigation. *See* 21 U.S.C. 355(j)(5)(B)(iii) (2000 & Supp. III 2003).

183. *Novartis*, 482 F.3d at 1343 (quoting 21 U.S.C. 355(j)(5)(B)(iii)).

attempted to litigate only one of its listed patents, the Federal Circuit concluded that its actions “frustrate[d]” the purpose and intent of the Hatch-Waxman Act.¹⁸⁴

Finally, pending and potential future litigation supported the Federal Circuit’s decision to allow the declaratory judgment action to proceed. Novartis had already filed suit against Teva over the composition patent.¹⁸⁵ Litigation over the composition patent and the method patents necessarily involved the same technology, the same parties, and related patents. In non-ANDA actions, all of these factors are relevant to jurisdiction.¹⁸⁶ Moreover, the possibility of future litigation loomed because Novartis could sue Teva for infringement at a later time based on the method patents.¹⁸⁷ The Federal Circuit concluded that the possibility that a single ANDA application could initiate multiple infringement suits and lengthy litigation supported its finding of a justiciable controversy.¹⁸⁸

In his concurring opinion, Judge Friedman reached the same conclusion on simpler grounds.¹⁸⁹ He noted that all five of Novartis’ patents were related and that, by listing them in the Orange Book, Novartis had asserted that it could file an infringement action against any unlicensed entity manufacturing, selling, or using a generic version of its drug.¹⁹⁰ Furthermore, Teva had filed an ANDA with a certification of noninfringement/invalidity against all of Novartis’ Orange Book listed patents.¹⁹¹ As a result, a justiciable controversy existed between Teva and Novartis with respect to all of those patents.¹⁹²

184. *Id.* at 1343-44 (Fed. Cir. 2007). In support of its reasoning, the court quoted the legislative history:

We fully expect that, in almost all situations where a generic applicant has challenged a patent [by filing an ANDA with a paragraph IV certification] and not been sued for infringement, a claim by the generic applicant seeking declaratory judgment on the patent will give rise to a justiciable ‘case or controversy’ under the Constitution.

Id. at 1343 (alteration in original) (quoting 149 CONG. REC. S15885 (Nov. 25, 2003) (remarks of Senator Kennedy, Ranking Member, Senate HELP committee)).

185. *Id.* at 1344.

186. *Id.*

187. *Id.* at 1345.

188. *Id.*

189. *Id.* at 1346-47 (Friedman, J., concurring).

190. *Id.* at 1347.

191. *Id.*

192. *Id.*

IV. ANALYSIS

The *MedImmune* decision signaled the demise of the Federal Circuit's RAS test. The Supreme Court thus reversed years of Federal Circuit precedent that had established heightened requirements in patent cases for a justiciable controversy. In the wake of *MedImmune*, the Federal Circuit quickly established new standards for declaratory judgment jurisdiction in patent cases.¹⁹³ However, Judge Bryson's concurrence in *SanDisk* cautions that the new standard may set the bar too low; the mere offer of a license for a fee may trigger jurisdiction over a declaratory judgment action of noninfringement and invalidity.¹⁹⁴ The precedential void created by *MedImmune* raises two related issues. What are the outer boundaries of circumstances in which a party may bring declaratory judgment claims against a patent holder with regard to (1) actions taken by the patent holder and (2) conduct of the alleged infringer?

The Federal Circuit's now defunct RAS test provided guidelines for conduct that would trigger declaratory judgment jurisdiction. A patent holder had clear-cut courses of action for offering a license without risking a declaratory judgment action in response.¹⁹⁵ The alleged infringer was less fortunate, having little recourse to the courts when the patent holder made threats just below the level needed to establish a justiciable controversy.

The *MedImmune* decision corrected a course of action that the Federal Circuit had taken to an arguably unjust extreme. Rather than focusing on whether the patent holder had grounds to bring suit, the RAS standard required courts to focus on the imminence and likelihood of suit by the patent holder.¹⁹⁶ Under this query, parties facing an asserted patent could not obtain standing to challenge the patent even if the patent holder made it clear that they believed the patent infringed while the alleged infringer believed there was no liability under that patent.¹⁹⁷ *MedImmune* returned the

193. See *SanDisk Corp. v. STMicroelectronics, Inc.* 480 F.3d 1372 (Fed. Cir. 2007); *Novartis*, 482 F.3d 1330.

194. *SanDisk*, 480 F.3d at 1384 (Bryson, J., concurring).

195. See Lisa A. Dolak, *Power or Prudence: Toward a Better Standard for Evaluating Patent Litigants' Access to the Declaratory Judgment Remedy*, 41 U.S.F. L. REV. 407, 429-30 (2007) (detailing circumstances that have precluded a finding of declaratory judgment jurisdiction).

196. See *supra* II.C.2; see also Dolak, *supra* note 5, at 908, 923-937 (providing a history of the evolution of the Federal Circuit's declaratory judgment jurisprudence and critiquing the divergence of the declaratory judgment jurisdiction standard from the infringement liability standard).

197. See *supra* II.C.2; see also William S. Nabors, *A Reasonable Apprehension of Lawsuit: A Restrictive Threshold for Federal Court Jurisdiction in Patent Declaratory*

jurisdictional standard to where it was before the Federal Circuit established the RAS test. Reasonable apprehension of an infringement suit may remain a factor for determining if two parties have adverse interests sufficient for declaratory judgment, but the *MedImmune* Court held that such apprehension is not required to establish jurisdiction. Since *MedImmune*, the Federal Circuit has begun to reshape the bounds of declaratory judgment jurisprudence in patent cases.

A. Actions Required of the Patent Holder to Establish a Controversy

At present, the Federal Circuit appears to consider declaratory judgment jurisdiction established when an alleged infringer gains knowledge of potential liability. In the past, Professor Lisa Dolak criticized the RAS test because of inconsistency between its standard for declaratory judgment jurisdiction and the standard for notice of infringement.¹⁹⁸ The standard for notice, a requirement for damages to accrue and a possible precursor to a finding of willful infringement, is much looser than that for establishing reasonable apprehension of litigation.¹⁹⁹ This disparity allowed a patentee to provide notice of infringement without risking a declaratory judgment suit, thus producing considerable pressure on the alleged infringer to agree to a license, even when validity and infringement were uncertain. The new standard is more analogous to a liability standard.²⁰⁰ The focus of the inquiry going forward appears to be whether the patent holder's actions give the alleged infringer a reasonable basis to conclude potential infringement liability exists. As a result, the courts have leveled the playing field, in one respect, between the patent holder and the alleged infringer.

1. *Is a Patent Grant Sufficient to Establish a Controversy?*

In *Novartis*, the Federal Circuit suggested that constructive notice of infringement without any affirmative act by the patentee may suffice to

Judgments, 7 WAKE FOREST INTELL. PROP. L.J. 1, 31 (2006) (“It is likely that there are situations where a declaratory judgment plaintiff will suffer an actual injury cause by the patent owner’s acts or omissions, but where there is no apprehension of lawsuit.”).

198. Dolak, *supra* note 5.

199. See Dolak, *supra* note 5, at 938-44 (describing the standards for notice of infringement liability); *id.* at 944 (“[T]he accused infringer is potentially liable for damages but may be unable to bring a declaratory judgment action to challenge validity and infringement.”).

200. See Dolak, *supra* note 5, at 945 (arguing that “the courts should return to the view that a reasonable apprehension of *liability* on the part of the accused infringer is sufficient to satisfy the [Declaratory Judgment] Act’s requirement for an actual controversy”).

create an actual controversy. The court noted that Novartis' listing of patents in the Orange Book weighed toward the existence of a controversy.²⁰¹ Although it cautioned that the listing alone may be insufficient to establish a controversy, the court did not foreclose this possibility. Indeed, Judge Friedman's concurrence found that the only act required by Novartis was the Orange Book listing.²⁰² But the majority pointed to other conduct by Novartis in support of justiciability: the pending infringement litigation for infringement of the composition patent and the strategic nature of selecting the composition patent as the basis for the pending litigation.²⁰³ Regardless, it remains unclear whether these additional actions by Novartis were necessary in the majority's view to support a finding of an actual controversy.

The above reasoning is a far cry from that of the Federal Circuit in *Pfizer*, decided under the RAS test.²⁰⁴ There, the Orange Book listing was considered a statutory requirement and not indicative of intent to enforce the patent.²⁰⁵ Moreover, the *Pfizer* court did not show much sympathy for the generic manufacturer, explaining that "more is required for an actual controversy than the existence of an adversely held patent."²⁰⁶ The *Pfizer* court's reasoning possibly reflected the idea that a patent holder, having only rights to exclude, does not assert her rights until she takes steps to enforce the patent.²⁰⁷ But if Judge Friedman's view in *Novartis* carries the day, then affirmative steps are entirely unnecessary—all that is needed from the patent holder is an adversely held patent.²⁰⁸

2. *Should the Court Consider the Interests of the Patent Holder in Deciding Jurisdiction?*

A scheme that requires little or no action on the part of the patentee—other than holding a patent—shows little regard for the plight of the patentee at the mercy of litigious potential licensees. Prior to *MedImmune*, the Federal Circuit cited the protection of "quiescent patent owners against

201. See *supra* note 174 and accompanying text.

202. See *supra* note 190 and accompanying text.

203. See *supra* text accompanying notes 181-186.

204. *Teva Pharm. USA, Inc. v. Pfizer Inc.*, 395 F.3d 1324 (Fed. Cir. 2005). See *supra* text accompanying notes 90-103.

205. *Id.* at 1333.

206. *Id.*

207. *Nabors*, *supra* note 197, at 21.

208. Granted, the *Novartis* and *Pfizer* cases involved patent litigation within the context of the Hatch-Waxman Act and its distinct statutory provisions and policy considerations. The Act is intended to encourage generic pharmaceutical companies to challenge drug patents. Minimizing the actions required by the patent holder to create a controversy thus aligns with the intent of the statute.

unwarranted litigation” as a rationale for placing weight on actions by the patentee that evince intent to sue for infringement.²⁰⁹ The court also concerned itself with the welfare of the patent licensors who had given up their statutory right to sue their licensees.²¹⁰ Professor Dolak argued that the Federal Circuit’s citing of protection of the patentee as one rationale for deciding declaratory judgment jurisdiction conflated policy concerns with constitutional concerns.²¹¹ She maintained that the protection of patent holders is a matter for legislative or judicial policy, not for jurisdictional issues that find their roots in the Constitution.²¹² Under *MedImmune*, concerns for protection of patentees may be considered as part of a district court’s discretion to hear the declaratory judgment action, rather than as part of the jurisdictional inquiry.

However, an effort to protect the patent holder may not actually prevent unnecessary litigation. In a case of actual controversy, the parties may land in court eventually, but under the RAS test there was bias towards the timing and venue of the patent holder’s choosing.²¹³ The RAS regime was not consistent with Supreme Court precedent that a controversy ripe for resolution via a conventional suit is appropriate for resolution by a declaratory judgment suit as well.²¹⁴

In *Micron Technology, Inc. v. MOSAID Technologies, Inc.*, a case decided after *MedImmune*, *SanDisk*, and *Novartis*, the Federal Circuit responded to the quandary of the competing interests of patent holders and alleged infringers where declaratory judgment jurisdiction is easily achieved.²¹⁵ In an opinion authored by Judge Rader, the Federal Circuit instructed courts to consider the convenience factors found in transfer

209. See Dolak, *supra* note 195, at 427 (citing *Arrowhead Indus. Water, Inc. v. Eco-lochem, Inc.*, 846 F.2d 731, 736 (Fed. Cir. 1988)). The court in *Arrowhead* had stated that, “[i]f, on the other hand, defendant has done nothing but obtain a patent, there can be no basis for the required apprehension, a rule that protects quiescent patent owners against unwarranted litigation.” *Arrowhead*, 846 F.2d at 736.

210. Dolak, *supra* note 195, at 423 (citing *Gen-Probe, Inc. v. Vysis, Inc.*, 359 F.3d 1376 (Fed. Cir. 2004)).

211. Dolak, *supra* note 195.

212. *Id.* at 429.

213. Nabors, *supra* note 197, at 7.

214. See *Aetna Life Ins. Co. v. Haworth*, 300 U.S. 227, 244 (1937) (stating that it is “the nature of the controversy, not the method of its presentation or the particular party who presents it, that is determinative.”); *Md. Cas. Co. v. Pac. Coal & Oil Co.*, 312 U.S. 270, 273 (1941) (“It is immaterial that frequently, in the declaratory judgment suit, the positions of the parties in the conventional suit are reversed; the inquiry is the same in either case.”).

215. *Micron Tech., Inc. v. MOSAID Techs., Inc.*, No. 2007-1080, 2008 U.S. App. Lexis 4387 (Fed. Cir. Feb. 29, 2007).

analysis when deciding whether to exercise their discretion to accept a declaratory judgment action.²¹⁶ Accordingly, where both the alleged infringer and the patent holder file suit in separate forums, the first-filed action may not always be given priority.²¹⁷

B. Action Required by the Alleged Infringer to Establish Jurisdiction

The RAS regime did not solely examine the acts of the patent holder. It also required that the alleged infringer engage in infringing acts or make meaningful preparations to do so before jurisdiction was established.²¹⁸ In *MedImmune*, the Supreme Court did not make clear whether this second prong of the RAS test was also overruled. Each case the Court cited as contradicting the RAS test dealt with lack of apprehension that the patentee—the declaratory judgment defendant—would imminently sue.²¹⁹ Thus far, the Federal Circuit has forgone deciding the effect of *MedImmune* on the standard for the conduct of the alleged infringer.²²⁰

1. *The Constitution and the Patent Statutes Mandate Demonstrable Interest in Allegedly Infringing Activities*

The Constitution and policy rationales require that the alleged infringer show a real interest in activities that the patentee may attempt to exclude.²²¹ The Constitution prohibits advisory opinions and decisions based on hypothetical facts.²²² If the alleged infringer has not yet finalized the potentially infringing device, determining infringement is a counterfactual endeavor.²²³ Moreover, litigation over a theoretical device would waste judicial resources and squander the financial resources of both parties.²²⁴ These considerations should prevent a party from using a declara-

216. *Id.* at *12-13. See 28 U.S.C. § 1404(a) (2000); *Genentech v. Eli Lilly & Co.*, 998 F.2d 931, 937 (Fed. Cir. 1993).

217. *Micron*, 2008 U.S. App. LEXIS 4387, *16-18.

218. See *supra* text accompanying notes 21-24.

219. See *MedImmune, Inc. v. Genentech, Inc.*, 127 S. Ct. 764, 774 n.11 (2007).

220. See *SanDisk Corp. v. STMicroelectronics, Inc.*, 480 F.3d 1372, 1380 n.2 (Fed. Cir. 2007) (“We therefore leave to another day the effect of *MedImmune*, if any, on the second prong.”).

221. See, e.g., *Lujan v. Defenders of Wildlife*, 504 U.S. 555 (1992). Any declaratory judgment plaintiff must have suffered an injury to a “legally protected interest” that can be traced to the “challenged action” of the defendant. *Id.* at 560-61.

222. See *Aetna Life Ins. Co. v. Haworth*, 300 U.S. 227, 241 (1937); see also *Muskrat v. United States*, 219 U.S. 346 (1911).

223. Dolak, *supra* note 195, at 435.

224. *Id.*

tory judgment action to attack a patent solely because it may impede a future business venture.

The patent statutes provide further basis for limiting a party's ability to challenge a patent via a declaratory judgment without a demonstrated interest in activities covered by the patent. Declaratory judgment challenges to patents can involve numerous claims, including noninfringement, invalidity, and unenforceability. Because a patentee will only bring a suit for infringement, invalidity and unenforceability are affirmative defenses, not freestanding actions.²²⁵ Thus, declaratory judgment actions cannot simply involve claims for invalidity or unenforceability, but must necessarily include a claim for noninfringement as the counterpart to the patentee's potential suit for infringement. If declaratory judgment actions could be brought solely on the basis of invalidity or unenforceability, the federal courts would effectively become tribunals for post-grant review, available at the whim of any party simply disgruntled by another party's patent.

In dissenting from the majority in *MedImmune*, Justice Thomas relied on the above arguments to contend that the courts had no jurisdiction over MedImmune's dispute with Genentech. He stated that "MedImmune's prayer for declaratory relief can be reasonably understood only as seeking an advisory opinion about an affirmative defense it might use in some future litigation."²²⁶ He also insisted that MedImmune's contract claim was simply a "repackag[ing]" of its invalidity claim and that invalidity is merely "an affirmative defense to patent infringement, not a freestanding cause of action."²²⁷

Justice Thomas' comments are more significant in the general context of patent disputes than within the context of *MedImmune* itself. Genentech's disagreement with MedImmune was complex, but it centered around the right of a licensee to challenge a licensed patent without first breaching the license agreement.²²⁸ Moreover, MedImmune was actually practicing the invention allegedly covered by the patent.²²⁹ But for the shield of the license, Genentech could have sued for infringement. Likewise, but for the un-breached license, MedImmune could have sought declaratory judgment, even under the high bar of the RAS test. But in cir-

225. Under the patent laws, patents are presumed valid. *See* 35 U.S.C. § 282(1)-(3) (2000).

226. *MedImmune, Inc. v. Genentech, Inc.*, 127 S. Ct. 764, 780 (2007) (Thomas, J., dissenting).

227. *Id.* at 779, 780.

228. *See supra* Section III.A.

229. *MedImmune*, 127 S. Ct. at 768 (majority opinion). Genentech indicated that the Cabilly II patent covered MedImmune's product Synagis. *Id.*

cumstances where a potential declaratory judgment plaintiff is not yet practicing an allegedly infringing invention, Justice Thomas' admonition against issuing advisory opinions over affirmative defenses would carry more weight.

2. *The Federal Circuit may Require Evidence of a Real Interest in Activities Covered by the Patent at Issue*

The *MedImmune* majority signaled that an alleged infringer must come relatively close to infringement before bringing a declaratory judgment action. The Court stated that the facts of the case must have "sufficient immediacy and reality"²³⁰ and that the dispute must be "definite and concrete."²³¹ But conversely, the majority also stated that a party should not be required to engage in offending or illicit conduct in order to establish a justiciable controversy. These latter statements conflict with the second prong of the Federal Circuit's reasonable apprehension of suit test, thereby calling the viability of that prong into question.²³²

Although the Federal Circuit explicitly refused to address the validity of the second prong²³³ in *SanDisk*, its holding in *SanDisk* is consistent with overruling it. The Federal Circuit held in *SanDisk* that the alleged infringer must merely contend "that it has the *right* to engage in the accused activity without license [and] *need not risk a suit for infringement by engaging in the identified activity* before seeking a declaration of its legal rights."²³⁴

The Federal Circuit's view of the second prong remains murky as its application of *MedImmune* belies its statements in *SanDisk* against the second prong. In *Benitec Australia, Ltd. v. Nucleonics, Inc.*, a case decided after *MedImmune*, *SanDisk*, and *Novartis*, the court suggests that it may not entirely dispose of the requirement for some evidence of potential liability.²³⁵ Benitec, the patent holder, brought suit against Nucleonics for

230. See *id.* at 771 (quoting *Md. Cas. Co. v. Pac. Coal & Oil Co.*, 312 U.S. 270, 273 (1941)).

231. See *id.* (quoting *Aetna Life Inc. v. Haworth*, 300 U.S. 227, 240-41 (1937)). The Federal Circuit cited to this language from *Aetna* and *Maryland Casualty* in both the *SanDisk* and *Novartis* opinions, highlighting the significance of these considerations. See *SanDisk Corp. v. STMicroelectronics, Inc.*, 480 F.3d 1372, 1378 (Fed. Cir. 2007); *Teva Pharm. USA, Inc. v. Novartis Pharm. Corp.*, 482 F.3d 1330, 1339 (Fed. Cir. 2007).

232. See *MedImmune*, 127 S. Ct. at 775 ("The rule that a plaintiff must destroy a large building, bet the farm, or (as here) risk treble damages and the loss of 80 percent of its business, before seeking a declaration of its actively contested legal rights finds no support in Article III.")

233. See *supra* Section II.C.2.

234. *SanDisk*, 480 F.3d at 1381 (emphasis added).

235. *Benitec Austl., Ltd. v. Nucleonics, Inc.*, 495 F.3d 1340 (Fed. Cir. 2007).

patent infringement.²³⁶ Nucleonics counterclaimed for a declaratory judgment of invalidity and noninfringement.²³⁷ The district court dismissed the case after an intervening change in precedent prevented Benitec from claiming Nucleonics' actions as infringing.²³⁸ The Federal Circuit reviewed whether the district court properly dismissed Nucleonics' declaratory judgment counterclaims for lack of jurisdiction.²³⁹ The inquiry focused on Nucleonics' stated desire to expand its activities into areas that would give rise to infringement liability.²⁴⁰ Without evidence that Nucleonics had already expanded its activities or made significant preparation to do so,²⁴¹ the court held that Nucleonics failed to fulfill the "immediacy and reality requirement of *MedImmune*."²⁴²

V. CONCLUSION

In *MedImmune*, the Supreme Court eased the requirements for establishing declaratory judgment standing in patent cases. The decision reduced the requirement for a justiciable controversy from that of a reasonable apprehension of litigation to a reasonable apprehension of liability. Post-*MedImmune*, the Federal Circuit has signaled that it may only require a patent holder to provide notice, actively or constructively, to the alleged infringer. But the Federal Circuit has yet to clarify how much liability the alleged infringer must risk to obtain standing for declaratory relief.

236. *Id.* at 1342.

237. *Id.*

238. *Id.* at 1343. Benitec first brought suit against Nucleonics for infringing a patent relating to RNA-based disease therapy. *Id.* at 1342. Several weeks before Benitec moved to dismiss its complaint, the Supreme Court decided *Merck KGaA v. Integra Lifesciences I, Ltd* where the Court read the 35 U.S.C. § 271(e)(1) pharmaceutical research exception broadly. 545 U.S. 193 (2005). See Daniel Wobbekind, Note, *Integra Lifesciences I, Ltd. v. Merck KGaA: Re-Examining the Broad Scope of the § 271(e)(1) Safe Harbor*, 23 BERKELEY TECH. L. J. 107 (2008) (discussing the background and the consequences of the *Merck* decision). Benitec claimed to seek the dismissal because, under the *Merck* decision, it could not obtain an infringement decision against Nucleonics. *Benitec*, 495 F.3d at 1343.

239. *Benitec*, 495 F.3d at 1343. The court's inquiry was focused not on whether jurisdiction was proper for Nucleonics' counterclaims for declaratory judgment at the time filed, but whether the court still had jurisdiction over the counterclaims.

240. *Id.* at 1348. Nucleonics' "present activities" were protected under 35 U.S.C. § 271(e)(1) and in light of the *Merck* decision. *Id.* at 1346 (referring to *Merck*). The activities would not become infringing until after an NDA filing with the U.S. Food and Drug Administration, which was not certain to happen. *Id.*

241. *Id.* at 1349.

242. *Id.* at 1348-49 (citing *MedImmune, Inc. v. Genentech, Inc.*, 127 S. Ct. 764, 771 (2007)).

MedImmune's lower bar brings patent cases back to the standard used in other areas of law. Further, the enhanced ability of alleged infringers to gain access to the courts prevents patent holders from exploiting the differences between the infringement notice requirements and the declaratory judgment jurisdiction requirements. However, *MedImmune*'s lower bar also provides an incentive for potential licensors to file suit first and ask for a settlement license later. This scenario creates further risk that a patent holder—wishing to file first in a venue and at a time of its choosing—may not be able to conduct sufficient investigation into the allegedly infringing activities before filing an action for infringement.²⁴³ In addition, small entities wishing to initiate licensing discussions with larger entities having more resources run the risk of providing ammunition for a declaratory judgment action they cannot fund or withstand. Thus, the practical effect of the post-*MedImmune* legal regime may be to make it easier to practice the inventions of others without a license.

To prevent abuses by potential declaratory judgment plaintiffs seeking to initiate suits against inconvenient patent holders, courts should increase the rigor of the inquiry into the declaratory judgment plaintiff's legal interests in the activities covered by the patent at issue. Constitutional requirements for a justiciable controversy compel such an inquiry.²⁴⁴ The patent statutes upon which these declaratory judgment actions rely also compel such an inquiry.²⁴⁵ Courts may also prevent abuses by both parties by following Judge Rader's roadmap from *Micron* regarding the use of convenience factors and discretionary dismissals.²⁴⁶ Under *Micron*, while timing is still under the control of the first to file suit, venue may not be.

Ultimately, establishing a justiciable controversy is a factually dependent, case-by-case inquiry. Prior to *MedImmune*, the Federal Circuit went astray by losing sight of the fundamental principles of the analysis. It arguably conflated generalized policy concerns with jurisdictional requirements. In the future, courts should avoid repeating this mistake by remembering that at base the inquiry is constitutional.

243. See *Micromesh Tech. Corp. v. Am. Recreation Prods.*, No. C-06-6030 MHP, 2007 U.S. Dist. LEXIS 64241 (N.D. Cal. Aug. 30, 2007) (granting motion for attorney's fees for failure to conduct reasonable investigation, among other failings, prior to filing suit for infringement).

244. See *supra* text accompanying notes 14-20 and Section IV.B.1.

245. See *supra* Section IV.B.1.

246. See *Micron Tech., Inc. v. MOSAID Techs., Inc.*, No. 2007-1080, 2008 U.S. App. Lexis 4387, *12-13, *16-19 (Fed. Cir. Feb. 29, 2007).

INJUNCTIVE RELIEF IN THE POST-*EBAY* WORLD

By Benjamin Petersen

I. INTRODUCTION

The power of a court to grant an injunction in patent cases arises out of 35 U.S.C. § 283: “The several courts having jurisdiction of cases under this title may grant injunctions in accordance with the principles of equity to prevent the violation of any right secured by patent, on such terms as the court deems reasonable.”¹ According to *W.L. Gore & Associates v. Garlock, Inc.*, an early Federal Circuit case, an injunction would almost certainly follow a showing of validity and infringement, and the court should issue an injunction unless there is a sufficient reason for denying it.² This principle derives from the reasoning that a patent embodies, in essence, the right to exclude others from making or using the subject of the invention, and that an injunction most strongly protects that right.³ Courts traditionally considered monetary damages insufficient to compensate for an infringed patent because the principal value of a patent comes from the patent holder’s right to exclude.⁴

Since courts traditionally issued injunctions almost automatically upon a showing of patent validity and infringement, patent holders could dangle the threat of a permanent injunction over the heads of defendants to promote favorable settlements. This threat effectively forced infringing manufacturers to choose between paying the settlement amount and entirely losing access to the patented technology. Thus, patent holders could often effectuate extremely favorable settlements, even in cases where the validity and value of the patent was questionable.

In *eBay Inc. v. MercExchange, LLC*, the Supreme Court significantly reduced the frequency with which courts grant injunctive relief, holding that courts should use the traditional four-factor test for equitable relief when considering whether to issue preliminary or permanent injunctions.⁵ Thus, patent holders found the value of their greatest bargaining chip greatly diminished when *eBay* cast doubt on whether injunctive relief could be obtained with any degree of certainty.

© 2008 Benjamin Petersen.

1. 35 U.S.C. § 283 (2000).

2. *See* 842 F.2d 1275 (Fed. Cir. 1988).

3. *See* *Smith Int’l, Inc. v. Hughes Tool Co.*, 718 F.2d 1573, 1581 (Fed. Cir. 1983).

4. *See id.*

5. *eBay Inc. v. MercExchange, LLC*, 547 U.S. 388 (2006).

In the two years after *eBay*, several trends emerged from cases addressing injunctive relief for patent infringement. There is a strong, almost perfect, correlation between competition between the parties and injunctive relief. Conversely, there is a strong correlation between pursuing a licensing program or failing to practice the patent and denial of an injunction. Indeed, most courts focused their analysis on those facts: whether there is competition, licensing, or practice of the invention. Courts have then shoehorned these factual findings into the framework of the equitable factors. This approach seems consistent across district courts, although courts differed as to how particular factual elements align with the factors of the *eBay* test.

In addition to changing district courts' willingness to grant injunctive relief, *eBay* has raised other questions with respect to patent litigation. The International Trade Commission (ITC) has recently increased in popularity as a forum for plaintiffs to assert their patents against infringers. *eBay* may provide an additional incentive for patent plaintiffs to go to the ITC. Additionally, a great deal of debate has emerged as to how courts should address willful infringement, particularly in the context of ongoing infringement post-trial. Finally, it remains unclear whether *eBay* effectively creates compulsory licenses for the infringer, irrespective of the patent holder's wishes.

This Note briefly reviews the *eBay* decision in Part II, then analyzes the trends that have emerged in the district courts over the past few years in Part III. Part IV discusses trends in royalty and damage calculations. Part V addresses whether a court's refusal to grant an injunction following a showing of infringement constitutes a compulsory license. Finally, Part VI discusses the recent surge in popularity of the ITC as a patent litigation forum.

II. BACKGROUND AND OVERVIEW OF *EBAY*

In *eBay Inc. v. MercExchange, LLC*, MercExchange sued eBay and its subsidiary Half.com in the United States District Court for the Eastern District of Virginia for infringing MercExchange's business method patent on online auctions.⁶ Although the jury found that eBay had infringed the patent, the district court denied MercExchange permanent injunctive relief.⁷ The court held that although 35 U.S.C. § 283 authorized courts to

6. *MercExchange, LLC v. eBay, Inc.*, 401 F.3d 1323, 1338 (Fed. Cir. 2005).

7. *Id.* at 1326.

grant injunctions, it did not require that such relief be granted automatically upon a showing of infringement.⁸

MercExchange successfully challenged this ruling in its appeal to the Federal Circuit.⁹ Overturning the district court, the Federal Circuit reaffirmed its long-standing general rule that courts will issue permanent injunctions against patent infringers absent exceptional circumstances.¹⁰ The Supreme Court then granted certiorari to determine “[w]hether th[e] Court should reconsider its precedents . . . on when it is appropriate to grant an injunction against a patent infringer.”¹¹

The Supreme Court overturned the Federal Circuit’s standard for injunctive relief and replaced it with the four-factor test for equitable relief. The Court ruled that to merit an injunction, a patent holder must show that 1) he has suffered irreparable harm; 2) legal remedies are inadequate; 3) the balance of hardships lies in his favor; and 4) the public interest weighs in favor of granting the injunction.¹² Furthermore, the Court held that the decision to grant or deny equitable relief lies within the discretion of the district courts and will be reviewed only for an abuse of that discretion.¹³

Chief Justice Roberts and Justice Kennedy wrote concurring opinions. Chief Justice Roberts suggested that district court judges, while having discretion, should still issue injunctions more often than not.¹⁴ Roberts noted that since the early 19th century, “courts have granted injunctive relief upon a finding of infringement in the vast majority of patent cases.”¹⁵ Thus, Roberts argued that “limiting discretion according to legal standards helps promote the basic principle of justice that like cases

8. *Id.*

9. *Id.* at 1338.

10. *See id.*

11. *eBay Inc. v. MercExchange, LLC*, 546 U.S. 1029, 1029-30 (2005).

12. *eBay Inc. v. MercExchange, LLC*, 547 U.S. 388, 391 (2006). Justice Thomas recited the four factors as follows:

[A] plaintiff must demonstrate: (1) that it has suffered an irreparable injury; (2) that remedies available at law, such as monetary damages, are inadequate to compensate for that injury; (3) that, considering the balance of hardships between the plaintiff and defendant, a remedy in equity is warranted; and (4) that the public interest would not be disserved by a permanent injunction.

Id. (citing *Weinberger v. Romero-Barcelo*, 456 U.S. 305, 311-13 (1982); *Amoco Production Co. v. Gambell*, 480 U.S. 531, 542 (1987)).

13. *Id.*

14. *Id.* at 1841-42 (Roberts, J., concurring).

15. *Id.* at 1842.

should be decided alike.”¹⁶ Over the past two years, however, few courts have cited to the Roberts concurrence.¹⁷

Justice Kennedy’s concurrence drew a distinction between cases where the patent holder does not practice the invention and cases where the patent holder actually uses the invention. Kennedy noted that over time, “[a]n industry has developed in which firms use [business method] patents not as a basis for producing and selling goods but, instead, primarily for obtaining licensing fees” and that “[t]he potential vagueness and suspect validity of some of these patents may affect the calculus under the four-factor test.”¹⁸ Fearing that such patents may be abused “as a bargaining tool to charge exorbitant fees,” he suggested that in cases where the patent holder does not practice the invention, and where the patented component makes up only a small portion of the infringing product, an injunction is unnecessary because monetary damages provide sufficient compensation.¹⁹ In the years following *eBay*, several courts relied heavily on the Kennedy concurrence in their analysis of whether to grant a patent holder a permanent injunction.²⁰

III. TRENDS IN THE POST-*EBAY* LANDSCAPE IN THE DISTRICT COURTS

In the two years after the Supreme Court’s ruling in *eBay*, there were thirty-three district court decisions²¹ that interpreted *eBay* when determining whether to grant injunctive relief to a patent holder. Of these decisions, twenty-four have granted permanent injunctions and ten have denied injunctions. Seven of these thirty-three cases were heard in the Eastern District of Texas, a forum that has a reputation for favoring patent holders and

16. *Id.* at 1841-42 (quoting *Martin v. Franklin Capital Corp.*, 546 U.S. 132, 139 (2005)).

17. The courts that have cited Chief Justice Robert’s concurrence have done so solely for purposes of establishing a background of injunctive relief. *See, e.g.*, *Paice, LLC v. Toyota Motor Corp.*, No. 2:04-CV-211-DF, 2006 WL 2385139, at *2 (E.D. Tex. Aug. 16, 2006), *aff’d in part and vacated in part on other grounds*, 504 F.3d 1293 (Fed. Cir. 2007).

18. *eBay*, 126 S. Ct. at 1842 (Kennedy, J., concurring).

19. *Id.*

20. *See, e.g.*, *z4 Techs., Inc. v. Microsoft Corp.*, 434 F. Supp. 2d 437, 440-41 (E.D. Tex. 2006) (citing the Kennedy concurrence to support their finding on the sufficiency of monetary damages when the patented component comprises only a small portion of a greater product); *Transocean Offshore Deepwater Drilling, Inc. v. GlobalSantaFe Corp.*, No. H-03-2910, 2006 WL 3813778, at *3 (S.D. Tex. Dec. 27, 2006); *MPT, Inc. v. Marathon Labels, Inc.*, 505 F. Supp. 2d 401 (N.D. Ohio 2007).

21. As of February 3, 2008.

thus presides over a significant percentage of patent litigation in the United States.²² Although several of the courts cited Justice Kennedy's concurrence regarding the sufficiency of legal remedies when the patent holder neither practices nor sells the invention, none have cited Justice Roberts' concurrence as authority for upholding strong patent rights.²³ Additionally, three of the earlier district court cases, *z4 Techs., Inc. v. Microsoft Corp.*, *Tivo, Inc. v. Echostar Comm. Corp.*, and *Finisar v. DirecTV*, have been widely cited by subsequent district courts.²⁴

In undertaking a comparative analysis of these thirty-one cases, a natural starting point would be an examination of the courts' treatment of each equitable factor. Unfortunately, the district courts have provided wildly divergent analyses of the four equitable factors. For instance, although some courts have viewed the public interest factor as including only the interests of the general public,²⁵ others have considered the possible plight of the infringer's employees if an injunction were to be issued a matter of public interest.²⁶ Thus, although the equitable factors provide courts with flexibility in their analysis, that same flexibility renders futile any attempt to compare the analysis of the various courts based on the four factors. Rather, it is more profitable to examine and compare the factual circumstances in these cases which the courts have found to be central to their analysis.

This Part will argue that four discrete and definable trends have emerged from the post-*eBay* cases, separate and distinct from the four equitable factors. First, district courts tend to place a heavy emphasis on whether the patent holder and the infringer are in direct competition; courts are more likely to grant injunctions when parties compete in the same marketplace. Indeed, in the post-*eBay* decisions to date, courts granted injunctions in thirteen out of sixteen such cases. Second, when the patent holder actually practices the invention, courts granted a permanent injunction by a margin of twelve to five. Third, some courts considered whether the patent holder licenses the invention, although the data indi-

22. Andrew W. Spangler, *Litigating in the Eastern District of Texas*, in PATENT LAW INSTITUTE (2ND ANNUAL), at 217 (PLI Patents, Copyrights, Trademarks, and Literary Property Course Handbook Series No. 14506, 2008). Of these Eastern District cases, five resulted in an injunction and two resulted in no injunctive relief.

23. See e.g., *Paice LLC v. Toyota Motor Corp.*, No. 2:04-CV-211-DF, 2006 WL 2385139, *2 (E.D. Tex. Aug. 16, 2006)

24. See, e.g., *Black & Decker Inc. v. Robert Bosch Tool Corp.*, No. 04 C 7955, 2006 WL 3446144, *4 (N.D. Ill. Nov. 29, 2006); *Transocean*, 2006 WL 3813778, *3.

25. See, e.g., *Paice*, 2006 WL 2385139, at *6.

26. See *id.*, *Sundance v. DeMonte Fabricating, Ltd.*, No. 02-73543, 2007 WL 37742, *2 (E.D. Mich. Jan. 4, 2007).

cates that this factor is not as dispositive as whether the parties directly compete. Finally, in five of the ten cases where courts denied an injunction, the court found that the patented invention is merely a small component of the infringing product. There were no instances where a court awarded an injunction after determining that the patent covers only a small component of the infringing product.

A. Direct Competition

When direct competition existed between the patent holder and infringer, courts proved more likely to grant an injunction. In language subsequently cited by other courts, Judge Ward of the Eastern District of Texas summarized the prevailing view on injunctions against competitors, writing that “[i]ntellectual property enjoys its highest value when it is asserted against a direct competitor in the plaintiff’s market.”²⁷ Other courts noted that direct competition between the parties is a central, if not dispositive, factor when considering whether to grant a permanent injunction.²⁸ To measure the level of competition between the parties, courts often considered the loss of market share by the patent holder.²⁹

A court granted an injunction to a patent holder who was not in direct competition with the infringer in only one post-*eBay* case. In *Commonwealth Scientific & Industrial Research Organisation v. Buffalo Technology, Inc. (CSIRO)*, the district court for the Eastern District of Texas granted an injunction to the patent holder, an Australian government agency.³⁰ Relying on language in the *eBay* decision, the court held that direct competition is not necessary for an injunction and that research in-

27. *Visto Corp. v. Seven Networks, Inc.*, No. 2:03-CV-333-TJW, 2006 WL 3741891, at *4 (E.D. Tex. Dec. 19, 2006).

28. *See e.g.*, *O2 Micro Int’l Ltd. v. Beyond Innovation Tech. Co.*, No. 2-04-CV-32 (TJW), 2007 WL 869576, at *2 (E.D. Tex. Mar. 21, 2007) (“[Direct competition] weighs heavily in the Court’s analysis.”); *MPT, Inc. v. Marathon Labels, Inc.*, 505 F. Supp. 2d 401, 420 (N.D. Ohio 2007) (“Usurping this market by inducing or contributing to infringement will irreparably harm [the patent holder].”); *Novozymes A/S v. Genencor Int’l, Inc.*, 474 F. Supp. 2d 592, 613 (D. Del. 2007) (“[The patent holder has a] right, granted by Congress, not to assist its rival with the use of proprietary technology.”); *Muniauction, Inc. v. Thomson Corp.*, 502 F. Supp. 2d 477, 482 (W.D. Pa. 2007) (“If plaintiff cannot prevent its only competitor’s continued infringement of its patent, the patent is of little value.”).

29. *See e.g.*, *Black & Decker*, 2006 WL 3446144, at *4 (“Loss of market share is a key consideration in determining whether a plaintiff has suffered irreparable harm.”); *Sundance*, 2007 WL 37742, at *2 (“[T]he market for tarp systems contains many other competitors and [noninfringing] systems have a larger percentage over” systems covered by the patent.).

30. *Commonwealth Scientific & Indus. Research Org. v. Buffalo Tech., Inc.*, 492 F. Supp. 2d 600, 601 (E.D. Tex. 2007).

stitutions, such as the patent holder, may reasonably prefer to pursue licensing rather than practicing the invention.³¹ However, this case is unique among post-*eBay* cases in that it involved a government research agency rather than business entities.³² The identity of the patent holder as a government research agency likely swayed the court in favor of granting an injunction. The court also emphasized that CSIRO was actively engaged in research,³³ perhaps drawing a subtle distinction between non-practicing patent holders who are nonetheless engaged in research, and entities that simply obtain and hold patents. Thus, *CSIRO* is not an anomaly in opposition to the trends established by other decisions, but rather distinguishable by the unique facts and circumstances of the case.

There are, to date, only two instances where a district court has denied the patent holder a permanent injunction where the parties were in direct competition.³⁴ Like *CSRIO*, these cases contain distinctive fact patterns. *Sundance, Inc. v. DeMonte Fabricating Ltd.* involved additional factors central to the court's decision and is discussed more in the following section on licensing. *Praxair Inc. v. ATMI* seems contrary to many of the trends established other cases and is analyzed separately.³⁵ Hence, there is an almost exact correlation between parties in direct competition and the courts' willingness to grant injunctive relief.³⁶ Whether the infringer directly competes with the patent holder so as to cause a loss of market share or other economic effects on the patent holder's business remains the clearest indicator of whether the court will grant an injunction.

B. Licensing the Invention

Courts are somewhat less likely to grant an injunction when a patent holder licenses his invention. In five of the ten post-*eBay* cases denying permanent injunctions, the patent holder licensed his invention to other

31. *Id.* at 603-04.

32. *Id.* at 604.

33. *Id.*

34. See *Sundance*, 2007 WL 37742; *Praxair, Inc. v. ATMI, Inc.*, 479 F. Supp. 2d 440 (D. Del. 2007). This analysis does not include *KEG Technologies, Inc. v. Laimer*, 436 F. Supp. 2d 1364, 1371 (N.D. Ga. 2006), wherein the court held that the patent holder lacked sufficient notice of the *eBay* decision and declined to grant a permanent injunction until the patent holder had an opportunity to make a showing of the four factors.

35. *Praxair*, 479 F. Supp. 2d 440, is discussed in detail in Section III.E, *supra*.

36. Aside from *CSIRO*, the parties were in direct competition in every instance where the court granted an injunction. Of the cases that denied the plaintiff an injunction, two involved direct competition between the parties.

parties.³⁷ In some of these cases, courts found the existence of a licensing program to be nearly dispositive in precluding injunctive relief. However, other courts held that a licensing program does not prohibit patent holders from obtaining injunctions.

Several courts used the lack of a licensing program as a reason to support granting a permanent injunction. Finding that the patent holder would suffer irreparable harm absent an injunction, the court in *MGM Well Services, Inc. v. Mega Lift Systems, LLC* noted that the “[p]atent gives MGM the right to exclude others from practicing its patent, and MGM has proven an existing policy not to license its patented technology.”³⁸ Similarly, although the plaintiff in *Novozymes A/S v. Genencor International, Inc.* did not practice the invention and instead licensed it to a subsidiary, the court held that this sort of licensing did not support denial of injunctive relief.³⁹ The court in *Sundance, Inc. v. DeMonte Fabricating Ltd.* found that the plaintiff “licenses the . . . patent to others, and offered to license it to [defendant] prior to filing suit against it, thus demonstrating that money damages are adequate.”⁴⁰ This language suggests that the existence of a licensing program is dispositive in the inquiry into whether monetary damages are sufficient.⁴¹

Although some courts viewed a plaintiff’s willingness to license the patent as evidence that monetary damages are sufficient,⁴² other district courts rejected this conclusion. In *Baden Sports Inc. v. Kabushiki Kaisha Molten*, the court held that “even if Baden were willing to offer such licenses, Baden still risks loss of good will because . . . Molten’s infringement and advertising erode consumers’ and retailers’ perception of Baden as an innovator.”⁴³ The court in *Smith & Nephew, Inc. v. Synthes, Inc.*

37. See *Sundance*, 2007 WL 37742, at *2 (“[The patent holder] licenses . . . to others, and offered to license it to [defendant] prior to filing suit against it, thus demonstrating that money damages are adequate”). See also *Paice LLC v. Toyota Motor Corp.*, No. 2:04-CV-211-DF, 2006 WL 2385139, at *5 (E.D. Tex. Aug. 16, 2006) (“Plaintiff does not demonstrate why other potential licensees would be less likely to take a license if this case ends with monetary damages instead of equitable relief.”); *Voda v. Cordis Corp.*, No. CIV-03-1512-L, 2006 WL 2570614 (W.D. Okla. Sept. 5, 2006).

38. *MGM Well Servs., Inc. v. Mega Lift Sys. LLC*, 505 F. Supp. 2d 359, 379 (S.D. Tex. 2007).

39. *Novozymes A/S v. Genencor Int’l, Inc.*, 474 F. Supp. 2d 592, 598, 603 (D. Del. 2007).

40. *Sundance*, 2007 WL 37742, at *2.

41. See *id.*

42. See *e.g.*, *IMX, Inc. v. LendingTree, LLC*, 469 F. Supp. 2d 203, 225 (D. Del. 2007); *Sundance*, 2007 WL 37742, at *2.

43. *Baden Sports, Inc. v. Kabushiki Kaisha Molten*, No. C06-210MJP, 2007 WL 2790777, at *2 n.1 (W.D. Wash. Sept. 25, 2007).

reached a similar conclusion, holding that *eBay* did not necessarily preclude licensing patent holders from obtaining injunctive relief.⁴⁴

There are three cases wherein a patent holder that licensed its patent still obtained a permanent injunction against the infringer: *CSIRO*, *Smith & Nephew*, and *Transocean Offshore Deepwater Drilling v. Globalsantafe Corp.* *CSIRO* was addressed in the previous section; the fact that the patentee was a government research agency likely swayed the court and distinguishes that case from others.⁴⁵ In *Smith & Nephew* the district court held that although the patent holder licensed the invention, “[m]onetary damages generally are not an adequate remedy against future infringement because the central value of holding a patent is the right to exclude others from using the patented product.”⁴⁶ The court found that the statutory right to exclude trumped other factors.⁴⁷ The court in *Transocean* reached a similar conclusion, holding that an offer to license was not sufficient to defeat a motion for a permanent injunction.⁴⁸ It is noteworthy that in both *Smith & Nephew* and *Transocean*, the patent holder was in direct competition with the infringer, a fact that weighed heavily in the analysis of both courts.⁴⁹

Thus, although an offer of a license by the patent holder did not preclude a permanent injunction, it seemed to be an important factor in the analysis of many courts.

C. A Small Component of the Infringing Product

In his concurrence, Justice Kennedy wrote that injunctions may not be appropriate in cases where the patented device comprises only a small

44. *Smith & Nephew, Inc. v. Synthes, Inc.*, 466 F. Supp. 2d 978, 983 (W.D. Tenn. 2006) (citing *eBay Inc. v. MercExchange, LLC*, 547 U.S. 388 (2006)).

45. *See Commonwealth Scientific & Indus. Research Org. v. Buffalo Tech., Inc.*, 492 F. Supp. 2d 600, 604 (E.D. Tex. 2007). For a discussion of this case, see Section III.A, *supra*.

46. *Smith*, 466 F. Supp. 2d at 984.

47. *Id.* Some courts have emphasized the importance of the right to exclude as a paramount interest. *See, e.g., Johns Hopkins Univ. v. Datascope Corp.*, 513 F. Supp. 2d 578, 586 (D. Md. 2007) (“The importance of the Plaintiffs’ continuing right to exclude favors a permanent injunction.”). However, other courts have been more dismissive of the right to exclude. *See e.g., Praxair, Inc. v. ATMI, Inc.*, 479 F. Supp. 2d 440, 443-44 (D. Del. 2007); *Finisar Corp. v. DirecTV Group*, No. 1:05-CV-264, 2006 WL 2709206 (E.D. Tex. Sept. 1, 2006).

48. *Transocean Offshore Deepwater Drilling, Inc. v. GlobalSantaFe Corp.*, No. H-03-2910, 2006 WL 3813778, at *5 (S.D. Tex. Dec. 27, 2006).

49. *See id.* at *4; *Smith*, 466 F. Supp. 2d at 983.

component of the infringing product.⁵⁰ Since *eBay*, courts have found that the patented device comprises only a small component of the infringing product in half of the cases in which a permanent injunction has been denied. Of the cases granting a permanent injunction, no court found that the patented device is merely a small component of the infringing product.

In one of the first post-*eBay* cases, *z4 v. Microsoft*, the court refused to grant a permanent injunction where the invention read on only a small part of Microsoft's infringing system.⁵¹ The court found that the infringing "component of the software is in no way related to the core functionality for which the software is purchased by consumers."⁵² The *z4* decision has been cited heavily by subsequent courts, including the district court in the *eBay* remand.⁵³ The court in *Paice, LLC v. Toyota Motor Corp.* also emphasized that the invention comprised only a small part of the infringing product, noting that "[t]he jury's damages award also indicates that the infringed claims constitute a very small part of the value of the overall vehicles."⁵⁴ The fact that the patent covered only one feature of the infringing product also greatly influenced the decision in *Sundance*.⁵⁵ The court held that the infringed device was "but one feature of" the product, and thus, *Sundance's* lost sales could not be attributable solely to the infringement.⁵⁶ Finally, the *Baden* court implicitly endorsed this notion when it held that "[w]here a defendant's infringement is not limited to a minor component of plaintiff's patented product, irreparable harm is likely."⁵⁷

50. *eBay Inc. v. MercExchange, LLC*, 547 U.S. 388 (2006) (Kennedy, J., concurring).

51. *z4 Techs., Inc. v. Microsoft Corp.*, 434 F. Supp. 2d 437, 440-41, 444 (E.D. Tex. 2006).

52. *Id.* at 442.

53. *See e.g.*, *IMX, Inc. v. LendingTree, LLC*, 469 F. Supp. 2d 203, 225 (D. Del. 2007). *See also* *eBay Inc. v. MercExchange, LLC*, 500 F. Supp. 2d 556, 568 (E.D. Va. 2007); *MPT, Inc. v. Marathon Labels*, 505 F. Supp. 2d 401, 420 (N.D. Ohio 2007) (holding that the patented devices were not "an insubstantial component of a larger invention").

54. *Paice, LLC v. Toyota Motor Corp.*, No. 2:04-CV-211-DF, 2006 WL 2385139, at *5 (E.D. Tex. Aug. 16, 2006). The Federal Circuit has already issued a ruling for *Paice*. *Paice LLC v. Toyota Motor Corp.*, 504 F.3d 1293 (Fed. Cir. 2007). The Federal Circuit did not dispute any of the findings of the district court with respect to the four factors. *See id.* at 1314-15. However, the court discussed the imposition of an ongoing royalty on the infringer at length. The question of ongoing royalties will be examined in Part V, *infra*. *See id.* at 1313-15.

55. *See Sundance, Inc. v. DeMonte Fabricating, Ltd.*, No. 02-73543, 2007 WL 37742, at *2 (E.D. Mich. Jan. 4, 2007).

56. *Id.*

57. *Baden Sports, Inc. v. Kabushiki Kaisha Molten*, No. 06-210, 2007 WL 2790777 (W.D. Wash. Sept. 25, 2007)

Despite this trend, there are two reasons why the data does not support a definite conclusion that courts will be less likely to grant injunctions where the patent in suit comprises only a small part of a larger product. First, determining what constitutes a “small component” of any device is often quite difficult. This is by nature a qualitative and unquantifiable issue, and no court has taken up the task of providing guidance for determining whether a given element constitutes a small component. Bereft of any objective standards and with only a few cases on point, courts are left to their own devices in answering this question. Second, in several of the cases that denied injunctions where the patent covered only a “small component,” other issues likely factored into the court’s decision. For instance, the holding in *z4* could be justified simply on the grounds of public policy, that the importance and ubiquity of Microsoft’s product prohibited a permanent injunction. Additionally, both the *Paice* and *Sundance* courts seemed to address the question of small components simply as one element of the more general question of market effects.⁵⁸

Although some post-*eBay* decisions cite Justice Kennedy’s statement that permanent injunctions should not issue where the invention constitutes only a small component of the larger product, this factor does not seem dispositive. Courts only applied this factor in a few instances, and it did not figure prominently in any decisions. Nevertheless, the difference in size between the patented technology and the infringing product remains an important issue, especially in those cases where the facts closely resemble those of cases such as *z4* or *Paice*.

D. Practicing the Invention

Courts have been much more likely to grant injunctive relief in cases where the patent holder actually practices the invention. However, there is naturally a strong correlation between actual practice of the invention and the parties being in direct competition. Indeed, there are only two cases wherein these variables are not aligned.

In *Novozymes*, the patent holder did not practice the invention itself, but instead licensed it to a subsidiary.⁵⁹ The patent holder, its subsidiaries,

(citing *IMX, Inc. v. LendingTree, LLC*, 469 F. Supp. 2d 203, 225 (D. Del. 2007)).

58. *Paice LLC v. Toyota Motor Corp.*, No. 2:04-CV-211-DF, 2006 WL 2385139, at *3 (E.D. Tex. Aug. 16, 2006); *Sundance*, 2007 WL 37742 at *2 (“Moreover, as DeMonte points out, the segmented cover is but one feature of its Quick Draw system. Thus, it cannot be said that Sundance’s licensees are losing sales to DeMonte expressly because of its infringement of the segmented cover.”).

59. *Novozymes A/S v. Genencor Int’l, Inc.*, 474 F. Supp. 2d 592, 598, 603 (D. Del. 2007).

and the infringer competed in the same market.⁶⁰ Given the fact that the subsidiary of the patent holder practiced the invention, this situation is distinguishable from those cases where the patent holder only licenses the patent to other entities.

In *IMX, Inc. v. LendingTree, LLC*, the parties did not directly compete within the same market. Rather, they occupied different niches within the financial services market.⁶¹ The court refused to grant a permanent injunction⁶² on the ground that the lack of direct competition was more important than whether the patent holder practiced the invention.⁶³

When the inquiries into whether the parties are in direct competition and whether the patent holder practices the invention yield different results, the competition factor is dispositive. Therefore, although the post-*eBay* landscape does show a correlation between grants of injunction and the patentee actually practicing the invention, this factor is of secondary importance when compared with the presence of direct competition between the parties.

E. An Outlier to the Post-*eBay* Trends: *Praxair*

The case of *Praxair, Inc. v. ATMI* is an outlier, running contrary to the trends discussed *supra*, and thus deserves special attention.⁶⁴ In *Praxair*, each of the factors seemed to point strongly toward granting a permanent injunction.⁶⁵ However, the court refused to grant an injunction, holding that Praxair failed to prove that it was entitled to its statutory right to exclude.⁶⁶ The court emphasized that Praxair did not provide enough evidence in the way of data on market share, sales figures, profits, and the like to show that a permanent injunction was warranted.⁶⁷ The court dismissed the argument that the right to exclude and thus become a “monopoly supplier” justified granting an injunction and noted that the products in question represented only a small share of each party’s revenue.⁶⁸ Despite the fact that the parties competed directly in the markets for these products, the court found that irreparable harm would not occur and that monetary damages were sufficient.⁶⁹

60. *Id.* at 608.

61. *IMX, Inc. v. LendingTree, LLC*, 469 F. Supp. 2d 203, 222 (D. Del. 2007).

62. *Id.* at 226.

63. *See id.* at 225.

64. *Praxair, Inc. v. ATMI, Inc.*, 479 F. Supp. 2d 440 (D. Del. 2007).

65. *Id.* at 442-43.

66. *Id.* at 443.

67. *Id.* at 444.

68. *Id.*

69. *Id.*

This case counters several of the trends discussed above. Despite the patentee practicing the invention and directly competing with the infringer, the court denied an injunction. Additionally, the court found no evidence that Praxair had licensed the invention or that it comprised only a small component of a larger product. The court seemed to place a heavy evidentiary burden on the patent holder but declined to state what would satisfy that burden. In contrast to many of the other courts that held that prospective damages from future infringing sales are incalculable and hence that monetary damages are insufficient,⁷⁰ the *Praxair* court seemed to assume that such damages are quantifiable.⁷¹

As one of the more recent post-*eBay* decisions, *Praxair* seems all the more out of place given the trends that had already begun to solidify. *Praxair* thus creates some uncertainty as to what a patent holder must do to provide the court sufficient reason to grant a permanent injunction. However, *Praxair* has not been cited by any subsequent courts and thus probably represents only an isolated incident rather than a wholesale change.

IV. ROYALTIES AND DAMAGES

An open question, and one not explicitly addressed by the courts to date, is whether a denial of injunctive relief will, or should, increase the royalty paid to the patent holder. Additionally, it remains unclear whether courts will include the possibility of treble damages in the calculation of the adequacy of monetary damages in the four-part test for injunctive relief.

A. Changes in Injunctions and Damages Due to *eBay*

In theory, an injunction is a mechanism that allows the market to determine the correct value of a patent, whereas the imposition of increased damages or an ongoing royalty substitutes the court's judgment. Unfortunately, this ideal is marred by the presence of trolls in the market, inefficiencies in the patent system, and problems arising from the lock-in phenomena.⁷² Due to these problems, the market cannot reach efficient out-

70. See, e.g., *Black & Decker, Inc. v. Robert Bosch Tool Corp.*, No. 04 C 7955, 2006 WL 3446144, at *4 (N.D. Ill. Nov. 29, 2006).

71. See *Praxair*, 479 F. Supp. 2d at 444.

72. In some cases, a given technology may become entrenched in an industry due to ubiquity, dependant technologies, or other causes. The technology thus becomes "locked in" in that industry. Such technologies may be overvalued because of the lock-in effect. See S.J. Liebowitz & Stephen E. Margolis, *Path Dependence, Lock-in, and History*, 11 J.L. ECON. & ORG. 205, 218 (1995).

comes; *eBay* represents a response to this inefficiency and is an attempt to restore the balance. However, *eBay* leaves to the district courts the responsibility of determining when to substitute the judgment of the court for that of the market, and of guessing the right value to substitute. Thus there is a danger of overvaluing some patents while undervaluing others. Given that the balance attempted in *eBay* is effectuated by diminishing the power of patent holders, the danger of undervaluing patents seems more immediate.

B. Should Courts Raise Royalties to Compensate for Denial of Injunction?

Courts may elect to increase the royalty rate paid to the patent holder in the absence of an injunction so as to compensate for future infringement. After all, the Supreme Court has recognized the principle of providing relief for future-arising damages in other areas of the law.⁷³

It is possible that any increase in damages due to more stringent injunction requirements is offset by the weaker bargaining position that the patent holder now occupies.⁷⁴ Absent the threat of an injunction, patent plaintiffs may find it much more difficult to bring manufacturers to the negotiating table. This is especially problematic for patent holders who are individual inventors or small businesses suing large infringing companies, since small entities are generally less able to weather the cost of protracted litigation. Thus, an increase in damages may still not level the playing field for patent holders and infringers.

For any given infringer involved in patent litigation, the expected cost of the litigation is equal to the probability of an adverse outcome multiplied by the expected cost of that outcome. As the expected cost of the judgment increases, so does the expected cost of the litigation. Thus, infringers have a greater incentive to settle as the expected cost of an adverse verdict increases. However, it is unlikely that courts will increase damage awards to a level that would result in infringers having the same settlement incentives as they did before *eBay*, as such an increase would essentially constitute a return to the pre-*eBay* world. Furthermore, the call for an increase in damages awards rests upon the assumption that courts

73. See, e.g., *Great-West Life & Annuity Ins. Co. v. Knudson*, 534 U.S. 204, 211 (2002) (holding that the Court may require specific performance in suits that seek to prevent future losses that are either incalculable or will be greater than sum awarded).

74. See David L. Applegate, *A Billion Here and a Billion There: Talking Real Money in the Patent Damages Case*, in *PATENT LITIGATION 2007*, at 1367 (PLI Patents, Copyrights, Trademarks, and Literary Property Course Handbook Series No. 11589, 2007).

will habitually undervalue patents, an assumption that has not been proven.

Post-*eBay*, it seems that the value of a patent is dependent not only upon what the patent covers, but also what the patent holder is doing with the patent. In keeping with the trends described in Part III, perhaps increased monetary damages could be used in those cases where some factors favor an injunction while others do not. For example, a court might consider increasing damages in cases where the patent holder does not compete with the infringer but still makes use of the invention. Increased damages would probably not be appropriate in cases where the patent holder licenses the invention since the market has already valued the patent. In any case, since courts have yet to address the issue of increased damages, it remains open for speculation.

C. Should Courts Calculate Treble Damages When Weighing Adequacy of Monetary Relief?

Under 35 U.S.C. § 284, courts may award treble damages in instances of willful patent infringement.⁷⁵ However, treble damage awards may be less common, especially after *In re Seagate*, a case in which the Federal Circuit revised the standard for proving willfulness, imposing a requirement of objectively reckless conduct.⁷⁶ In determining whether to award enhanced damages, courts must balance equitable considerations, weighing the positions of the patent holder and the infringer.⁷⁷ Enhanced damages awards are considered remedies at law.⁷⁸ Thus, in determining whether the plaintiff has an adequate remedy at law, the prospect of treble damages may enter into the court's calculations.⁷⁹

Such a consideration of treble damages would likely cause adverse unintended consequences. If willfulness can serve as insurance against the imposition of an injunction, an infringer may have an incentive to willfully

75. 35 U.S.C. § 284 (2000) (“[T]he court may increase the damages up to three times the amount found or assessed.”).

76. *In re Seagate Tech. LLC*, 497 F.3d 1360, 1371 (Fed. Cir. 2007). Although a detailed analysis of *In re Seagate* is beyond the scope of this Note, it is important to acknowledge that the standard for willful infringement is continuing to evolve and change. For a more detailed treatment of this subject, see Joseph Casino & Michael Kasdan, *In re Seagate Technology: Willfulness and Waiver, a Summary and a Proposal*, 2007 Patently-O Patent L.J. 1, http://www.patentlyo.com/lawjournal/2007/05/in_re_seagate_t.html. See also Danny Prati, Note, *In re Seagate Technology LLC: A Clean Slate for Willfulness*, 23 BERKELY TECH. L.J. 47 (2008).

77. *SRI Int'l, Inc. v. Advanced Tech. Labs., Inc.*, 127 F.3d 1462, 1468 (Fed. Cir. 1997); *Swofford v. B&W Inc.*, 336 F.2d 406, 410 (5th Cir. 1964).

78. *Tull v. United States*, 481 U.S. 412, 426 (1987).

79. See Applegate, *supra* note 74, at 1400-01.

infringe. Thus, the original intent of treble damages—to deter willful infringement—would be perverted as infringers might actually seek to willfully infringe. Additionally, the *eBay* factors look to compensatory damages⁸⁰ while willfulness damages are inherently punitive. Thus, despite the fact that treble damages may be considered monetary damages, courts must avoid mixing injunctive relief analysis with the analysis for willfulness.

An additional issue, that has gone largely unaddressed, is whether continuing infringers not subject to injunctions may be subject to treble damages.⁸¹ Treating continued acts of infringement as willful infringement would act as a strong deterrent and buttress the case for limiting injunctive relief.⁸² In instances where the court imposes a compulsory license, willfulness is not a problem.⁸³ In cases where the court does not impose a license, however, treble damages may be so high so as to constitute *de facto* injunctions against continued infringement. For almost all infringers, the possibility of treble damages would act as a potent incentive to negotiate a license, as the costs of damages would be much greater than the benefits of continued infringement.

This issue reveals a great tension between two competing ideals. On the one hand, it seems implausible that courts would create a new and detailed standard for injunctive relief only to have the prospect of treble damages for willfulness act as a *de facto* injunction. On the other hand, it also seems unlikely that an infringer should become permanently immune from the willfulness penalty simply by avoiding an injunction. Unfortunately, there is no readily apparent relief for this tension.

V. COMPULSORY LICENSING

An open question, and one not yet fully answered by the courts, is whether a denial of injunctive relief constitutes compulsory licensing. Some have rejected the term “compulsory licensing” as being unnecessarily pejorative, preferring the term “ongoing royalty” instead.⁸⁴ However, others have been quick to point out that this is merely a semantic shift that does little to disguise the fact that the courts are compelling patent holders

80. *See eBay Inc. v. MercExchange, LLC*, 547 U.S. 388, 391 (2006) (establishing that the second factor inquires whether “remedies available at law, such as monetary damages, are inadequate to compensate for that injury”).

81. *See Applegate*, *supra* note 74, at 1401.

82. *See id.*

83. For a more detailed examination of compulsory licensing, see Part V, *infra*.

84. *Paice LLC v. Toyota Motor Corp.*, 504 F.3d 1293, 1313 (Fed. Cir. 2007).

to license their inventions.⁸⁵ Although most early district court cases did not tackle this issue, the Federal Circuit recently addressed it in *Paice, LLC v. Toyota Motor Corp.*⁸⁶

A. Early Cases

The right of a patent holder to exclude is derived from Article I, Section 8, Clause 8 of the Constitution, which gives Congress the power to secure for inventors for limited times the “exclusive Right” to their inventions.⁸⁷ Although § 283 does make injunctions discretionary by providing that a court may grant an injunction “in accordance with the principles of equity” and “on such terms as the court deems reasonable,”⁸⁸ courts previously issued an injunction almost automatically in cases of infringement.⁸⁹ Immediately after *eBay*, commentators expressed concern that the decision constituted a violation of the right to exclude and instead compelled patent holders to license their inventions, willing or not.⁹⁰

The courts in *IMX* and *Transocean* suggested that when a court does not enjoin future infringement, the court effectively compels the patent holder to license its patent to the infringer.⁹¹ The *Transocean* court reasoned that “if it does not enter a permanent injunction, it will force a compulsory license on Transocean.”⁹² Such a compulsory license, imposed without regard for the patent holder’s wishes, contrasts sharply with the usual norms of the U.S. legal system, which generally avoids coercing parties at suit into ongoing relationships.⁹³

85. *Id.* at 1316

86. *Id.* at 1313.

87. U.S. CONST. art. I, § 8, cl. 8.

88. 35 U.S.C. § 283 (2000).

89. Matt Gross, *Supreme Court sides with eBay in patent case*, IDG NEWS, May 15, 2006, http://www.computerworld.com/action/article.do?command=viewArticleBasic&articleId=9000470&source=rss_news62.

90. *See, e.g., id.* (quoting Ronald Riley as saying “It amounts to a compulsory license at the whim of a judge. It will allow vested interests to take the very essence of what makes an upstart start-up viable.”).

91. *IMX, Inc. v. LendingTree, LLC*, 469 F. Supp. 2d 203, 226 (D. Del. 2007); *Transocean Offshore Deepwater Drilling, Inc. v. GlobalSantaFe Corp.*, No. H-03-2910, 2006 WL 3813778, at *5 (S.D. Tex. Dec. 27, 2006).

92. *Transocean*, 2006 WL 3813778 at *5.

93. Colleen Chien, *Cheap Drugs at What Price to Innovation: Does The Compulsory Licensing Of Pharmaceuticals Hurt Innovation*, 18 BERKELEY TECH. L.J. 1, 10-12 (2003) (“[C]ourts have emphatically resisted compulsory licenses merely because a patent holder chooses not to use her invention.”).

B. The Federal Circuit Weighs In

In one of its first post-*eBay* decisions on injunctive relief, *Paice, LLC v. Toyota Motor Corp.*, the Federal Circuit addressed the issue of compulsory licensing much differently than the *IMX* or *Transocean* courts.⁹⁴ First, the court objected to the characterization of an ongoing royalty as a compulsory license, holding that:

The term “compulsory license” implies that anyone who meets certain criteria has congressional authority to use that which is licensed By contrast, the ongoing-royalty order at issue here is limited to one particular set of defendants; there is no implied authority in the court’s order for any other auto manufacturer to follow in Toyota’s footsteps and use the patented invention with the court’s imprimatur.⁹⁵

However, in his concurrence, Judge Rader appropriately noted that this strenuous objection to the term “compulsory license” amounts to little more than an exercise in semantics.⁹⁶ In addition, the court neglected to show how the term “compulsory” denotes a license open to the public, as opposed to the traditional meaning of the word.⁹⁷

The Federal Circuit majority went on to explore “[t]he more difficult question raised by this case . . . whether an order *permitting* use of a patented invention in exchange for a royalty is properly characterized as *preventing* the violation of the rights secured by the patent.”⁹⁸ The court held that “awarding an ongoing royalty where ‘necessary’ to effectuate a remedy . . . does not justify the provision of such relief as a matter of course whenever a permanent injunction is not imposed.”⁹⁹ Although the district court had the power to impose an ongoing royalty on the parties, it neglected to provide sufficient reasoning to support its determination of the amount of that royalty.¹⁰⁰

94. *Paice LLC v. Toyota Motor Corp.*, 504 F.3d 1293 (Fed. Cir. 2007).

95. *Id.* at 1313 n.13.

96. *Id.* at 1316 (Rader, J., concurring) (“Nonetheless, calling a compulsory license an “ongoing royalty” does not make it any less a compulsory license.”).

97. *See id.* at 1316.

98. *Id.* at 1314 (emphasis in original).

99. *Id.* at 1314-15.

100. *Id.* at 1315. This case was remanded to the district court for a reevaluation of the ongoing royalty rate.

In his concurrence, Judge Rader argued that the trial court should not have the power to deny the parties an opportunity to set the terms of a royalty on their own.¹⁰¹ Rather, the court should encourage the parties to negotiate the terms of the royalty on their own.¹⁰² In Judge Rader's view, allowing the parties the opportunity to set the royalty would ensure that "an ongoing royalty would be an ongoing royalty, not a compulsory license."¹⁰³

The plaintiff in *Paice* also raised a constitutional challenge to the imposition of an ongoing royalty rate, arguing that the imposition of such an award by the court violated the right to a jury trial guaranteed by the Seventh Amendment.¹⁰⁴ The court rejected that argument, holding that "while *Paice* may be correct as a general matter, not all monetary relief is properly characterized as 'damages.'"¹⁰⁵ An order for an ongoing royalty falls within the sphere of equitable relief and thus raises no Seventh Amendment issues.¹⁰⁶

C. Moving Forward: Will Courts Order Ongoing Royalties?

Unfortunately, the Federal Circuit's decision raises more questions than it answers. Despite the court's insistence that its ongoing royalties are not compulsory licenses, Judge Rader effectively dispatches that semantic argument. However, neither the majority opinion nor Judge Rader addresses the question of whether such orders are in accordance with the stated purposes of the Patent Act. Additionally, since the Patent Act provides that injunctions depend on the equitable discretion of the court "to prevent the violation of any right secured by patent, on such terms as the court deems reasonable,"¹⁰⁷ it is difficult to see how ordering the payment of an ongoing royalty under the auspices of the court's equitable discretion fits within the stated purpose of the Act. Under *Paice*, victorious plaintiffs may find that they have achieved only a pyrrhic victory, as the ultimate value of their patent may be set by judicial fiat.

Judge Rader's insistence that the court provide an opportunity for the parties to independently negotiate the terms of a royalty offers little hope for plaintiffs. A patent holder who has been denied an injunction can apply only anemic leverage to the negotiating table at best; an infringer who

101. *Id.* at 1316 (Rader, J. concurring).

102. *Id.*

103. *Id.*

104. *Id.* at 1314.

105. *Id.* at 1316.

106. *Id.*

107. 35 U.S.C. § 283 (2000).

finds himself relieved of the possibility of facing an injunction will likely be able to control the settlement. Additionally, since patent litigation tends to be costly, it stands to reason that if the parties could negotiate a licensing settlement on their own, they would do so. Thus, Judge Rader's recommendation here seems ultimately inutile.¹⁰⁸ Finally, Judge Rader seeks refuge from the unpleasantness of imposing compulsory licenses by allowing the parties to negotiate a royalty rate.¹⁰⁹ But the only motivation that parties would have to come to the table would be the prospect of the court imposing a compulsory license.¹¹⁰ Thus, Judge Rader seems preoccupied with the difference between compelling the parties to accept a given license and compelling them to negotiate a license under threat of a court-imposed license. Although there may be differences in these approaches, calling one compulsory and the other non-compulsory seems somewhat implausible.

Assuming that granting ongoing royalties is both a legitimate exercise of a court's discretion and is in accordance with the stated purposes of the Patent Act, there is still the question of how to calculate the royalty. Here the Federal Circuit did not provide much guidance, opting instead to remand the case to the district court.¹¹¹ The only concrete direction given by the court was that the royalty should not necessarily be identical to the damages for past infringement. However, an examination of the underlying incentives of the parties reveals that the royalty can only be at or greater than the level of damages. If the royalty is set lower than damages, patent holders have an incentive to wait as long as possible before bringing suit. Although the doctrine of laches and estoppel may act as a deterrent against such behavior, it is doubtful that the court would intend to encourage delay by setting royalty rates lower than damages. In general, the patent holder's incentive to bring suit would likely correlate with the expected royalty rate. However, an extremely high royalty, while providing a great incentive for bringing suit, would likely be unfair to the infringer and be viewed as punitive. The Federal Circuit did not specify any quantitative or qualitative standards with respect to the district court's analysis of the royalty, merely holding that the lower court had erred in not providing any reasoning.¹¹² Thus, there is still uncertainty as to how a court should calcu-

108. In addition to the issues discussed here, there is also the problem of how compulsory licensing would interact with the doctrine of willfulness. *See* Section IV.C, *supra*.

109. *See Paice*, 504 F.3d at 1316.

110. *See id.*

111. *Id.* at 1315.

112. *Id.*

late an ongoing royalty and whether there are upper or lower bounds for the royalty.

Implicit in an imposition of an ongoing royalty is a possible erosion of a patent holder's statutory right to exclude. In *eBay*, the Supreme Court effectively penned an addendum to the Patent Act: that patents grant inventors the right to exclude others from making, using, or selling the invention—provided that the court deems such exclusion to be proper.¹¹³ Although injunctive relief has always been discretionary, the previous Federal Circuit rule captured the idea that, absent injunctions, a patent holder had no way to preserve his statutory right to exclude. Indeed, a refusal by the government to protect and enforce a right serves to undermine that right. Because *eBay* has been applied almost exclusively against non-producing patent holders, however, not much has been made of this point.¹¹⁴

VI. THE INTERNATIONAL TRADE COMMISSION AS AN ALTERNATE FORUM

After *eBay*, patent holders can no longer assume that district courts will always grant injunctive relief. As a result, some patent plaintiffs may turn to the International Trade Commission (ITC) as an alternate forum. The ITC has several important institutional differences from district courts that favor patent holders, and *eBay* has increased the perceived favorability of the ITC.

A. Overview of the ITC

Created by Congress in 1916, the ITC determines the impact of imports on U.S. industries and adjudicates disputes surrounding importation, including patent infringement. The ITC offers two remedies for plaintiff: exclusion orders and cease-and-desist orders. Exclusion orders prevent entry into the United States all infringing articles that originate from the infringer.¹¹⁵ Cease-and-desist orders prevent the use of infringing goods that are already in the United States.¹¹⁶ The ITC can also order the seizure

113. See notes 91 & 92 *supra*.

114. Additionally, the fact that injunctions have been refused under the *eBay* doctrine only in cases where the patent holder is a non-producing entity (see discussion in Part III, *supra*) is perhaps a testament to the utility and salutary effect of the four-factor test.

115. Joseph R. Heffern & Jacob A. Gantz, *Outbidding the Supreme Court: The ITC as an Alternative Forum for Patent Litigation Post-eBay*, 4 THE LEGAL INTELLIGENCER 27 (2007).

116. *Id.*

of the infringing products for forfeiture to the U.S. government.¹¹⁷ A combination of an exclusion order and a cease-and-desist order effectively constitutes an injunction. Even before *eBay*, the ITC steadily gained popularity as a forum for adjudicating patent infringement disputes. From 2003 to 2006, the number of cases before the ITC alleging patent infringement more than doubled, and this number will likely to continue to rise.¹¹⁸

Relief offered by the ITC stands almost opposite to the relief granted by the district courts. Whereas injunctive relief has become more difficult to obtain at the district court due to the *eBay* decision, the ITC offers only injunctive-type relief in the form of exclusion orders and cease-and-desist orders.¹¹⁹ Although relief from the ITC is limited in that it can only halt the importation of infringing products into the United States, the U.S. government enforces these orders. In contrast, patent holders bear the burden of enforcing injunctions granted by district courts.¹²⁰ ITC exclusion orders are generally limited in scope, but the ITC may occasionally issue general exclusion orders to bar the importation of an entire category of products.¹²¹

There are several reasons why a prospective plaintiff in a patent case may choose to bring his case before the ITC rather than the district courts. First, under Section 1337 of the ITC statute, the ITC can assert jurisdiction over a dispute when a defendant imports an allegedly infringing product or device into the United States.¹²² This simple standard contrasts sharply with the frequent jurisdiction and venue battles which plague the early stages of patent litigation in the district courts.¹²³ Thus, plaintiffs can avoid the uncertainty and cost of these skirmishes by electing to go to the ITC. Second, the ITC is popularly viewed as the forum with the shortest time interval from initiating proceedings to resolution.¹²⁴ The speed and efficiency of the ITC are due to several institutional features, most notably the drastically expedited discovery process.¹²⁵ Third, the ITC provisions

117. *Id.*

118. See Robert Hahn, *Assessing Bias in Patent Infringement Cases: A Review of International Trade Commission Decisions* 3 (AEI-Brookings Joint Center for Regulatory Studies 07-03, 2007).

119. John F. Rabena & Kim E. Choate, *Injunctive Relief in the ITC Post eBay*, 1 AKRON INTELL. PROP. J. 27, 32 (2007); see also 19 U.S.C. § 1337(d)-(f) (2000).

120. *See id.*

121. Eric J. Fues, *Implications Of eBay v. MercExchange*, PATENT WORLD, June 2007, at 4.

122. 19 U.S.C. § 1337 (2000).

123. Rabena, *supra* note 119, at 31-32.

124. *Id.*

125. *Id.*

for post-proceeding design-around products favor victorious patent holders much more than the corresponding district court procedures.¹²⁶ Therefore patent holders are in a stronger position to negotiate with infringers since it is more difficult to meet the ITC standard for design-around products than the standards in district courts. Finally, patent plaintiffs are statistically more likely to prevail in the ITC than they are in the district courts.¹²⁷ These four reasons could certainly explain the surge in the number of patent cases before the ITC in recent years.¹²⁸

B. *eBay* and the ITC

The weakening of the patent holder's bargaining position due to the *eBay* decision now provides an additional incentive for plaintiffs to bring their case to the ITC. The Supreme Court based its ruling in *eBay* chiefly upon its interpretation of 35 U.S.C. § 283.¹²⁹ The ITC is not obligated to adhere to the Court's reasoning because patent infringement suits adjudicated at the ITC are governed by an entirely different statute, 19 U.S.C. § 1337.¹³⁰ The ITC statute contains no provisions mandating use of the equitable factors when deciding whether to grant relief. Instead, "absent extraordinary circumstances, the ITC will issue an exclusion order if the plaintiff meets three criteria: the plaintiff is using the patent in the United States; and the plaintiff's patent is infringed by an imported product."¹³¹ The only major caveat to the otherwise general policy towards granting exclusion orders upon a showing of infringement is that the ITC will not grant exclusion orders that would adversely affect the general U.S. economy.¹³²

126. *Id.* at 32.

127. Hahn, *supra* note 118 ("Between 1975 and 1988, the complainant prevailed—that is, achieved a favorable decision by the ITC or a settlement—in 75 percent of patent cases brought before the ITC, compared with a 40 to 45 percent win rate for patent plaintiffs in federal district courts. . . . In more recent years, the ITC 'has decided 54 percent of contested cases in favor of the patent holder. This compares positively with win rates for district court patent cases.'").

128. Omitted from the list of reasons why the ITC offers a more plaintiff-friendly environment than the district courts is the assertion that "certain defenses that are available in district court are not available at the ITC . . . though that argument may be hard to square with the terms of Section 337(c), which provides that a respondent in an ITC complaint proceeding may raise '[a]ll legal and equitable defenses.' (19 U.S.C. § 1337(c))." *Id.*

129. *eBay Inc. v. MercExchange, LLC*, 547 U.S. 388 (2006).

130. 19 U.S.C. § 1337 (2000).

131. Heffern, *supra* note 115.

132. 19 U.S.C. § 1337 (c)-(f) (2000).

Although monetary damages are unavailable at the ITC, the near certainty of an exclusion order upon a successful showing of infringement gives the patent holder a distinct advantage in negotiations with the alleged infringer.¹³³ Additionally, the ITC places additional restrictions upon infringers that may complicate an attempt to avoid infringement by redesigning the product.¹³⁴ For instance, the ITC requires separate adjudication for each design-around product before allowing the importation of those products.¹³⁵ This process generally takes about a year to complete and may seriously hamper a business's efforts to bring its product to market.¹³⁶ Thus, the ITC provides great bargaining power to patent holders, especially those who would otherwise be unlikely to pass the four-factor test set forth in *eBay*.

As a final incentive to patent holders, an ITC determination does not preclude or influence action in other forums, including district courts.¹³⁷ Thus, a patent holder is free to bring an action for exclusion before the ITC and then, regardless of outcome, bring an infringement suit before a district court.¹³⁸ This institutional bias may cause problems in the future as more patent holders begin to employ this forum, especially if the ITC becomes viewed as a safe haven for non-practicing patent holders.¹³⁹

The ITC is currently experiencing a surge of activity as greater numbers of patent plaintiffs view it as a more favorable forum. However, the past few years have seen a general move toward patent reform. Beginning with *eBay* and continuing with *KSR International Co. v. Teleflex, Inc.*, the Supreme Court has recently made several major adjustments to patent doctrine.¹⁴⁰ Meanwhile, the United States Patent and Trademark Office (USPTO) has recently promulgated new rules governing patent applications,¹⁴¹ and patent reform continues to be a subject of Congressional ac-

133. Hahn, *supra* note 118, at 3-4.

134. Rabena, *supra* note 119, at 35.

135. *Id.* at 35-36.

136. *See id.* at 39.

137. Heffern, *supra* note 115, at 138.

139. Hahn, *supra* note 118, at 3.

140. *See eBay Inc. v. MercExchange, LLC*, 547 U.S. 388, 126 S. Ct. 1837 (2006); *KSR Int'l Co. v. Teleflex, Inc.*, 127 S. Ct. 1727 (2007) (addressing the issue of obviousness).

141. *See* Changes to Practice for Continued Examination Filings, Patent Applications Containing Patentably Indistinct Claims, and Examination of Claims in Patent Applications, 72 Fed. Reg. 46,716, 46,716-46,843 (Aug. 21, 2007) (to be codified at 37 C.F.R. pt. 1). For an examination of the proposed new rules, see Matt Browning, *New PTO Rules: What Are They, and Will They Work?*, 23 BERKELEY TECH. L.J. 247 (2008).

tion.¹⁴² Against this background, it seems unlikely that the ITC will escape the reformers' touch.

VII. CONCLUSION

Although *eBay* altered the landscape of patent litigation, uncertainty remains as to whether the decision heralds the beginning of permanent shift toward the ITC, the demise of patent trolls, or how it will relate to the doctrine of willfulness. Although injunctive relief is no longer nearly automatic, post-*eBay* district court decisions do not suggest that injunctions are now rare. Indeed, the effect of *eBay* seems limited almost exclusively to non-practicing patent holders who are not in direct competition with the infringer. Nevertheless, there is still no consensus among district courts regarding the application of the equitable test to patent infringement, and the Federal Circuit has offered only minimal guidance. Thus, there remains some inconsistency in the analysis, if not the results, of district courts in determining whether to issue injunctive relief.

The use of the traditional four-factor test in granting injunctive relief has created tension with the doctrine of willfulness. Although the apparent incompatibility between these two principles has not yet been addressed, it will likely be pivotal in any future litigation where a patent holder who was denied an injunction brings suit against the same defendant for continuing acts of infringement.

The notion of compulsory licensing is implicit in the imposition of ongoing royalties, but courts remain uncomfortable with the idea. This is likely because they view compulsory licensing as an intrusion upon the fundamental right granted by a patent—the right to exclude. Moving forward, courts will have to resolve the tension inherent in ruling that although a patent holder has a right to exclude others, this right is contingent on how the patent holder is using the patent.

The ITC currently serves as a safety net for patent plaintiffs—a forum in which the four-factor test does not apply. The trend of increasing ITC patent suits could continue well into the future. However, there is no guarantee that the ITC will remain unaffected by the patent reform movement.

The *eBay* decision constituted a valiant effort to restore the balance between patent holders and the public, and thus far it seems as though district courts have carefully applied it in only against non-producing and non-practicing patent holders. Although the ancillary effects of the Court's decision have yet to be fully realized, experience has so far validated the

142. See Patent Reform Act of 2007, H.R. 1908, 110th Cong. (2007).

eBay decision. The *eBay* decision may thus mark the beginning in a shift from rigid formulaic analysis to a more flexible and nuanced approach in determining injunctive relief.

REGULATORY PRIORITIES GOVERNING STEM CELL RESEARCH IN CALIFORNIA: RELAXING REVENUE SHARING & SAFEGUARDING ACCESS PLANS

*By David C. Tolley*¹

I. INTRODUCTION

California has taken the lead in domestic support of human embryonic stem cell (hESC) research. This Note evaluates California's stem cell research plan with particular focus on the intellectual property (IP) policies developed by the California Institute for Regenerative Medicine (CIRM). CIRM's IP policies lie at the heart of the State's obligation to ensure taxpayers receive real return on their investment in research in the forms of tangible economic gains and better healthcare for Californians.²

Part II of this Note offers a brief overview of the science and the controversy at the heart of hESC research. Part III introduces the Bayh-Dole Act, which governs IP ownership for federally funded biomedical research. Part III then compares and contrasts the corresponding CIRM and Bayh-Dole IP policies. Part IV evaluates CIRM's revenue sharing policies, which aim to ensure economic return to the State from funded research. Part IV then concludes that revenue sharing is imprudent given the likelihood of much larger economic returns through comprehensive benefits to society such as longer, more productive lives and improved healthcare. Part V evaluates CIRM's access plan policies, which are designed to promote broad access for Californians to therapies developed through CIRM funded research. Part V concludes that because broad access is unlikely without regulatory intervention, access plans are crucial to CIRM's IP policies. Finally, because the obligation to develop access plans only attaches to exclusive licensing agreements, and because the CIRM's licensing regulations contain significant ambiguities, Part V also develops a principle of interpretation for discerning whether licensing agreements are exclusive or nonexclusive.

© 2008 David C. Tolley.

1. This paper received support from the California Institute for Regenerative Medicine (CIRM) through the Stem Cell Fellows Program at UC Berkeley.

2. See California Institute for Regenerative Medicine, Initial Statement of Reasons for the Proposed Adoption of Intellectual Property Regulations for For-Profit Organizations, http://www.cirm.ca.gov/reg/pdf/IP_init_stmt.pdf [hereinafter CIRM Initial Statement].

II. STEM CELL RESEARCH: THE SCIENCE AND THE CONTROVERSY

Human stem cells are important for biomedical research because they have the ability to produce a variety of specialized descendant cells.³ The most attractive stem cells to researchers are those from the developing human embryo. Once an egg is fertilized, the process of cellular differentiation begins immediately. Through a series of cleavage divisions, the fertilized egg passes through a two-cell, four-cell, and multi-cellular stage, respectively, before forming a blastocyst at about six days of development. The blastocyst is comprised of two parts: the inner cell mass (ICM) and the surrounding trophectoderm. The ICM cells are pluripotent, meaning that they have the potential to form any type of cell within the human body. The trophectoderm becomes the placenta for the developing embryo and allows the developing embryo to attach to the uterine wall during implantation.⁴

To perform human embryonic stem cell (hESC) research, scientists cultivate ICM cells. This cultivation requires puncturing the outer trophectoderm, which makes the embryo incapable of implantation and further development.⁵ The controversy surrounding hESC research centers on this issue. If the embryo is given rights usually afforded to a person upon fertilization, embryonic stem cell research is murderous. On the other hand, if the embryo is considered primarily as a mass of cells in early development, and only becomes a “person” much later in development, hESC research is largely unproblematic from an ethical standpoint.⁶

A. Federal Policy

The Bush administration prohibits all federally funded hESC research except research using stem cell lines created prior to August 9, 2001,

3. THE HUMAN EMBRYONIC STEM CELL DEBATE, at xvii (Suzanne Holland, Karen Lebacqz & Laurie Zoloth eds., MIT Press 2001).

4. James Thomson, *Human Embryonic Stem Cells*, in THE HUMAN EMBRYONIC STEM CELL DEBATE, *supra* note 3, at 15.

5. Although scientists are looking to find ways of cultivating hESC's without destroying the embryo's capacity for development, this research remains in the very early stages. See Nicholas Wade, *New Stem Cell Method Avoids Destroying Embryos*, N.Y. TIMES, Aug. 23, 2006, available at <http://www.nytimes.com/2006/08/23/science/23cnd-stem.html>.

6. There are, of course, a variety of sophisticated moral positions between these extremes, but the ultimate focus is moral status.

which are lines created prior to adoption of federal policy.⁷ Unfortunately, the policy under the Bush administration is not conducive to meaningful hESC research. Many of the stem cell lines existing prior to President Bush's 2001 decision are contaminated because the lines were cultured in the presence of animal feeder cells causing biological deficiencies in most lines.⁸ Due to such contamination, only about twenty of the sixty lines have proven useful to researchers.⁹ Difficulty in accessing the small number of available stem cell lines has further prohibited much of the scientific community in the United States from engaging in meaningful research.¹⁰

On July 18, 2006, President Bush issued the first veto of his presidency on a bill that would have allowed federal funding for hESC research. The bill comfortably passed both the House and Senate, but the President nonetheless refused to sign it.¹¹ Despite creative policies designed to minimize ethical problems—for example, using only spare embryos from *in vitro* fertilization clinics and prohibiting creation of embryos for research purposes—President Bush refused to compromise.¹²

B. California Steps Out

Faced with the federal impasse, California took the lead in early 2004 and organized a state-funded initiative to support hESC research. In early November of that year, California voters passed a ballot initiative, Proposition 71, authorizing three billion dollars worth of state funded hESC research over a course of ten years. Proposition 71 created the California Institute for Regenerative Medicine (CIRM) to regulate research in the state and to distribute funding for state-sponsored research. Although other

7. Press Release, White House, Fact Sheet: Embryonic Stem Cell Research (Aug. 9, 2001), available at <http://www.whitehouse.gov/news/releases/2001/08/20010809-1.html>.

8. Martin et al., *Human Embryonic Stem Cells Express an Immunogenic Nonhuman Sialic Acid*, 11 NATURE MEDICINE 228 (2005).

9. *Id.* at 228.

10. *Id.* at 228.

11. Charles Babington, *Stem Cell Bill Gets Bush's First Veto*, WASH. POST, July 20, 2006, at A4, available at <http://www.washingtonpost.com/wp-dyn/content/article/2006/07/19/AR2006071900524.html>.

12. Michael Luo, *Stem Cell Bill Clears Senate and Bush Promises a Veto*, N.Y. TIMES, April 4, 2007, at A17, available at <http://www.nytimes.com/2007/04/12/us/12stem.html>.

states have developed state-funding programs, no state provides funds comparable to those available in California.¹³

Initially, the California research program was stalled by legal challenges made primarily on state constitutional grounds. However, on February 26, 2007, the California Court of Appeal for the First District affirmed an Alameda Superior Court holding that the research initiative suffered no defects and could proceed.¹⁴ The California Supreme Court denied review in May of 2007, and research in California is progressing.¹⁵

III. INTELLECTUAL PROPERTY ISSUES IMPLICATED IN HESC RESEARCH

Given California's position as the key domestic leader for hESC research, it will be important for regulators, policymakers, and researchers to pay close attention to how California navigates the complex array of legal issues presented by the new research initiative. As stated by one commenter during the initial comment period for CIRM's for-profit IP policy:

There was a clear promise of public benefit in Proposition 71 . . . About half of all California's families were estimated to have a child or adult who suffers from, or will suffer from, diseases that potentially could be cured with stem cell therapies . . . Proposition 71 also promised the voters who overwhelmingly supported it that the . . . investment was built on a sound economic base. It is the intellectual property rules—in other words, who will control the ownership of Proposition 71 discoveries—that will ulti-

13. Connecticut, Illinois, Maryland, New Jersey, and Ohio have all passed stem cell research initiatives allocating funds for hESC research, although none on the fiscal scale of California's plan. Massachusetts and New York are poised to launch state initiatives relatively soon. See National Conference of State Legislatures, State Embryonic and Fetal Research Laws, <http://www.ncsl.org/programs/health/genetics/embfet.htm> (last visited December 19, 2007).

14. *Cal. Family Bioethics Council v. Cal. Inst. for Regenerative Med.*, 147 Cal. App. 4th 1319 (Ct. App. 2007) (holding that the State Constitution guarantees a presumption of validity for voter initiatives).

15. Jason Dearden, *California High Court Clears the Way for Stem Cell Grants*, S.F. CHRON., May 16, 2007, available at <http://sfgate.com/cgi-bin/article.cgi?f=/n/a/2007/05/16/state/n171737D93.DTL>.

mately determine whether the bold initiative's promises are kept.¹⁶

This Part discusses the important legal issue of IP policy. Section III.A presents an overview of the federal IP law as it pertains to federally funded research. Section III.B gives an overview of CIRM's non-profit IP policy and CIRM's for-profit IP policy, highlighting key differences with Bayh-Dole.

A. IP Policy Governing Federally Funded Research

Pursuant to the Bayh-Dole Act (Bayh-Dole), the federal government grants ownership of intellectual property to university researchers and small businesses that develop inventions as a result of federally funded research.¹⁷ Prior to Bayh-Dole, multiple funding agencies implemented a variety of ownership schemes for funded researchers.¹⁸ Uniformly, however, agencies retained ownership of intellectual property developed through funded research.¹⁹ Bayh-Dole changed this landscape considerably.

The "policy and objective" section of the Bayh-Dole Act sets forth the goal of the statutory scheme. In short, the scheme is meant to promote publicly beneficial research by academic institutions and small businesses by granting ownership incentives to research institutions.²⁰ 15 U.S.C. § 200 provides in pertinent part that "it is the policy and objective of the Congress to use the patent system to promote the utilization of inventions arising from federally supported research or development."²¹

The most important provisions of Bayh-Dole for purposes of this analysis are those relating to (1) intellectual property ownership, (2) government reserved march-in rights, and (3) the obligation of contractors (academic institutions or small businesses) to license technology with priority for U.S. manufacture.

16. John Simpson, Ensuring All Californians Benefit from Prop. 71 Grants to Businesses: State Should Hold Patents; Attorney General Must Be Enforcer 1-2 (2006), http://test-www.cirm.ca.gov/meetings/pdf/2006/04/042706_item_AM_1.pdf.

17. 35 U.S.C. §§ 200-212 (2000).

18. See Nat'l Institutes of Health Office of Tech. Transfer, NIH Response to the Conference Report Request for a Plan to Ensure Taxpayers' Interests are Protected (July 1, 2001), http://www.ott.nih.gov/policy/policy_protect_text.html [hereinafter NIH Response].

19. *Id.*

20. 35 U.S.C. § 200 (2000).

21. *Id.*

1. *IP Ownership Scheme*

Perhaps Bayh-Dole's most important provision, 15 U.S.C. § 202(a) gives all contractors (defined as any party to a federal funding agreement) the right to retain title to any invention created through federally funded research. In exchange for the right to claim title in inventions, § 202(c) requires contractors to make a number of disclosures including: all inventions resulting from federally funded research; whether the contractor will retain title to the invention; and a promise that the contractor will file any patent applications prior to statutory bar dates.

Additionally, the federal government retains certain rights over and against the contract-inventor, although the contract-inventor holds title to valuable intellectual property.²² Most importantly, the federal funding agency "shall have a nonexclusive, nontransferable, irrevocable, paid-up license to practice or have practiced for or on behalf of the United States any subject invention throughout the world."²³ Additionally, the federal funding agency is entitled to "require periodic reporting on the utilization or efforts at obtaining utilization that are being made by the contractor or his licensees or assignees."²⁴

2. *March-in Rights*

The Bayh-Dole Act vests federal funding agencies with march-in rights for executing licenses from contract-researchers to "responsible applicants."²⁵ Specifically, "the Federal agency under whose funding agreement the subject invention was made shall have the right . . . to require the contractor, an assignee or exclusive licensee of a subject invention to grant . . . [a] license in any field of use to a responsible applicant or applicants, upon terms that are reasonable under the circumstances."²⁶ Furthermore, if a contractor, assignee, or exclusive licensee refuses to honor such request, the Federal agency is permitted to grant the desired license itself if one of four criteria is met:

(1) action is necessary because the contractor or assignee has not taken, or is not expected to take within a reasonable time, effective steps to achieve *practical application* of the subject invention in such field of use;

22. 35 U.S.C. § 202(c) (2000).

23. 35 U.S.C. § 202(c)(4) (2000).

24. 35 U.S.C. § 202(c)(5) (2000).

25. 35 U.S.C. § 203(a) (2000).

26. *Id.*

(2) action is necessary to alleviate *health or safety needs* which are not reasonably satisfied by the contractor, assignee, or their licensees;

(3) action is necessary to meet requirements for *public use* specified by Federal regulations and such requirements are not reasonably satisfied by the contractor, assignee, or licensees; *or*

(4) action is necessary because the agreement required by *section 204* has not been obtained or waived or because a licensee of the exclusive right to use or sell any subject invention in the United States is in breach of its agreement obtained pursuant to section 204.²⁷

A federal agency may only exercise its march-in rights within a strict procedural framework requiring the agency to offer a full administrative appeals process.²⁸ Also, any contractors, inventors, assignees, or exclusive licensees who are adverse to the agency's action have a right to petition the U.S. Claims Court within sixty days of an adverse agency ruling.²⁹ Further, all march-in actions will be "held in abeyance pending the exhaustion of appeals or petitions."³⁰

3. *Preference for U.S. Industry*

Finally, the Bayh-Dole framework sets forth an exclusive licensing scheme that promotes U.S. industry. In particular, exclusive licensees must agree to "substantially" manufacture licensed inventions in the United States.³¹

B. CIRM Regulatory Framework

CIRM's IP policies are clearly influenced by the federal IP scheme codified in the Bayh-Dole Act. However, CIRM's policies depart from Bayh-Dole in key respects. Consistent with the California Stem Cell Research and Cures Act, the CIRM IP policies take a more aggressive approach to realizing tangible economic benefits for the State and ensuring

27. 35 U.S.C. § 203(a)(1)-(4) (2000) (emphases added). Although federal agencies are granted considerable power through march-in rights, march-in rights have been seldom exercised. Most agree that federal level march-in rights provide a mostly impotent threat to researchers. See Lorelei Ritchie de Larena, *The Price of Progress: Are Universities Adding to the Cost?* 43 HOUS. L. REV. 1373, 1391 (2007).

28. 35 U.S.C. § 203(b) (2000).

29. *Id.*

30. *Id.*

31. 35 U.S.C. § 204 (2000).

that research products reach Californians.³² Separate policies govern research conducted by CIRM-funded non-profit entities (e.g., research universities) and research conducted by CIRM-funded for-profit entities (e.g., biotech companies).

1. *IP Policy for Non-Profit Entities*

a) Ownership & Licensing Scheme (Non-Profit Policy)

CIRM's non-profit IP policy mirrors Bayh-Dole by assuming that academic institutions will retain title to IP developed through funded research.³³ In partial exchange for ownership rights, grantee organizations must make a number of disclosures to CIRM.³⁴ Grantee organizations must report all inventions to CIRM³⁵ and inform CIRM annually of all filed patent applications, executed licensing agreements, and efforts to utilize CIRM funded inventions.³⁶ All CIRM-funded researchers must also provide CIRM with an abstract for the public highlighting all CIRM-funded research results published in scientific journals.³⁷

California Code of Regulations Title 17, section 100306 implements a distinct licensing scheme for CIRM-funded research leading to licensable inventions and/or technology. The current scheme, which took effect on July 14, 2007, encourages non-exclusive licensing "whenever possible" but allows exclusive licensing "if such licenses are necessary to provide economic incentives required to enable commercial development and availability of the inventions."³⁸

The most unique part of CIRM's non-profit licensing scheme requires that all exclusive licensees "shall grant exclusive licenses involving CIRM-funded patented inventions relevant to therapies and diagnostics only to persons that agree to have a plan in place at the time of commercialization to provide access to resultant therapies and diagnostics for uninsured California patients."³⁹ This contrasts significantly with the regime under Bayh-Dole, in which researchers are generally used to non-

32. Roger G. Noll, *Designing an Effective Program of State-Sponsored Human Embryonic Stem Cell Research*, 21 BERKELEY TECH. L.J. 1143, 1170-74 (2006); see also CAL. HEALTH & SAFETY CODE § 125290.30(h) (2007) (codifying mandate to ensure economic returns to California through revenue sharing).

33. See CAL. CODE REGS. tit. 17, §§ 100300-100310 (2007).

34. CAL. CODE REGS. tit. 17, § 100302(a)-(e) (2007).

35. CAL. CODE REGS. tit. 17, § 100302(b) (2007).

36. CAL. CODE REGS. tit. 17, § 100302(c) (2007).

37. CAL. CODE REGS. tit. 17, § 100303 (2007).

38. CAL. CODE REGS. tit. 17, § 100306(b) (2007).

39. CAL. CODE REGS. tit. 17, § 100306(d) (2007).

interference from funding sources with respect to licensing and other business activities related to research endeavors.

b) Sharing of Biomedical Materials (Non-Profit Policy)

Also unlike Bayh-Dole, section 100304 requires sharing of biomedical materials resulting from CIRM-funded research. The section provides in pertinent part:

Grantees shall share biomedical materials first created under CIRM funding and described in published scientific articles for research purposes in California within 60 days of receipt of a request and without bias. . . . [E]xceptions to [this rule] are possible [only] with approval by CIRM. . . . Such materials are to be shared without cost or at . . . actual cost.⁴⁰

c) March-in Rights (Non-Profit Policy)

CIRM retains march-in rights under its non-profit IP policy. The march-in framework partially mirrors the Bayh-Dole march-in framework. CIRM has the right to require a grantee organization or an exclusive licensee to grant a license (exclusive, partially exclusive, or non-exclusive) of a CIRM-funded invention to another “in any field of use to a responsible applicant or applicants, upon terms that are reasonable under the circumstances.”⁴¹ Further, CIRM reserves the right to license such inventions itself if the grantee organization or exclusive licensee refuses to grant the required license.⁴²

Like Bayh-Dole, the CIRM regulations set forth four criteria, at least one of which must be met to trigger the lawful exercise of march-in rights. However, CIRM’s criteria slightly differ from the federal scheme. For CIRM to exercise march-in rights, it must believe that action is required:

- (1) Because the grantee organization or the licensee has not made responsible efforts in a reasonable time to achieve practical application of a CIRM-funded patented invention;
- (2) Because the licensee has failed to adhere to the agreed-upon plan for access to resultant therapies as described in subdivision (d) of Code of California Regulations, Title 17, section 100306;
- (3) To meet requirements for public use and the requirements have not been satisfied by the grantee organization or its licensee;

40. CAL. CODE REGS. tit. 17, § 100304(d) (2007).

41. CAL. CODE REGS. tit. 17, § 100310(a) (2007).

42. *Id.*

(4) To alleviate public health and safety needs which are not reasonably satisfied by the grantee organization or its licensee and which needs constitute a public health emergency.⁴³

Although CIRM's framework and Bayh-Dole share criteria (1), (3) and (4) in common, criterion (2) is unique to the CIRM policy and highlights the importance of access plans to California regulators.

d) Revenue Sharing (Non-Profit Policy)

CIRM's revenue sharing provisions set forth at section 100408 are also unique to CIRM's policy. CIRM grantee organizations are required to share revenues with California that result from licensing of CIRM-funded inventions.⁴⁴ See Figure 1, *infra*. Specifically, non-profit grantees are required to share 25% of net exclusive licensing revenue in excess of \$500,000 with California.⁴⁵

2. CIRM's for-Profit IP Policy

The for-profit regulations largely mirror the non-profit regulations.⁴⁶ Generally speaking, however, CIRM's for-profit scheme places stricter financial reporting requirements upon for-profit entities and imposes more aggressive revenue-sharing requirements.

a) Ownership & Licensing Scheme (For-Profit Policy)

The for-profit policy, like CIRM's non-profit policy, grants researchers ownership and licensing rights over inventions created through CIRM-funded research.⁴⁷ Further, the for-profit policy, like the non-profit policy, discourages exclusive licensing of technologies that substantially result from CIRM funding. Specifically, "a grantee may negotiate an exclusive license if exclusivity is reasonably believed by Grantee to be an economic incentive necessary to achieve commercial development and availability of the invention."⁴⁸ The for-profit policy also ties exclusive licensing arrangements to access plan requirements.⁴⁹

For-profit grantees that plan to develop and commercialize products themselves are also subject to access plan requirements. The regulations state that "a grantee (or, by terms of an Exclusive License Agreement, its

43. CAL. CODE REGS. tit. 17, § 100310(a)(1)-(4) (2007).

44. CAL. CODE REGS. tit. 17, § 100308 (2007).

45. CAL. CODE REGS. tit. 17, § 100308(b) (2007).

46. *See* CAL. CODE REGS. tit. 17, §§ 100400-100410 (2008).

47. CAL. CODE REGS. tit. 17, § 100405 (2008).

48. CAL. CODE REGS. tit. 17, § 100406(c) (2008).

49. *Id.*

exclusive licensee) must submit a plan [at the time of commercialization] to afford uninsured Californians access to a drug . . . the development of which was in whole or in part the result of CIRM-funded Research.”⁵⁰ The regulations define “drug” broadly as “an article intended for use in the diagnosis, cure, mitigation, treatment, or prevention of disease in man or other animals . . . [and] this term includes therapeutic products such as blood, blood products, cells, and cell therapies.”⁵¹

The for-profit scheme, unlike the non-profit scheme, also provides that CIRM may make access plans available to the public.⁵²

b) Sharing of Biomedical Materials (For-Profit Policy)

Like their non-profit counterparts, CIRM requires for-profit grantees to share research related biomedical materials at no charge (or at cost) to any party who requests the materials.⁵³

c) March-in Rights (For-Profit Policy)

The for-profit scheme, like the non-profit scheme, grants CIRM march-in rights to compel licensing of CIRM funded inventions.⁵⁴ The for-profit march-in scheme is identical to the non-profit scheme.

d) Revenue Sharing (For-Profit Policy)

Like the non-profit policy, the for-profit policy includes revenue sharing requirements for CIRM-funded research leading to commercially successful inventions.⁵⁵ The for-profit revenue sharing scheme, however, requires much greater paybacks to the State for successful commercial products.

In particular, for-profit companies who elect to commercialize products developed through CIRM-funded research are subject to a four-tiered revenue sharing arrangement. See Figure 2, *infra*. First, companies must share a negotiated percentage of net commercial revenues (between 2% and 5%) up to a maximum of three times the amount of the original CIRM grant.⁵⁶ Second, companies are subject to two sets of blockbuster provisions. When a for-profit grantee’s revenue from a product developed through CIRM funding exceeds \$250 million in one year, the for-profit

50. CAL. CODE REGS. tit. 17, § 100407(a) (2008).

51. CAL. CODE REGS. tit. 17, § 100401(a) (2008).

52. CAL. CODE REGS. tit. 17, § 100407(a)(3) (2008).

53. CAL. CODE REGS. tit. 17, § 100404(a) (2008).

54. CAL. CODE REGS. tit. 17, § 100410 (2008).

55. CAL. CODE REGS. tit. 17, § 100408 (2008).

56. CAL. CODE REGS. tit. 17, § 100408(b)(1) (2008).

grantee must make a “blockbuster” payment to California of three times the initial grant amount.⁵⁷ And when revenue exceeds \$500 million in one year, the for-profit grantee must make a second blockbuster payment to California.⁵⁸ Finally, in addition to early stage revenue sharing and blockbuster payments, a for-profit grantee is subject to late-stage revenue sharing of 1% of all net commercial revenue in excess of \$500 million per year.⁵⁹

For-profit companies that elect not to commercialize developments themselves are required to share 25% of net licensing revenue in excess of \$500,000 with the State.⁶⁰ See Figure 3, *infra*.

IV. ENSURING TANGIBLE ECONOMIC RETURN

CIRM has sought to ensure return on investment for taxpayers through its IP policies. Tangible economic return on investment is most likely to be realized through improvements to the “overall well-being of society” from increased life spans and healthcare savings,⁶¹ benefits the CIRM policy may have underestimated.⁶² However, the likely return through revenue sharing, a much contested but central aspect of CIRM’s IP policy, will be comparatively small.⁶³ Taken together, the tremendous returns likely to be realized apart from revenue sharing and the resistance expressed by industry and researchers weigh in favor of relaxing or abandoning revenue sharing provisions. This Part concludes that CIRM’s revenue sharing policies are likely imprudent given possible disincentives for industry and the likelihood of large economic returns through broader societal benefits.

A. Projected Economic Benefits of Revenue Sharing

In contrast to Bayh-Dole, CIRM has decided to “take a piece of the pie,” from researchers and others who develop valuable products as a result of CIRM-funded research. Requiring researchers and commercial developers to share the financial rewards they reap with the State (revenue sharing) is a relatively simple way to ensure tangible economic return on investment.

57. CAL. CODE REGS. tit. 17, § 100408(b)(2) (2008).

58. *Id.*

59. CAL. CODE REGS. tit. 17, § 100408(b)(3) (2008).

60. CAL. CODE REGS. tit. 17, § 100408(a)(1) (2008).

61. Michael Longaker et al., *Proposition 71 and CIRM: Assessing the Return on Investment*, 25 NATURE BIOTECHNOLOGY 513, 514 (2007).

62. *Id.*

63. *Id.* at 520.

For example, assume first that a for-profit firm obtains a \$10 million grant from CIRM.⁶⁴ Assume further that the for-profit firm develops a patented product that generates \$5 billion in revenue during the life of the patent.⁶⁵ The for-profit firm will be obligated to pay CIRM between 2% and 5% of revenue for any years in which net revenue is more than \$500,000 but less than \$250 million, up to \$30 million in total payments.⁶⁶ On the first year the for-profit firm reaches \$250 million in net revenue, it will owe CIRM another \$30 million.⁶⁷ Then, if the product reaches \$500 million in revenue in one year, it will owe CIRM another \$30 million.⁶⁸ After the second blockbuster payment is made, the for-profit company is further obliged to pay 1% of net revenue in excess of \$500 million for the life of the patent.⁶⁹ The State would recover approximately \$135 million from one blockbuster product (\$30 million in early stage revenue sharing, plus \$60 million in blockbuster payments, plus another (possible) \$45 million in late stage revenue sharing).⁷⁰

Assume also that non-profit institutions license ten highly successful patents, developed through CIRM funded research, to for-profit firms.⁷¹ Assume further that each patent generates \$100 million in revenue over its lifetime. The State would recover approximately \$250 million from the ten licenses, and \$385 million overall (\$135 million from the for-profit firm with a blockbuster product and \$250 million from the non-profit institutions).⁷²

B. Projected Economic Benefits through Betterment of Society

Professor Longaker and colleagues conducted a hypothetical analysis of the likely societal impact (to the United States at large) of a treatment reducing the impact of juvenile onset diabetes mellitus (JODM) by half (in terms of mortality rate, annual healthcare costs of individuals with the disease, and direct costs of a new therapy).⁷³ As they point out, current therapies require a life-time of insulin replacement therapies resulting in “an enormous medical burden, eventually causing clinical problems in organs

64. *Id.*

65. *Id.*

66. CAL. CODE REGS. tit. 17, § 100408(b)(1) (2008).

67. CAL. CODE REGS. tit. 17, § 100408(b)(2) (2008).

68. *Id.*

69. CAL. CODE REGS. tit. 17, § 100408(b)(3) (2008).

70. Longaker, *supra* note 61, at 520.

71. *Id.*

72. *Id.*

73. *Id.* at 514.

and tissues.”⁷⁴ Researchers hope that hESC research will lead to creation of functional pancreatic cells that will “physiologically sense glucose [levels] and secrete insulin” as needed for proper metabolism.⁷⁵ Cells like these would present a real possibility of a cure for JODM. In order to add credibility to their economic assessment, however, Longaker’s group notes that “stem cell therapies that would lead to complete cures for JODM are commonly discussed [and hold great economic promise], but we develop our model around a more conservative scenario in which a new therapy reduces the impact of JODM by half.”⁷⁶

Further, Longaker’s model conservatively assumes that Proposition 71 leads to an earlier realization of therapies for JODM—not that the JODM therapies would never be developed in absence of Proposition 71. Longaker states that “policies like Proposition 71 do not generate discoveries that would otherwise never have been made, but rather they can help by shortening the time that elapses before the therapies become available.”⁷⁷

The most significant potential economic benefits of CIRM-funded research will arise from increased life years, and in particular, quality adjusted life years (QALYs).⁷⁸ In the context of JODM, under currently accepted estimates (where one QALY amounts to \$50,000), the economic gain attributable to the hypothesized advance for individuals with JODM, as a result of CIRM-funded research, would amount to \$28 billion undiscounted current dollars.⁷⁹ Longaker’s group also estimates that individuals with JODM could add upwards of \$12 billion in added productivity in the workplace, if the modest hypothesized advance in treatment for JODM results in increased QALYs for these individuals.⁸⁰

Developments in JODM treatment would also likely lead to healthcare savings.⁸¹ Assuming the therapeutic advance would lead to an overall decrease in the amount of healthcare resources devoted to persons with JODM (due to reduced complications, better disease management, etc.), and before accounting for costs associated with introducing the new therapy, Longaker and colleagues have calculated that decreased health care consumption would amount to \$2.3 billion in current undiscounted dol-

74. *Id.* at 515.

75. *Id.* at 515.

76. *Id.*

77. *Id.*

78. *Id.* at 516.

79. *Id.* at 516.

80. *Id.*

81. *Id.*

lars.⁸² These overall savings would be eroded by costs associated with introduction of the new therapy, resulting in net health care savings of \$368 million.⁸³

It is important to acknowledge the assumptions underlying Longaker's group's results. JODM is a highly prevalent condition.⁸⁴ For a developed therapy to benefit society in the ways Longaker's group has suggested: the therapy must be widely accessible/affordable; the therapy must be actually hastened by CIRM-funded research; the conditions addressed by the research must be serious and affect many people (e.g., JODM); and the conditions addressed by the research must be conditions that affect people relatively early in life as opposed to near the end of life when additional life years are unlikely.⁸⁵

C. Returns through Revenue Sharing Are Too Small to Justify Added Burdens to Researchers and Industry

The above evaluation of the benefits from revenue sharing and from the betterment of society yields the conclusion that it is unwise for CIRM to risk discouraging participation by researchers and others through revenue sharing, given that comparatively larger economic returns will be realized in other, non-controversial ways.

1. Revenue Sharing in Context

Although the possibility of California receiving \$385 million through revenue sharing as a result of CIRM-funded research is significant in real terms, "direct returns from IP from CIRM funding . . . pale [in comparison to] other anticipated returns from Proposition 71."⁸⁶ In particular, \$385 million is relatively small when compared to more than \$40 billion in gains likely to be seen as a result of increased quality of life, decreased mortality, increased productivity, and health care savings resulting from a single therapeutic advance.⁸⁷

The hypothetical \$385 million in revenue sharing is even less significant in comparison to broader economic benefits, considering that \$385 million in revenue sharing requires creation of at least one blockbuster therapy in addition to at least ten patents collectively worth \$1 billion dollars in primary licensing revenue. It is reasonable to assume that a single

82. *Id.* at 517.

83. *Id.*

84. *Id.* at 515.

85. *See id.* at 518.

86. *Id.* at 520.

87. *Id.* at 516.

blockbuster product would probably lead to even more significant societal benefits (increased quality of life, decreased mortality rates, health care savings, etc.) than the modest advance in JODM treatment discussed above. It is also reasonable to assume that ten valuable patents would lead to multiple therapeutic advances comparable, at the least, to the JODM example. The gap between economic returns through revenue sharing and economic returns through broad societal benefits only increases if CIRM research is as successful as California predicts.

2. *Revenue Sharing Is Likely to Discourage Participation by Important Players*

A key question for the propriety of revenue sharing is whether the risk of discouraging researchers and investors from participating is worth the relatively modest sum at stake. On balance, it seems unlikely that university researchers will be discouraged by CIRM's revenue sharing provisions despite loss of licensing revenue. No other state within the United States is offering research funding comparable to the levels available in California.⁸⁸ Even if researchers or universities more generally do not like the idea of sharing revenues, they have little bargaining power given the lack of suitable state funding alternatives.

It remains possible that concerns about lost profits or State-imposed burdens for university entrepreneurs will discourage universities from engaging in CIRM funded research. Dr. Michelle Cai argued persuasively that "pure academic research devoid of commercial implications is becoming a rarity in an era of federal incentives to turn the fruits of government-funded basic research into commercial applications."⁸⁹ Given the political (and scientific) cachet associated with hESC research, however, and given the general commitment of most academic researchers to advancement of science, university non-participation appears unlikely for the foreseeable future. California is proud of its status as a biotechnology leader, and dissatisfaction with revenue sharing seems unlikely to overtake the desire for biotechnological advancement in the State, at least among researchers in the university setting.⁹⁰

88. Monya Baker, *Industry Concerns Mount Over CIRM Grants*, 25 NATURE BIOTECHNOLOGY 1063, 1064 (2007).

89. Michelle Cai, Note, *Madey v. Duke University: Shattering the Myth of Universities' Experimental Use Defense*, 19 BERKELEY TECH L.J. 175, 175 (2004).

90. See Baker, *supra* note 88.

The for-profit sector, however, appears far more likely to resist participating in research with revenue sharing requirements.⁹¹ Industry resistance is not surprising given that a \$10 million grant, for example, could result in as much as \$135 million in required payments back to the State.⁹² The California Healthcare Institute (CHI), an advocacy group for the biomedical research and development community within the State, interviewed its members regarding CIRM's IP policies. CHI's members include "more than 250 of California's leading life sciences companies, universities, and academic research institutions."⁹³ The CHI interviews revealed that "over 80% [of members] . . . would be much less likely to consider licensing a technology, or investing in a start-up company based on a technology carr[ying] [the revenue sharing and access requirements in the regulatory policy]."⁹⁴ CHI worries that "the likely consequences of these provisions . . . will be fewer new medicines and therapies to the citizens of California."⁹⁵

Others besides CHI have also highlighted industry reluctance to participate in CIRM funded research under the current IP policies.⁹⁶ For example, Geron CEO Tom Okarma has noted that "his company is unlikely to apply for any science grants [from CIRM], but would [ordinarily] welcome funds for clinical research. Geron's investors have already done the 'heavy lifting' to generate the company's technologies . . . and grants that might siphon away revenues don't appeal."⁹⁷ Simply put, "CIRM needs to figure out how many restrictions it can have in place and still attract quality companies for its grants."⁹⁸

In addition to burdens from direct revenue sharing, industry members may face increasing licensing fees from researchers. Research institutions, whether non-profit or for-profit, may increase licensing fees to account for revenues they lose through revenue sharing. This creates further disincentives for industry members who might otherwise be inclined to license technologies developed through CIRM-funded research.

91. See Letter from David Gollaher, President and CEO of California Healthcare Institute, to C. Scott Tocher, Interim Counsel to CIRM (Oct. 4, 2006), *available at* http://www.chi.org/uploadedFiles/Legislative_Action/State_Issues/CHI%20comments%20to%20revised%20IPNPO_100406.pdf [hereinafter Gollaher letter].

92. See *supra* Section IV.A.

93. Gollaher letter, *supra* note 91, at 1.

94. *Id.* at 2.

95. *Id.*

96. See Baker, *supra* note 88, at 1063.

97. *Id.* at 1063.

98. *Id.*

3. *The NIH Has Rejected Revenue Sharing Requirements Twice*

At numerous points in the past, federal legislators and officials at the National Institutes of Health (NIH) have explicitly rejected revenue sharing regulations for federally funded medical research. These officials have based their decisions in part, on (1) concerns about discouraging participation by research and industry communities and (2) recognition that the most significant economic returns on research will be from advances in health care and increased productivity of citizens.⁹⁹

In 1980, prior to passage of Bayh-Dole, legislators debated the question of return on investment for taxpayers.¹⁰⁰ However, revenue sharing provisions were removed prior to passage of Bayh-Dole, due in part to concerns about negative incentives to researchers and industry.¹⁰¹ In 2001, the NIH reconsidered the issue of revenue sharing and concluded again that “requiring direct financial recoupment of the federal investment in biomedical research can potentially impede the development of promising technologies by causing industry to be unwilling to license federally funded technologies.”¹⁰²

The NIH also rejected revenue sharing requirements because the potential economic return through revenue sharing is small, relative to returns resulting from general benefits to society such as improved quality of life and increased longevity.¹⁰³ The NIH concluded that the risk of discouraging participation in research was not worth the modest returns foreseeable through revenue sharing.¹⁰⁴ The NIH also highlighted direct economic returns from taxes on profits, job creation, and overall economic growth, all of which California is likely to experience as a result of CIRM funded research. As summarized in a 2006 report by the Congressional Research Service,

While the idea of [revenue sharing] was considered by the Congress in hearings on [Bayh-Dole] legislation, it was rejected as an unnecessary obstacle. . . . Instead, Congress accepted as satis-

99. NIH Response, *supra* note 18.

100. *Id.* at Section C.5 (capping the total proposed revenue sharing at the amount provided by the government under the particular funding arrangement, so that the most any researcher would share with the federal government was the actual amount granted).

101. WENDY SCHACHT, CRS REPORT FOR CONGRESS: THE BAYH-DOLE ACT: SELECTED ISSUES IN PATENT POLICY AND THE COMMERCIALIZATION OF TECHNOLOGY 14 (2006), available at <http://www.ncseonline.org/NLE/CRSreports/07Jan/RL32076.pdf>.

102. NIH Response, *supra* note 18, at Section F.

103. *Id.* at Section C.7.

104. *Id.*

factory the anticipated payback to the country through increased revenues from taxes on profits, new jobs created, improved productivity, and economic growth . . . [in addition to] the emergence of the biotechnology industry and the development of new therapeutics to improve health care.¹⁰⁵

Of course, unlike the NIH, CIRM is charged with regulating research for the sake of primarily *Californians*, not all U.S. citizens more generally. Revenue sharing allows regulators to ensure that California in particular receives a share of economic gains resulting from CIRM-funded research. Otherwise, CIRM must worry about the possibility that although research will be conducted in California, industry growth and therapeutic developments may ultimately be widely distributed both nationally and internationally. Unfortunately for CIRM, however, dispersion problems exist whether revenue sharing is required or not. Revenue sharing alone cannot make up for the possibility that industrial growth might be siphoned away from California. CIRM has the difficult task of balancing the need to attract industry with the need to ensure that benefits to Californians are maximized. Revenue sharing creates a risk of lack of participation by industry in exchange for small economic gain.

Some may argue that revenue to California derived from revenue sharing is more secure (i.e., easier to measure) than economic gains associated with broader societal benefits. However, it is reasonable to assume that gains from revenue sharing are only likely to be seen if discoveries with strong potential to lead to therapeutic advances are actually made. Further, when these discoveries are made, much greater economic benefits should accrue in broader benefits to society.

Therefore, given that the return to California taxpayers will be greatest from improvements to “the overall well-being of society,” that the relative return through revenue sharing is likely to be comparatively small, and that there is significant resistance to revenue sharing within the biotechnology and investment communities, CIRM should de-emphasize (or eliminate) revenue sharing as a way of generating economic return for taxpayers.¹⁰⁶

105. SCHACHT, *supra* note 101, at 14-15.

106. *See* Longaker, *supra* note 61, at 513-21.

V. THE IMPORTANCE OF ACCESS PLAN REQUIREMENTS AND THE NEED TO RESOLVE REGULATORY AMBIGUITY

The access plan provisions contained in CIRM's IP policies are designed to ensure that benefits of state-funded research reach socio-economically disadvantaged Californians.¹⁰⁷ Unlike the goal of tangible economic return, CIRM's regulatory policies are likely to be a necessary step to realize the goal of broad access to health benefits. Therefore, CIRM's access plan requirements are crucial to ensuring that Californians, especially socio-economically vulnerable Californians, have access to healthcare improvements that result substantially from CIRM-funded research.

A. Broad Access is Unlikely Without Policy Intervention

As Professor Ruth Faden points out, "it [is] . . . of serious moral concern, that there will be significant economic barriers to access to new therapies utilizing stem cells. New technologies are usually expensive and thus the earliest (and sometimes only) beneficiaries of medical advances are the economically privileged."¹⁰⁸ In its stated rationale for requiring exclusive licensees to create access plans, CIRM explains that it "seeks to ensure that licensees of CIRM-funded patented inventions obtain the appropriate scope of rights . . . to develop potential applications of the invention while optimizing public good through . . . widespread use."¹⁰⁹ Furthermore, as many in California agree "it is essential that the policy controlling ownership of any valuable medical discoveries that result from Proposition 71-funded research by businesses . . . be crafted so that all Californians . . . benefit from the research paid for by [all] taxpayers."¹¹⁰

Access plan requirements, like revenue sharing requirements, pose disincentives to researchers and industry alike. Unlike the case of revenue sharing where economic return is likely to occur in other, far more significant ways, the policy objectives underlying access plan requirements, access for uninsured and low income Californians, are unlikely to be met by alternate means.¹¹¹

107. See CIRM Initial Statement, *supra* note 2.

108. Ruth Faden, *Public Stem Cell Banks: Considerations of Justice in Stem Cell Research and Therapy*, 33 HASTINGS CENTER REP. 13, 25 (2003).

109. CIRM Initial Statement, *supra* note 2, at 7.

110. Simpson, *supra* note 16, at 1.

111. In fact, there may be other ways to better ensure broad access. Future work should assess the likely success or failure of access plans.

B. Exclusive and Non-Exclusive Licensing: Industry Practice and Regulatory Ambiguity

The non-profit regulations define an exclusive license as “any license agreement for a CIRM-funded patented invention that permits the licensee to exclusively exercise any commercial right within the state of California or the United States, or within any field of use.”¹¹² Broadly stated, domestic geographic exclusivity and all forms of field exclusivity impose access plan requirements upon exclusive licensees of technologies developed by non-profit grantees.

The for-profit regulations provide an even broader definition, defining an exclusive license as “any license agreement for a CIRM-funded patented invention that authorizes the licensee to exclusively exercise one or more of the rights (or a portion of the rights) belonging to the patent holder under the patent.”¹¹³ Exclusive licensees of technologies developed through CIRM-funded research by for-profit grantees and all for-profit entities that self-commercialize products resulting from CIRM-funded research must provide access plans to the CIRM.¹¹⁴

Ambiguities in both licensing policies leave a number of important questions unanswered: What about international exclusivity? Precisely what counts as field exclusivity in the non-profit policy? What about other forms of exclusivity: temporal, technique, method of use, etc.? Are these forms of exclusivity covered by the broader for-profit policy? Are they covered by the non-profit policy?

Given ambiguities in the licensing policies, CIRM should be prepared to confront licensees (and licensors) who may attempt to strategize around access plan requirements. A full analysis of licensing issues related to CIRM’s access plan requirements is beyond the scope of this Note. However, this Note develops a principle of interpretation based upon licensee intent by which CIRM regulators and others should evaluate whether access plan requirements attach to licensing arrangements: access plan requirements should attach when, at the time of licensing, a licensee intends to use technology resulting from CIRM-funded research directly to exploit market opportunities.

112. CAL. CODE REGS. tit. 17, § 100301(f) (2007).

113. CAL. CODE REGS. tit. 17, § 100401(f) (2008).

114. CAL. CODE REGS. tit. 17, § 100407 (2008).

1. *The Difficult Distinction Between Exclusive and Non-Exclusive*

The distinction between an exclusive and a non-exclusive license is not easy to draw in practice.¹¹⁵ As one treatise author points out, “commercial practice yields a wide variety of differing transactional frameworks . . . mak[ing] drawing a simple distinction between exclusive and nonexclusive licenses difficult.”¹¹⁶ Some courts define a non-exclusive license as one in which a licensor waives the right to sue the licensee.¹¹⁷ Exclusive licenses thus entail giving rise to the right to sue when other rights conveyed are violated.

Whether a license is deemed to be exclusive or non-exclusive also depends on the *scope* of the rights conveyed. If the scope of rights is too narrow, the license is effectively non-exclusive.¹¹⁸ For example, a license for one year is far less exclusive than a license extending for the entire term of the licensor’s IP right.¹¹⁹ Additionally, a license with national exclusivity is far more excluding than a license limited to a narrow geographic area.¹²⁰ As Nimmer and Dodd argue, “as the scope of exclusivity becomes more narrow, its effect[s] reach the point where describing the license as exclusive becomes more analytically cumbersome than useful.”¹²¹ Exclusivity in general, and the extent of exclusivity within particular agreements, is a matter of interpretation.¹²²

In its definition of exclusive license in the non-profit policy, CIRM specifically notes field of use and geographic exclusivity.¹²³ With respect to field of use, there are a variety of ways to interpret exclusivity. For instance, Nimmer and Dodd note that “[field of use] is best understood as referring to those portions of the licensed scope that deal with the location, area of technology, market, and other attributes of the permitted use of the subject matter.”¹²⁴ Thus, there are a variety of ways in which parties can contract for exclusive rights related to “field of use.” CIRM has yet to offer guidance as to types of field exclusivity that fall within its definition of

115. See *Exxon Corp. v. Oxxford Clothes, Inc.*, 109 F.3d 1070 (5th Cir. 1997).

116. RAYMOND NIMMER & JEFF DODD, *MODERN LICENSING LAW* § 5:1 (2007).

117. *Suessen v. Schubert*, 829 F.2d 1075, 1081 (Fed. Cir. 1987).

118. NIMMER & DODD, *supra* note 116, at § 5:7.

119. *Id.*

120. *Id.*

121. *Id.*

122. *Id.*

123. See CAL. CODE REGS. tit. 17, § 100310.

124. NIMMER & DODD, *supra* note 116, at § 6:15.

exclusive license, but this question should be anticipated. Furthermore, given the much broader definition of exclusive license contained in the for-profit policy, CIRM should be prepared to clarify what types of exclusivity it considers relevant.

Generally, geographic exclusivity articulates the market for the licensed product or technology.¹²⁵ Because CIRM defines geographic exclusivity—California or the United States more generally—there is less room for ambiguity in geographic limitations.¹²⁶

2. *An Intention-Based Principle of Interpretation for Scrutiny of Licensing Arrangements*

Given lack of consensus as to what constitutes an exclusive licensing agreement, and given industry incentives to avoid access plan requirements, CIRM should address the question of how licensing arrangements will be scrutinized. This Note suggests the following principle for analysis of licensing arrangements: where there is ambiguity regarding exclusivity (e.g., where it is somewhat unclear whether there is field or geographic exclusivity in the agreement or any other meaningful exchange of rights), if a licensing arrangement appears to be based upon expectation of immediately marketable therapeutic (or other) uses, this expectation favors finding exclusivity.

If, on the other hand, there is no clear exchange of substantial rights and “significant further research and development efforts to realize the commercial application of the invention” are required post-license, a finding of non-exclusivity is likely favored.¹²⁷ Finally, if CIRM finds that a particular licensing arrangement is exclusive, the licensee should have the burden to show non-exclusivity since licensees have clear economic incentives to so demonstrate.

Legislators and regulators alike believe that access plans are crucial for accomplishing the distributive intent of California taxpayers who voted for Proposition 71. In its statement supporting proposal of the for-profit IP regulations, CIRM provides that:

125. *Id.*

126. One open question relates to international exclusivity. Will access plan requirements fall upon an exclusive licensee who takes an exclusive license to practice a technology in a foreign country?

127. California Institute for Regenerative Medicine, Working Draft: CIRM Intellectual Property Policy for Non-Profit Organizations 32 (Jan. 18, 2006), http://www.cirm.ca.gov/meetings/pdf/2006/01/012306_item_3.pdf (See discussion entitled “Licensing Policy Elements”) [hereinafter Working Draft].

As a consequence of expenditure of the ‘first dollar’ of CIRM funding, the for-profit awardee organization agrees to provide a plan (at the time of commercialization) to provide to uninsured California residents access to resultant therapies. . . . This will ensure that Californians without insurance are able nonetheless to have improved access to therapies developed with the financial assistance of California’s taxpayers.¹²⁸

Legislators and regulators also expect that licenses will be exclusive when technology is licensed on the basis of expectations of immediate marketability of therapeutic or other uses. CIRM provides the following discussion supporting location of the exclusive/non-exclusive distinction in the intent of the licensee:

For inventions with [direct] potential preventive, diagnostic, or therapeutic uses, where some type of exclusivity (and therefore patent protection) is necessary for product development, [exclusive] licensing of the patent rights is the primary vehicle for transferring the technology to commercial partners.¹²⁹

Taken together, (1) the importance of access plans for making therapies available to uninsured Californians, and (2) the expectation that licenses for technologies expected to lead directly to marketable products will be exclusive, amounts to the interpretive principle noted above—licenses based on expected marketable uses favor finding exclusivity.

The interpretive principle is also supported by industry practice. Companies will pay handily for non-exclusive licenses, but probably only where significant research and development will be required after a license is granted.¹³⁰ This is because the companies believe that their own researchers will discover and develop new products. Exclusive licenses, on the other hand, are generally sought when a company intends to use a particular technology that with limited direct competition is either itself a marketable product or that will develop quickly into a marketable product.¹³¹

128. CIRM Initial Statement, *supra* note 2, at 7-8.

129. Working Draft, *supra* note 127, at 32.

130. See Christopher Scott Thomas, *Mice with a Human Touch*, 25 NATURE BIOTECHNOLOGY 1075 (2007).

131. John Walsh et al., *Effects of Research Tool Patents and Licensing on Biomedical Innovation*, in PATENTS IN THE KNOWLEDGE-BASED ECONOMY 285, 307 (Wesley Cohen & Stephen Merrill eds., National Research Council 2003).

Along similar lines, one member of CIRM's IP regulatory council pointed out that the exclusive/non-exclusive distinction is best viewed in light of the intent of the licensee.¹³² When industry licensees take non-exclusive licenses, the license usually serves a research function that will hopefully lead to a marketable product downstream.¹³³ Exclusive licenses, on the other hand, are usually taken with the intention of directly exploiting market opportunities through the license.¹³⁴

Like access requirements for exclusive licensees and self-commercializers, CIRM's express preference for non-exclusive licenses promotes broad access to health benefits. Non-exclusive licenses allow multiple companies to work with the licensed technologies, thereby increasing the possibility of developing useful therapies.¹³⁵ In fact, there is "a belief on the part of some holders of target patents that by giving several firms a nonexclusive license they increase the chances that one will discover a useful drug."¹³⁶

Although non-exclusive licensing may increase the possibility of significant research developments, problems will still arise in terms of delivery to broad socioeconomic groups. This issue has not yet been addressed by CIRM.

VI. CONCLUSION

California is the key domestic leader of stem cell research in the United States. CIRM's IP policies for non-profit and for-profit organizations are important contributions to the national research landscape.

CIRM's IP policies aim to assure two chief goals promised by the legislation authorizing the research initiative: tangible economic return and broad access to benefits. Requiring grantees to share revenues with the State is an imprudent policy strategy because major economic returns will materialize in other ways, and revenue sharing may discourage key players from participating. Access plan provisions, on the other hand, are worth possible negative incentives given that broad access is unlikely to be achieved without regulatory intervention by CIRM. Finally, given the centrality of licensing agreements to attachment of access plan require-

132. Telephone Interview with Michael Goldberg, Partner, Mohr Davidow Ventures (Oct. 24, 2007).

133. *Id.*

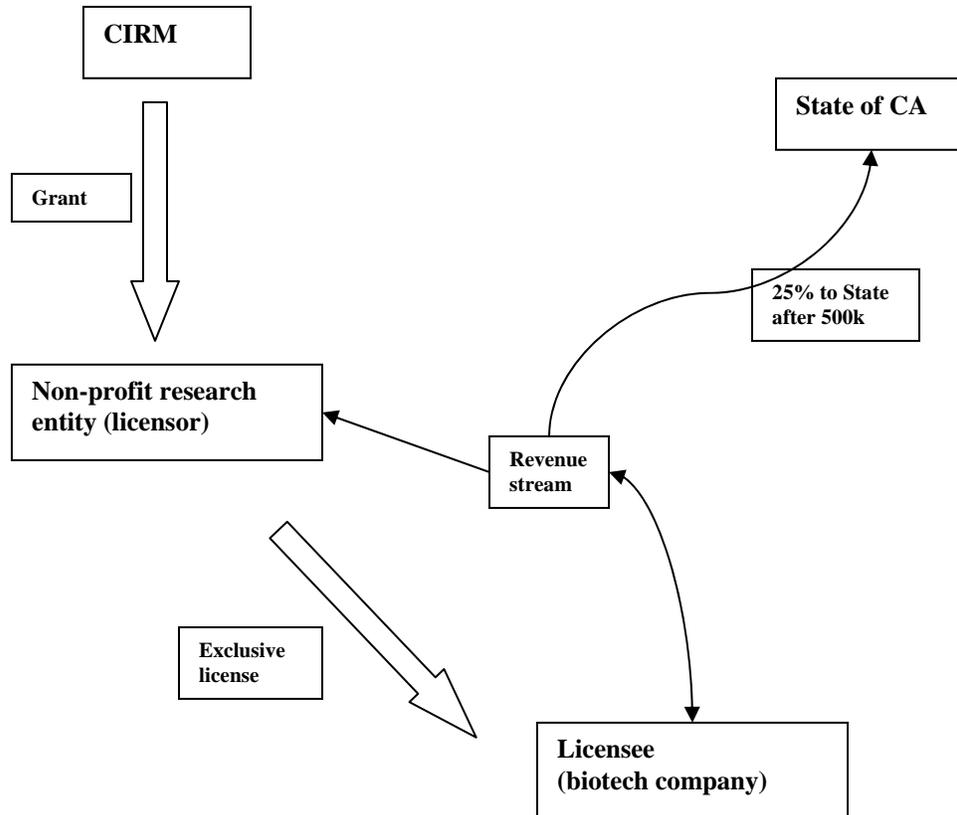
134. *Id.*

135. Walsh, *supra* note 131, at 323.

136. *Id.*

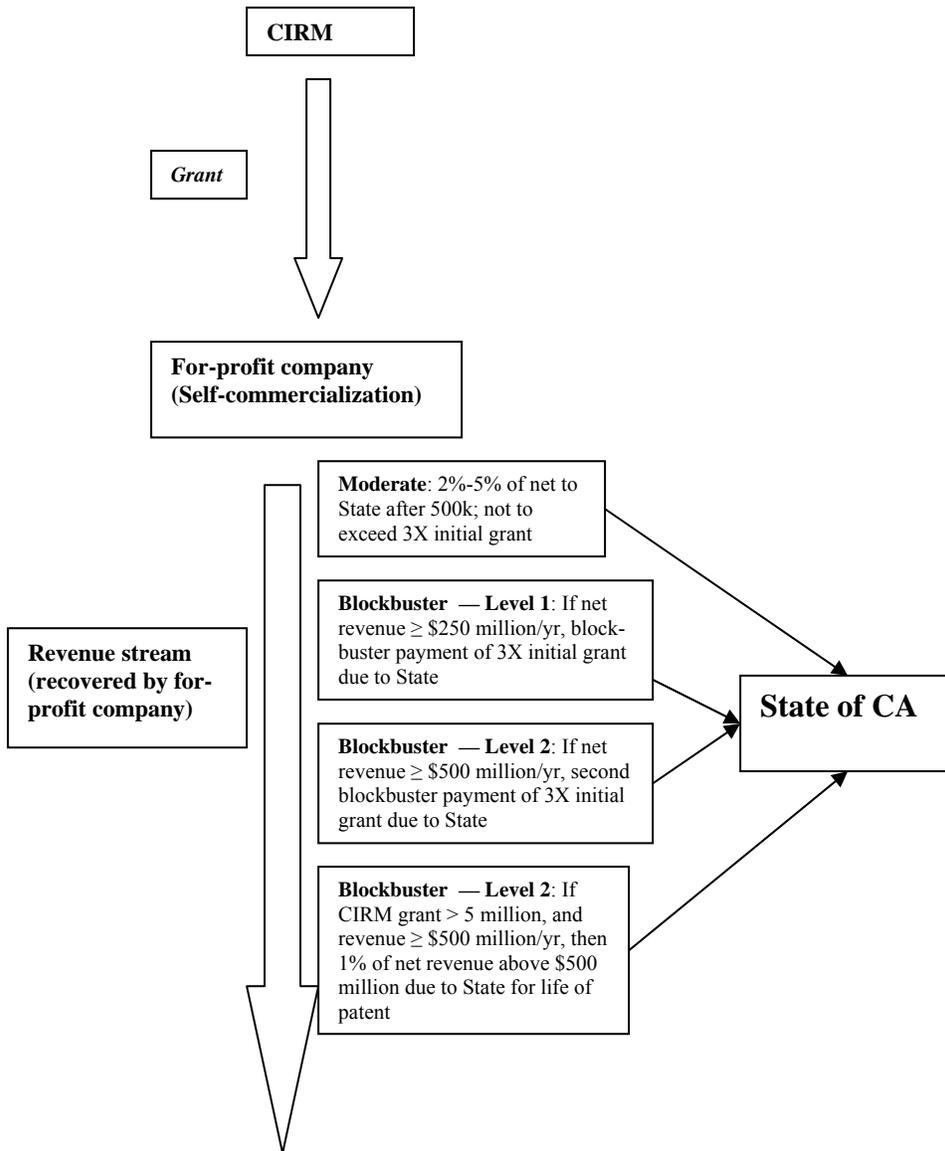
ments, CIRM should interpret licensing agreements on the basis of licensee intent and find exclusivity when licensees expect technologies to allow immediate market exploitation.

Figure 1: Non-Profit Revenue Sharing Scheme¹³⁷



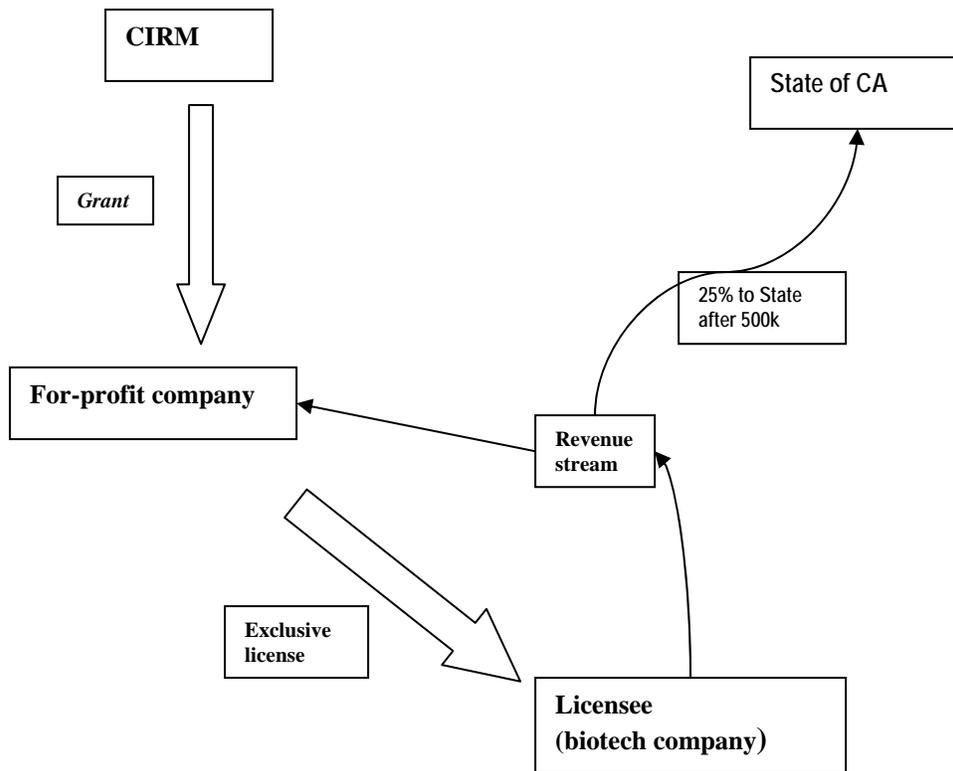
137. See CAL. CODE REGS. tit. 17, § 100408 (2007).

Figure 2: For-Profit Revenue Sharing Scheme (self-commercialization)¹³⁸



138. See CAL. CODE REGS. tit. 17, §§ 100408(b)(1)-(3) (2008).

Figure 3: For Profit Revenue Sharing Scheme (exclusive licensing)¹³⁹



139. See CAL. CODE REGS. tit. 17, § 100408(a)(1) (2008).

NOW YOU SEE THEM, NOW YOU DON'T: THE PTO'S RULES ON CLAIMS AND CONTINUATIONS

By Matt Browning

I. INTRODUCTION

The number of applications for patents filed at the United States Patent and Trademark Office (PTO) has grown rapidly, rising from 206,276 in 1996 to 443,652 in 2006.¹ Consequently, the backlog of unexamined applications at the PTO grew from 303,720 pending applications in 1996 to 1,003,884 in 2006.² The PTO faces a difficult problem: how to manage the increasing backlog of applications while maintaining or improving patent quality.

As part of its efforts in formulating a solution, the PTO published controversial new rules (“the Final Rules”) in August 2007 that may significantly change the practice of patent prosecution.³ The PTO planned to make the rules effective on November 1, 2007,⁴ but on the eve of their implementation, the U.S. District Court for the Eastern District of Virginia granted a preliminary injunction preventing the PTO from implementing the changes.⁵ The court recently upheld its preliminary decision by granting summary judgment against the PTO.⁶ Nevertheless, if the PTO succeeds on appeal or receives explicit authority from Congress, the PTO may ultimately put the rules into practice.

The PTO initially published a set of proposed rules (“the Proposed Rules”) in January 2006.⁷ After a period of public commentary, the PTO

© 2008 Matt Browning.

1. U.S. PATENT & TRADEMARK OFFICE, PATENT APPLICATIONS FILED (2006), available at http://www.uspto.gov/web/offices/com/annual/2006/50302_table2.html.

2. U.S. PATENT & TRADEMARK OFFICE, PATENT APPLICATIONS PENDING PRIOR TO ALLOWANCE (2006), available at http://www.uspto.gov/web/offices/com/annual/2006/50303_table3.html.

3. See Changes to Practice for Continued Examination Filings, Patent Applications Containing Patentably Indistinct Claims, and Examination of Claims in Patent Applications, 72 Fed. Reg. 46716, 46716-46843 (Aug. 21, 2007) (to be codified at 37 C.F.R. pt. 1) [hereinafter Final Rules].

4. Final Rules, *supra* note 3, at 46716.

5. *Tafas v. Dudas*, 511 F. Supp. 2d 652 (E.D. Va. 2007).

6. *Tafas v. Dudas*, 2008 U.S. Dist. LEXIS 26086 (E.D. Va. Apr. 1, 2008).

7. Final Rules, *supra* note 3, at 46717.

revised the Proposed Rules to generate the Final Rules.⁸ In most aspects, the Final Rules are less drastic than the Proposed Rules.⁹

The Final Rules alter the procedures for prosecuting patent applications in three major ways. First, the rules limit continuation and continuation-in-part applications, as well as requests for continued examination.¹⁰ Second, the rules limit the number of claims in an application.¹¹ Third, the rules require patent applicants to identify related applications.¹²

The rules, if implemented, will give applicants fewer chances to claim the subject matter within their applications. Consequently, the rules may decrease incentives for innovation, particularly in industries that rely on continuation applications, such as the biotechnology industry. Nevertheless, if the rules are successful in managing the backlog and decreasing the pendency of applications in the PTO, they may increase incentives for innovation in industries that rapidly send inventions to market, such as the software industry.

Part II of this Note briefly describes the current practice of patent prosecution and the rules and practices that the Final Rules may change. Part III discusses the PTO's motivation behind the rules and the major provisions of the Final Rules. Part IV discusses the industry and patent bar responses to the rules, the PTO's authority to promulgate rules, the ongoing litigation regarding the rules, and the future of the rules. Part V argues that the rules are not likely to help the PTO decrease its backlog of unexamined applications.

II. PRACTICE PRIOR TO THE FINAL RULES

Inventors obtain patents for their inventions through a process called patent prosecution.¹³ A patent applicant, usually acting through a patent attorney, prepares an application that describes an invention and files it with the PTO.¹⁴ The application includes a specification that describes the invention and one or more "claims" that precisely identify the scope of

8. *Id.* at 46718.

9. For example, the Proposed Rules would have limited applicants to one continuation per application without justification, whereas the Final Rules limit applicants to two continuations per application without justification. *Id.* at 46719.

10. *Id.* at 46716.

11. *Id.*

12. *Id.*

13. See ROBERT P. MERGES ET AL., INTELLECTUAL PROPERTY IN THE NEW TECHNOLOGICAL AGE 159-63 (4th ed. 2006).

14. *Id.* at 160.

legal protection that the applicant seeks.¹⁵ A patent examiner at the PTO examines the application to determine whether it meets the statutory requirements of the Patent Act.¹⁶ If the application is deficient, the examiner issues an “office action” setting forth the grounds of rejection.¹⁷ The applicant may then respond and argue against the rejection.¹⁸

In practice, this process of office action and response often involves successive rounds of negotiations between the applicant and the patent examiner.¹⁹ Typically, the negotiations discuss “prior art,”²⁰ which describes other patents or publications, filed or published before the filing date of the application (the “priority date”) that may render the invention unpatentable. Eventually, the examiner issues either a patent or a final rejection.²¹ An applicant who receives a final rejection may appeal the decision to the Board of Patent Appeals and Interferences (BPAI).²² The applicant may also continue to debate the examiner by filing one of several special types of applications, described in Section II.A, that claim the priority date of the initial application.²³

The remainder of this Part describes the major patent prosecution rules subject to amendment by the Final Rules: applications that enjoy the priority date of a prior application; the claims of a patent application; and the doctrine of double patenting. Part III will describe how the Final Rules will affect this framework.

A. Applications that Claim the Priority Date of a Prior Application

The first element of the prosecution process affected by the rules changes includes procedural tools that applicants use to: 1) convince the PTO that a patent is warranted and 2) reach an agreement with the PTO to define the scope of that patent. Continuation applications, continuation-in-part (CIP) applications, and divisional applications are all based on earlier applications submitted to the PTO and benefit from the earlier priority dates of those applications. A request for continued examination (RCE) is a request from an applicant to continue prosecution of an application after an examiner issues a final rejection; filing an RCE operates similarly to

15. *Id.*

16. *See id.*

17. *Id.*

18. *Id.*

19. *See id.* at 160-61.

20. *Id.* at 160.

21. *See id.* at 160-61.

22. *Id.* at 161.

23. *Id.*

filing a continuation application.²⁴ Earlier priority dates are valuable to applicants because they establish what prior art may be used against their applications.

1. *Continuation Applications*

A continuation application is a second application for the same invention disclosed in an earlier application, usually with different claims.²⁵ The new claims must be directed to subject matter described in the earlier application.²⁶ An applicant can file a continuation application at any time before the PTO issues a patent on, or the applicant abandons, the earlier application.²⁷ An applicant can also file a continuation application based on an earlier continuation application; multiple continuations filed in this manner create a chain of continuation applications that all trace priority to the first filed application. Congress authorized continuation applications in 35 U.S.C. § 120.²⁸

Pharmaceutical and biotechnology companies have long used continuation applications to update claims in an initial patent application when research and development that occurs after filing results in new information about the claimed invention.²⁹ These companies initially file broad application disclosures and then file continuation applications with narrower claims to cover specific uses discovered during research and clinical trials.³⁰ Companies often know that a new chemical type is important, but do not know which particular instances of a class are most useful as pharmaceuticals. Similarly, independent inventors and small companies use continuations when they need to test the market with new products; they can file broad initial disclosures and, after market studies, pursue narrow claims in continuation applications.³¹

24. *See id.* at 161 n.34.

25. U.S. DEP'T OF COMMERCE, MANUAL OF PATENT EXAMINING PROCEDURES § 201.07 (8th ed. rev. 5, 2006) [hereinafter MPEP], available at <http://www.uspto.gov/web/offices/pac/mpep/mpep.htm>.

26. *Id.*

27. *Id.*

28. 35 U.S.C. § 120 (2000).

29. *See, e.g.*, Letter from Danielle Pasqualone, Patent Counsel for Genentech, Inc., to Robert W. Bahr, U.S. PTO (May 1, 2006), available at http://www.uspto.gov/web/offices/pac/dapp/opla/comments/fpp_continuation/genentech.pdf.

30. Laxman Sahasrabuddhe, Note, *Is the PTO Authorized to Promulgate the Proposed Rule Change to the Continuation Practice?*, 22 BERKELEY TECH. L.J. 193, 201 (2007).

31. *Id.*

Currently, an applicant can file as many continuation applications as desired.³² Applicants file continuation applications to obtain claims varying in scope, and often desire broad claims to cover as many variations as possible, but narrow enough to improve the odds of surviving a validity challenge during litigation. For example, when the PTO allows narrow claims in an application but rejects broader claims, the applicant can allow the original application to issue as a patent with the narrow claims (and enforce that patent against competitors) and file a continuation application to pursue the broader claims.³³

2. *Continuation-In-Part Applications*

A CIP application also enjoys the priority date of an earlier application but adds “new matter” that was not disclosed in the earlier application.³⁴ The new matter is often a description of an improvement or variation of the original invention, such as an updated component that improves operation of a device described in an earlier application. Claims directed to the new matter are not entitled to the priority date of the earlier application.³⁵

3. *Divisional Applications*

A divisional application, like a continuation application, enjoys the priority date of an earlier application, but only contains claims directed to an independent or distinct invention “carved out” of the earlier application.³⁶ Applicants often file divisional applications when an examiner issues a restriction requirement,³⁷ a requirement that an application containing two or more independent and distinct inventions be restricted to one of the inventions.³⁸ Divisional applications are common in the pharmaceutical and biotechnology fields, where applicants often file applications with a large number of related chemical compounds and examiners issue restriction requirements that force applicants to subdivide their large applications.

32. *Tafas v. Dudas*, 511 F. Supp. 2d 652, 657 (E.D. Va. 2007).

33. *MERGES*, *supra* note 13, at 161.

34. *MPEP*, *supra* note 25, § 201.08.

35. *MERGES*, *supra* note 13, at 161.

36. *MPEP*, *supra* note 25, § 201.06.

37. *Id.*

38. 35 U.S.C. § 121 (2000).

4. *Requests for Continued Examination*

An applicant files an RCE to continue negotiating with an examiner after the examiner has issued a final rejection.³⁹ After the applicant files the RCE, the examiner withdraws the finality of the rejection, and the applicant presents new claims or arguments to the examiner.⁴⁰ Currently, an applicant can file as many RCEs as desired, and need only pay the additional application fees for each RCE.⁴¹ Applicants may file several RCEs where they are trying to develop complex arguments or persuade a recalcitrant examiner.

B. The Claims of a Patent Application

The second element of the prosecution process affected by the rules changes relates to the number of claims permitted in an application. The claims of a patent are a numbered series of sentences that describe precisely what the applicant regards as the invention and establish the “metes and bounds” of the property right established by the patent.⁴² Currently, the number claims that an applicant may put into a patent application is unlimited;⁴³ an applicant need only pay additional fees for additional claims.⁴⁴ Claims come in two forms: independent claims, which do not reference any other claims, and dependent claims, which narrow and elaborate on other claims.⁴⁵

Applicants accomplish a variety of goals by describing their inventions with multiple claims. In general, applicants want claims that are as broad (i.e., covering many variations of the invention) as the PTO will allow.⁴⁶ Nevertheless, applicants also want narrow claims to fall back on in case the broad claims granted by the PTO are later invalidated in litigation.⁴⁷ The examiner is more likely to allow narrower claims than broader ones.⁴⁸

39. 37 C.F.R. § 1.114 (2006).

40. *Id.*

41. *Id.*

42. *See* 35 U.S.C. § 112 (2000); *see also* ROBERT P. MERGES & JOHN P. DUFFY, PATENT LAW AND POLICY: CASES AND MATERIALS 26 (4th ed. 2007).

43. *See* Final Rules, *supra* note 3, at 46720-21.

44. *See* 37 C.F.R. § 1.16(h),(i).

45. 35 U.S.C. § 112 (2000).

46. MERGES & DUFFY, *supra* note 42, at 27.

47. *Id.* at 31.

48. *Id.*

C. Double Patenting

The third element of the prosecution process likely to be affected by the Final Rules relates to double patenting. Double patenting occurs when an applicant files a later application that claims almost the same subject matter as an earlier application or patent owned by the applicant.⁴⁹ In that case, if the PTO granted both the earlier and later patents, the patentee would effectively secure exclusive rights to the claimed subject matter for an extended term.⁵⁰ The doctrine of double patenting prevents this extension of the patent term by invalidating the claims of the later patent.⁵¹

The PTO issues two types of double patenting rejections. The first is statutory double patenting, or “same invention,” based on 35 U.S.C. § 101, which states in the singular that an inventor “may obtain a patent.”⁵² The PTO issues a statutory double patenting rejection when an applicant claims exactly the same subject matter in both an earlier application and a later application.⁵³ The second type of double patenting rejection is a non-statutory double patenting, which is based on a judicially created doctrine.⁵⁴ Typically, the PTO issues a nonstatutory double patenting rejection when a claim in a later application is obvious when considered against an earlier application by the same applicant.⁵⁵

An applicant may overcome a nonstatutory double patenting rejection by filing a “terminal disclaimer.”⁵⁶ The terminal disclaimer shortens the term of the later patent, thus preventing extension of the term of the earlier patent.⁵⁷ An applicant may not overcome a statutory double patenting rejection by filing a terminal disclaimer.⁵⁸ Currently, though, the applicant must only respond *after* an examiner has issued a rejection and need not submit any information *before* a rejection to demonstrate the absence of double patenting.

III. CHANGES TO PRACTICE UNDER THE FINAL RULES

The Final Rules, if implemented, will effect sweeping changes in the practice of patent prosecution. Under the Final Rules, applicants are per-

49. See MPEP, *supra* note 25, § 804.

50. See *id.*

51. See *id.*

52. *Id.*

53. *Id.* § 804(II)(A).

54. *Id.* § 804.

55. *Id.* § 804(II)(B).

56. *Id.* § 804.02(II).

57. See *id.* § 804.02(V).

58. *Id.* § 804.02(I).

mitted for each application to file only two continuation applications and one RCE without justification. Each application is limited to five independent claims and twenty-five total claims unless the applicant conducts a prior art search and submits a report to that effect. Finally, applicants are required to report related applications to help the PTO identify double patenting issues.

The Final Rules also add new terminology to patent prosecution. A “continuing application” is any application that claims priority to an earlier U.S. non-provisional application or Patent Cooperation Treaty (PCT) national phase application.⁵⁹ Therefore, continuing applications include continuation applications, CIP applications, and divisional applications. An “application family” is an application and its permitted continuation and CIP applications.⁶⁰ A “divisional application family” is a divisional application and its permitted continuation and CIP applications.⁶¹

This Part first discusses the PTO’s motivation for the Final Rules. Second, it discusses restrictions on continuing applications and RCEs. Third, it discusses claim limits and examination support documents. Fourth, it discusses related applications and when the PTO can presume that applications contain patentably indistinct claims.

A. The PTO’s Motivation for the Final Rules

The PTO asserts that the Final Rules are a response to “the need for a better focused and effective examination process to reduce the large and growing backlog of unexamined applications while maintaining or improving the quality of issued patents.”⁶² The PTO has repeatedly stated that it cannot reduce the backlog merely by hiring more examiners.⁶³ According to PTO projections, the backlog could reach 1.4 million unexamined applications by 2012,⁶⁴ and the average total pendency for applications within the PTO could reach 38.6 months.⁶⁵

59. Final Rules, *supra* note 3, at 46729.

60. U.S. PATENT & TRADEMARK OFFICE, QUESTIONS AND ANSWERS, CLAIMS AND CONTINUATIONS FINAL RULE A5 (2007), *available at* <http://www.uspto.gov/web/offices/pac/dapp/opla/presentation/ccfrfaq.pdf> [hereinafter FAQ].

61. *Id.*

62. Final Rules, *supra* note 3, at 46717.

63. *See, e.g., id.* at 46817, Response to Comment 278.

64. U.S. PATENT & TRADEMARK OFFICE, USPTO STRATEGIC PLAN 2007-2012 11 (2007), *available at* <http://www.uspto.gov/web/offices/com/strat2007/stratplan2007-2012.pdf>.

65. Final Rules, *supra* note 3, at 46817, Response to Comment 278.

The PTO also believes that unrestricted continuation applications and RCEs allow applicants to abuse the system.⁶⁶ To justify the Final Rules, the PTO relied on a 2004 article by Mark A. Lemley and Kimberly A. Moore titled "Ending Abuse of Patent Continuations."⁶⁷ Lemley and Moore argued that continuation practice has a number of harmful consequences for the patent system, most notably, delay and uncertainty.⁶⁸ Nevertheless, they acknowledge that a combination of legislation and court decisions have solved the worst abuse of continuation applications, known as "submarine patenting" and "evergreening."⁶⁹

Submarine patenting involved filing chains of continuation applications solely to delay issuance of a patent, with the hope of eventually using those patents to extract huge royalties from a mature industry that evolved around the disclosed technology.⁷⁰ Congress changed two rules in the 1990s that largely ended submarine patenting: first, Congress changed the patent term from seventeen years from the date of issuance to twenty years from filing date; and second, Congress required publication of most patent applications eighteen months after filing.⁷¹

Evergreening is a now defunct tactic that related entirely to pharmaceutical companies that exploited a loophole involving the FDA's "Orange Book."⁷² Specifically, an applicant could file multiple continuations covering obvious variants of the same drug and then list those patents with the FDA in the Orange Book.⁷³ Once those patents were listed, the patent owner could obtain, for each patent, a thirty-month stay preventing a generic drug company from entering the market while litigation was pending, thus gaming the Hatch-Waxman rules for pharmaceutical patents.⁷⁴ Congress closed this loophole in 2003 by requiring that patentees obtain no more than one thirty-month stay per product regardless of how many patents are listed in the Orange Book.⁷⁵

66. *Id.* at 46718-19.

67. *Id.* (citing Mark A. Lemley & Kimberly A. Moore, *Ending Abuse of Patent Continuations*, 84 B.U. L. REV. 63, 64 (2004)).

68. Lemley & Moore, *supra* note 67, at 71.

69. *Id.* at 79-94.

70. *Id.* at 79.

71. *Id.* at 80.

72. *Id.* at 81-83. Under the Hatch-Waxman Act, a pharmaceutical patent owner can list patents in the Orange Book, and then sue any generic company who intends to manufacture a listed drug and obtain an automatic thirty-month stay preventing the generic from entering the market. *Id.* at 82.

73. *Id.*

74. *Id.* at 82-83.

75. *Id.* at 83.

Although Congress has curbed the practices of submarine patenting and evergreening, the PTO asserts that the Final Rules are necessary to defeat other improper uses of continuations.⁷⁶ Specifically, the PTO is concerned that applicants are not distinctly claiming their inventions in their original applications, thus making those applications more difficult to examine.⁷⁷ Furthermore, the PTO believes that applicants are defeating the public notice function of patents by keeping application families open (i.e., subject to broadening claims in continuation applications) for long periods of time.⁷⁸

In addition to the PTO's belief that applicants are abusively filing continuation applications, the PTO avers that applicants file too many claims per application.⁷⁹ The PTO asserts that this hampers effective examination because "[a]pplications which contain a large number of claims . . . continue to absorb an inordinate amount of patent examining resources, as they are extremely difficult to properly process and examine."⁸⁰

B. Restrictions on Continuing Applications and RCEs

The Final Rules provide that an applicant may file only two continuation or CIP applications claiming the benefit of an initial application without justification.⁸¹ Furthermore, an applicant can only file one RCE in an application family without justification; the applicant may use the RCE to extend examination of either the initial application or a permitted continuation or CIP application.⁸² Applicants can submit an additional continuation application or RCE by filing a petition "showing why the amendment, argument, or evidence sought to be entered could not have been previously submitted."⁸³ Amendments, arguments, and evidence could have been "previously submitted" during the prosecution of the initial application, two continuation or CIP applications, and one RCE in an application family.⁸⁴

76. Final Rules, *supra* note 3, at 46719.

77. *Id.* at 46760, Comment 46.

78. *See, e.g., id.* at 46757, Comment 40.

79. *Id.* at 46720-21. If an application contains claims directed to independent and distinct inventions, the PTO can issue a restriction requirement and force the applicant to divide the application. *See supra* Section II.A.3.

80. Final Rules, *supra* note 3, at 46721.

81. FAQ, *supra* note 60, at B1.

82. *Id.*

83. Final Rules, *supra* note 3, at 46716.

84. *See* FAQ, *supra* note 60, at E6 ("If an amendment, argument or evidence could be submitted during the prosecution of the initial application, two continuation or CIP

1. *Petitions for Additional Continuation Applications and RCEs*

Applicants will find it difficult to make the proper showing to justify submission of additional continuation applications and RCEs. Under no circumstances will the PTO grant a petition automatically; each petition will be considered on a case-by-case basis.⁸⁵ The PTO asserts that, when deciding whether to grant a petition for additional continuations or RCEs, it *may* consider:

Whether the applicant should file an appeal or a petition under 37 CFR 1.181 (e.g., to withdraw the finality of an Office action) rather than a continuing application or RCE;

The number of applications filed in parallel or serially with substantially identical disclosures; and

Whether the evidence, amendments, or arguments are being submitted with reasonable diligence.⁸⁶

Applicants are “reasonably diligent” under the third factor when they submit applications that are initially in proper form for examination (e.g., free of typographical errors and the like) and they make earnest efforts to overcome outstanding rejections.⁸⁷

The PTO has identified several situations where it will not grant a petition for an additional continuation or RCE. Showing that the examiner made new arguments or a new ground of rejection in a final office action will not be sufficient justification, unless the applicant also shows that it could not have anticipated the new ground of rejection.⁸⁸ Similarly, showing that an applicant added new subject matter in a CIP application will not be sufficient justification.⁸⁹ The PTO will not grant a petition for an additional application where the applicant has changed patent lawyers, even where the previous patent lawyer made clear errors.⁹⁰ Furthermore, an applicant cannot circumvent these requirements by submitting a new set of claims instead of an amendment: the PTO considers a new claim in

applications, and an RCE in an application family, applicant must present such an amendment, argument or evidence earlier rather than wait to submit it later in an additional continuing application or RCE.”).

85. *Id.* at E4.

86. *Id.* at E6.

87. *Id.*

88. *Id.* at E7.

89. *Id.* at E8.

90. Final Rules, *supra* note 3, at 46776.

a continuation application to be “an amendment to the claims of the prior-filed application.”⁹¹

Perhaps most notably, the PTO has indicated that it will likely deny a petition for an additional RCE to submit an Information Disclosure Statement (IDS), which describes relevant prior art that the applicant is aware of, or an amendment necessitated by newly discovered prior art.⁹² Consequently, an applicant who discovers new prior art after receiving a notice of allowance will not be able to file an RCE with an IDS. However, the PTO has proposed new IDS rules⁹³ that would alleviate the harshness of this rule by allowing applicants to submit an IDS without a continuation or RCE in some cases.⁹⁴ Furthermore, applicants who receive prior art from a foreign patent office search will be permitted to file an IDS after the close of prosecution in some cases.⁹⁵

The PTO has also identified a few situations where it will likely grant a petition. For example, the PTO has stated it will likely grant a petition if:

in a continuing application or request for continued examination, the data necessary to support a showing of unexpected results just became available to overcome a new rejection under 35 U.S.C. 103 made in the final Office action, and the data is the result of a lengthy experimentation that was diligently commenced and could not have been completed earlier.⁹⁶

The PTO will also likely grant a petition in the unusual situation where “an interference is declared in a second continuation or continuation-in-part application that contains both claims corresponding to the count and claims not corresponding to the count, and the BPAI suggests that the claims not corresponding to the count be . . . pursued in a separate application.”⁹⁷

2. *Divisional Application Practice*

An applicant may file two continuations and one RCE based on a divisional application without justification and without exhausting the permitted continuations and RCE of the initial application. Thus, a divisional application is permitted its own family of continuations and RCEs, distinct

91. FAQ, *supra* note 60, at E2.

92. Final Rules, *supra* note 3, at 46773, Response to Comment 85.

93. *Id.* at 46764, Response to Comment 58.

94. *Id.*; *see also id.* at 46773, Response to Comment 85.

95. *Id.* at 46773, Response to Comment 85.

96. *Id.*

97. *Id.* at 46776.

from the continuations and RCEs permitted for the initial application.⁹⁸ An applicant may file a divisional application only if the PTO issues a restriction requirement.⁹⁹ Nevertheless, an applicant may file a Suggested Requirement for Restriction (SRR) if two or more independent and distinct inventions are claimed in an application; the SRR proposes the applicant's desired restriction requirement to the PTO.¹⁰⁰ The applicant must file the SRR before the PTO issues a first office action on the merits or its own restriction requirement.¹⁰¹

The Proposed Rules would have limited applicants to filing divisional applications in parallel, but the Final Rules permit applicants to file divisional applications in serial.¹⁰² In other words, the Proposed Rules would have allowed applicants to file divisional applications based on an initial application only while that initial application was still pending, which would have required applicants to file all divisional applications before the initial application issued. The Final Rules allow applicants to file divisional applications that are based on other divisional applications (i.e., divisional applications filed after the initial application). Thus, only one application in the family needs to be pending to permit an applicant to file additional divisional applications. Applicants filing divisional applications in this manner (i.e., serially) create a chain of applications similar to the way that applicants created chains of continuation applications prior to the Final Rules.

C. Claim Limits and Examination Support Documents

The Final Rules require applicants whose applications contain more than five independent claims or more than twenty-five total claims to submit an examination support document (ESD), which is essentially a detailed prior art search report.¹⁰³ The five/twenty-five limit includes all of the claims in any other co-pending application having a patentably indistinct claim, including those co-pending applications that the PTO pre-

98. FAQ, *supra* note 60, at C2.

99. *Id.* at C1.

100. *See id.* at H1.

101. *Id.* at H1-H2.

102. Final Rules, *supra* note 3, at 46718.

103. *Id.* at 46721. The PTO believes that ESDs will encourage faster examination. *See id.* at 46718 ("The examination support document will assist the Office in the examination process and the determination of patentability of the invention by providing the most relevant prior art and other useful information.").

sumes contain at least one patentably indistinct claim.¹⁰⁴ An ESD must include:

- (1) A statement that a preexamination search . . . was conducted . . .
- (2) A listing of the reference or references deemed most closely related to the subject matter of each of the claims . . .
- (3) For each reference cited, an identification of all the limitations of each of the claims . . . that are disclosed by the reference . . .
- (4) A detailed explanation particularly pointing out how each of the independent claims is patentable over the cited references; and
- (5) A showing of where each limitation of each of the claims (whether in independent or dependent form) finds support under the first paragraph of 35 U.S.C. § 112 in the written description of the specification.¹⁰⁵

The ESD is substantially similar to the Accelerated Examination Support Document that applicants are required to provide in order to use the Accelerated Examination program.¹⁰⁶

Most applicants will avoid filing ESDs. Writing an ESD will be expensive; the PTO estimates that it could cost up to \$13,000 per application for small entities.¹⁰⁷ Additionally, mistakes made during the search required to prepare the ESD will expose the applicant to inequitable conduct charges during litigation.¹⁰⁸ Therefore, most applicants will likely limit claims in their applications to the five/twenty-five limit. Some practitioners have suggested that they will never file ESDs because of the risks involved.¹⁰⁹

104. FAQ, *supra* note 60, at F1; *see also infra* Section III.D (discussing when the PTO presumes that co-pending applications have patentably indistinct claims).

105. Final Rules, *supra* note 3, at 46842.

106. *See* U.S. PATENT & TRADEMARK OFFICE, COMPARISON OF ACCELERATED EXAMINATION SUPPORT DOCUMENT AND EXAMINATION SUPPORT DOCUMENT UNDER 37 CFR 1.265 (2007), *available at* <http://www.uspto.gov/web/offices/pac/dapp/opla/presentation/ccfrcomparison.pdf>.

107. ICF INTERNATIONAL, CERTIFICATION ANALYSIS UNDER THE REGULATORY FLEXIBILITY ACT 18 (June 29, 2007), *available at* <http://www.uspto.gov/web/offices/pac/dapp/opla/presentation/ccfrcertificationanalysis.pdf>.

108. Posting of Russ Krajec to Anything Under the Sun Made By Man, Patent Strategies in Light of the New Rules, http://www.krajec.com/index.php?/weblog/patent_strategies_in_light_of_the_new_rules/ (Sept. 4, 2007).

109. *Id.*; *see also* Posting of Peter Zura to 271 Patent Blog, The “5/25 Rule”, “Representative Claims”, and the USPTO, <http://271patent.blogspot.com/2007/08/525-rule-representative-claims-and.html> (Aug. 27, 2007).

1. *Impacts of the Five/Twenty-Five Limit and ESD Requirement*

According to the PTO, the Final Rules will not require many applicants to file an ESD or file fewer claims. Less than eight percent of the applications filed in fiscal year 2006 would have required either the cancellation of one or more independent claims or an ESD to comply with the rules.¹¹⁰ Less than twenty-five percent of the applications filed in fiscal year 2006 would have required either the cancellation of one or more dependent claims or an ESD for compliance.¹¹¹

Nevertheless, the Final Rules may have a disparate impact on patents according to their significance. Specifically, the rules may have more effect on “important” patents, those patents that are more likely to be involved in litigation.¹¹² According to one report, approximately 4400 of the patents issued between January 1, 2002 and August 1, 2007 have been involved in some type of litigation, and 35% of these “important” patents have more than twenty-five claims.¹¹³ In contrast, the PTO asserted that only about 5% of all applications filed in fiscal year 2006 would have required either the cancellation of claims or an ESD.¹¹⁴ Additionally, the number of patents affected by the claim limits varies across technology groups. One study found that from 2002-2006, 46% of medical device patents would have been affected, 43% of pharmaceutical patents would have been affected, and 47% of biotechnology patents would have been affected.¹¹⁵

2. *The Claim Limits in the Finals Rules Differ Substantially from the Limits in the Proposed Rules*

The five/twenty-five claim limit is substantially different from the standard the PTO suggested in the Proposed Rules, which would have required applicants to elect ten “representative” claims for initial examination, including all of the independent claims.¹¹⁶ The proposed approach would have allowed applicants to secure as many as ten independent claims and an unlimited number of dependent claims without an ESD, but

110. Final Rules, *supra* note 3, at 46718.

111. *Id.*

112. Posting of Dennis Crouch to Patently-O, Patents with More Than 25 Claims, <http://www.patentlyo.com/patent/2007/08/patents-with-mo.html> (Aug. 23, 2007).

113. *Id.*

114. Final Rules, *supra* note 3, at 46718 (“[B]y prosecuting an initial application and two continuation applications serially, about ninety-five percent of the applications filed in fiscal year 2006 would not have required either the cancellation of any claims or an examination support document.”).

115. Zura, *supra* note 109.

116. Final Rules, *supra* note 3, at 46718.

could have protracted the examination process. The PTO asserts that its departure from the Proposed Rules was in response to comments it received during the comment period.¹¹⁷ This provision is one of few where the Final Rules are stricter than the Proposed Rules.

D. Related Applications and the Rebuttable Presumption of Patentably Indistinct Claims

The Final Rules require applicants to identify certain commonly owned applications and patents and allow the PTO to presume that certain applications contain patentably indistinct claims.¹¹⁸ The PTO created these provisions to prevent applicants from filing multiple similar applications, which could have allowed applicants to circumvent the ESD requirement and secure claims in excess of the five/twenty-five limit.¹¹⁹ Although multiple similar applications would be subject to double patenting rejections without these provisions, the PTO asserts that examination will be more efficient when double patenting issues are identified and resolved early in the process with an applicant's assistance.¹²⁰

Under the Final Rules, an applicant must identify other commonly owned pending applications or patents that: (1) have a claimed filing or priority date within two months of the claimed filing or priority date of the application; and (2) name at least one inventor in common with the application.¹²¹ The Final Rules also create a rebuttable presumption that applications filed by the same applicant on the same day, with at least one shared inventor and substantially overlapping disclosures, contain at least one claim pair between the two applications that is not patentably distinct.¹²² In this case, the applicant must file a terminal disclaimer or explain how the applications (or application and patent) contain only patentably distinct claims.¹²³

Applicants still have a duty to notify examiners of other applications that are "material to patentability," so an applicant cannot easily evade the identification requirement by intentionally filing outside the two-month window.¹²⁴ Commonly owned applications containing patentably indistinct claims will be treated as a single application for claim counting purposes; either the total number of claims in all of those applications must be

117. *Id.*

118. *Id.* at 46721-22.

119. *Id.* at 46722.

120. *Id.* at 46780, Response to Comment 112.

121. FAQ, *supra* note 60, at J1.

122. *Id.* at J8.

123. *Id.* at J9.

124. *Id.* at J7.

below the five/twenty-five limit or the common applicant must submit an ESD.¹²⁵ The PTO may refer any registered practitioner who repeatedly fails to comply with this rule to the Office of Enrollment and Discipline.¹²⁶ Furthermore, failure to comply could expose the patent to charges of inequitable conduct in subsequent litigation.

As a result of the related application disclosure requirement, large technology companies that file thousands or tens of thousands of patent applications in a year will disclose long lists of related applications. For example, many software and computer technology patents recite common language (“boilerplate”) that describes generic computers and computing technology, which means that the new disclosure requirement could require them to submit a list of hundreds or even thousands of patents. These long lists will likely be too cumbersome to help examiners find double-patenting situations.

Nevertheless, the provisions of the Final Rules regarding related applications are not as onerous as they appeared when initially published. The Proposed Rules would have required applicants to identify related applications for all pending applications, including applications filed before the November 1, 2007 effective date of the Final Rules. For example, in preparation for enactment of the rules, IBM conducted an initial search and believed that it would be required to disclose approximately 10,000 related applications (of its entire portfolio of over 25,000 pending applications) to the PTO under the Final Rules.¹²⁷ In early October, before the Final Rules went into effect but after they had been published for over a month, the PTO effectively withdrew that requirement in a published “clarification” document.¹²⁸ Therefore, under the clarification document, IBM did not need to review its entire portfolio of pending applications.

125. *Id.* at F1.

126. *Id.* at J15.

127. Declaration of David J. Kappos, On Behalf of IBM, In Support of AIPLA Amicus Brief in Matter of GSK Preliminary Injunction Motion to Stay New PTO Rules, ¶¶ 7-8 (Oct. 24, 2007), *available at* http://www.patentlyo.com/patent/Kappos_20Declaration.pdf.

128. U.S. PATENT & TRADEMARK OFFICE, CLARIFICATION OF THE TRANSITIONAL PROVISIONS RELATING TO CONTINUING APPLICATIONS AND APPLICATIONS CONTAINING PATENTABLY INDISTINCT CLAIMS 3-5 (Oct. 10, 2007), *available at* <http://www.uspto.gov/web/offices/pac/dapp/opla/preognotice/clmcontclarification.pdf>.

IV. INDUSTRY RESPONSE AND THE STATUS OF THE RULES

The Final Rules, controversial since their conception, limit continuation and CIP applications, RCEs, and claims, and they require applicants to disclose certain related applications to help the PTO identify double patenting. This Part discusses the industry and patent bar response to the Final Rules, the PTO's authority to promulgate them, ongoing litigation regarding them, and their future.

A. Response to the Proposed Rules

The PTO initially published the Proposed Rules in January 2006 and received a substantial amount of feedback.¹²⁹ Software companies and electronics companies generally supported the Proposed Rules because those companies develop products rapidly and are concerned with reducing application pendency.¹³⁰ Biotechnology companies and independent inventors opposed the Proposed Rules because those groups must file patent applications on many inventions before they can determine which variations will be valuable and therefore rely on continuation applications in order to claim the marketable invention.¹³¹

The relationship between the PTO and the patent bar is changing as patent practitioners develop hostile feelings toward the PTO.¹³² Patent

129. Final Rules, *supra* note 3, at 46717-18.

130. *See, e.g.*, Letter from Robert W. Holleyman, II., President and CEO of Business Software Alliance, to Jon Dudas, Dir., U.S. PTO (May 3, 2006), *available at* http://www.uspto.gov/web/offices/pac/dapp/opla/comments/fpp_continuation/bsa.pdf (“The consequences of a patent system with a million-plus application backlog and 8 year average pendency in art areas relating to the technologies being developed by our members is very troubling and particularly burdensome to the highly innovative technology companies in the software and hardware sectors.”); Letter from David Simon, Chief Patent Counsel of Intel Corp., to John Doll, Commissioner for Patents at the PTO (May 3, 2006), *available at* http://www.uspto.gov/web/offices/pac/dapp/opla/comments/fpp_continuation/intel.pdf.

131. *See, e.g.*, Letter from A. Scott Whitaker, COO of Biotechnology Industry Organization, to Robert W. Bahr, U.S. PTO (May 2, 2006), *available at* http://www.uspto.gov/web/offices/pac/dapp/opla/comments/fpp_continuation/bio.pdf; Letter from Ron Rhode, Inventors Alliance, to John Doll, PTO Commissioner for Patents (May 3, 2006), *available at* http://www.uspto.gov/web/offices/pac/dapp/opla/comments/fpp_continuation/ia_con.pdf.

132. *See, e.g.*, Posting of Joff Wild to IAM Magazine Blog, Fear and Loathing in the US Capital, <http://www.iam-magazine.com/blog/detail.aspx?g=35cea80a-d11d-4823-bbd1-6b904ee9a029> (Oct. 20, 2007) (“[T]he relationship between the USPTO and practitioners is profoundly unhealthy at the moment There is real venom—sometimes even contempt—in the language I have been hearing from members of the US Patent bar . . . when they speak about the [PTO].”).

lawyers voiced negative opinions on the Final Rules, and they have reacted similarly to related rules packages that the PTO is promulgating, including rules for appeals to the BPAI and rules regarding IDSs.¹³³ One group of patent practitioners went further and sued the Secretary of Commerce for appointing Margaret Peterlin as deputy director of the PTO in May 2007, alleging that Peterlin's appointment was illegal under 35 U.S.C. 3(b), which requires that the deputy director have "a professional background and experience in patent or trademark law."¹³⁴ The U.S. District Court for the District of Columbia dismissed that lawsuit.¹³⁵

B. The PTO's Authority to Promulgate the Final Rules

The PTO may not have the authority to limit continuation applications as a matter of administrative law.¹³⁶ 35 U.S.C. § 2(b)(2) authorizes the PTO to promulgate rules; however, the PTO is only authorized to promulgate procedural rules, not substantive rules.¹³⁷ It is unclear whether the Final Rules are purely procedural or whether they also include substantive aspects.¹³⁸

The PTO previously attempted to limit the number of allowable continuations in *In re Henriksen*.¹³⁹ There, the Court of Customs and Patent Appeals rejected the PTO's attempt to restrict the number of continuation applications as a matter of right to three.¹⁴⁰ Nevertheless, in *In re Bogese*,¹⁴¹ the Federal Circuit affirmed the PTO's authority to reject continuation applications where an applicant fails to advance prosecution of his application for an unreasonably long time.¹⁴² There, the applicant filed a chain of eleven continuation applications without amending the claims

133. See Posting of Peter Zura to 271 Patent Blog, Comments Posted on USPTO Regarding New BPAI Rule Changes, <http://271patent.blogspot.com/2007/11/comments-posted-on-uspto-on-new-appeal.html> (Nov. 8, 2007) ("The comments are in on the PTO's proposed BPAI rule changes—they are not favorable.").

134. Posting of Dennis Crouch to Patently-O, Patently-O TidBits, <http://www.patentlyo.com/patent/2007/07/patently-o-ti-1.html> (July 24, 2007).

135. Posting of Peter Zura to 271 Patent Blog, Peterlin Lawsuit Dismissed in the DC District Court, <http://271patent.blogspot.com/2007/12/peterlin-lawsuit-dismissed-in-dc.html> (Dec. 10, 2007).

136. See Sahasrabuddhe, *supra* note 30, at 193-94.

137. *Id.* at 194.

138. See *id.* at 195.

139. 399 F.2d 253 (C.C.P.A. 1968).

140. *Id.* at 255.

141. 303 F.3d 1362 (Fed. Cir. 2002).

142. *Id.* at 1363.

or offering any arguments addressing the rejections in any of those applications.¹⁴³

C. The Ongoing Litigation

When the PTO published the Final Rules in August 2007, an individual inventor, Dr. Triantafyllos Tafas, immediately filed a declaratory judgment action in the U.S. District Court for the Eastern District of Virginia, requesting that the court declare the Final Rules in conflict with the Patent Act and therefore invalid.¹⁴⁴ Later, pharmaceutical heavyweight GlaxoSmithKline (GSK) filed another action requesting the court to enjoin the PTO before the effective date of the rules.¹⁴⁵ The court consolidated the two cases.¹⁴⁶

The court scheduled a hearing to decide a motion for a preliminary injunction on October 31, 2007, the day before the PTO's planned effective date.¹⁴⁷ Patent prosecutors watched anxiously and frantically filed continuation applications and RCEs.¹⁴⁸ On the morning of the 31st, Judge James Cacheris issued a preliminary injunction from the bench.¹⁴⁹ Patent prosecutors rejoiced as the PTO belatedly posted a notice on its website that the Final Rules would not be going into effect.¹⁵⁰

The court held in favor of GSK on each of the four factors relevant to granting the preliminary injunction.¹⁵¹ The court considered the following four factors: (1) the likelihood of the plaintiff's success on the merits; (2)

143. *Id.* at 1364-65.

144. Posting of Dennis Crouch to Patently-O, Dr. Tafas Files Declaratory Judgment Action to Block Implementation of Continuation Rules, <http://www.patentlyo.com/patent/2007/08/dr-tafas-files-.html> (Aug. 22, 2007).

145. Posting of Dennis Crouch to Patently-O, GlaxoSmithKline vs. Dudas: An Attempt to Stop Implementation of PTO Prosecution Rules, <http://www.patentlyo.com/patent/2007/10/glaxosmithkline.html> (Oct. 13, 2007).

146. MVS Filewrapper Blawg, Glaxo's preliminary injunction motion to be heard October 31, consolidated with earlier challenge, <http://www.filewrapper.com/index.cfm/2007/10/18/Glaxos-preliminary-injunction-motion-to-be-heard-October-31-consolidated-with-earlier-challenge> (Oct. 18, 2007).

147. *Id.*

148. See Posting of Dennis Crouch to Patently-O, Patent Prosecutors: Don't Wait for the Witching Hour, <http://www.patentlyo.com/patent/2007/10/patent-prosecut.html> (Oct. 29, 2007).

149. Posting of Gene Quinn to PLI Patent Blog, Glaxo Wins Injunction—Part 2, <http://www.pli.edu/patentcenter/blog.asp?view=plink&id=151> (Oct. 31, 2007 12:10 p.m.).

150. Posting of Sherri Oslick to Patent Docs, USPTO Late to Its Own Party, http://www.patentdocs.net/patent_docs/2007/10/uspto-late-to-i.html (Oct. 31, 2007 10:45 a.m.).

151. *Tafas v. Dudas (Tafas I)*, 511 F. Supp. 2d 652, 663-71 (E.D. Va. 2007).

irreparable harm if the injunction is not granted; (3) the balance of hardships between the parties; and (4) the public interest.¹⁵²

Regarding likelihood of success, the court discussed six arguments advanced by GSK as to why it was likely to prevail on the merits of the case.¹⁵³ The court found that GSK was likely to succeed on four of its arguments, that the PTO was likely to succeed on one, and that neither party could claim likely success on the remaining issue.¹⁵⁴

In favor of GSK, the court found that GSK “created a colorable question as to whether the Final Rules are truly substantive” and therefore was likely to show that the PTO, which only has authority to promulgate procedural rules, did not have the authority to promulgate the Final Rules.¹⁵⁵ The court also found that GSK would likely prevail on its claim that “Section 120 of Title 35 prohibits the PTO from limiting the number of continuation applications that may be filed.”¹⁵⁶ Furthermore, the court found that GSK demonstrated a real likelihood of success in showing that the rules were impermissibly retroactive.¹⁵⁷ Finally, the court found that GSK “raised serious concerns as to whether a reasonably prudent person would be able comply with the ESD requirements,” and that therefore GSK was likely to win on its Constitutional vagueness challenge.¹⁵⁸

In favor of the PTO, the court found that GSK was not likely to prevail in showing that the PTO’s rationale, that the rules are justified on grounds of administrative efficiency, was arbitrary and capricious.¹⁵⁹ The court relied on the fact that the PTO considered weaker alternatives and concluded that those alternatives would be inadequate.¹⁶⁰ Furthermore, the court found that neither party could claim a strong likelihood of success on the issue of whether the limits on claims and RCEs are contrary to the Patent Act.¹⁶¹

152. *Id.* at 659 (citing *Abbott Labs. v. Andrx Pharms., Inc.*, 473 F.3d 1196, 1200-01 (Fed. Cir. 2007)).

153. *Tafas I*, 511 F. Supp. 2d at 664-68.

154. *Id.*

155. *Id.* at 664.

156. *Id.* at 664-65.

157. *Id.* at 667.

158. *Id.* at 668.

159. *Id.* at 666.

160. *Id.*

161. *Id.* at 665.

1. *The ESD Requirements May Be Unconstitutionally Vague*

GSK argued that the pre-examination search rule is vague and does not put applicants on sufficient notice as to how to comply.¹⁶² According to GSK, the rule, which requires searching “U.S. patents and patent application publications, foreign patent documents and non-patent literature,” does not provide any boundaries on the scope of the search, such as whether electronic or manual searches are required, which countries’ databases must be searched, or which libraries must be searched.¹⁶³ Furthermore, GSK argued that the PTO’s guidance documents are not regulations and do not cure the vagueness of the ESD requirement.¹⁶⁴

The PTO responded by arguing that there is no due process interest in patent applications or procedures, and further, that the ESD requirement is clear.¹⁶⁵ The PTO contended that, although the rule itself does not address “every imaginable circumstance that may confront a patent applicant conducting a search,” the rule is constitutionally sound because of the guidance from the final Federal Register notice, the Manual of Patent Examining and Procedure (MPEP), and the PTO’s extensive public guidance, including the FAQ document posted on the PTO’s website.¹⁶⁶

The court held that GSK had demonstrated a real likelihood of success on this issue, apparently crediting GSK’s rebuttal argument that the need for official guidance suggests an admission of vagueness.¹⁶⁷ The court also suggested that any guidance documents generated by the PTO outside of the notice and comment rulemaking process violate the Administrative Procedure Act.¹⁶⁸

2. *A Hobson’s Choice?*

GSK also argued that the standard for granting petitions for additional continuations forces it and other applicants into a Hobson’s choice¹⁶⁹ un-

162. Plaintiffs’ Motion for a Temporary Restraining Order and Preliminary Injunction at 26, *Tafas v. Dudas*, 511 F. Supp. 2d 652 (E.D. Va. 2007) (Civ. No. 1:07cv1008) [hereinafter GSK Motion].

163. *Id.* at 26-27.

164. *Id.* at 27.

165. Defendants’ Opposition to Plaintiffs’ Motion for a Temporary Restraining Order and Preliminary Injunction at 35, *Tafas v. Dudas*, 511 F. Supp. 2d 652 (E.D. Va. 2007) (Civ. No. 1:07cv1008 (JCC/TRJ) Consolidated with No. 1:07cv846) [hereinafter PTO Motion].

166. *Id.* at 26-37.

167. *Tafas v. Dudas*, 511 F. Supp. 2d 652, 668 (E.D. Va. 2007).

168. *Id.*

169. A “Hobson’s Choice” is an apparently free choice, but one that is made because there was no real alternative.

der PTO ethical rules that bar a practitioner from knowingly making a false statement of law or fact.¹⁷⁰ According to GSK, the PTO made it clear that the standard—that a petition will be denied unless the applicant “could not have” previously entered the argument or amendment—applies not only to the grant of a petition, but also to the actual filing of the petition.¹⁷¹ Consequently, according to GSK, if an applicant wants to file a petition for an additional continuation or RCE but knows that it physically could have previously presented the amendment, evidence, or argument, then the applicant is barred from even filing the petition.¹⁷² GSK called this situation a “regulatory trap.”¹⁷³

The PTO responded by noting that other procedural options exist that allow applicants to claim all of the subject matter in their applications without using the petition process.¹⁷⁴ In particular, the PTO pointed out that applicants can claim the subject matter in the initial application and any continuation applications, and that applicants can use SRRs and divisional applications to add claims drawn to independent or distinct inventions.¹⁷⁵ Citing these options, the PTO called GSK’s concern about violating ethical rules “a red herring.”¹⁷⁶

The court did not rule on that issue or even discuss it. Many practitioners agree with GSK—they would like to be able to file petitions and argue them even if they know that under the strict standard they are not entitled to additional applications. Nevertheless, a relaxed standard would place an additional burden on the PTO by requiring it to review petitions filed by applicants who know they cannot meet the “could not have” standard.

D. The Future of the Final Rules

The court in the GSK litigation recently upheld its preliminary decision and granted summary judgment in favor of GSK and Tafas.¹⁷⁷ The court held that the Final Rules—including the 5/25 claim limits and the limits on RCEs—are substantive in nature.¹⁷⁸ The PTO’s rulemaking authority does not extend to substantive rules, so the court found the Final

170. GSK Motion, *supra* note 162, at 19.

171. *Id.*

172. *Id.* at 19-20.

173. *Id.* at 20.

174. PTO Motion, *supra* note 165, at 14-15.

175. *Id.*

176. *Id.* at 15.

177. *Tafas v. Dudas (Tafas II)*, 2008 U.S. Dist. LEXIS 26086 (E.D. Va. Apr. 1, 2008).

178. *Id.* at *15, *25-34.

Rules void as unlawful agency action under section 706(2) of the Administrative Procedure Act.¹⁷⁹

The PTO plans to appeal that decision to the Federal Circuit.¹⁸⁰ Some provisions of the Final Rules may survive, however, even if some are ultimately blocked.

If the Federal Circuit enjoins the PTO from implementing some or all of the Final Rules, Congress may grant the PTO explicit authority to promulgate the rules. The Patent Reform Act of 2007, passed by the House in September 2007 and pending in the Senate as of this writing, amends 35 U.S.C. § 2(c) by adding the following:

The powers granted under paragraph (2) of subsection (b) include the authority to promulgate regulations to ensure the quality and timeliness of applications and their examination, including specifying circumstances under which an application for patent may claim the benefit under sections 120, 121 and 365(c) of the filing date of a prior filed application for patent.¹⁸¹

The House Report clarifies that this section is intended to “resolve the ambiguity behind the USPTO’s rulemaking authority that *In re Henriksen* has caused,” and that the PTO “has always had authority to promulgate rules that place limitations or conditions on patent applications, including continuation applications.”¹⁸² As of this writing, the Senate is still struggling with the Patent Reform Act, which includes many other provisions.¹⁸³

V. WILL THE FINAL RULES HELP REDUCE THE BACKLOG?

The PTO asserts that the Final Rules will assist it to achieve two primary goals: to reduce the backlog by improving the efficiency of examination, and to improve the quality of issued patents, making them easier to evaluate, enforce, and litigate. Many participants argued during the comment period that the rules will not accomplish these goals.¹⁸⁴ Nevertheless,

179. *Id.* at *34 (citing 5 U.S.C. § 706(2)).

180. Posting of Dennis Crouch to Patently-O, *Tafas v. Dudas*: Appeal and Legislation, <http://www.patentlyo.com/patent/2008/04/tafas-v-dudas-a.html> (Apr. 2, 2008).

181. Patent Reform Act of 2007, H.R. 1908, 110th Cong. § 14(a) (as passed by House, Sept. 10, 2007).

182. H.R. Rep. No. 110-314, at 87 (2007).

183. Posting of Dennis Crouch to Patently-O, Patent Reform in the Senate, <http://www.patentlyo.com/patent/2007/10/patent-reform-i.html> (Oct. 29, 2007).

184. *See, e.g.*, Final Rules, *supra* note 3, at 46763, Comment 55.

the PTO remains confident that under the Final Rules, “the exchange between applicant and the examiner will be more efficient because applicant can no longer delay the submissions of amendments, argument, and evidence.”¹⁸⁵

It is unclear whether and to what extent the rules will alleviate the backlog of unexamined applications. The PTO acknowledges that the rules changes alone cannot control the backlog.¹⁸⁶ Nevertheless, the PTO asserts that the Final Rules, as part of a comprehensive effort including hiring new examiners, are crucial to managing the backlog and assuring timely examination.¹⁸⁷

This Part analyzes whether the rules are likely to reduce the backlog and concludes that any reduction due to the rules will be small relative to the overall size of the backlog for several reasons, which are discussed in the following Sections. First, the Final Rules will not significantly decrease the number of continuing applications. Second, appeals to the BPAI will increase as a result of the Final Rules and will thus delay examination. Third, additional examination burdens will offset improvements to examination speed attributable to fewer claims. Fourth, the rules do not address the root of the problem: the PTO’s lack of resources to hire and retain examiners.

A. The Number of Continuing Applications Will Probably Not Significantly Decrease

The PTO asserts that one reason the backlog is so severe is that applicants file too many continuing applications.¹⁸⁸ According to the PTO, the volume of continuing applications “is having a crippling effect on the Office’s ability to examine ‘new’ (*i.e.*, non-continuing) applications.”¹⁸⁹ In particular, the PTO points out that the volume of continuation application filings (including RCEs but not divisional applications) as a percentage of overall filings has increased steadily from about 11.4 percent in fiscal year 1980 to 29.4 percent in fiscal year 2006.¹⁹⁰ However, some commentators believe that the PTO’s statistics are misleading and that continuation applications as a percentage of overall filings have not grown over a longer

185. *Id.* at 46764.

186. *Id.* at 46756 (“The [PTO] does not expect that the changes being adopted in this final rule alone will be sufficient to address the growing backlog of unexamined patent applications.”).

187. *Id.* at 46764.

188. *See id.* at 46718.

189. *Id.*

190. *Id.*

time period.¹⁹¹ Indeed, these commentators establish that the actual percentage of second continuation applications filed per total applications filed *decreased* from 2002-2005.¹⁹²

One reason for the popularity of continuations and RCEs is that the examiner production system, which measures examiners' productivity and is used to monitor and reward examiners, encourages examiners to draw out the examination process.¹⁹³ Patent examiners receive credit, called "counts," for issuing first office actions and for disposing of applications by finally rejecting or allowing them.¹⁹⁴ Examiners are assigned production goals on the basis of the number of counts they are expected to earn in a two-week period.¹⁹⁵ Examiners consider a count earned by examining a continuation application or an RCE to be an "easy" count if they examined the initial application and are already familiar with subject matter.¹⁹⁶ This encourages examiners to issue final rejections as quickly as possible so that they can get easy counts by examining RCEs and continuations; this in turn causes applicants to file RCEs and continuations to placate examiners.¹⁹⁷

191. Stephen T. Schreiner & Patrick A. Doody, *Patent Continuation Applications: How the PTO's Proposed New Rules Undermine an Important Part of the U.S. Patent System with Hundreds of Years of History*, 88 J. PAT. & TRADEMARK OFF. SOC'Y 556, 566-67 (2006) ("[W]ith the exception of the anomaly in the mid 1990's due to enactment of the 20 year patent term from date of filing, the percentage of continuations has stayed statistically the same (about 27%) since 1975.").

192. *Id.* at 564. Furthermore, the Final Rules, unlike the Proposed Rules, only impede third continuation applications, not second continuation applications. *See supra* Section III.B.

193. *See* Harold C. Wegner, Testimony on the New Rules (Mar. 14, 2006), *available at* http://www.uspto.gov/web/offices/pac/dapp/opla/comments/fpp_continuation/wegner.pdf. Wegner asserts that examiners trying to boost their production figures is "[o]ne of the greatest abuses that has spawned the proliferation of continuing applications" and that "[t]he proof of the pudding lies in the greatly increased number of continuing application filings." *Id.*

194. UNITED STATES GOVERNMENT ACCOUNTABILITY OFFICE, U.S. PATENT AND TRADEMARK OFFICE: HIRING EFFORTS ARE NOT SUFFICIENT TO REDUCE THE PATENT APPLICATION BACKLOG 7 (Sept. 2007), *available at* <http://www.gao.gov/new.items/d071102.pdf> [hereinafter GAO REPORT].

195. GAO REPORT, *supra* note 194, at 7.

196. Posting to Just a Patent Examiner, Hard Counts, Easy Counts, and the New Rules, <http://just-n-examiner.livejournal.com/24329.html> (Oct. 20, 2007 17:08:00); *but see* Lemley & Moore, *supra* note 53, at 74 (arguing that continuations "wear down" examiners and cause them to grant patents because they are sick of them, but not acknowledging the extra credit examiners get to continue examination). Commentators have criticized Lemley and Moore's argument that continuations "wear down" examiners. *See, e.g.*, Schreiner & Doody, *supra* note 178, at 563.

197. *See* Final Rules, *supra* note 3, at 46817, Comment 279.

The Final Rules do nothing to address the examiner production system¹⁹⁸ and instead focus on preventing applicants from extending chains of continuation applications. However, the PTO's own statistics suggest that the rules will only block a small number of applications: the Final Rules would have affected only 2.7 percent of the filings in fiscal year 2006.¹⁹⁹ Eliminating only 2.7 percent of filings will not greatly reduce the backlog. Many commentators believed that even the Proposed Rules, which would have allowed only one continuation application without justification and potentially cut 6.5 percent of filings, would not have helped.²⁰⁰

Furthermore, applicants are likely to file divisional applications where previously they would have filed continuation applications. For example, an applicant who files a large application containing many distinct inventions might have previously pursued claims to each invention in separate continuation applications.²⁰¹ Under the Final Rules, that applicant can file an SRR with the large application and pursue claims to each invention in separate divisional applications.²⁰² In this case, the Final Rules reduce the number of continuation applications, but they do not decrease the total number of applications that the PTO must examine.

In GSK's litigation regarding the preliminary injunction, GSK argued that the PTO's backlog rationale for the Final Rules is arbitrary and capricious, relying primarily on the PTO's concession that less than 2.7% of applications involved a third or subsequent continuation or a second or subsequent RCE.²⁰³ GSK contended that the PTO cannot meaningfully hope to reduce its backlog by revising the continuing application process, and that the backlog rationale is a "red herring."²⁰⁴

The PTO responded by asserting that, according to its models, the changes in the Final Rules will have an "appreciable" impact on the back-

198. According to the PTO, the examiner production system is outside the scope of the Final Rules. *Id.* at 46805, Response to Comment 243. Nevertheless, the PTO asserts that changes to examiner production goals, appraisal plans, and award systems alone will not be sufficient to address the backlog. *Id.* at 46818, Response to Comment 279.

199. *Id.* at 46755.

200. See, e.g., Schreiner & Doody, *supra* note 191, at 563 (asserting that the Proposed Rules would "barely mak[e] a dent in the purported problem").

201. The PTO explicitly states that these "voluntary divisionals," which are not the result of a restriction requirement, will be counted as continuation applications. Final Rules, *supra* note 3, at 46720.

202. See *supra* Section II.B.2.

203. GSK Motion, *supra* note 162, at 23-24.

204. *Id.*

log.²⁰⁵ The PTO averred that the Final Rules are part of an “integrated scheme” to reduce the backlog.²⁰⁶ More convincingly, the PTO noted that the 2.7% figure represents approximately 11,000 continuation applications and requests for continued examination.²⁰⁷ The PTO believes it would take 275 new patent examiners one year to examine that many applications.²⁰⁸

Preventing examination of 11,000 applications sounds like a huge accomplishment; however, that number of applications is small, relative to the enormous backlog and the growing number of applications being filed each year. The backlog is currently over one million applications,²⁰⁹ and the PTO’s projections show that the backlog could reach 1.4 million unexamined applications by 2012.²¹⁰ Although the limits on continuation applications and RCEs would slightly reduce the number of filed applications, those limits seem unlikely to significantly alleviate the backlog. Moreover, the PTO cannot have it both ways. The PTO must reckon with the consequences that the Final Rules significantly reduce continuation applications and thus risk harming incentives for innovation in certain industries, or that the Final Rules do not affect enough applications to significantly reduce the backlog.²¹¹

B. Appeals to the BPAI Will Greatly Increase and Thus Delay Applications

Currently, applicants who receive a final rejection may file a continuation application or an RCE, or appeal to the BPAI. Under the Final Rules, prudent applicants will probably hold their one RCE and two continuation applications in reserve until they are needed, for example, after losing an appeal to the BPAI.²¹² Consequently, applicants will appeal adverse decisions and follow through with the appeals process to a final decision much more frequently. If applicants appeal to the BPAI (instead of abandoning the appeal and filing an RCE) just one or two more times per examiner than currently, the BPAI will have to decide two or three times the number appeals that it currently does.²¹³

205. PTO Motion, *supra* note 165, at 32.

206. *Id.*

207. *Id.* at 30 n.22.

208. *Id.*

209. PATENT APPLICATIONS PENDING PRIOR TO ALLOWANCE, *supra* note 2.

210. STRATEGIC PLAN, *supra* note 64, at 10.

211. *See supra* Section IV.A.

212. See Email from Hal Wegner, Continuation Rules: Board of Patent Appeals and Interferences Backlog under the New Rules, Sept. 18, 2007 (on file with author).

213. *Id.*

The PTO believes that the pendency of an appeal²¹⁴ is relatively short and that the BPAI is ready for the increase in appeals.²¹⁵ The PTO justifies its belief by noting that it recently reduced the inventory of pending appeals and implemented new procedures to streamline the appeals process.²¹⁶ In particular, the PTO points to an appeal conference program to review the rejections in applications in which an applicant has filed an appeal brief, and to a pre-appeal brief conference program that allows an applicant to have a rejection reviewed by a panel of examiners.²¹⁷

According to the PTO, the current (as of the end of the second quarter of fiscal year 2007) pendency of a decided appeal is 5.6 months.²¹⁸ Professor Dennis Crouch's analysis reveals a different picture.²¹⁹ In his study of thirty recent BPAI decisions, applicants waited about eighteen months from filing an appeal brief until the BPAI reached a decision.²²⁰ Most of the delay was attributable to the time to complete briefing (about eleven months on average), which involves an applicant's brief, an examiner's answer, and a reply brief.²²¹ Thus, although the delay is not directly attributable to the BPAI, it still takes twice as long as the PTO asserts to get a decision from the appeal process. Many commentators are skeptical of the BPAI's ability to handle the increase in the number of appeals.²²²

Many also predict that the changes in the Final Rules will force applicants to appeal applications that are not in condition for appeal.²²³ When an examiner issues a final rejection, the applicant can petition to submit an after-final amendment to change the application in response to the examiner's arguments and prepare the application for appeal.²²⁴ However, examiners often refuse to enter the after-final amendments,²²⁵ hoping that the applicants will file RCEs and give them easy counts.²²⁶ Thus, practitioners have long used continuations and RCEs to "place the application in better

214. The pendency of an appeal is the period between the assignment of an appeal number and the mailing date of the decision. Final Rules, *supra* note 3, at 46763, Response to Comment 54.

215. *Id.* at 46720.

216. *Id.*

217. *Id.*

218. *Id.* at 46763, Response to Comment 54.

219. Posting of Dennis Crouch to Patently-O, How long does a BPAI appeal take?, <http://www.patentlyo.com/patent/2007/09/how-long-does-a.html> (Sept. 17, 2007).

220. *Id.*

221. *Id.*

222. *See, e.g.*, Final Rules, *supra* note 3, at 46763, Comment 54.

223. *See, e.g.*, *id.*

224. *Id.* at 46763, Response to Comment 53.

225. *See id.* at 46763, Comment 54.

226. *See supra* Section IV.A (discussing the examiner production system).

condition for appeal because most examiners refuse to enter the after-final amendments.”²²⁷ Under the Final Rules, though, applicants will not want to use their single RCE to further an essentially procedural purpose, necessary only due to the PTO’s misguided production system for its employees. Thus, applicants’ extensive use of RCEs is not solely an abuse of the system, but rather at least partially a result of the PTO’s own policies. The PTO responded to these comments by noting that applicants “should have sufficient opportunity to place the application in condition for appeal during the prosecution of the initial application, two continuing applications, and one request for continued examination in an application family.”²²⁸

The Final Rules, by re-routing examination disputes to the appeals board, will arguably give examiners more time to work on new applications and in that respect, reduce the backlog. Nevertheless, this will only decrease the pendency of applications until the first office action; it will not help decrease the total pendency of applications if many applications are subjected to lengthy appeals. Moreover, the PTO’s separate improvements to the appeals process will likely re-route some disputes to the BPAI even without the Final Rules,²²⁹ so not all of the appeals-related backlog reduction can be attributed to the Final Rules.

C. Examiners Will Not Be Able to Examine Faster

Examiners should be able to examine applications with fewer claims at greater speed, and that should help reduce the backlog. The five/twenty-five limit on claims will force at least some applicants to file applications with fewer claims.²³⁰

Nevertheless, additional examination burdens will offset improvements to examination speed attributable to fewer claims. Applicants “will be forced to front-load responses to every Office action with interviews, declarations and other evidence when the attorney’s argument alone otherwise might have been sufficient.”²³¹ It is likely that applicants will begin to argue more over dependent claims to prepare for appeals, request interviews to avoid appeals and filing RCEs, and make every possible argument in responses to office actions. These tactics will force examiners to

227. Final Rules, *supra* note 3, at 46763, Comment 54.

228. *Id.* at 46763, Response to Comment 54.

229. *Id.* at 46763, Comment 54 (“[O]nce applicants appreciate the appeal process changes, more applicants w[ill] file appeals rather than continuing applications and requests for continued examination.”).

230. About eight percent of the applications filed in fiscal year 2006 had more than five independent claims, and about twenty-five percent of the applications filed in fiscal year 2006 had more than twenty dependent claims. *See id.* at 46718.

231. *Id.* at 46764, Comment 57.

spend more time on applications and will erase improvements to examination speed caused by claim limits.

The Final Rules also introduce a lot of new documents for the PTO to process: petitions for additional continuations and RCEs, long lists of related applications, additional terminal disclaimers to rebut the presumption of patentably indistinct claims, and SRRs. Although petitions may not be decided by examiners, and the PTO asserts that it will “make every effort to decide the petitions in a timely manner,”²³² the petition process will at some level divert PTO resources that could otherwise be devoted to examining new applications or supporting the examination of new applications.

D. Hiring and Retaining Examiners Is the Root of the Problem

Hiring and retaining examiners appears to be the key to controlling the backlog. The PTO has recognized this and plans to hire 9,000 new examiners between 2005 and 2012.²³³ The PTO projects that with aggressive hiring, the average time of patent pendency will only rise to about forty months by 2012, as opposed to fifty-five months without such a plan.²³⁴

The rapid growth of the backlog occurred because staffing levels for examiners did not keep pace with application growth.²³⁵ For example, from 1990 to 2002, applications increased by 79 percent, whereas the number of examiners increased only 73 percent.²³⁶ Similarly, from 2002 to 2004, applications increased seven percent while examiners increased by only four percent.²³⁷ The PTO is a fee-funded agency, but it still receives annual appropriations before it can spend its fee revenues, and Congress limited the PTO's access to its fees beginning in 1992.²³⁸ Between fiscal

232. *Id.* at 46752.

233. STRATEGIC PLAN, *supra* note 64, at 11.

234. *Id.*

235. NATIONAL ACADEMY OF PUBLIC ADMINISTRATION, US PATENT AND TRADE-MARK OFFICE: TRANSFORMING TO MEET THE CHALLENGES OF THE 21ST CENTURY 13 (Aug. 2005) [hereinafter NAPA REPORT]; *see also* Letter from Michael Kirk, Executive Dir. American Intellectual Property Law Association, to Jon Dudas, Dir., U.S. PTO (Apr. 24, 2006), *available at* http://www.uspto.gov/web/offices/pac/dapp/opla/comments/fpp_continuation/aipla.pdf (“Congress essentially starved the PTO of the resources it needed to keep pace with the increase in patent application filings from roughly FY 1992 through FY 2003, diverting nearly \$800 million in fees generated by [a fee] increase. Hundreds of examiners, who would be fully trained and experienced today, were not hired.”).

236. NAPA REPORT, *supra* note 235, at 13.

237. *Id.*

238. *Id.* at 40.

years 1992-2004, Congress kept \$573 million in patent funding from the PTO.²³⁹

A study by the National Academy of Public Administration shows that if the PTO had used those funds for examiner hiring, the current backlog would be much smaller.²⁴⁰ The study used the Patent Production Model, which is maintained by the Office of Financial Management under the Commissioner for Patents.²⁴¹ According to the study, if the PTO had used the \$543 million of unavailable funding entirely for examiner hiring, total application pendency would have averaged 21.2 months in 2004, instead of the actual 2004 pendency of 27.6 months.²⁴² If the PTO had used only \$503 million for examiner hiring, total application pendency would have averaged 22.6 months.²⁴³ If the PTO had spent \$680 million on examiner hiring, which would have required diversion of some of the unavailable trademark funds to patent work, the total application pendency would have averaged 20.8 months and never exceeded level for fiscal year 1996.²⁴⁴ The study stressed that consistent hiring, which was used in the simulations, is key to reducing pendency.²⁴⁵ The study criticized the intermittent “emergency” hiring that actually occurred (citing fiscal years 1998, 1999, and 2002) as not as efficient or effective as consistent hiring.²⁴⁶

The PTO asserts that hiring alone will not reduce the backlog of pending applications in the near future.²⁴⁷ The PTO’s assertion is misdirected: hiring alone will not suffice because the PTO lacks the institutional capacity to hire enough examiners,²⁴⁸ not because no possible number of examiners could do the job. Furthermore, part of the reason that the PTO lacks the institutional capacity to hire enough examiners is that examiner attri-

239. *Id.* Recent appropriations permit the PTO to retain all of the fees collected to process patent applications. *Id.* at 48.

240. *Id.* at 41-49.

241. *Id.* at 41.

242. *Id.* at 43.

243. *Id.* at 44.

244. *Id.* at 42.

245. *Id.* at 45.

246. *Id.*

247. Final Rules, *supra* note 3, at 46817, Response to Comment 278.

248. GAO REPORT, *supra* note 194, at 5 (“Over the last 5 years the [PTO] has moved away from its prior strategy because it realized that it did not have the institutional capacity to train and supervise the relatively large number of new patent examiners it would need to hire annually to keep pace with the increasing number of incoming patent applications expected each year.”).

tion significantly offsets hiring.²⁴⁹ If the PTO could hire and retain enough examiners, it could successfully manage the backlog without implementing new restrictions on the application process.

Therefore, the backlog is primarily a result of insufficient examiner hiring and retention to keep pace with the rising number of applications. Pursuing efforts that expand the PTO's hiring capacity and examiner retention should be the most effective way to address the backlog. For example, the PTO is planning to explore options such as allowing examiners to work from home and establishing regional PTO offices.²⁵⁰ Limiting continuation applications and RCEs will not solve the underlying problem causing the backlog.

VI. CONCLUSION

The growing backlog of unexamined patent applications challenges the PTO's ability to process applications in a timely manner. The PTO has responded admirably by securing all of its fees collected for patent examination and setting out an aggressive plan to hire enough examiners to keep up with the growing number of applications.

Nevertheless, the Final Rules, if implemented, would almost certainly negatively affect patent prosecution practice and would ultimately reduce incentives to innovate, particularly in biotechnological and pharmaceutical fields. Moreover, the Final Rules are unlikely to significantly reduce the backlog due to the low percentage of applications affected and the unintended consequence of increased appeals and increased examination burdens. Thus, the PTO should reconsider whether the Final Rules are an appropriate part of the scheme to manage the backlog.

249. *Id.* at 6 (“Although [the PTO] is hiring as many new patent examiners as it has the annual capacity to supervise and train, for nearly every two patent examiners it has hired over the last 5 years at least one has left the agency.”). The reason that examiners leave so frequently is not clear. *See id.* The PTO management asserts that personal reasons drive examiners to leave, whereas examiners blame the examiner production system. *Id.*; *see also supra* Section V.A (discussing the examiner production system).

250. STRATEGIC PLAN, *supra* note 64, at 16.

TRIALS AND TRIPS-ULATIONS: INDIAN PATENT LAW AND *NOVARTIS AG v. UNION OF INDIA*

By Linda L. Lee

I. INTRODUCTION

When pharmaceutical company Novartis challenged the rejection of its patent application for the leukemia drug Gleevec in *Novartis AG v. Union of India*,¹ it became the first major legal challenge to India's newly amended patent law. In 2005, India purportedly made the final changes required to bring its intellectual property laws in compliance with the Trade-Related Aspects of Intellectual Property Rights (TRIPS), the World Trade Organization's (WTO) minimum standards for intellectual property protection,² but its patent law is still fraught with a number of controversial provisions. The ability of pharmaceutical companies such as Novartis to secure patent protection in India not only is important in creating incentives for pharmaceutical research, but also greatly affects the Indian generic drug industry, and therefore the price of medicine available to patients. India is the world's second most populous country³ and the second-fastest growing major economy,⁴ but has 70% of its population living on less than \$2 per day,⁵ making *Novartis AG* of paramount importance.

© 2008 Linda L. Lee.

1. *Novartis AG v. Union of India*, (2007) 4 MADRAS L.J. 1153, available at <http://www.scribd.com/doc/456550/High-Court-order-Novartis-Union-of-India>.

2. Agreement on Trade-Related Aspects of Intellectual Property Rights, Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1C, Legal Instruments—Results of the Uruguay Round, 33 I.L.M. 81 (1994) [hereinafter TRIPS], arts. 27-38 (setting forth obligations for patent protection). The WTO granted developing countries and least developed countries (LDC) transitional periods to comply with all the provisions of TRIPS. See TRIPS, art. 65.4 (“To the extent that a developing country Member is obliged by this Agreement to extend product patent protection to areas of technology not so protectable in its territory on the general date of application of this Agreement for that Member, . . . it may delay the application of the provisions on product patents of Section 5 of Part II to such areas of technology for an additional period of five years.”). Under this provision, India had a January 1, 2005 deadline to fully comply with TRIPS. See *infra* Part II.D.3.

3. Central Intelligence Agency, Rank Order—Population, <https://www.cia.gov/library/publications/the-world-factbook/rankorder/2119rank.html> (last visited Apr. 5, 2008). See also CENTRAL INTELLIGENCE AGENCY, THE 2007 WORLD FACTBOOK 261 (2006).

4. U.S. Dept. of Agriculture, Economic Research Service, Briefing Room—India, <http://www.ers.usda.gov/Briefing/India/> (last visited Oct. 28, 2007).

5. Fareed Zakaria, *India Rising*, NEWSWEEK, Mar. 6, 2006, at 38.

India joined the WTO at the end of the twentieth century,⁶ marking India's entry into the global economy, but also requiring compliance with international standards for its intellectual property regime. Under TRIPS obligations, developing countries such as India must strengthen its intellectual property rights (IPRs) to conform to the stronger intellectual property regimes prevalent in developed countries in order to be members of the WTO.⁷ Changes in Indian intellectual property law would undoubtedly affect many different sectors,⁸ but its influence on public health is of particular concern.⁹ Like many developing countries prior to joining the WTO, India's patent law only allowed for process, but not product, patents for pharmaceutical inventions.¹⁰ Inventors generally prefer to have stronger patent protection through product rather than process patents,¹¹ and the patent regimes of developed countries predominately protect end products.¹² In contrast, developing nations prefer regimes that only recog-

6. India and the WTO: Member Information, http://www.wto.org/english/thewto_e/countries_e/india_e.htm (last visited Oct. 28, 2007).

7. Some scholars see TRIPS as a product of unequal bargaining between developed and developing countries, or as a result of coercion by developed countries. Developing countries were unsatisfied with the imposition of strong IPRs, but had to agree to the demands of developed countries in order to enjoy the benefits of international trade. See Peter K. Yu, *TRIPS and Its Discontents*, 10 MARQ. INTELL. PROP. L. REV. 369, 370-79 (2006).

8. *Id.* at 383. (“[I]t is no surprise that less developed countries have been concerned about the heightened protection required by the TRIPs Agreement and its deleterious impact in the areas of agriculture, health, environment, education, and culture.”).

9. Carlos M. Correa, *Public Health and Patent Legislation in Developing Countries*, 3 TUL. J. TECH. & INTELL. PROP. 1, 3 (2001) (contending that IPRs and their impact on access to medicines can have “life-or-death consequences”).

10. The 1970 Patents Act, § 5, stated:

In the case of inventions—(a) claiming substances intended for use, or capable of being used, as food or as medicine or drug, or (b) relating to substances prepared or produced by chemical processes (including alloys, optical class, semi-conductors and inter-metallic compounds), *no patent shall be granted in respect of claims for the substances themselves*, but claims for the methods or processes of manufacture shall be patentable.

The Patents Act, 1970, Act No. 39 of 1970, 27 India A.I.R. Manual 450, available at http://www.wipo.int/clea/docs_new/pdf/en/in/in004en.pdf [hereinafter 1970 Act] (emphasis added).

11. Process patents often pose enforcement problems such as difficulty in detecting infringement (patentee may be unable to obtain evidence regarding the ultimate use of a product). Furthermore, process patents are subservient to product patents because a process patent cannot be obtained when a patent on the composition is still in effect. ROBERT P. MERGES & JOHN F. DUFFY, *PATENT LAW AND POLICY: CASES AND MATERIALS* 387-92 (4th ed. 2007).

12. See *infra* note 100.

nize process patents such that their domestic industries can benefit by inventing cheaper methods of making expensive patented products.¹³ Thus, India's former patent regime favored domestic generic manufacturers who had been able to produce drugs for a fraction of the prices in the United States and Europe.¹⁴

Under the 2005 amendments to the Indian patent law, one of the most significant changes was the extension of product patents to pharmaceutical substances,¹⁵ creating an intellectual property regime that shifts the balance from domestic generic manufacturers in favor of multinational pharmaceutical companies. On one hand, given the high cost of health-related innovation, strong intellectual property rights are crucial in providing incentives for the private sector to engage in costly and risky research and development in the fields of pharmaceuticals and biotechnology.¹⁶ Patents motivate companies to engage in capital-intensive and inherently risky biomedical research because of the possibility of charging monopoly prices and reaping high profits.¹⁷ On the other hand, that very monopoly prevents generic manufacturing and affects the price and availability of the finished medicine to consumers.¹⁸ A successful intellectual property regime must strike a balance between creating incentives for innovation and protecting consumers' access to essential medicine.¹⁹ Developing countries argue that because the needs and interests of their countries are different than those of developed countries, they should have flexibility in enacting intellectual property regimes that offer the proper balance for their individual situations.²⁰

The debate about balancing strong IPRs and access to essential medicine is especially important to India. Historically, India has possessed a

13. Srividhya Ragavan, *A "Patent" Restriction in Research & Development: Infringers or Innovators?*, 2004 U. ILL. J.L. TECH. & POL'Y 73, 76 (2004).

14. Rishi Gupta, *TRIPS Compliance: Dealing With the Consequences of Drug Patents in India*, 26 HOUS. J. INT'L L. 599, 602 (2004).

15. The Patents (Amendment) Act, 2005, No. 15, Acts of Parliament, 2005, available at http://www.wipo.int/clea/docs_new/pdf/en/in/in018en.pdf. Section 5 of the original India Patents Act, 1970, was deleted.

16. Correa, *supra* note 9, at 3.

17. Rebecca S. Eisenberg, *Patents, Product Exclusivity, and Information Dissemination: How Law Directs Biopharmaceutical Research and Development*, 72 FORDHAM L. REV. 477, 479 (2003).

18. Correa, *supra* note 9, at 3.

19. *Id.*

20. For example, less developed countries may prefer to promote the transfer of technologies needed for development, rather than create strong monopolies. *See id.* at 4-6.

thriving generic drug manufacturing industry²¹ that provided affordable medicine to the Indian population and other developing countries.²² More recently, India is becoming known as a science and technology innovator, rather than just an imitator,²³ which has stimulated a need for stronger IPRs. The 2005 amendments to the Indian patent law have the potential to considerably upset the existing state of affairs. In this context, it is not surprising that the TRIPS-imposed changes to India's patent law and their effects on public health prompted many constituencies to voice concerns, including those from multinational pharmaceutical companies,²⁴ domestic Indian pharmaceutical manufacturers,²⁵ Western governments,²⁶ groups

21. Janice Mueller, *The Tiger Awakens: The Tumultuous Transformation of India's Patent System and the Rise of Indian Pharmaceutical Innovation*, 68 U. PITT. L. REV. 491, 495 [hereinafter Mueller, *The Tiger Awakens*].

22. India exports two-thirds of its generic drug production to other developing countries, most of which lack any domestic manufacturing capability. *Id.* See also Vijay Yalamanchili, *State of India's TRIPS-compliant Patent Regime*, 26 BIOTECH. L. REP. 211, 211 (2007) (explaining that India generic manufacturers supply over 50% of all antiretroviral drugs used to treat AIDS patients in developing countries, at 5% the price of what US and European pharmaceutical companies charge).

23. Mueller, *The Tiger Awakens*, *supra* note 21, at 500 (explaining that while India has been well-known for its contributions in information technology and software, India is starting to innovate in other industries as well).

24. See Press Release, Pharmaceutical Research and Manufacturers of America (PhRMA), PhRMA Welcomes Passage of Patent Bill in India (Mar. 23, 2005), http://www.phrma.org/news_room/press_releases/phrma_welcomes_passage_of_patent_bill_in_india (last visited Dec. 20, 2007) (applauding India's Patents (Amendment) Act of 2005, but remaining concerned that particular sections of the Act rendered India non-compliant with minimum TRIPS obligations). See also The Organisation of Pharmaceutical Producers of India's (OPPI) Position on Trade Related Aspects of Intellectual Property Rights (TRIPS) (on file with Berkeley Technology Law Journal), <http://www.indiaoppi.com/pharminindia.htm> (last visited Dec. 20, 2007) (stating that Indian's patent law does not recognize incremental innovations and such patents for incremental innovations would hinder long-term research and development). PhRMA represents the interests of leading U.S. pharmaceutical and biotechnology companies, and OPPI is an Indian trade group representing MNCs' interests in India.

25. See Indian Drug Manufacturer's Association (IDMA), <http://www.idma-assn.org/Patents.html> (last visited Dec. 20, 2007) (taking the position that the 2005 Amendment would have adverse effects on public health and the Indian pharmaceutical industry because generic companies can no longer reverse engineer, resulting in multinational firms monopolizing the pharmaceutical industry in India). IDMA has a membership of over 600 wholly-Indian large, medium and small companies.

26. Letter from Representative Henry A. Waxman, 30th District of California, to Daniel Vasella, Chairman and CEO of Novartis, *available at* <http://oversight.house.gov/Documents/20070213183300-13686.pdf> (last visited Dec. 20, 2007) (urging Novartis's CEO to reconsider Novartis's position in India). See also Letter from Five Members of the European Parliament to Novartis CEO Daniel Vasella, *available at*

concerned with access to medicine,²⁷ and lawyers and commentators from around the world.²⁸ Finding a practical balance between long-term investment in the pharmaceutical industry and keeping essential medicines affordable is therefore a continuing point of tension.

Novartis AG came amidst these competing concerns. It is a challenge to one of the most controversial provisions introduced by the 2005 amendments, Section 3(d), which protects against patenting trivial improvements of known molecules.²⁹ This provision is widely regarded as a “public health safeguard”³⁰ that aims to prevent “evergreening,” a practice by which pharmaceutical companies attempt to extend patent protection by filing new patents over the process, dosage form, or method of administration, rather than the active ingredient itself.³¹ Section 3(d) attempts to regulate the granting of such patents by limiting the scope of protection available for derivatives of known substances and new uses of known substance.³² After the Indian patent office rejected Novartis’s patent application for Gleevec on Section 3(d) grounds, Novartis sued the Government of India on a number of claims, including a challenge on the TRIPS-compliance of Section 3(d).³³

Part II of this Note places *Novartis AG* in context of the historical development of patent law in India (including India’s recent and final steps in bringing its patent law in compliance with TRIPS) and the expansion of the pharmaceutical industry in India. Part III reports on Novartis’s current

<http://www.cptech.org/ip/health/c/india/meps02092007.html> (last visited Dec. 20, 2007) (reaffirming European Parliament’s support of India’s implementation of pro-public health patent laws).

27. See NGO statement on Novartis challenge to Indian Patents Act, <http://www.cptech.org/ip/health/c/india/meps02092007.html> (last visited Dec. 20, 2007) (expressing the joint views of several NGOs and urging Novartis to drop its case in India).

28. See, e.g., Janice Mueller, *Taking TRIPS to India—Novartis, Patent Law, and Access to Medicines*, 356 NEW ENGL. J. MED. 541 (2007) [hereinafter Mueller, *Taking TRIPS to India*].

29. Vijay, *supra* note 22, at 223. Other commentators contend that Section 3(d) is a codified nonobviousness standard for pharmaceutical substances. Essentially, Section 3(d) requires a higher nonobviousness standard for pharmaceutical and chemical substances. See Posting of Shammad Basheer to Spicy IP, India Patent Act Faces TRIPS Challenge, <http://spicyipindia.blogspot.com/2006/09/indian-patent-act-faces-trips.html> (Oct. 1, 2006). See *infra* note 212 and surrounding text.

30. Vijay, *supra* note 22, at 223.

31. See Mueller, *The Tiger Awakens*, *supra* note 21, at 550-51.

32. Derivatives of known substances must show “enhancement of . . . known efficacy” and new uses of known substances must “[result] in a new product or [employ] a new reactant.” See *infra* Part IV.

33. See *infra* Section III.C.

litigation in India, including the role of the newly formed Intellectual Property Appellate Board (IPAB). Part IV describes the elements of Section 3(d) and argues that Section 3(d) is not a radical departure from the approaches taken by developed countries to limit the patentability of derivatives and new uses of existing pharmaceutical compounds. Finally, this Note concludes with some recommendations on how India should balance protecting access to affordable medicine and creating incentives for increased innovation.

II. INDIA'S LEGAL SYSTEM, PATENT LAW, AND PHARMACEUTICAL INDUSTRY

A. Basics of Indian Legal System and Intellectual Property Regime

The modern Indian legal system is based primarily on the British common law model.³⁴ After gaining independence from the British empire, India passed a national constitution in 1950.³⁵ The main sources of law in India include the constitution, statutory laws, customary laws and case law.³⁶ Hindu and Muslim law are still prevalent for some matters such as family law.³⁷

The types of intellectual property that are protected by law in India include patents, trademarks, copyrights, geographic indications, industrial designs, designs of integrated circuits, and plant varieties.³⁸ India is a member of several international organizations and a signatory of several treaties, including the World Intellectual Property Organization (WIPO), the Paris Convention for the Protection of Industrial Property, the Berne Convention for the Protection of Literary and Artistic Works, and the Patent Cooperation Treaty (PCT).³⁹

B. Administrative Regulation of Patent Regime

The Office of the Controller General of Patents, Designs and Trademarks (CGPDTM), a subordinate office under the Department of Industrial Policy and Promotion (DIPP), administers laws relating to patents,

34. Jayanth K. Krishnan, *India*, in LEGAL SYSTEMS OF THE WORLD : A POLITICAL, SOCIAL, AND CULTURAL ENCYCLOPEDIA 693-95 (Herbert M. Kritzer ed., 2003).

35. *Id.*

36. *Id.*

37. *Id.*

38. India Department of Industrial Policy & Promotion, Intellectual Property, <http://dipp.nic.in/ipr.htm> (last visited Dec. 20, 2007).

39. *Id.*

trademarks, industrial designs, and geographic indications.⁴⁰ The CGPDTM oversees the functioning of the Indian Patent Office, based in Kolkata with branches in Chennai, New Delhi, and Mumbai.⁴¹ The central government appoints the Controller of Patents, patent examiners, and various officers.⁴² The Patent Act vests most powers in the Controller of Patents and stipulates that the Controller may delegate powers to subordinate officers.⁴³

C. Indian Judiciary and the IPAB

A unique feature of the Indian judicial system is that although its federal system is composed of autonomous states united by a federal government, India has a single integrated system of courts characterized by a high degree of uniformity.⁴⁴ The Supreme Court sits at the top, followed by High Courts for each state, followed by a hierarchy of subordinate courts.⁴⁵ The Supreme Court of India hears appeals from subordinate courts and public-interest cases; it has original jurisdiction over disputes either between the central government and individual states, or between the states.⁴⁶ Each state and union territory has a High Court that has appellate and some original jurisdiction.⁴⁷

The Indian judicial system also comprises specialized tribunals, including the Intellectual Property Appellate Board (IPAB).⁴⁸ The Indian

40. India Controller General of Patents, Designs and Trademarks, <http://www.ipindia.nic.in/> (last visited Dec. 20, 2007). Other governmental departments administer laws relating to other forms of intellectual property. For example, the Department of Higher Education administers copyright laws. India Department of Industrial Policy & Promotion, Intellectual Property, *supra* note 38.

41. Addresses and Names of the Contact Persons of the Intellectual Property Offices, http://ipindia.nic.in/ipr/patent/ipo_office_add.htm (last visited Dec. 20, 2007).

42. Shammad Basheer, “Policy Style” Reasoning at the Indian Patent Office, 3 INTELLECTUAL PROPERTY QUARTERLY 309, 319 (2005), available at <http://ssrn.com/abstract=829464>. See also Posting of Shammad Basheer to Spicy IP, A Bureaucratic Babu as IP Chief!!, <http://spicyipindia.blogspot.com/2005/12/bureaucratic-babu-as-ip-chief.html> (Dec. 16, 2005) (criticizing the Indian government for appointing Controller of Patents without appropriate technical and legal qualifications).

43. See Basheer, “Policy Style” Reasoning at the Indian Patent Office, *supra* note 42, at 319.

44. Krishnan, *supra* note 34 at 693.

45. *Id.* at 698.

46. *Id.* at 696.

47. *Id.* at 697. There are twenty-one High Courts in India. Three of them have jurisdiction over more than one state.

48. See Intellectual Property Appellate Board, <http://www.ipab.tn.nic.in/> [hereinafter IPAB] (last visited Dec. 20, 2007).

government established the IPAB on September 15, 2003⁴⁹ to hear appeals from the decisions of the Registrar of Trademarks and Geographic Indications, and as of April 2007, from the Controller of Patents.⁵⁰ The IPAB is headquartered in Chennai and has additional branches in Mumbai, New Delhi, Kolkata, and Ahmedabab.⁵¹ A key difference between the IPAB and other judicial tribunals is that the composition of the IPAB must include at least one “technical” member in the board in addition to at least one “legal” member.⁵² The Indian government appoints all members of the IPAB.⁵³ Before the creation of the IPAB, the High Courts heard appeals from the various intellectual property administrative offices.⁵⁴ Following the creation of the IPAB, cases pending before the High Courts that fell under the jurisdiction of the IPAB were transferred to the IPAB.⁵⁵ While the IPAB now has jurisdiction over administrative patent challenges, the District Courts still have original jurisdiction over patent infringement disputes.⁵⁶ The High Courts have jurisdiction over infringement suits involving a challenge on the validity of the patent.⁵⁷

In the past, the IPAB was active in adjudicating trademark cases⁵⁸ but not patent matters because the government had not appointed to the board a “technical” member familiar with patent law until April 2007.⁵⁹ Thus,

49. *Id.*

50. When the IPAB was established in 2003, it had jurisdiction only over appeals against the Registrar of Trademarks and Geographic Indications. The Indian government added jurisdiction over appeals against the Controller of Patents through a notification promulgated on April 3, 2007, *available at* http://ipindia.nic.in/ipr/patent/gazetteofindia_apr2007.pdf [hereinafter April 3, 2007 Gazette] (last visited Dec. 20, 2007).

51. IPAB, *supra* note 48.

52. *Id.*

53. Novartis: Frequently Asked Questions, <http://www.novartis.com/newsroom/india-glivec-patent-case/faq.shtml#9> (last visited Dec. 20, 2007).

54. Posting of Shamnad Basheer to Spicy IP, Novartis Case Before the IPAB?, <http://spicyipindia.blogspot.com/2007/04/novartis-case-before-ipab.html> (Apr. 3, 2007).

55. However, infringement and criminal proceedings would be continued in the High Courts. IPAB, *supra* note 48.

56. Tarun Mathur, *Patent Litigation Trend in India*, June 22, 2007, <http://ssrn.com/abstract=995994>, 14. Administrative challenges are cases that involve the Patent Office as the defendant, including disputes on grant of a patent, patent invalidation, and compulsory licensing.

57. *Id.*

58. Even though the IPAB technically has jurisdiction over patent cases, the official IPAB website frequently only mentions trademark law and disputes. *See* IPAB, *supra* note 48.

59. Novartis Case Before the IPAB?, *supra* note 54.

until *Novartis AG*, the patent division of the IPAB existed in theory but was not in operation with functioning board members.⁶⁰

Given that the IPAB is newly established, the outcome of having a dedicated tribunal to hear appeals of intellectual property cases in India is uncertain. For example, there is no provision for any further appeals from a decision of the IPAB, and it appears that further appeals would make their way back to the High Courts.⁶¹ Furthermore, all patent infringement proceedings are heard by the District and High Courts, even if the proceedings involve a challenge to revoke a patent issued by the Controller of Patents.⁶² Will the IPAB lead to more speedy and fair resolution of cases?⁶³ Or will the relative inexperience of the IPAB, in particular with patent cases, mean that adjudication within the state and federal court system would be more prudent at this stage?⁶⁴

D. Development of Patent Law in India

The historical development of India's patent regime can be divided into three stages.⁶⁵

1. *India's Colonial Era to 1970: Recognition of Need to Reform Indian Patent Law to Increase Patent Filing and Stimulate Innovation*

The first stage covers India's colonial era through 1970. During colonial India, the British administration implemented India's first patent statute, India's Act VI of 1856, which was based on British patent law of 1852.⁶⁶ The law provided certain exclusive privileges to inventors of new manufacturers for a fourteen-year term.⁶⁷ In 1911, the British enacted the Indian Patents and Designs Act, which created a Controller of Patents to

60. *Id.* S. Chandrasekharan, former Controller of the Madras Patent Office, was appointed as the technical member in June 2007. *See infra* Section III.D.

61. *Novartis Case Before the IPAB?*, *supra* note 54.

62. Mathur, *Patent Litigation Trend in India*, *supra* note 56. In contrast, the Federal Circuit in the United States has exclusive jurisdiction over appeals from all cases arising in part from the patent laws, including patent validity and infringement. 4 JOHN GLADSTONE MILLS III ET AL., *PAT. L. FUNDAMENTALS* § 20:110 (2d ed. 2002).

63. India's judicial system is notoriously slow. Some sources have described a backlog of 18 million pending cases, of which 16 million cases are criminal ones. *See, e.g.*, India to set up fast track courts, http://news.bbc.co.uk/2/hi/south_asia/5227038.stm (last visited Dec. 20, 2007).

64. *See* *Novartis Case Before the IPAB?*, *supra* note 54 (describing that practicing attorneys in India are skeptical of the IPAB).

65. *See* Mueller, *The Tiger Awakens*, *supra* note 21, at 504-31.

66. *Id.* at 506.

67. *Id.*

oversee patent administration in India.⁶⁸ Despite these developments and the emergence of an industrialized economy,⁶⁹ patent filing in India remained low.⁷⁰

Shortly after India gained independence from Great Britain in 1947, the new government appointed a committee to review and revamp the patent law.⁷¹ Recovering from the oppressive colonial rule, the Indian government wanted a “patent system [that] was more conducive to national interests.”⁷² In 1950, the committee issued the Chand Report, which revealed the need to “stimulate invention and encourage exploitation of new inventions for industrial purposes” and recommended changes such as introducing compulsory licensing provisions.⁷³

The government commissioned a second report, the Ayyangar Report, in 1959.⁷⁴ The Ayyangar Committee found that multinational companies were exploiting India’s patent system to achieve monopolistic control; foreigners held about 80-90% of Indian patents, but practiced less than 10% of those patents in India.⁷⁵ The report recommended “radical” modifications to India’s patent law and became the foundation of the modern Indian patent system.⁷⁶ Reform, however, would not come until 1970, after more than a decade of long negotiations and debates in the Indian parliament.⁷⁷

2. *1970 to 1986: The India Patents Act of 1970 Prohibits Patents on Pharmaceutical Products, Stimulating India’s Generic Drug Manufacturing Industry*

The second stage of Indian patent law began when India enacted its first independently drafted patent law, the India Patents Act of 1970 (1970 Act), which repealed the 1911 Act.⁷⁸ The 1970 Act expressly revoked the

68. *Id.* at 507.

69. *Id.* By World War I, India was ranked fourteenth among industrialized nations of the world. Production of textiles, food processing, and metals were among the dominant industries. *Id.*

70. *Id.* at 508 (noting that by India’s independence, in 1947, the Indian Patent Office received only 2,610 annual filings despite a population of about 400 million).

71. *Id.* at 510-11.

72. *Id.* at 511.

73. *Id.*

74. *Id.* at 511-12.

75. Shamnad Basheer, *India’s Tryst with TRIPS: The Patents (Amendment) Act 2005*, 1 INDIAN J.L. & TECH. 15, 18 (2005), available at <http://ssrn.com/abstract=764066>.

76. Mueller, *The Tiger Awakens*, *supra* note 21, at 511-12.

77. *Id.* at 512.

78. *Id.*

patentability of pharmaceutical products.⁷⁹ The 1970 Act prohibited patents on “substances intended for use, or capable of being used as food or medicine or drug, or . . . relating to substances prepared or produced by chemical processes (including alloys, optical glass, semi-conductors and inter-metallic compounds).”⁸⁰ However, the 1970 Act permitted patents on processes for making pharmaceutical compounds.⁸¹ Through the 1970 Act, the Indian government made a deliberate choice to stimulate the lagging Indian economy by promoting domestic drug manufacturing.⁸² Over the ensuing years, India developed a worldwide reputation as a producer of low-price generic drugs.⁸³ India is currently the biggest producer of generic drugs by volume⁸⁴ and the leading exporter of medicine to developing countries,⁸⁵ and it supplies a large percentage of AIDS medicines used in developing countries.⁸⁶

79. 1970 Act, *supra* note 10, §5. Both the 1856 and 1911 Acts permitted patenting of pharmaceutical products, even though the domestic pharmaceutical industry was a minor sector at that time. Mueller, *The Tiger Awakens*, *supra* note 21, at 508.

80. 1970 Act, *supra* note 10, § 5(a)-(b).

81. 1970 Act, *supra* note 10, § 5. The patent term of process patents for pharmaceutical compounds was shorter than the term of other types of patents:

[I]n respect of an invention claiming the method or process of manufacture of a substance, where the substance is intended for use, or is capable of being used, as food or as a medicine or drug, be five years from the date of sealing of the patent, or seven years from the date of the patent whichever period is shorter; . . .

Id. § 53(a).

82. Mueller, *The Tiger Awakens*, *supra* note 21, at 514.

83. *Id.*

84. MÉDECINS SANS FRONTIÈRES (DOCTORS WITHOUT BORDERS), UNTANGLING THE WEB OF PRICE REDUCTIONS: A PRICING GUIDE FOR THE PURCHASE OF ARVS FOR DEVELOPING COUNTRIES 4 (8th ed. 2005), available at <http://www.doctorswithoutborders.org/publications/reports/2005/untanglingthewebv8.pdf> (last visited Dec. 20, 2007).

85. Press Release, Oxfam, Oxfam Targeted with Email Campaign as Novartis' Legal Action against India Approaches Climax (Feb. 15, 2007), http://www.oxfam.org/en/news/2007/pr070215_novartis (last visited Dec. 20, 2007).

86. See Press Release, Médecins Sans Frontières (Doctors Without Borders), Patent Application For AIDS Drug Opposed For First Time in India: Patents in India Endanger Global Access to Affordable Medicines and Treatment Scale-up (Mar. 30, 2006), available at http://www.doctorswithoutborders.org/pr/2006/03-30-2006_1.cfm (last visited Mar. 28, 2008) (“Of the over 60,000 patients in nearly 30 countries in MSF projects, 84 percent receive generic AIDS medicines made in India.”).

3. *1986 to Present: An Uncertain Future for Generic Drug-manufacturing After India Reforms Patent Law to be TRIPS-Compliant.*

The third stage encompasses the period from India's participation in the GATT (and later the WTO) to the present.⁸⁷ India was one of the original 140 member nations who became WTO members on January 1, 1995.⁸⁸ Like many other developing countries at the time, India first opposed the inclusion of intellectual property rights in an international trade agreement.⁸⁹ However, in light of India's declining economy in the 1980s and fearing that it would be cut off from valuable western markets, India agreed to conduct more serious negotiations on intellectual property provisions in the WTO.⁹⁰ Throughout the negotiations, India maintained the position that patent protection should be tailored to the level of an individual country's economic development.⁹¹

In order to belong to the WTO, India was required to comply with TRIPS, which set out minimum standards of intellectual property protection.⁹² The basic provision of TRIPS delineating the scope of patentability, Article 27.1, states that all member nations must make patents "available for any inventions, whether products or processes, in all fields of technology," subject to standard requirements of novelty, utility, and nonobviousness.⁹³ Under the broad language of Article 27, all members must provide full patent protection to pharmaceuticals.⁹⁴

87. Mueller, *The Tiger Awakens*, *supra* note 21, at 505.

88. India and the WTO: Member Information, *supra* note 6.

89. Brazil, Argentina and Mexico were among the other countries initially opposed to TRIPS. Mueller, *The Tiger Awakens*, *supra* note 21, at 517.

90. *Id.* at 517-18.

91. *Id.* at 518.

92. See TRIPS, *supra* note 2, arts. 27-38.

93. Article 27.1 is known as the "non-discrimination" clause. It states:

Subject to the provisions of paragraphs 2 and 3, patents shall be available for any inventions, whether products or processes, in all fields of technology, provided that they are new, involve an inventive step and are capable of industrial application. Subject to paragraph 4 of Article 65, paragraph 8 of Article 70 and paragraph 3 of this Article, patents shall be available and patent rights enjoyable without discrimination as to the place of invention, the field of technology and whether products are imported or locally produced.

TRIPS, *supra* note 2, art. 27.1. Article 27.2 provides for an "ordre public" exception:

Members may exclude from patentability inventions, the prevention within their territory of the commercial exploitation of which is necessary to protect *ordre public* or morality, including to protect human, animal or plant life or health or to avoid serious prejudice to the envi-

The WTO granted India, as a developing country, a transition period to bring its domestic intellectual property laws in compliance with TRIPS.⁹⁵ Most notably, India had to amend its patent law to make patents available for pharmaceutical products by January 1, 2005.⁹⁶ In the interim, the 1970 Act underwent three amendments. The first amendment implemented the “mailbox” rule, which stipulated that (a) India must provide a system so that patent applications could be filed during the transition period, and (b) the Indian Patent Office would examine those applications when India started to grant pharmaceutical product patents.⁹⁷ The second amendment

ronment, provided that such exclusion is not made merely because the exploitation is prohibited by their law.

Id. art. 27.2. Article 27.3 provides further exception. Of relevance to pharmaceuticals and health is clause (a), which exempts diagnostic, therapeutic and surgical methods:

Members may also exclude from patentability:

(a) diagnostic, therapeutic and surgical methods for the treatment of humans or animals;

(b) plants and animals other than micro-organisms, and essentially biological processes for the production of plants or animals other than non-biological and microbiological processes. However, Members shall provide for the protection of plant varieties either by patents or by an effective *sui generis* system or by any combination thereof. The provisions of this subparagraph shall be reviewed four years after the date of entry into force of the WTO Agreement.

Id. art. 27.3.

94. Notwithstanding the broad language of Article 27.1, TRIPS also contains certain provisions to moderate Article 27.1’s coverage with regard to public health. For example, Article 31 sets out specific provisions that member countries should follow under a compulsory license, which enables a government to license of the use of a patented invention to a third party or government agency without the consent of the patent holder. *See id.* art. 31. Article 6 and footnote 6 addresses parallel importation, stating that patentees may not challenge the importation of a patented product marketed in another country because their rights have been exhausted upon sale of the product. *See id.* art. 6. Furthermore, the Doha Declaration on the TRIPS agreement and public health, adopted by the WTO Ministerial Conference in Doha in 2001, reaffirmed that TRIPS does not prevent member countries from “taking measures to protect public health.” World Trade Organization, Ministerial Declaration on the TRIPS Agreement and Public Health, WT/MIN(01)/DEC/2, 41 ILM 755, 755 (2002), available at http://www.wto.org/english/thewto_e/minist_e/min01_e/mindecl_trips_e.pdf (last visited Dec. 20, 2007).

95. *See generally* TRIPS, *supra* note 2, art. 65.

96. *See id.* art. 65.4.

97. *See id.* art. 70.8. Patent applications for pharmaceutical products would be accepted and put away in a “mailbox” until 2005. Applications would be judged for “novelty” on the basis of the filing date and not with reference to 2005, the year in which pharmaceutical product patents were first incorporated into the patent regime. *Id.* In 1997, the US complained to WTO’s Dispute Settlement Body (DSB) that India’s patent system was noncompliant with respect to its lack of a mailbox system as required by Ar-

lengthened the patent term to twenty years and modified the compulsory licensing requirements and the burdens of proof for patent infringement.⁹⁸ Finally, in 2005, the Indian government took its latest (and purportedly last) step towards achieving TRIPS compliance by making pharmaceutical products patentable.⁹⁹ The availability of patent protection for pharmaceutical products, as required by TRIPS Article 27.1's broad nondiscrimination provision, has been a key difference between the patent regimes of developed and developing countries.¹⁰⁰

The Patents (Amendment) Act of 2005 (2005 Amendment) removed the prohibition of product patents for pharmaceutical compounds, allowing any company to seek both product and process patents in India.¹⁰¹ However, other provisions in the 2005 Amendment could potentially limit the reach of product patent protection. One of the newly introduced provisions, Section 3(d), which is the subject of the Novartis litigation, states that the following are not patentable inventions:

The mere discovery of a new form of a known substance which does not result in the enhancement of the known efficacy of that substance or the mere discovery of any new property or new use for a known substance or of the mere use of a known process, machine or apparatus unless such known process results in a new product or employs at least one new reactant.

ticle 70.8. The DSB held that India failed to meet its TRIPS obligations. Appellate Body Report, *India—Patent Protection for Pharmaceutical and Agricultural Chemical Products*, ¶ 97, WT/DS50/AB/R (Dec. 19, 1997), available at http://www.wto.org/english/tratop_e/dispu_e/tripab.pdf (last visited Dec. 20, 2007).

98. Mueller, *The Tiger Awakens*, *supra* note 21, at 519, 526-28.

99. Mueller, *Taking TRIPS to India*, *supra* note 28, at 542; *see also* Mueller, *The Tiger Awakens*, *supra* note 21 529-31.

100. Before TRIPS, most developing countries did not have pharmaceutical patents. Correa, *supra* note 9, at 2. Surprisingly, many industrialized countries excluded pharmaceutical products from patentability in early phases of their development. Pharmaceutical patents were first authorized in Japan in 1976, Switzerland in 1977 and Italy in 1978, and were unavailable in Finland, Greece, Iceland, Monaco, Norway, Portugal and Spain as late as 1988. MERGES & DUFFY, *supra* note 11, at 186-87.

101. Many commentators contend that the 2005 Amendment illustrates a compromise between the obligation to recognize pharmaceutical product patents and the desire to restrain overbroad IPRs. The 2005 Amendment began as the Patents (Amendment Bill) of 2003, but the Bill lapsed due to a change in government. Legislators feared that India would not meet its 2005 TRIPS deadline and instead passed the Bill as a temporary Presidential Ordinance in 2004. Due to intense public debate and pressure from the "Left" (Communist) party (representing the interest of India's poor), the final version of the Patents (Amendment) Act of 2005 was significantly different from the 2004 Ordinance. *See, e.g.*, Mueller, *The Tiger Awakens*, *supra* note 21, at 529-531.

Explanation—For the purposes of this clause, salts, esters, ethers, polymorphs, metabolites, pure form, particle size isomers, mixtures of isomers, complexes, combinations and other derivatives of known substance shall be considered to be the same substance, unless they differ significantly in properties with regard to efficacy.

This controversial amendment is aimed at preventing frivolous patents that are only trivial modifications of existing inventions. Some commentators have alleged that the objective of Section 3(d) is to prevent “ever-greening.”¹⁰²

E. Development of the Indian Pharmaceutical Industry

The changes in India’s patent regime should be viewed in the context of the development of the Indian pharmaceutical industry. Much of the debate and many of the changes in the patent law were directly related to the demands of both multinational pharmaceutical companies and domestic pharmaceutical manufacturers.

India had virtually no domestic pharmaceutical industry during the British colonial rule.¹⁰³ As India began to industrialize during the first half of the twentieth century, that industry failed to develop.¹⁰⁴ Although both the 1856 and 1911 Acts technically allowed patents for pharmaceutical products, other policies, which favored British pharmaceutical company’s interests with little regard for India’s welfare, hindered the growth of a domestic pharmaceutical industry.¹⁰⁵

By the time of India’s independence, India’s healthcare system was in disarray.¹⁰⁶ While India was then one of the world’s poorest countries, it imported medicines and sold them to Indian patients at some of the highest prices in the world, often exceeding the prices in Western countries.¹⁰⁷ Multinational pharmaceutical companies dominated what little drug manufacturing that existed in India.¹⁰⁸ In this context, both the Chand Report of

102. *See supra* note 31 and surrounding text.

103. Mueller, *The Tiger Awakens*, *supra* note 21, at 507-08.

104. *Id.* at 507-08.

105. *Id.* The 1911 Act established an intra-British Empire priority system where British applicants for Indian patents that had filed within the U.K. for the same invention benefited from the earlier filing date. Foreign corporations reportedly used the 1911 Act to prevent Indian manufacturers from producing drugs invented abroad. *Id.*

106. *Id.* at 508-10.

107. *Id.* at 509-10.

108. *Id.*

1950 and the Ayyangar Report of 1959 called for the need to encourage innovation and prevent foreign monopolization.¹⁰⁹

By explicitly abolishing patents for pharmaceutical products, the 1970 Act generated immediate and dramatic results. Within a decade, the number of foreign-owned patent applications filed decreased sharply.¹¹⁰ Because pharmaceutical products patented outside of India could be reverse engineered and manufactured, India developed a capable generic drug manufacturing industry reputed for producing generic versions of branded drugs at low cost.¹¹¹

Today, India still has a thriving domestic generic drug industry that competes directly with brand-name drug manufacturers from the U.S. and Europe.¹¹² Indeed, India and Japan are the only two countries where generic drug manufacturers dominate over multinational corporations.¹¹³ The domestic industry is itself divided between several large companies (such as Ranbaxy, Cipla, and Dr. Reddy's Laboratories), which engage in some original research and development in addition to generic drug production, and hundreds of smaller companies, which exclusively reverse engineer and manufacture generics.¹¹⁴ Both segments rely heavily on export markets.¹¹⁵ Meanwhile, a growing Indian middle class and an expanding health insurance system have increased the demand for medicines within India. Annual sales have been predicted to triple to \$20 billion by 2015.¹¹⁶

The landscape of the multinational pharmaceutical industry in India is also changing. Multinational companies traditionally manufactured drugs outside of India and then exported them into India.¹¹⁷ Recently, multinationals are leveraging India's low labor costs and skilled workforce to

109. *Id.* at 510-12.

110. *Id.* at 513-14 (noting 4,248 non-Indian applications in 1968 compared to 1,010 a decade later).

111. *Id.* at 514-15.

112. Aaron Smith, *Report: Indian Drug Market to Reach \$20B*, CNNMONEY.COM, Aug. 22, 2007, http://money.cnn.com/2007/08/22/news/companies/india_pharma/index.htm (last visited Dec. 20, 2007).

113. In 2004, multinational firms held only a 23% share of the Indian pharmaceutical market as compared to domestic companies' 77% market share. Mueller, *The Tiger Awakens*, *supra* note 21, at 532-33.

114. *Id.* at 537.

115. *Id.* at 537-40. Larger companies export to regulated markets such as with higher entry barriers, such as the US, Western Europe, Japan, Australia and New Zealand. Smaller drug manufacturers tend to export to markets characterized as "unregulated," such as Vietnam, Syria, Jordan, Brazil, China, Korea, Taiwan and Egypt.

116. Smith, *supra* note 112.

117. Mueller, *The Tiger Awakens*, *supra* note 21, at 533.

conduct manufacturing, R&D, and clinical testing in India.¹¹⁸ Yet, India must compete with countries such as Singapore or China for foreign investors who prefer more stringent patent rights.¹¹⁹

The fragmented Indian pharmaceutical industry has led to a wide disparity of interests with respect to patent protection. Not only do multinational drug companies want enhanced patent protection, but some domestic companies—primarily those who have significant research and development operations—also want a stronger patent regime.¹²⁰ Other domestic companies, however, fervently oppose patent law reform, fearing that it would lead to patent-based monopolies and destroy their imitation-based business models.¹²¹

III. GLEEVEC PATENT REJECTION AND NOVARTIS AG

A. Background: Novartis's Patent Application

Gleevec is used for the treatment of chronic myeloid leukemia (CML), a disease that afflicts nearly 5,000 new patients in the United States each year.¹²² Studies have shown that Gleevec, which targets specific cancer proteins, is almost ten times more effective than traditional interferon therapy.¹²³ In 1993, Novartis filed patents worldwide for the active molecule imatinib.¹²⁴ Novartis did not patent imatinib in India because the 1970 Act did not allow patenting of pharmaceutical products at that time.¹²⁵ After India's entry into the WTO in 1995, Novartis filed a "mailbox" patent application¹²⁶ in the Madras Patent Office for imatinib mesylate, a beta

118. *Id.* at 533-35.

119. *See generally* Hitesh Gajaria, Protecting IP for Prosperity, *ECONOMIC TIMES (India)* (Aug. 3, 2007), available at http://economictimes.indiatimes.com/Guest_Writer/Protecting_IP_for_prosperity/articleshow/2251915.cms (expressing need for IP protections to compete in the region).

120. Mueller, *The Tiger Awakens*, *supra* note 21, at 540.

121. *Id.* at 539-40.

122. American Cancer Society, How Many People Get Chronic Myeloid Leukemia? (Aug. 14, 2007), http://www.cancer.org/docroot/CRI/content/CRI_2_2_1X_How_many_people_get_chronic_leukemia_62.asp (last visited Dec. 20, 2007).

123. American Cancer Society, Gleevec's New Successes Show Growing Promise of Targeted Therapies (May 22, 2002), http://www.cancer.org/docroot/NWS/content/NWS_1_1x_Gleevec_s_New_Successes_Show_Growing_Promise_of_Targeted_Therapies.asp (last visited Dec. 20, 2007).

124. Novartis, History of Glivec in India, <http://www.novartis.com/downloads/about-novartis/glivec-history-india.pdf> (last visited Dec. 20, 2007).

125. *Id.*

126. *See supra* note 97 and surrounding text.

crystalline form of the free base imatinib.¹²⁷ In 2002, Novartis started its Gleevec donation program in India to provide Gleevec to patients who were unable to afford the medicine, but halted that program after Indian drug manufacturers began to produce a generic version of Gleevec.¹²⁸ In 2003, the Patent Office granted Novartis Exclusive Marketing Rights (EMR)¹²⁹ in India, which allowed Novartis to enjoin generic Gleevec manufacturers and raise the price of Gleevec almost ten-fold.¹³⁰ When the Gleevec mailbox application came up for examination in 2006, some commentators suspected that the application was fast-tracked due to controversies over the donation program and the divisive rise in price.¹³¹

In January 2006, the Madras Patent Office refused to grant Novartis a patent for imatinib mesylate.¹³² The first major ground for rejection was that because imatinib mesylate was a salt form of the free base imatinib,¹³³ and Novartis claimed all pharmaceutical salt forms of imatinib in its 1993 patents, the Indian application therefore lacked novelty and inventiveness.¹³⁴ The second major ground for rejection was based on Section 3(d)

127. Posting of Shamnad Basheer to Spicy IP, First Mailbox Opposition (Gleevec) Decided in India (Mar. 11, 2007), <http://spicyipindia.blogspot.com/2006/03/first-mailbox-opposition-gleevec.html>.

128. Stephanie Strom & Matt Fleischer-Black, *Drug Maker's Vow to Donate Cancer Medicine Falls Short*, N.Y. TIMES, June 5, 2003, at A1. Novartis started the donation program in India with the warning that it would be halted should any Indian company launch a generic version.

129. See TRIPS, *supra* note 2, art. 70.9. During a member country's transition period, it must grant patent applicants "exclusive marketing rights" (EMRs) which last for five years or until the issuance or rejection of a patent. *Id.*

130. Ganapati Murdur, *Indian Patients Go to Court Over Cancer Drug*, 329 BRIT. MED. J. 419 (2004), available at <http://www.pubmedcentral.nih.gov/articlerender.fcgi?tool=pubmed&pubmedid=15321889>. One month's dose of Gleevec costs \$2,600, roughly ten times more than the generic versions.

131. Basheer, First Mailbox Opposition (Gleevec) Decided in India, *supra* note 127.

132. *Id.*

133. A free base is converted a salt form by adding acid, in this case, methanesulfonic acid to the free base imatinib. The beta crystalline form of the salt is allegedly the most stable form of the salt. Posting of Shamnad Basheer to Spicy IP, US Enablement Case: Relevance for the Novartis Patent Case in India, <http://spicyipindia.blogspot.com/2007/10/us-enablement-case-relevance-for.html> (Oct. 29, 2007).

134. In the Matter of an Application for Patent No. 1602/MAS/98 (Jan. 26, 2006), available at <http://www.scribd.com/doc/416824/Patent-office-Order-India-Glivec>. The Patent Controller wrote:

I do not agree with the contention of the Applicant that the 1993 patent discloses only the free base. The 1993 patent discloses mathanesulfonic acid as one of the salt forming groups and also the 1993 patent specification states that the required acid additions salts are obtained in a customary manner. Further, claims 6 to 23 of the 1993 patent claim a

of the 2005 Amendment, which required that new forms of a known substance could only be patented as a product if they demonstrated “enhanced efficacy.”¹³⁵ Although Novartis disclosed information that imatinib mesylate had a 30% increase in bioavailability (the percentage of the drug absorbed into the bloodstream) as compared with imatinib, the Patent Office found this insufficient to meet the “enhanced efficacy” requirement of Section 3(d).¹³⁶

B. Procedural History of Novartis’s Appeal

In May 2006, Novartis petitioned the Madras High Court, opposed by the Indian Government, the Patent Office, several Indian generic drug manufacturers¹³⁷ and an Indian public interest group.¹³⁸ Novartis claimed that the Patent Controller erred in rejecting the Gleevec patent application, that Section 3(d) was not compliant with TRIPS, and that Section 3(d) was vague, ambiguous and in violation of Article 14 of the Constitution of India¹³⁹ because it was discriminatory against Novartis. The case was bifurcated between the Madras High Court and the Intellectual Property Appellate Board (IPAB). The challenges on TRIPS compliance and constitutionality of Section 3(d) were heard by the Madras High Court, which issued a judgment against Novartis on August 8, 2007.¹⁴⁰ The IPAB pro-

pharmaceutically acceptable salt of the base compound. The patent term extension certificate for the 1993 patent issued by the US Patent Office specifically mentions imatinib mesylate (GleevecR) as the product. All these points clearly prove that imatinib mesylate is already known from the prior art publications.

Id. (quoted in Basheer, First Mailbox Opposition (Gleevec) Decided in India, *supra* note 127).

135. *Id.* See also Basheer, First Mailbox Opposition (Gleevec) Decided in India, *supra* note 127 (discussing ruling)

136. The Patent Controller wrote, “As per the affidavit the technical expert has conducted studies to compare the relative bioavailability of the free base with that of crystal form of imatinib mesylate and has said that the difference in bioavailability is only 30% and also the difference in bioavailability may be due to the difference in their solubility in water.” Basheer, First Mailbox Opposition (Gleevec) Decided in India, *supra* note 127.

137. These manufacturers are Natco Pharma, Cipla, Hetro Drugs, Ranbaxy, Sun Pharmaceuticals. See *Novartis AG v. Union of India*, (2007) 4 MADRAS L.J. 1153, § 1.

138. Cancer Patient Aid Association. *Id.*

139. Article 14 states, “The State shall not deny to any person equality before the law or the equal protection of the laws within the territory of India.” INDIA CONST. art. 14.

140. Posting of Shamnad Basheer to Spicy IP, *Novartis Loses at the High Court: Focus Now Shifts to IPAB*, <http://spicyipindia.blogspot.com/2007/08/novartis-loses-at-high-court-focus-now.html> (Aug. 7, 2007).

ceedings on the merits of Novartis's appeal on the rejection of the Gleevec patent are currently pending.¹⁴¹

C. Issues at the Madras High Court

The Madras High Court entertained three issues: First, whether courts in India have jurisdiction to review if Section 3(d) of the 2005 Amendment is compliant with Article 27 of TRIPS, and alternatively, whether courts in India can grant declaratory relief that Section 3(d) is not compliant with TRIPS. Second, if courts do have jurisdiction, whether Section 3(d) complies with Article 27 of TRIPS. Third, whether Section 3(d) violates Article 14 of the Constitution of India because it is vague, arbitrary and confers uncontrolled discretion to the Patent Controller.¹⁴² This Section will review the Madras High Court's holding on each issue.

1. Jurisdiction

The Madras High Court held that it did not have jurisdiction to decide a case concerning the compliance of a domestic Indian law with an international treaty.¹⁴³ In support of its arguments, Novartis relied on a case from the United Kingdom, *Equal Opportunities Commission & Another v. Secretary of State for Employment*, in which the court held that British courts had jurisdiction to decide a case concerning the compatibility of a British law with the European Community Law.¹⁴⁴ The Madras High Court distinguished the facts of the *Novartis* dispute with those under *Equal Opportunities Commission*, because the European Community Law had been "domesticated" as the domestic law of England through the European Communities Act, whereas the Indian government had not "domesticated" TRIPS.¹⁴⁵ Furthermore, the Madras High Court asserted that the nature of an international treaty is contractual, and accordingly contains provisions for dispute settlement.¹⁴⁶ Since Article 64 of TRIPS expressly provides that disputes should be taken to the Dispute Settlement Body of the WTO, the Madras High Court held that Novartis should seek to enforce TRIPS through that mechanism and not an Indian court.¹⁴⁷

Concerning the alternative argument of granting of declaratory relief, the Madras High Court asserted that courts have broad discretionary power to grant declaratory relief under Article 32 of the Constitution of

141. *See infra* Section III.D.

142. *Novartis AG*, § 5.

143. *Id.* § 7.

144. *Id.* § 6.

145. *Id.*

146. *Id.*

147. *Id.*

India.¹⁴⁸ The court held, however, that declaratory relief should not be given where it would serve no useful purpose to the petitioner.¹⁴⁹ Because Novartis could not compel the Indian parliament to enact or amend a law even if Novartis were to get a declaration that Section 3(d) was noncompliant with TRIPS, the court held that Novartis was not entitled to declaratory relief.¹⁵⁰

2. *Compliance with TRIPS*

Because the Madras High Court held that it did not have jurisdiction to decide whether a domestic law violated an international treaty, it refused to decide whether Section 3(d) is compliant with TRIPS.¹⁵¹ Nevertheless, the court opined that TRIPS allows flexibility for the individual needs and situations of every member country.¹⁵² In complying with the TRIPS obligations, India has a constitutional duty to provide good health care to its citizens, including giving them access to affordable drugs.¹⁵³ Thus, the court opined that the validity of Section 3(d) should be analyzed with consideration of its objectives of preventing evergreening and making generic drugs available.¹⁵⁴

3. *Constitutionality*

The court held that Section 3(d) did not violate Article 14 of the Constitution of India and was not vague or arbitrary, and did not confer uncontrolled discretion to the Patent Controller.¹⁵⁵ The court rejected Novartis's arguments that Section 3(d), which denies patents to new uses of known substances unless the patentee can show "enhancement of the known efficacy" or "differing significantly in properties with regard to efficacy," was ambiguous and unclear.¹⁵⁶ While these two phrases are not explicitly defined, the court held that it was common practice for the legislature to use general language and leave the courts to interpret the language based on the context and facts of each case.¹⁵⁷ Moreover, the court held that Novar-

148. *Id.* § 9.

149. *Id.*

150. *Id.*

151. *Id.* § 8.

152. *Id.* § 15. The Madras High Court interpreted TRIPS as granting member countries enough flexibility to comply with TRIPS, but at the same time enacting laws benefiting the social and economic welfare of each country. *See id.*

153. *Id.*

154. *Id.*

155. *Id.* § 19.

156. *Id.* § 11.

157. *Id.* § 14.

tis was a sophisticated party who had the technological expertise to comprehend the enhanced efficacy requirement.¹⁵⁸

The court also rejected Novartis's argument that Section 3(d) was arbitrarily enacted.¹⁵⁹ Novartis argued that the actual amended Section 3(d) was not the same as the one originally proposed to the Parliament, which made no mention of an efficacy requirement, and was substituted in the current form of Section 3(d) without explanation.¹⁶⁰ The court held that Section 3(d) was not arbitrarily enacted, referring to the parliamentary debates leading to the 2005 Amendment.¹⁶¹ The debates revealed that there was widespread fear that the earlier proposed amendments would deny Indian citizens of access to affordable medicines and open up the possibility of evergreening.¹⁶² Thus, the court found that the legislature did not arbitrarily enact Section 3(d) in its final form.¹⁶³

Finally, the court held that Section 3(d) did not confer unlimited discretionary power to the Patent Controller and was not discriminatory.¹⁶⁴ The court emphasized that discretionary power did not necessarily mean that it would be discriminatory.¹⁶⁵ The Patent Controller's discretionary power under Section 3(d) in deciding whether a known substance has enhanced efficacy did not automatically lead to an arbitrary exercise of discretionary power or discrimination against Novartis.¹⁶⁶ Furthermore, the court opined that the judiciary should be more deferential to the legislature in the field of economic regulation.¹⁶⁷ Because the Patent Act was designed to encourage the economic interests of India, the courts should be especially cautious before overruling the legislature.¹⁶⁸

158. *Id.* § 13 (“The writ petitioner is not a novice to the pharmacology field but it, being pharmaceutical giant in the whole of the world, cannot plead that they do not know what is meant by enhancement of a known efficacy and they cannot snow [sic] that the derivatives differ significantly in properties with regard to efficacy.”).

159. *Id.* § 12.

160. *Id.*

161. *Id.*

162. *Id.*

163. *Id.*

164. *Id.* § 16.

165. *Id.* § 17 (quoting *Selvi. J. Jayalalitha v. The Union of India*, 2007-1-LW, at 724: “We cannot presume that the authorities will administer the law ‘with an evil eye and an unequal hand.’”).

166. *Id.* § 16.

167. *Id.* § 17.

168. *Id.*

D. Issue at the IPAB

In April 2007, while the case was still pending before the Madras High Court, the Indian government put into operation the patent division of the IPAB¹⁶⁹ and transferred the challenge on the merits of the denial of Novartis's patent application to the Chennai-based IPAB.¹⁷⁰ The government appointed S. Chandrasekharan, a former Controller of the Madras Patent Office, as the "technical member."¹⁷¹ Subsequently, Novartis objected to the appointment of S. Chandrasekharan on the ground that he was the Controller, although not the examining officer, when Novartis's Gleevec patent application was rejected.¹⁷² The IPAB dismissed this objection, and Novartis appealed to the Madras High Court to remove Chandrasekharan.¹⁷³ The Madras High Court heard the appeal on October 9, 2007, when the Indian government proposed revising the composition of the board to hear the Novartis dispute by removing altogether the "technical member."¹⁷⁴ Even though Novartis agreed to this proposal, Hyderabad-based generic drug manufacturer Natco Pharma Ltd, the main corporate opponent to Novartis in the case, argued that the board should not hear the case without a technical member present.¹⁷⁵ After the Madras High Court ruled that the case could proceed at the IPAB without a technical member, Natco appealed to the Supreme Court of India.¹⁷⁶ On January 28, 2008, the Supreme Court issued a stay order on the Madras High Court judgment.¹⁷⁷ As this Note went into publication, it is unclear if and when the IPAB proceedings will continue.

169. See April 3, 2007 Gazette, *supra* note 50.

170. Basheer, *Novartis Case Before IPAB?*, *supra* note 54.

171. Patents: Appellate Board Becomes Functional, MEDINDIA.COM, Apr. 10, 2007, http://www.medindia.net/news/view_news_main.asp?x=19886 (last visited Dec. 20, 2007).

172. Posting of Shammad Basheer to Spicy IP, *Novartis Case at IPAB Stayed*, <http://spicyipindia.blogspot.com/2007/08/novartis-case-at-ipab-stayed.html> (Aug. 10, 2007).

173. *Id.*

174. C. H. Unnikrishnan, *Order Deferred in Glivec Case*, LIVEMINT.COM, Oct. 23, 2007, <http://www.livemint.com/2007/10/23234424/Order-deferred-in-Glivec-case.html>.

175. *Id.* (quoting Natco company secretary Adi Narayana: "Our argument is that since the points to be raised in the IPAB hearing are highly technical in nature, it will be almost impossible for the board to take a balanced view unless it heard by an expert in this subject.").

176. Bhuma Shrivastava & C. H. Unnikrishnan, *SC Issues Stay Order Against Appeal Hearing*, LIVEMINT.COM, Jan. 29, 2008, <http://www.livemint.com/2008/01/29001921/SC-issues-stay-order-against-a.html>.

177. *Id.*

IV. ANALYSIS OF SECTION 3(D)

As previously discussed, the Indian government introduced Section 3(d) to prevent multinational pharmaceutical companies from extending the life of a patent. Because pharmaceutical inventions rarely relate to new chemical entities or novel active ingredients that have never before been available for therapeutic use, pharmaceutical companies often prolong patent protection by obtaining separate patents on multiple attributes of a single product.¹⁷⁸

This Part will describe how Section 3(d) regulates the granting of pharmaceutical product patents by limiting the scope of protection available for derivatives and new uses of a known substance. Section 3(d) essentially codifies distinct patentability criteria for pharmaceutical and chemical substances to prevent patents on trivial modifications of known substances. This Part argues that because other countries have taken more indirect routes to achieve similar objectives, Section 3(d) is not a radical departure from international practices.

A. Derivatives of Known Substances

1. India

The first clause of Section 3(d), “the mere discovery of a new form of a known substance which does not result in the enhancement of the known efficacy of that substance,”¹⁷⁹ prohibits patents of derivatives of known substances, unless such derivatives display “enhanced efficacy.” The explanation following the rule clarifies which substances will be considered derivatives of known substances and further requires that efficacy must “differ *significantly*.”¹⁸⁰

Pharmaceutical companies often file independent patent applications on variations of known substances to extend their protection on known active ingredients.¹⁸¹ For example, some therapeutically active ingredients are present in polymorphic forms (crystallization in different forms) that may have different therapeutic properties.¹⁸² Pharmaceutical companies often file composition patents protecting the formulated product contain-

178. These attributes include processes of manufacture, formulations, systems of delivery, new uses and different chemical forms of a known product such as salts, isomers, metabolites and polymorphic forms. Correa, *supra* note 9, at 14, 29-32.

179. The Patents (Amendment) Act, 2005, *supra* note 15, § 3(d).

180. *Id.* (emphasis added).

181. Correa, *supra* note 9, at 30.

182. *Id.*

ing active ingredients and appropriate additives.¹⁸³ They also seek patents on the active metabolite, the compound that forms in the patient's body after the drug is ingested and produces the desired therapeutic effect in the body.¹⁸⁴

2. *Other Countries*

The efficacy requirement is controversial because it has no explicit parallel in any other patent regime in the world.¹⁸⁵ Efficacy of pharmaceutical substances is usually addressed through drug safety regulation, and has no effect on the patentability of substances.¹⁸⁶ The language of Section 3(d) seems to have been taken directly from a European legislative directive dealing with drug safety regulation.¹⁸⁷ Furthermore, Section 3(d) raises questions as to what kind of data is required to establish efficacy and how much an improvement results in significantly enhanced efficacy.¹⁸⁸

While Section 3(d) has no direct counterpart in other patent laws, other countries such as the United States have myriad indirect ways to deal with

183. *Id.* (discussing composition patents, combinations of previously known products, allowing the patentee to extend the term of protection granted under the basic patent).

184. *Id.*

185. Basheer, *India's Tryst with TRIPS: The Patents (Amendment) Act 2005*, *supra* note 75, at 24.

186. *Id.*

187. *Id.* Article 10(2)(b) of Council Directive 2004/27/EC defines a "generic medicinal product" as:

a medicinal product which has the same qualitative and quantitative composition in active substances and the same pharmaceutical form as the reference medicinal product, and whose bioequivalence with the reference medicinal product has been demonstrated by appropriate bioavailability studies. The different salts, esters, ethers, isomers, mixture of isomers, complexes or derivatives of an active substance shall be considered to be the same active substance, unless they differ significantly in properties with regard to safety and/or efficacy. In such cases, additional information providing proof of the safety and/or efficacy of the various salts, esters or derivatives of an authorised active substance must be supplied by the applicant. The various immediate-release oral pharmaceutical forms shall be considered to be one and the same pharmaceutical form. Bioavailability studies need not be required of the applicant if he can demonstrate that the generic medicinal product meets the relevant criteria as defined in the appropriate detailed guidelines.

Council Directive 2004/27, art. 10(2)(b), 2004 O.J. (L 136) 39 (EC).

188. Mueller, *The Tiger Awakens*, *supra* note 21, at 553 (describing questions as both qualitative and quantitative).

patents on insubstantial modifications of known active ingredients. For example, U.S. courts have invalidated patents on derivatives of known substances under the doctrine of inherent anticipation. In *Schering Corp. v. Geneva Pharmaceuticals, Inc.*, the Federal Circuit invalidated a patent on the metabolite of antihistamine drug because the metabolite “necessarily and inevitably” formed upon ingestion of previously patented antihistamine under normal conditions.¹⁸⁹

In addition, U.S. courts prevent the patenting of derivatives under the complex doctrine of double patenting, which aims to prevent a patentee from holding more than one patent with claims to the same invention or obvious modifications or variations of the same invention.¹⁹⁰ In the United States, prohibition against double patenting has both a statutory basis, which prohibits a patentee from holding more than one patent with identical claims,¹⁹¹ and a judicially-created equitable doctrine, which provides that a patentee may not have a later-issued patent with claims directed to an obvious variation of the subject matter of claims in an earlier-issued patent.¹⁹²

Another approach in the United States is the patent misuse doctrine, which prevents pharmaceutical companies from extending patent rights by obtaining multiple patents covering essentially the same invention.¹⁹³ Finally, U.S. courts draw upon the 35 U.S.C. § 103 nonobviousness doctrine¹⁹⁴ when invalidating certain pharmaceutical patents. In *Pfizer, Inc. v.*

189. 339 F.3d 1373, 1378 (Fed. Cir. 2003).

190. See generally Emily Evans, *Double Patenting Recapitulated*, 87 J. PAT. & TRADEMARK OFF. SOC'Y 625 (2005) (examining the doctrine in detail); see, e.g., *In re Longi*, 759 F.2d 887, 892-97 (Fed. Cir. 1985) (affirming rejection of a patent application upon a holding of obviousness-type double patenting over the claims of three commonly-owned patent applications).

191. Evans, *supra* note 190, at 625. The statutory basis is 35 U.S.C. § 101, which states, “[w]hoever invents or discovers any new and useful process, machine, manufacture, or composition of matter or any new and useful improvement thereof, may obtain a patent therefor . . .” The word “a” has been interpreted to mean that a patentee may have only a single patent covering a claimed invention. *Id.*

192. Evans, *supra* note 190, at 625-26. See also Dan Burk & Mark Lemley, *Biotechnology's Uncertainty Principle*, 54 CASE W. RES. L. REV. 691, 741 n.214 (2004) (suggesting that strengthening the obviousness standard will deter pharmaceutical companies from unjustifiably extending the effective patent life). For a more detailed discussion of the doctrine of double patenting, see 4 DONALD CHISUM, PATENTS: A TREATISE ON THE LAW OF PATENTABILITY, VALIDITY AND INFRINGEMENT ON PATENTS § 9.01 (2007).

193. Burk & Lemley, *supra* note 192, at 742.

194. 35 U.S.C. § 103(a) states, “A patent may not be obtained . . . if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.”

Apotex, Inc., the Federal Circuit invalidated Pfizer's patent on a hypertension drug on nonobviousness grounds because the active ingredient of the drug was merely a salt form of a known substance.¹⁹⁵

B. New Uses of Known Substances

1. India

The second clause of Section 3(d), "any new property or new use for a known substance or of the mere use of a known process, machine or apparatus unless such known process results in a new product or employs at least one new reactant,"¹⁹⁶ regulates the granting of "new use" patents.¹⁹⁷ Patents are frequently issued for new therapeutic uses of known products.¹⁹⁸ New use patents are critical to the patent strategy of pharmaceutical companies, who rely on new use patents to extend the commercial life of product patents.¹⁹⁹

195. 480 F.3d 1348, 1364 (Fed. Cir. 2007). Pfizer argued there was no easy way to predict, and therefore rendering the invention nonobvious, the influence of a different salt form on the active part of the drug. The court opined, "[A] rule of law equating unpredictability to patentability, applied in this case, would mean that any new salt . . . would be separately patentable, simply because the formation and properties of each salt must be verified through testing. This cannot be the proper standard since the expectation of success need only be reasonable, not absolute." *Id.*

196. The Patents (Amendment) Act, 2005, Section 3(d), *supra* note 15.

197. Mueller, *The Tiger Awakens*, *supra* note 21, at 557-59.

198. Edson B. Rodrigues Jr. & Brian Murphy, *Brazil's Prior Consent Law: A Dialogue Between Brazil and the United States Over Where the TRIPS Agreement Currently Sets the Balance Between the Protection of Pharmaceutical Patents and Access to Medicines*, 16 ALB. L.J. SCI. & TECH. 423, 430 (2006). Rodrigues and Murphy point to a 2002 study done by the National Institute of Health Care Management (NIHCM) Research and Education Foundation found that in 1989-2000, only 35% of the 1035 new drugs approved by the US FDA entailed a new active principle. *Id.* (citing THE NATIONAL INSTITUTE FOR HEALTH CARE MANAGEMENT RESEARCH AND EDUCATIONAL FOUNDATION, CHANGING PATTERNS OF PHARMACEUTICAL INNOVATION (2002), available at www.nihcm.org/~nihcmor/pdf/innovations.pdf).

199. Rodrigues & Murphy, *supra* note 198. This procedure is known as "evergreening" and may have anticompetitive effects. However, some scholars believe patent protection for drugs, which has an "effective patent life" between product launch and patent expiration of only about 11 years, is too short for firms to capture the value of its research and development investment. Process patents on new therapeutic uses developed as a way for firms to capture more value by extending the commercial life of the patent. See Rebecca Eisenberg, *The Problem of New Uses*, 5 YALE J. HEALTH POL'Y, L. & ETHICS 717, 722-25 (2005).

2. *Other Countries*

The patentability of new uses of known substances is controversial and is often treated inconsistently by other countries.²⁰⁰ In the United States, a new use of an existing product can be protected by a process patent.²⁰¹ The patent is confined to the particular method of use and does not encompass protection of the product.²⁰² Patent holders do not prefer process patents, which are not easily enforceable and cannot be used to stop competitors from selling the same product for other uses.²⁰³

Europe has a more expansive approach to new use patents.²⁰⁴ In Europe, a new use can either be a product claim or a process claim, depending on whether the product had previous pharmaceutical use. A new therapeutic use of a known product having no previous pharmaceutical use, known as a “first indication” or “first medical use,” can be protected by a product patent.²⁰⁵ This specialized form of product patent claim is known as “purpose-limited-product” claim, which limits the scope of the patent protection to the particular purpose or use of the product.²⁰⁶ However, a new use for a product that already has an existing pharmaceutical use, known as a “second indication” or “second medical use,” is protected by a process patent.²⁰⁷ The claim format is known as a “Swiss claim” and is merely limited to the new use of the known compound or composition.²⁰⁸

C. Section 3(d) and TRIPS

The above discussion indicates that the objective of India’s Section 3(d) is not a radical departure from international practices to regulate the

200. Jean Lanjouw, *A New Global Patent Regime for Diseases: U.S. and International Legal Issues*, 16 HARV. J.L. & TECH. 85, 95 (2002).

201. Eisenberg, *The Problem of New Uses*, *supra* note 199, at 724. A case often cited for the proposition that a new use for an existing product should be covered by a process patent is *Rohm & Haas Co. v. Roberts Chemicals, Inc.*, 245 F.2d 693, 699 (4th Cir. 1957).

202. Eisenberg, *The Problem of New Uses*, *supra* note 199, at 724.

203. *Id.* Enforcement is not easy because patent holders would have to enforce the use claim against patients taking the drug for the patented use, doctors prescribing it for such use, or pharmacists who fill the prescriptions. Enforcement against drug manufacturers who produce the drug would be difficult because they would be liable for contributory infringement, and there may be substantial non-infringing uses of the product.

204. Correa, *supra* note 9, at 14-15.

205. *Id.*

206. Ragavan, *supra* note 13, at 83-84.

207. *Id.*

208. *Id.* Thus, third party inventing a new use of a patented or known product can get patent protection limited to the marketing the product for the new use.

patenting of derivatives and new uses. Nevertheless, Novartis claimed that Section 3(d) was not compliant with TRIPS Article 27. Assuming that the patent laws of other countries are TRIPS-compliant and absent WTO ruling on the contrary, Novartis has likely overstated the noncompliance of Section 3(d).²⁰⁹

TRIPS Article 27.1 states, “patents shall be available for any inventions, whether products or processes, in all fields of technology, provided that they are new, involve an inventive step and are capable of industrial application.” This provision obliges member countries to grant product and process patents in all fields of technology and sets up three criteria, novelty, inventive step, and industrial applicability, for patentability. Inventive step and industrial applicability correlate to the concepts of nonobviousness and utility in the United States.²¹⁰

The 2005 Amendment extended product patent protection to pharmaceutical substances in order to fulfill Article 27.1’s requirements. However, “novelty,” “inventive step” and “industrial application” are not defined in TRIPS; member countries arguably have considerable flexibility in applying these three criteria.²¹¹ One perspective is that Section 3(d) is merely a codified nonobviousness standard in the context of pharmaceutical substances, and therefore permissible under TRIPS.²¹² India has limited discretion under TRIPS to decide the subject matter entitled to patent protection, but it has greater discretion to fine tune its patent regime by limiting the scope of protection available for derivatives and new uses by adjusting the inventive step criteria.²¹³

209. Treaty interpretation principles are beyond the scope of this Note. This Section discusses generally requirements under TRIPS and presents viewpoints on the interpretation of TRIPS Article 27. However, it is interesting to note that the Swiss government has declined to take Novartis’s challenge of the noncompliance of India’s patent law to the WTO. Swiss Government Not to Take Novartis Case to WTO—Reports, <http://www.forbes.com/markets/feeds/afx/2007/08/08/afx3997818.html> (last visited Dec. 20, 2007).

210. UNCTAD-ICTSD, RESOURCE BOOK ON TRIPS AND DEVELOPMENT, 359-61 (2005). Footnote 5 to Article 27.1 states that “inventive step” and “capable of industrial application” is synonymous with “non-obvious” and “useful.”

211. *Id.* at 358. This is the view taken by many academic commentators and NGOs. While member countries must apply those three criteria, the WTO Dispute Settlement Board (DSB) has never directly addressed *how* member countries must implement them. In one of the few WTO cases concerning Article 27, the Dispute Settlement Board (DSB) opined that member countries can adopt different rules for particular product areas, as long as those differences represent bona fide purposes. *Id.* at 370-71.

212. Basheer, *India Patent Act Faces TRIPS Challenge*, *supra* note 29.

213. One early view expressed by academics after TRIPS was promulgated is that the WTO should be more deferent to developing countries with respect to inventive step than

TRIPS is also silent on the issue of whether new medical uses, which itself is controversial and inconsistently treated by developed countries, is patentable.²¹⁴ Some commentators assert that new use patents lack novelty because they are mere discoveries of new properties of existing products. The EU approach sidesteps this obstacle by recognizing it as a “legal fiction” in which an invention can draw novelty from a new use.²¹⁵ Furthermore, since new use patents frequently refer to new medical uses of known pharmaceutical substances, they may fall under the TRIPS exception on patenting of a therapeutic method.²¹⁶

D. The Novartis Dispute Should Encourage Clarity in Indian Patent Law

India’s patent law needs to be clear and reliable in order to effectuate the purpose of advancing innovation. The 2005 Amendment and Section 3(d) introduced considerable uncertainty into Indian patent law. Therefore, India must be cautious in interpreting the provisions of Section 3(d).²¹⁷ For example, as previously described, although Section 3(d)’s limitation on patenting derivatives of known substances is not without parallels in other patent regimes, the problem stems from uncertainty about how the India patent office and judiciary will interpret “enhanced efficacy.” The 2005

to subject matter issues. See Rochelle C. Dreyfuss & Andreas F. Lowenfeld, *Two Achievements of the Uruguay Round: Putting TRIPS and Dispute Settlement Together*, 37 VA. J. INT’L L. 275, 282-304 (1997). However, the issue of permissible nonobviousness standards under TRIPS is widely debated on both sides. Some commentators have contended that nonobviousness is the most problematic issue in international harmonization of intellectual property protection. See J. H. Reichman, *From Free Riders to Fair Followers: Global Competition Under the TRIPS Agreement*, 29 N.Y.U. J. INT’L L. & POL. 11, n.62 and surrounding text.

214. Rodrigues & Murphy, *supra* note 198, at 430.

215. Furthermore, this “legal fiction” is not universally accepted. The British Patents Office took the position that this is an indefensible legal fiction and avoided these patents for unjustifiably extending the period of protection of the invention, regardless of the existence of a genuine inventive activity. See *id.* at 432.

216. *Id.* TRIPS Article 27.2(a) reads: “Members may also exclude from patentability: (a) diagnostic, therapeutic and surgical methods for the treatment of humans or animals.” TRIPS, *supra* note 2, art. 27.2.

217. Recent cases confirm that Section 3(d) will be a continuing issue in patent litigation in India. Closely following behind the Novartis litigation, F Hoffman-La Roche sued to enjoin Indian generic manufacturer Cipla in January 2008 after Cipla launched a generic version of Roche’s lung cancer drug Tarceva. Cipla asked the Delhi High Court to revoke the Tarceva patent, claiming that the patent was invalid under Section 3(d) because Tarceva was a mere derivative of an older drug. At the time of writing, the case is currently pending at the Delhi High Court. See Bhuma Shrivastava, *Roche-Cipla Row Test Case for Balancing Health Issues, Patents*, LIVEMINT.COM, Feb. 9, 2008, <http://www.livemint.com/2008/02/08230319/RocheCipla-row-test-case-for.html>.

Amendment does not define “efficacy.” Nor is it defined in the Indian Manual of Patent Practice and Procedure (MPPP), a publication of the Indian Patent Office.²¹⁸ *Novartis AG* suggests that a 30% bioavailability enhancement is not sufficient for the Patent Office to grant a patent. While the Madras High Court did not directly address the issue of what kind of data would establish enhanced efficacy, the court relied on a medical dictionary definition to opine that “efficacy” means “therapeutic” efficacy.²¹⁹ Some commentators have noted that efficacy should not be limited to merely therapeutic efficacy because a broader definition of efficacy, for example, one that includes practical efficiencies such as enhanced heat stability of drugs, would actually reward genuine advances.²²⁰ But until IPAB settles the pending case, there is no conclusive statement on how efficacy in Section 3(d) will be interpreted.

Although TRIPS sets out minimum requirements for intellectual property protection, it is dubious that member countries are obliged to expand beyond that.²²¹ On the other hand, a patent system should provide incentives for technical progress, and India may benefit from stronger patent protection. India is technologically more advanced than many other developing countries, and more and more of its domestic pharmaceutical companies are engaging in original research.²²² For example, some of these domestic companies may have the technological capacity to develop new medical uses, and therefore would benefit from a regime that recognizes new use patents.

218. Mueller, *The Tiger Awakens*, *supra* note 21, at 554 (discussing INDIAN PATENT OFFICE, MANUAL OF PATENT PRACTICE AND PROCEDURE (2005), available at <http://patentoffice.nic.in/ipr/patent/manual-2052005.pdf> (last visited Dec. 20, 2007)).

219. *Novartis AG v. Union of India*, (2007) 4 MADRAS L.J. 1153, § 13 (“Darland’s Medical Dictionary defines the expression ‘efficacy’ in the field of Pharmacology as ‘the ability of a drug to produce the desired therapeutic effect.’ . . . Dictionary meaning of ‘therapeutic’ is healing of disease—having a good effect on the body”).

220. Posting of Shamnad Basheer to Spicy IP, *Novartis Patent Dispute: Of Spins and Empty Rhetoric*, <http://spicyipindia.blogspot.com/2007/08/novartis-patent-dispute-of-spins-and.html> (Aug. 11, 2007).

221. *Id.* Other commentators note that availability of new use patents are negotiated under “TRIPS-plus” agreements, bilateral or regional free trade agreements. If new use patents were obligated under TRIPS, then TRIPS-plus agreements would be redundant. See Frederick M. Abbott, *Toward a New Era of Objective Assessment in the Field of TRIPS and Variable Geometry for the Preservation of Multilateralism*, 8 J. INT’L ECON. L. 77, 88-89, n.44 (2005).

222. See *supra* Section II.E.

While Section 3(d) aims to prevent trivial patents, incremental inventions can often embody considerable innovation.²²³ In particular, in the pharmaceutical industry, patents rarely involve new chemical entities but rather incremental improvements over prior inventions. If the nonobviousness standard is set so high that it effectively bars patentability of most incremental pharmaceutical innovations, that rule may contravene TRIPS²²⁴ and be detrimental to the Indian pharmaceutical industry by failing to provide proper incentives for research and development for the long term.

V. CONCLUSION

In the short term, the outcome of the Novartis litigation will guide the Indian patent offices and judiciary in interpreting the scope of patentability under India's new patent law. However, *Novartis AG* is also a small piece in a much larger puzzle: how developing countries can fashion intellectual property regimes to deliver better healthcare to their citizens. India is a noteworthy case study because its immense population is rapidly transforming into a global force. Its vast generic drugs industry, which supplies drugs to both developing and developed nations around the world, is also beginning to have the capacity to leverage India's skilled workforce and conduct original R&D. Other countries are also keeping a close eye on how India's patent law is developing; more than ten countries

223. This is the view taken by Shammad Basheer, Visiting Associate Professor of Law at George Washington University Law School and a prominent commentator on India's IP regime. He also keeps the blog, *Spicy IP*. In the face of the Novartis litigation, the government of India commissioned a group of experts, widely known as the "Mashelkar Committee," to comment on whether the recent amendments to India's patent law was TRIPS compliant. The Intellectual Property Institute (IPI), a think tank located in England, commissioned Basheer to write a paper to submit to the Mashelkar Committee. Both Basheer and the final Mashelkar Committee Report contend that limiting pharmaceutical patents to "new chemical entities" would not be TRIPS compliant. However, it is important to note that the Mashelkar Committee Report does not directly address Section 3(d). The Mashelkar Committee Report was later withdrawn after allegations that the Committee plagiarized from Basheer. On his blog, Basheer states that these allegations are unfounded. Posting of Shammad Basheer to *Spicy IP*, *Deconstructing the Mashelkar Committee Report Controversy: Part I*, <http://spicyipindia.blogspot.com/2007/02/deconstructing-mashelkar-committee.html> (Feb. 26, 2007).

224. India would be in breach of Article 27.1 if its nonobviousness standards were so rigid such that an invention would require an "inventive leap" rather than an "inventive step." See Dreyfuss & Lowenfeld, *supra* note 213, at 298.

in the Asia-Pacific region are actively considering adopting provisions similar to Section 3(d) in their own patent laws.²²⁵

The effects of a country's patent system on the domestic industries and public health are evident, and India should be cautious in going forth with any decisions that would alter India's traditionally conservative approach to patent policy. For example, after Italy introduced pharmaceutical patents in 1978, multinational companies took over many local companies, and exports of generic drugs declined while imports of patented drugs increased.²²⁶ The history of India's patent system demonstrates that India's generic drugs industry was built because of a deliberate move by the Indian government in shaping a conservative patent policy in 1970. But India's pharmaceutical industry today is far different than what it was in 1970. Stronger IPRs, such as new use patents or patents on derivatives of known substances, while likely not obligated under TRIPS, may benefit India's pharmaceutical companies by encouraging path-breaking research and development.

225. Gireesh Chandra Prasad, Copycats Popping Patent Law Pill, *ECONOMIC TIMES* (India), August 13, 2007, http://economictimes.indiatimes.com/News/News_By_Industry/Healthcare_Biotech/Pharmaceuticals/Copycats_popping_patent_law_pill/articleshow/2276358.cms (last visited Dec. 20, 2007).

226. COMM'N ON INTELL. PROP. RIGHTS, *INTELLECTUAL PROPERTY RIGHTS AND DEVELOPMENT POLICY* 37 (2002), available at http://www.iprcommission.org/graphic/documents/final_report.htm.

ADDITIONAL DEVELOPMENTS— PATENT LAW

IN RE NUIJTEN

500 F.3d 1346 (Fed. Cir. 2007).

The United States Court of Appeals for the Federal Circuit held, by a vote of two to one, that applicant Petrus Nuijten's claims directed toward a signal embedded with supplemental data did not claim patentable subject matter. The case, along with its companion *In re Comiskey*, 499 F.3d 1365 (Fed. Cir. 2007), represents the Federal Circuit's retreat from previously more liberal patent eligibility rules.

The Patent and Trademark Office examiner allowed Nuijten's other claims on the process of adding low-distortion watermarks to signals, on a device that performs the process, and on a storage medium for holding the resulting signals. But the examiner rejected Nuijten's claims directed toward the signals themselves as outside the scope of patentable subject matter under 35 U.S.C. § 101. The Board of Patent Appeals and Interferences affirmed. Thus, the sole claims on appeal before the Federal Circuit covered the encoded signals themselves. The court affirmed the rejection on the basis that a transitory, propagating signal like Nuijten's was not a process, machine, manufacture, or composition of matter and therefore did not constitute patentable subject matter under § 101.

Section 101 provides that "[w]hoever invents or discovers any new and useful process, machine, manufacture, or composition of matter" may obtain a patent. The four categories define the "exclusive reach" of patentable subject matter. Thus, explained the court, if a claim covers material not found in any of the four statutory categories, that claim falls outside the scope of §101 even if the subject matter is otherwise new and useful.

The court considered each statutory category in turn. First, the court found that the disputed claims were not process claims, despite the required recitation of acts in the claims, because such claims were directed toward the signal—the ultimate product—and not the process. Next, the court held that the claims did not meet the statutory definition of a "machine," because signals did not possess the concrete structure consisting of mechanical devices and parts required under the Supreme Court's definition of "machine." Nuijten also failed to persuade the court that the claimed signals fell within the category of "manufacture," because the court remained unconvinced that a signal comprised tangible articles or commodities. The Federal Circuit did not reach the issue of whether the signals constituted compositions of matter because the parties did not contest the PTO's determination that they did not.

*IN RE COMISKEY**499 F.3d 1365 (Fed. Cir. 2007)*

The United States Court of Appeals for the Federal Circuit held that appellant Comiskey's claims directed toward a method for mandatory arbitration resolution regarding unilateral and contractual documents did not constitute patentable subject matter.

The Patent and Trademark Office had rejected Comiskey's claims as obvious in light of prior art under 35 U.S.C. §103(a), and the Board of Patent Appeals and Interferences affirmed. On appeal, the Federal Circuit did not reach the ground relied on by the Board because it held that many of the claims were barred as failing to state patentable subject matter under 35 U.S.C. §101.

Section 101 provides that a patent may be obtained for "any new and useful art, machine, manufacture, or composition of matter, or any new or useful improvement thereof." Despite the broad range of patentable subject matter under § 101, courts have long recognized that certain categories—phenomena of nature, mental processes, and abstract intellectual ideas—are not patentable. Accordingly, the Federal Circuit rejected Comiskey's claims directed toward the process of resolving a legal dispute between two parties by the decision of a human arbitrator. The court reasoned that the claims sought to patent a mental process—the use of human intelligence in and of itself. The court stated that "mental processes—or processes of human thinking—standing alone are not patentable even if they have practical application."

The Federal Circuit noted, however, that a claim reciting an abstract concept can state patentable subject matter if it is tied to a particular machine, or involves another class of statutory subject matter such as a machine, manufacture or composition of matter. Thus, the Federal Circuit remanded consideration of Comiskey's claims that recited patentable subject matter to the PTO for determination of whether the additional limitation of modern computers and communications devices to otherwise unpatentable mental processes would have been obvious. The court stated that remanding these claims was appropriate because had the Board relied on the new § 101 ground for rejection in the first instance, and Comiskey would have had the opportunity to amend his application in response to that rejection under 37 C.F.R. §41.50(b).

PFIZER, INC. V. APOTEX, INC.*480 F.3d 1348 (Fed. Cir. 2007)*

In one of its first post-*KSR* obviousness decisions, the Court of Appeals for the Federal Circuit held obvious claims 1-3 of plaintiff Pfizer Inc.'s U.S. Patent No. 4,879,303 ("the '303 patent"). In so doing, the Federal Circuit affirmed the allocation of the burden of proof and evidentiary standard facing challengers as to obviousness. It also clarified the application of the teaching-suggest-motivation test to combination and chemical patents, especially as to the effects of a reasonable expectation of success and of unexpected results.

Pfizer filed suit alleging that defendant Apotex infringed the '303 patent by seeking approval from the Food and Drug Administration to commercially sell amlodipine besylate tablets. Apotex counterclaimed for a declaratory judgment that Pfizer's '303 patent was invalid on obviousness and novelty grounds. The U.S. District Court for the Northern District of Illinois entered judgment for Pfizer and ruled against Apotex on its counterclaim for declaratory judgment. Apotex appealed.

Pfizer had obtained a prior patent claiming certain dihydropyridine compounds and their pharmaceutically-acceptable acid addition salts, including maleate. Despite structural differences between the newly-claimed amlodipine besylate and the prior art amlodipine maleate, the Federal Circuit held that the district court erred in finding non-obviousness. First, the court scolded the district court for having held that the examiner's initial rejection of Pfizer's application, standing alone, constituted a *prima facie* showing of obviousness. According to the Federal Circuit, that determination "reflect[ed] a serious misconception regarding the proper burden of proof each party bears in patent litigation." Rather, the court explained, an examiner's rejection provides "at most only one factual consideration the court must consider" in assessing obviousness.

Next, the Federal Circuit explained that the party claiming obviousness must demonstrate by clear and convincing evidence: (1) that the prior art would have taught, motivated, or suggested to a skilled artisan to combine its elements to come up with the claimed invention and (2) that the artisan would have had a reasonable expectation of success. The court found that the prior art taken as a whole and the nature of the problem addressed by the relevant prior art both would have encouraged a skilled artisan to produce amlodipine besylate. The Federal Circuit pointed to trial evidence that when Pfizer researchers encountered trouble with the prior art amlodipine maleate, they created a list of chemical alternatives, including besylate, that they expected would remedy the problems. The court found that although the researchers could not guarantee that they would be able to make the alternative salts, mere unpredictability as to whether a salt would form or what its properties would be did not negate obviousness so long as there was a reasonable expectation of success.

The court then laid out the rule that unexpected results can defeat a *prima facie* case of obviousness, but that "obviousness cannot be avoided simply by a showing of some degree of unpredictability in the art" if the skilled artisan would nevertheless have harbored reasonable probability of success. Under this rule, the allegedly unexpected properties of drug stability and processing efficiencies of amlodipine besylate over amlodipine maleate did not rise to a level of significance sufficient to defeat Pfizer's obviousness problems. According to the court, Pfizer failed to present persuasive evidence that the properties of amlodipine besylate were actually unexpected by skilled artisans. The mere

fact that Pfizer researchers had to perform some experiments to verify their expectation was of “no consequence” to obviousness analysis.

Finally, the Federal Circuit rejected Pfizer’s contention that it was merely “obvious to try” rather than obvious to make the claimed combination. The court stressed that the distinction among the claimed and the prior art salts involved only one variable parameter (not many), that one skilled in the art would have noted that the FDA had previously approved the use of the claimed salts, and that Pfizer had to perform only “routine testing” to verify the success of the salt it selected. The court explained that Pfizer’s “routine testing” served as mere verification of its reasonable expectation of success rather than demonstrating any true discovery.

Over spirited dissents from Judges Newman, Lourie, and Rader, the Federal Circuit refused to rehear the case *en banc*.

VODA V. CORDIS CORP.*476 F. 3d 887 (Fed. Cir. 2007)*

The United States Court of Appeals for the Federal Circuit held that a district court could not exercise supplemental jurisdiction over Voda's foreign patent claims.

Jan Voda, a doctor from Oklahoma, filed a suit in the Western District of Oklahoma against Cordis, a U.S. company with several foreign affiliates, for infringement of his U.S. patent on a medical device. Voda subsequently sought to amend his complaint to add foreign patent infringement claims. The district court granted Voda leave to amend, basing its subject matter jurisdiction over Voda's foreign patent claims on 28 U.S.C. § 1367, which provides for supplemental jurisdiction. Cordis filed an interlocutory appeal from the district court's decision.

The Federal Circuit could have decided that the district court lacked subject matter jurisdiction over Voda's foreign patent claims on the basis of either 28 U.S.C. § 1367(a) or § 1367(c). Under § 1367(a), there would be no supplemental jurisdiction unless Voda's foreign patent claims were "part of the same case or controversy" as his U.S. patent claims. The court emphasized that the test with respect to this issue remains whether the claims involved a "common nucleus of operative fact," as set forth in *United Mine Workers of America v. Gibbs*, and that language in *Gibbs* concerning whether a district court would "ordinarily be expected to try [the claims] all in one judicial proceeding," did not constitute a separate operative test. However, the Federal Circuit declined to decide whether § 1367(a) authorized supplemental jurisdiction since it decided that the district court erred under § 1367(c).

Under § 1367(c), the exercise of supplemental jurisdiction is within the district court's discretion, not a plaintiff's right. A district court should consider and weigh the values of comity, judicial economy, convenience, and fairness in deciding whether to exercise supplemental jurisdiction. The Federal Circuit found that the district court had conducted no such analysis, as required by § 1367(c). After considering these factors values and the treaty obligations of the United States, the Federal Circuit held that the district court abused its discretion in deciding to exercise supplemental jurisdiction.

The Federal Circuit first noted that international treaties, like the Paris Convention, Patent Cooperation Treaty, and the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPs) do not contemplate one jurisdiction adjudicating the patents of another. The Federal Circuit held that the risk that exercising supplemental jurisdiction over foreign patent claims would violate U.S. treaty obligations was an "exceptional circumstance" that warranted declining jurisdiction under § 1367(c). The court further stated that exercising supplemental jurisdiction in this case would undermine comity, the "spirit of cooperation" in which a domestic court should approach the resolution of cases that involve laws of other sovereigns. The court held that judicial economy weighed against exercising jurisdiction because a U.S. district court would expend more resources in the case than a foreign court better versed in the foreign patent regime. Convenience also favored declining jurisdiction, the court stated. Finally, the court suggested that exercising supplemental jurisdiction could be fundamentally unfair to the alleged infringer if, assuming U.S. courts cannot inquire into the validity of plaintiff's foreign patents, the case is decided just on infringement grounds.

COMPULSORY LICENSES IN THAILAND AND BRAZIL

Under World Trade Organization (WTO) rules, Thailand issued compulsory licenses for several patented medicines, including efavirenz, a pivotal HIV medicine patented by Merck & Co, Inc. Brazil soon followed, issuing a compulsory license on the same drug, making it the second emerging economy to aggressively seek a reduction in the cost of patented medicines. A compulsory license allows a government to purchase a patented product or process from rival sources without the consent of the patent owner. This option is intended to cut treatment costs. While most countries uphold it under international law, the practice has sparked an international debate as to the appropriate balance between access to life-saving drugs and encouraging innovation in the pharmaceutical field.

Between November 2006 and January 2007, Thailand's Ministry of Health issued compulsory licenses for two antiretroviral drugs used for treating human immunodeficiency virus (HIV) (efavirenz and lopinavir/ritonavir) and a heart medication (clopidogrel). The licenses represent the climax of years of failed negotiations with the patent holders. Each drug was issued for government use at a royalty rate of 0.5 percent. Thailand exercised its authority to issue government-use compulsory licenses according to Article 51 of the Thai Patent Act.

Similarly, in May of 2007, Brazil announced it had issued a compulsory license for efavirenz. In the years leading up to the decision, the Brazilian government had successfully threatened to issue compulsory licenses against other pharmaceutical firms in order to negotiate lower prices of antiretroviral drugs. The compulsory license issued against Merck resulted from a breakdown in negotiations and was the first time Brazil actually carried out its threat. The government relied on the public interest provision of the Brazilian Industrial Property Law to grant the license. Accordingly, the license must be for non-commercial use, non-exclusive production, and for a fixed period of time, although it may be extended and will remain in force for as long as the public interest exists.

The Thai and Brazilian governments argue the compulsory licenses are lawful not only under their domestic laws, but also under the WTO's Trade-Related Aspects of Intellectual Property Rights Agreement (TRIPS), as affirmed by the Doha Declaration on the TRIPS Agreement and Public Health. Under paragraph 5b of the Doha Declaration, each member state is free to determine the grounds upon which compulsory licenses are granted. For national emergencies, other circumstances of extreme urgency, or public non-commercial use, negotiation of a voluntary license can be bypassed to save time, though the patent owner is still owed royalties. Thailand and Brazil both contend that they have valid public health reasons and are producing the drugs for permissible public non-commercial use.

While the countries' compliance with the TRIPS agreement is by and large uncontested, there is concern that it sets a precedent for the way in which developing countries manage their public health problems and access to patented medicines. While health and human rights activists view compulsory licensing as a victory in the fight for access to affordable medicines, the pharmaceutical industry warns that it could have a chilling effect on drug development. Critics of compulsory licensing argue that the expropriation of intellectual property will discourage industry from undertaking risky research on diseases affecting the developing world.

NANOTECHNOLOGY

Nanotechnology holds the potential to revolutionize a wide range of fields—from pharmaceuticals to consumer products to computing—but also presents significant regulatory and intellectual property challenges. Nanotechnology studies materials at the level of molecules, measured in nanometers, one-billionth of a meter. There are fundamental differences between the physical, chemical and biological features of molecules at the nanoscale compared to the properties of individual atoms or molecules. Working at the nanoscale gives rise to new ways of manipulating compounds for therapeutic and other commercial applications. However, nanotechnology comes with new questions with respect to health and safety regulation and intellectual property management.

Possible uses of nanotechnology are difficult to predict at this early stage. Nonetheless, nanotechnology has generated great excitement in biotechnology and other industries. Early scientific applications of nanotechnology in biotechnology include: (1) more predictable drug toxicity based on surface-level characteristics such as charge or particle positioning of nanoscale molecular materials; (2) more efficient drug delivery mechanisms through nanoscale manipulations; and (3) better controlled drug absorption through nanoscale manipulations. Other applications beyond biotechnology include better product development for sunscreen, cosmetics, paint, and disinfectant manufacturers.

In July 2007, the U.S. Food and Drug Administration (FDA) Nanotechnology Task Force issued a report on regulating nanotechnology. The FDA refused to adopt a comprehensive definition of nanotechnology or nanoscale materials given the relative novelty of the field and the difficulty of predicting the scope of uses. The FDA stressed the importance of careful regulation of nanotechnology given possible molecular unpredictability of nanoscale materials.

In particular, the FDA emphasized challenges posed by nanotechnology inventions as “combination products” given that nanotechnology inventions will likely have application in a variety of contexts including biotechnology, food processing, and cosmetics. The FDA recommended increasing nanotech expertise for agency staff and recruitment of nanotech specialists to help with regulatory review.

Industry is fast embracing the promise of nanotechnology. Many companies have rushed to patent a variety of nanotechnology inventions. Law firms with strong intellectual property practices have developed specialized nanotechnology practices to help with prosecuting nanotechnology patents.

Nonetheless, the rush to patent at such an early scientific stage could present roadblocks to development and innovation. In particular, scholars have expressed concern that patenting “building block” technologies will create a “patent thicket” that could hinder development and commercialization of nanotechnology in fields ranging from biotechnology to electrical engineering.

Going forward, it is important for regulators and industry members alike to monitor the proliferation of nanotechnology in the marketplace, the promise of nanotechnology for advancement of science and industry, and the effects of patenting practices upon development of this new and exciting field.

NOT A COPYRIGHT LAW? *UNITED STATES V. MARTIGNON* AND WHY THE ANTI-BOOTLEGGING PROVISIONS ARE UNCONSTITUTIONAL

By William McGinty

I. INTRODUCTION

When is a law granting exclusive rights to the content of a videotape or a phonorecord not a copyright law? According to the Second Circuit, whenever jail time is a possibility.

In 1994, Congress enacted the Uruguay Round Agreements Act which established civil and criminal penalties for “bootlegging,” the unauthorized recording of a live musical performance (such as a rock concert).¹ Because the Copyright Clause of the Constitution only empowers Congress to give exclusive rights to “authors” for their “writings,” and because artists do not write down their live performances, these statutes arguably exceed Congress’ constitutional authority. Furthermore, the statutes grant perpetual protection against bootlegging, contrary to the duration requirement of the Copyright Clause.² Despite this, courts have so far upheld the statutes against constitutional attacks.

In 2003, Jean Martignon, proprietor of Midnight Records in New York, was prosecuted under the criminal prohibition against bootlegging and challenged the statute’s constitutionality.³ The U.S. Court of Appeals for the Second Circuit upheld the statute, finding that Congress had the power under the Commerce Clause to enact perpetual criminal protection against bootlegging because criminal laws give the right to exclude to the government, not to the author, and therefore criminal laws cannot be con-

© 2008 William McGinty.

1. Uruguay Round Agreements Act Pub. L. No. 103-465, §§512-13, 108 Stat. 4809, 4974 (1994) (codified at 17 U.S.C. § 1101 (2000); 18 U.S.C. § 2319A (2000)).

2. U.S. CONST. art. 1, § 8, cl. 8 reads “The Congress shall have power . . . To promote the Progress of Science and the useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries.” Article 1, section 8, clause 8 has been variously called the “Progress Clause,” the “Intellectual Property Clause,” The “Copyright Clause” and the “Patent Clause.” This Note will use the term “Copyright Clause” because the most recent decision by the United States Supreme Court interpreting this clause in the context of copyright law used this term. *Eldred v. Ashcroft*, 537 U.S. 186 (2002).

3. *United States v. Martignon*, 346 F. Supp. 2d 413 (S.D.N.Y. 2004), *rev’d*, 492 F.3d 140 (2d Cir. 2007).

sidered as copyright laws.⁴ The court held that the Copyright Clause had no relevance whatsoever to the constitutionality of the criminal prohibition on bootlegging, basically, because Martignon faced the possibility of jail time.⁵

The Second Circuit's analysis was incorrect because both the criminal and civil bootlegging statutes *are* copyright laws, or at least "copyright-like" enough for the Copyright Clause to have relevance. When that relevance is properly taken into account through application of the Eleventh Circuit's "fundamental inconsistency" test, which invalidates a law if it breaks some important restraint on Congress's power,⁶ it becomes apparent that the Constitution does grant Congress the power to protect live performances from unauthorized recording, but only for limited times.

Part II of this Note gives background information about the anti-bootlegging provisions, the Copyright Clause, and the Commerce Clause. Part III summarizes the law relating to congressional power conflicts, or where one congressional power seems to limit the scope of another. Part IV details the holdings of the *Martignon* court and argues that its conclusion was flawed. Part V suggests alternatives to the *Martignon* rationale, and argues that the Eleventh Circuit's "fundamental inconsistency" test should be applied to the anti-bootlegging provisions to find that Congress has the power to enact the anti-bootlegging laws, but can only protect live performances for "limited times."

II. BACKGROUND INFORMATION AND LAW

The legal background to this question encompasses both statutory law (the anti-bootlegging provisions) and constitutional law (the scope of the Copyright and Commerce Clauses). The Note will first summarize the anti-bootlegging provisions of the Uruguay Round Agreements Act, then it will discuss the scope of the Copyright Clause, and finally of the Commerce Clause.

Congress enacted two anti-bootlegging provisions in 1994 when it passed the Uruguay Round Agreements Act ("URAA"), a civil provision and a criminal provision. The URAA codified the agreements reached in the Uruguay Round of the General Agreement on Tariffs and Trade ("GATT").⁷ 17 U.S.C. § 1101⁸ is the civil provision granting performers

4. *Martignon*, 492 F.3d at 151.

5. *Id.*

6. *See infra* Section III.C.

7. Uruguay Round Agreements Act § 101, 19 U.S.C. § 3511 (2000).

the remedies of the copyright act⁹ to recover against any person who fixed their performances without authorization (e.g., with a camcorder or audio recorder), or who distributed such unauthorized fixations.¹⁰ 18 U.S.C. § 2319A allows for the criminal prosecution of any person who knowingly fixed a live performance without authorization, or who distributed such unauthorized fixations, for “purposes of commercial advantage or private financial gain.”¹¹ This intent requirement is not present in the civil provision.¹²

The powers delegated to Congress relevant to § 1101 and § 2319A are the Copyright Clause and the Commerce Clause.¹³ The Copyright Clause reads, “The Congress shall have power to . . . promote the Progress of Science and the useful Arts, by securing for limited Times to Authors . . . the exclusive Right to their . . . Writings.”¹⁴

A. The Copyright Clause

While the Copyright Clause grants power to Congress, it also limits that power. This section will briefly go over the preamble, the limited times provision, and the authors and writings requirement to explain how they limit congressional power to enact copyright laws. Further, the First Amendment also restricts Congress’s ability to act under the Copyright Clause, and this limitation will be covered last. Because the anti-bootlegging provisions protect works in perpetuity, and the Copyright Clause forbids perpetual protection, the anti-bootlegging provisions would certainly be unconstitutional if the Copyright Clause were the sole source of their congressional power.

1. *The Promotion of Progress*

Copyrights are usually thought of as a bargain between the public and an individual author: the author agrees to let the public see her work in

8. 17 U.S.C. § 1101 (2000).

9. *See* 17 U.S.C. §§ 502-505 (2000).

10. *See* 17 U.S.C. § 1101 (2000).

11. *See* 18 U.S.C. § 2319A (2000).

12. 17 U.S.C. § 1101 (2000).

13. The Treaty Clause, U.S. CONST. art. 2, § 2, gives independent legislative authority to the federal government. *See Missouri v. Holland*, 252 U.S. 416, 433 (1920). The Treaty Clause, however, is not applicable to the anti-bootlegging provisions because President Clinton never presented the GATT treaty to Congress for ratification. David Nimmer, *The End of Copyright*, 48 VAND. L. REV. 1385, 1398 (1995).

14. U.S. CONST. art. I, § 8, cl. 8. The Copyright Clause also grants Congress the power to confer exclusive rights to “Inventors” for their “Discoveries” thus authorizing federal patent law.

exchange for protection against copycats.¹⁵ “The Preamble indicates that the granting of [exclusive] rights [in works of original authorship] is driven by the goal of enhancing public welfare.”¹⁶ In a patent case, *Graham v. John Deere Co.*,¹⁷ the Court held that, “The [Copyright] [C]lause is both a grant of power and a limitation. This qualified authority . . . is limited to the promotion of advances in the useful arts.”¹⁸ However, in *Eldred v. Ashcroft*, the Court held that the judiciary should show substantial deference to Congress regarding what kinds of copyright laws promote progress.¹⁹ It noted “it is generally for Congress, not the courts, to decide how best to pursue the Copyright Clause’s objectives.”²⁰ As long as a copyright law rationally relates to the promotion of progress, the Court held, the law does not violate the constitutional objective of copyright.²¹ Furthermore, the *Eldred* Court distinguished between copyright and patent law on the ground that “[a] reader of an author’s writing may make full use of any fact or idea she acquires from her reading” whereas patents grant a full monopoly on the use of the knowledge contained in the patent.²² Finally, the Court held that even though the promotion of progress is a substantive limit on congressional power in patent law, that law does not imply a similar restriction on Congress’s power to pass copyright laws.²³ Interpreting the Court’s decision, the Tenth Circuit has held that “the clear import of *Eldred* is that Congress has expansive powers when it legislates under the Copyright Clause.”²⁴

2. “For Limited Times”

In addition to the requirement that copyrights promote progress, the Constitution only allows copyrights to be granted for “limited times.” The purpose of this provision is that once the copyright term has ended, works will fall into the public domain and give the public free access to them.²⁵ While the Supreme Court has been deferential to Congress regarding the

15. See, e.g., *Eldred v. Ashcroft*, 537 U.S. 186, 214 (2003); Paul J. Heald & Suzanna Sherry, *Implied Limits on the Legislative Power: The Intellectual Property Clause as an Absolute Constraint on Congress*, 2000 U. ILL. L. REV. 1119, 1154 (2000).

16. Heald & Sherry, *supra* note 15, at 1154.

17. 383 U.S. 1 (1966).

18. *Id.* at 5 (internal quotation marks omitted).

19. *Eldred v. Ashcroft*, 537 U.S. 186, 212 (2003).

20. *Id.*

21. *Id.* at 204-05.

22. *Id.* at 217.

23. *Id.*

24. *Golan v. Gonzales*, 501 F.3d 1179, 1187 (10th Cir. 2007).

25. Heald & Sherry, *supra* note, 15 at 1165.

exact duration of copyright, the Court has acknowledged that a perpetual copyright would be unconstitutional.²⁶ Congress is free, however, to set virtually any finite duration on copyright protection as long as the duration rationally relates to the purposes of copyright.²⁷ The Copyright Term Extension Act (“CTEA”) added twenty years to the term of protection for works still covered by copyright and for works created after the date of enactment.²⁸ When the law was challenged on Copyright Clause grounds in *Eldred v. Ashcroft*, the Court found that the Act did not violate the Copyright Clause’s “limited times” provision.²⁹ The Court held that it was within the purview of Congress to decide the proper scope of copyright protection, consistent with historical practice.³⁰ The CTEA was consistent with historical practice both because the Copyright Clause grants to Congress the power to decide how long copyrighted works should be protected and because copyright terms had been lengthened numerous times in the past.³¹ Therefore, while the limited times requirement mandates that no copyright law be perpetual, Congress has broad authority up to that limit.³²

3. “*To . . . Authors . . . For Their . . . Writings*”

Similar to the requirement that copyrights only last for limited times, Congress can only grant exclusive rights to “authors” for “writings” under the Copyright Clause. Courts have interpreted these requirements in two ways. First, in order to qualify as a “writing,” and in order for the originator of the writing to qualify as an “author,” the work must be original.³³ Second, the authors and writings requirement may mandate that copy-

26. See *Eldred*, 537 U.S. at 209 (holding that the CTEA’s extension of the copyright term did not create a perpetual copyright, and did not represent a congressional attempt to evade the “limited times” constraint).

27. See *id.* at 213.

28. Copyright Term Extension Act, Pub. L. No. 105-298, 112 Stat. 2827 (codified at 17 U.S.C. § 304 (2000)). Copyright terms vary depending on the kind of author (personal or institutional, individual or joint) and also depending on when the work was created. However, for works created on or after January 1, 1978 by an individual author, the term is now measured by the life of the author plus seventy years. 17 U.S.C. § 302 (2000).

29. *Eldred*, 537 U.S. at 209-210.

30. *Id.* at 212-14.

31. *Id.*

32. The Supreme Court did imply that very long durations could be practically perpetual, especially if that was the intent of Congress. *Cf. id.* at 210 n.16 (examining legislative history to prove that Congress had no intent to act unconstitutionally in passing the CTEA); *Cf. id.* at 210 n.17 (noting that the rule against perpetuities could produce property interests as long in duration as those produced by the CTEA).

33. *Feist Publ’ns., Inc. v. Rural Tel. Serv. Co.*, 499 U.S. 340, 347-48 (1991).

rightable works be fixed in some tangible medium,³⁴ although no court has so held explicitly.

Even though “originality remains the sine qua non of copyright,”³⁵ the originality requirement is very weak, requiring only a “modicum of originality” to render a work copyrightable.³⁶ The originality requirement in the Copyright Clause does, however, mandate that facts are not copyrightable, even though the particular expression of a fact can be copyrighted.³⁷

However, originality is not the only requirement: works of authorship might still be constitutionally ineligible for copyright protection due to a tangibility requirement within the word “writings.” Because Congress has placed a tangibility requirement in every copyright law passed so far,³⁸ no court has ever ruled on whether or not the Constitution requires tangibility for copyrightable works.³⁹ What counts as “tangible,” furthermore, has broadened as media has evolved beyond pen and paper. As the Court in the *Trade-Mark Cases* noted, the word “writings” has progressively widened in order to encompass things that in no sense are words.⁴⁰ “Fixation” may refer to software that only exists for a brief moment in the random access memory of a computer.⁴¹ Arguably, in light of the needs of a tech-

34. *Cf.* *Goldstein v. California*, 412 U.S. 546, 561 (1973) (“[A]lthough the word ‘writings’ might be limited to script or printed material, it may be interpreted to include any physical rendering of the fruits of creative intellectual or aesthetic labor.”); *United States v. Moghadam*, 175 F.3d 1269, 1274 (11th Cir. 1999) (assuming *arguendo* that the Copyright Clause did require a copyrightable work to be tangible).

35. *Feist Publications, Inc.*, 499 U.S. at 348.

36. *Id.* at 346.

37. *See* *Burrow-Giles Lithographic Co. v. Sarony*, 111 U.S. 53, 58 (1884).

38. The first U.S. copyright act protected only “maps, charts, and books.” Copyright Act of 1790, ch. 15, 1 Stat. 124 (1790). The Copyright Act of 1909 specified classes of works that were eligible for copyright protection including “books,” “drawings,” and “lectures, sermons, addresses” that were “prepared for oral delivery.” Copyright Act of 1909, ch. 320, 35 Stat. 1075 (1909). The list of eligible classes remained substantially in place until 1976 when Congress replaced it with the general proscription that “copyright protection subsists . . . in original works of authorship fixed in any tangible medium of expression.” Copyright Act of 1976, Pub. L. No. 94-553, 90 Stat. 2541 (codified as amended 17 U.S.C. § 102 (2000)). This language persists in the copyright laws today. 17 U.S.C. § 102 (2000).

39. *See* 1-1 NIMMER ON COPYRIGHT § 1.08(C)(2).

40. *See* *The Trade-Mark Cases*, 100 U.S. 82, 94 (1879) (holding that a federal trademark law was unconstitutional because it was outside of the scope of Congress’s power).

41. *See* *MAI Sys. Corp. v. Peak Computer, Inc.*, 991 F.2d 511, 518 (9th Cir. 1993) (holding that software loaded into the random access memory of a computer is “fixed” for purposes of 17 U.S.C. § 101).

nologically advancing society, the word “writings,” if it embodies a tangibility requirement at all, should not be construed to deny protection to works of authorship that meet the originality and promotion of progress requirements. According to David Nimmer, however, “[N]o respectable interpretation of the word ‘Writings’ embraces an un-taped performance of someone singing at Carnegie Hall.”⁴² Furthermore, intangible works cannot be archived. The entire point of the “limited times” requirement is to benefit the public by putting valuable works in the public domain once the copyright on them has expired.⁴³ Yet if the work is not fixed, there is no guarantee that the work will last for extended periods. Copyright’s current duration is a bit longer than one human lifetime.⁴⁴ Therefore, an unfixed work might persist in the memory of the current generation and could fade once that generation had forgotten. If copyright protected unfixed works that faded into obscurity, those works would have copyright protection for their entire existence. The copyright owner would get the copyright, but the public would not get the benefit of the public domain work after the copyright had expired. A copyright on unfixed works would cheat society, in a sense, because those works could not be archived and preserved for posterity.⁴⁵

Protecting intangible works, however, like the singer’s performance at Carnegie Hall, “creates a minimal but discernible incentive.”⁴⁶ Because live performers are guaranteed some degree of protection by the anti-bootlegging provisions, they are likely to perform more.⁴⁷ Anti-bootlegging provisions, therefore, promote progress in the way that copyright laws should—by giving authors legal protection in exchange for the creation of more works. Furthermore, an eighteenth century reading of the word “writings” is not necessary in interpreting the Constitution. In the same way that “speech” in the First Amendment includes more than oral expression in order to protect First Amendment values,⁴⁸ a court could in-

42. Nimmer, *supra* note 13, at 1409.

43. See Heald & Sherry, *supra* note 15, at 1165.

44. See Copyright Term Extension Act § 102, 17 U.S.C. § 304 (2000).

45. See Joseph Merschman, Note, *Anchoring Copyright Laws in the Copyright Clause: Halting the Commerce End Run Around Limits on Congress’s Copyright Power*, 34 CONN. L. REV. 661, 681 (2002).

46. Heald & Sherry, *supra* note 15, at 1192.

47. *Id.*

48. The Supreme Court has construed “speech” to include the wearing of armbands, *Tinker v. Des Moines Independent Community School District*, 393 U.S. 503, 508 (1969), the defacement of license plates, *Wooley v. Maynard*, 430 U.S. 705, 716 (1977), and dancing in the nude, see *Erie v. Pap’s A.M.*, 529 U.S. 277, 289 (2000).

terpret “writings” in the Copyright Clause to include more than tangible expression in order to uphold the anti-bootlegging provisions, thereby protecting live performers from exploitation.⁴⁹

4. *The First Amendment*

In addition to the restraints on congressional action in the Copyright Clause itself, the First Amendment imposes independent restrictions on Congress’s ability to act under the Copyright Clause. In *Harper & Row v. Nation Enterprises*,⁵⁰ the Supreme Court held that the First Amendment requires that copyright protection be limited by the fair use exemption to copyright infringement as well as by the idea/expression dichotomy.⁵¹ The doctrine of fair use protects from a copyright infringement claim certain uses of copyrighted material that are beneficial to the public and do little to no economic harm to the copyright owner.⁵² The “idea/expression” dichotomy exempts from copyright sufficiently abstract ideas, such as general plot outlines.⁵³ The Court of Appeals for the Tenth Circuit recently held that a law implicates First Amendment rights when it alters the “traditional contours” of copyright law.⁵⁴ The court was concerned with a provision of the URAA that took works from the public domain and put them under copyright protection.⁵⁵ It held that the fair use doctrine and the idea/expression dichotomy did not sufficiently guarantee the First Amendment interests at issue because the “traditional contours” of copyright protection required that works in the public domain stay in the public domain.⁵⁶ Despite this holding, the court remanded the case to the district court for a further consideration of the First Amendment question.⁵⁷

Absent powers granted to Congress by the Commerce Clause, the Copyright Clause would almost certainly invalidate the anti-bootlegging provisions because they have no duration limitation and protect unfixed

49. Heald & Sherry, *supra* note 15, at 1192 n.515.

50. 471 U.S. 539 (1985).

51. *Id.* at 560.

52. *See* 17 U.S.C. § 107 (2000).

53. *See* *Baker v. Seldon*, 101 U.S. 99, 104 (1880); *Nichols v. Universal Pictures Corp.*, 45 F.2d 119, 121-22 (2d Cir. 1930).

54. *Golan v. Gonzales*, 501 F.3d 1197 (10th Cir. 2007).

55. *Id.* at 1182-83; *see also* Uruguay Round Agreements Act § 514, 17 U.S.C. § 104A (2000). The copyright restoration provisions “restored” to copyright protection certain foreign works that had lapsed into the public domain through operation of formalities in the United States copyright law. *Id.*

56. *Golan*, 501 F.3d at 1189.

57. *Id.* at 1197.

works.⁵⁸ This position is alluded to by the *Martignon* district court, where the government conceded that § 2319A was invalid under the Copyright Clause because of their lack of conformity with the limited times and fixation requirements.⁵⁹

B. The Commerce Clause

Instead of relying on the Copyright Clause for congressional authority to enact the anti-bootlegging provisions, the government in *Martignon* argued that the Commerce Clause gave Congress the requisite authority.⁶⁰ The Commerce Clause provides Congress with broad powers to “regulate commerce among the several states.”⁶¹ Under the Commerce Clause, Congress can regulate 1) “the channels of interstate commerce” 2) “the instrumentalities of interstate commerce . . . even though the threat may come only from intrastate activities” and 3) “those activities having a substantial relation to interstate commerce.”⁶² Furthermore, “substantial effect” has a very broad and permissive definition. For example, in *Wickard v. Filburn*, the Court found that Congress could prohibit one farmer from producing wheat for consumption on his own farm because the additional wheat introduced into the market affected interstate prices.⁶³

Review of the constitutionality of statutes passed under the Commerce Clause is very deferential to Congress; the Court will only strike down a law if there is no rational basis for believing that the regulated activity falls under the above named categories.⁶⁴ Thus the fact that bootleg copies of live performances are easily sold nation-wide via the Internet⁶⁵ is sufficient interstate commerce to find that § 2319A is constitutional under even a narrow interpretation of the Commerce Clause.⁶⁶ Even if the sale of the bootlegs were purely or predominantly local, the law would only be unconstitutional if there were “no rational basis” for the conclusion that the sale of bootlegs could “affect[] interstate commerce” or if there were “no

58. *United States v. Moghadam*, 175 F.3d 1269, 1274 (11th Cir. 1999).

59. *United States v. Martignon*, 346 F. Supp. 2d 413, 422 (S.D.N.Y. 2004).

60. *Id.*

61. The Commerce Clause reads, “The Congress shall have the Power . . . To regulate Commerce with foreign Nations, and among the several States, and with the Indian Tribes.” U.S. CONST. art. I, § 8, cl. 3.

62. *United States v. Lopez*, 514 U.S. 549, 558-59 (1995).

63. 317 U.S. 111, 130-31 (1942).

64. *See Lopez*, 514 U.S. at 557.

65. As was Mr. Martignon’s business model. *United States v. Martignon*, 346 F. Supp. 2d 413, 417 (S.D.N.Y. 2004).

66. *See, e.g., Gibbons v. Ogden*, 22 U.S. 1, 189-90 (1824) (holding that the federal government has the power to regulate interstate shipping routes).

reasonable connection between the regulatory means selected and the asserted ends.”⁶⁷ Section 2319A was enacted in the context of an international agreement and “[t]he context reveals that the focus of Congress was on interstate and international commerce.”⁶⁸ Therefore, there is no serious suggestion that the Commerce Clause, if the limitations in the Copyright Clause do not apply, is insufficient to enact the anti-bootlegging laws.

III. CONFLICTS BETWEEN CONGRESSIONAL POWERS

There is a tension between what the Copyright Clause forbids and what the Commerce Clause authorizes. The anti-bootlegging provisions are right in the middle—not clearly authorized, yet not clearly forbidden. To determine if Congress was authorized to enact the anti-bootlegging provisions, the courts require a framework to evaluate conflicts in Congress’s constitutional powers. When Congress passes a law that is authorized by one clause of the Constitution but that seems to conflict with another congressional power, courts have used three methods to determine the constitutionality of the questioned law.⁶⁹ The first method, the solitary analysis approach, is to uphold the statute if any constitutional authority can be found, regardless of limitations in other grants of power.⁷⁰ The second method, the categorization approach, is to categorize the law under the most appropriate congressional power and then apply any limitations found in that power while disregarding the limitations in any others.⁷¹ The

67. Fed. Energy Regulatory Comm’n v. Mississippi, 456 U.S. 742, 754 (1982).

68. United States v. Moghadam, 175 F.3d 1269, 1276 (11th Cir. 1999).

69. Dotan Oliar finds five methods, but also counts scholarly approaches unendorsed by any court. Dotan Oliar, *Resolving Conflicts Among Congress’s Powers Regarding Statutes’ Constitutionality: The Case of Anti-Bootlegging Statutes*, 30 COLUM. J.L. & ARTS 467 (2007).

70. Cf. Heart of Atlanta Motel, Inc. v. United States, 379 U.S. 241, 250-52 (1964) (holding that the Civil Rights Act of 1964 was a valid exercise of the Commerce power, despite previous holding in the *Civil Rights Cases*, 109 U.S. 3, 25 (1883), that Congress had no power under the Thirteenth and Fourteenth Amendments to enact similar provisions); Author’s League of Am., Inc. v. Oman, 790 F.2d 220, 224 (2d Cir. 1986) (“In our view, denial of copyright protection to certain foreign-manufactured works is clearly justified as an exercise of the legislature’s power to regulate commerce with foreign nations.”).

71. Cf. Ry. Labor Executives Ass’n v. Gibbons, 455 U.S. 457, 468 (1982) (holding that a special congressional act disposing of the assets of a railroad company was not an exercise of the commerce power, but of the bankruptcy power and so was invalid); Edey v. Robertson (*The Head Money Cases*), 112 U.S. 580, 595 (1884) (holding that a fee imposed on ship-owners for transporting immigrants was not a tax under the tax power of art. I, § 8, cl. 1 but an exercise of the commerce power).

third method, the fundamental inconsistency approach, is to decide if there is any “fundamental inconsistency” between the law and any relevant congressional power.⁷² This Part will discuss each of the three methods in turn.

A. Solitary Analysis

Under the solitary analysis approach, the statute is constitutionally valid so long as one of the powers standing alone is sufficient to uphold it. The Supreme Court in *Heart of Atlanta Motel, Inc. v. United States* held that the Commerce Clause granted Congress the authority to enact the Civil Rights Act of 1964, which banned racial discrimination in places of public accommodation, even though the Court denied that power to Congress under the Thirteenth and Fourteenth Amendments in the *Civil Rights Cases*.⁷³ The Court first found that the *Civil Rights Cases* did not rule on the Commerce Clause question with authority because the discussion was cursory and the Court in the *Civil Rights Cases* did not consider the Commerce Clause question properly before it.⁷⁴ The Court in *Heart of Atlanta* then found that the *Civil Rights Cases* decision and the congressional powers conferred by the Thirteenth and Fourteenth Amendments had no relevance to whether the Commerce Clause authorized Congress to pass the Act.⁷⁵ It ultimately held that the Commerce Clause stood alone in the evaluation of constitutional authority.⁷⁶

The Second Circuit applied a similar analysis to the manufacturing clause⁷⁷ of the Copyright Act in *Authors League of America, Inc. v. Oman*.⁷⁸ The manufacturing clause required, with multiple exceptions, that “nondramatic literary material” in the “English Language” must either have been “manufactured in the United States or Canada” or forego copyright protection.⁷⁹ The court first found that, “the Copyright Clause is not

72. *Cf. Moghadam*, 175 F.3d at 1281 (finding the Copyright Clause was not “fundamentally inconsistent” with section 2319A).

73. *See Heart of Atlanta Motel, Inc. v. United States*, 379 U.S. 241, 250-52 (1964); *see also The Civil Rights Cases*, 109 U.S. 3, 25 (1883).

74. *Heart of Atlanta*, 379 U.S. at 251. *Cf. The Civil Rights Cases*, 109 U.S. at 19 (“[W]hether Congress, in the exercise of its power to regulate commerce among the several states, might or might not pass a law regulating rights in public conveyances passing from one state to another, is also a question which is not now before us, as the sections in question are not conceived in any such view.”)

75. *Heart of Atlanta*, 379 U.S. at 251.

76. *See id.*

77. *See* 17 U.S.C. §§ 601-603 (2000).

78. 790 F.2d 220 (2d Cir. 1986).

79. *See* 17 U.S.C. §§ 601-603 (2000).

the only constitutional source of congressional power that could justify the manufacturing clause.”⁸⁰ Finding authority under the Commerce Clause for the manufacturing clause of the Copyright Act, the court’s analysis ended.⁸¹ Once again, the Commerce Clause stood alone and any limitations to Congress’s power in other parts of the Constitution were irrelevant.⁸²

B. Categorization

In contrast to the solitary analysis approach, the categorization approach categorizes a law under its proper congressional power and requires investigation into all relevant constitutional powers in order to apply the correct limitations.⁸³ A court first must decide which power is most appropriate for the law and then apply the limitations found in that power.⁸⁴

In the most recent Supreme Court decision about Article I, section 8 conflicts, *Railway Labor Executives Association v. Gibbons*, the Court found that the Rock Island Transition and Employee Assistance Act of 1980 (“RITA”)⁸⁵ violated the uniformity limitation in the Bankruptcy Clause of the Constitution,⁸⁶ and so was void.⁸⁷ RITA affected interstate commerce by distributing assets from the liquidated Rock Island and Pacific Railroad Company, and could have been upheld on Commerce Clause grounds had there been no limitation in the Bankruptcy Clause.⁸⁸ The Court first held that RITA was a bankruptcy law because RITA distributed the assets of an insolvent organization and because Congress thought it was exercising its Bankruptcy Clause powers.⁸⁹ Because RITA

80. *Author’s League*, 790 F.2d at 224.

81. *Id.*

82. *See id.*

83. *See Ry. Labor Executives Ass’n v. Gibbons*, 455 U.S. 457, 468-69 (1982) (“[I]f we were to hold that Congress had the power to enact nonuniform bankruptcy as pursuant to the Commerce Clause, we would eradicate from the Constitution a limitation on the power of Congress to enact bankruptcy laws.”).

84. *See id.*

85. Rock Island Transition and Employee Assistance Act, Pub. L. No. 96-254, 94 Stat. 399 (1980) (codified as amended at 45 U.S.C. §§ 1001 et seq. (2000)).

86. The Bankruptcy Clause reads, “Congress shall have the power . . . to establish . . . uniform Laws on the subject of Bankruptcies throughout the United States.” U.S. CONST. art. I, § 8, cl. 4.

87. *Gibbons*, 455 U.S. at 471.

88. In *Gibbons*, the challenged provisions of RITA distributed money to former Rock Island employees. *Id.* at 461-62.

89. *Id.* at 467-68.

was a law governing bankruptcies, the Court held, the limitations in the Bankruptcy Clause had to apply in order to ensure that bankruptcy laws would be uniform as the Constitution required.⁹⁰

The Supreme Court employed a similar analysis, albeit to find a constitutional limitation on congressional power not applicable, in the *Head Money Cases*, where it categorized a law under the Commerce Clause.⁹¹ There the Court held that a fee on ship owners imposed for each immigrant they brought to the United States was an exercise of the Commerce Power and not the Tax Power.⁹² The law had been challenged because the fee was not imposed uniformly and Congress did not collect the fee for the “common defense” or “general welfare” of the United States.⁹³ The “true answer to all these objections,” the Court held, was that the tax was levied to “mitigate the evils inherent in the business of bringing foreigners to this country.”⁹⁴ Because Congress enacted the statute to regulate immigration, that purpose, the regulation of traffic, placed the statute within the Commerce Clause.⁹⁵ Therefore, the limitation that a tax had to be uniform and for the general welfare had no force.⁹⁶

In both *Gibbons* and *The Head Money Cases*, the Court engaged in a two-step inquiry to analyze the statute at issue. First, it found the constitutional power most appropriate to the statute by determining the statute’s area of law (e.g. bankruptcy law). Then the Court applied any limitations to congressional power contained in the most appropriate clause of the Constitution while disregarding limitations contained in other, even related, clauses. In *Gibbons*, the Court found that the more restrictive power was most appropriate, and so there were no limitations to disregard.⁹⁷ In the *Head Money Cases*, the Court found that the Commerce Power better fit the purpose of the law.⁹⁸ As a result, the limitations in the Tax Power

90. *Id.* at 469.

91. *Edye v. Robertson (The Head Money Cases)*, 112 U.S. 580, 595 (1884).

92. *Id.* The Tax Power of the Constitution provides that, “the Congress shall have Power To lay and collect Taxes, Duties, Imposts and Excises, to pay the Debts and provide for the common Defence and general Welfare of the United States; but all Duties, Imposts and Excises shall be uniform throughout the United States.” U.S. CONST. art. I, § 8, cl. 1.

93. *The Head Money Cases*, 112 U.S. at 594-95.

94. *Id.*

95. *Id.*

96. *Id.* at 596.

97. *Ry. Labor Executives Ass’n v. Gibbons*, 455 U.S. 457, 467-68 (1982).

98. *The Head Money Cases*, 112 U.S. at 594-95.

were wholly irrelevant.⁹⁹ According to the Court, Congress could levee a fee that was both non-uniform and collected for a specific constituency (as opposed to the general welfare), so long as that fee regulated the traffic of goods and people internationally.¹⁰⁰

C. Fundamental Inconsistency

The “fundamental inconsistency” approach, unlike either the solitary analysis or the categorization approaches, applies all relevant constitutional powers and their limitations.¹⁰¹ The statute at issue is struck down if it breaches some fundamental limitation on congressional action found in one of the relevant constitutional powers.¹⁰² This method was first used by the Eleventh Circuit in *United States v. Moghadam* to reconcile the tension between the solitary analysis and categorization approaches.¹⁰³ The court in *Moghadam* found that the criminal prohibition on bootlegging in § 2319A passed constitutional muster by applying this test.¹⁰⁴ However, it noted that “there are some circumstances, as illustrated by [*Gibbons*], in which the Commerce Clause cannot be used by Congress to eradicate a limitation placed upon Congress in another grant of power.”¹⁰⁵ The court found that such circumstances occurred where Congress used the Commerce Clause in a way fundamentally inconsistent with the other power.¹⁰⁶

In analyzing the bootlegging statute, § 2319A, the *Moghadam* court began by noting that because it regulates “conduct that has a substantial effect on both commerce between the several states and commerce with foreign nations,” it was therefore consistent with the Commerce Clause.¹⁰⁷ The court next assumed, while expressly reserving the question, that because § 2319A protected unfixed works, it violated the “writings” requirement of the Copyright Clause.¹⁰⁸ The court further held that the stat-

99. The Court gave dicta that the fee met the requirements of the Tax Power, but held that it did not have to meet constitutional muster. *Id.*

100. *See id.*

101. *See, e.g.,* *United States v. Moghadam*, 175 F.3d 1269, 1280 (11th Cir. 1999) (holding that § 2319A was not “fundamentally inconsistent” with the fixation requirement of the Copyright Clause).

102. *Id.*

103. *See* *United States v. Elcom*, 203 F. Supp. 2d 1111, 1139 (N.D. Cal. 2002) (noting that the *Moghadam* court resolved the tension between the stand alone and categorization approaches).

104. *See Moghadam*, 175 U.S. 1269.

105. *Id.* at 1280.

106. *Id.*

107. *Id.* at 1276.

108. *Id.* at 1277.

ute was “copyright-like” and was therefore related to the Copyright Clause and the limitations in the Copyright Clause could not be completely ignored.¹⁰⁹ The court further found, however, that Congress’s focus in passing the law was on international and interstate commerce, and the anti-bootlegging provisions were therefore related to the Commerce Clause.¹¹⁰ Finally, the court held that § 2319A was not “fundamentally inconsistent” with the fixation requirement of the Copyright Clause because a live performance can gain fixation, and copyright protection, during its performance via simultaneous broadcast.¹¹¹ However, it was careful to note that the perpetuity of the protection offered by § 2319A was not at issue.¹¹² In dicta, it reasoned that this aspect of the statute might be fundamentally inconsistent with the “limited times” provision of the Copyright Clause.¹¹³

The “fundamental inconsistency” method strikes a balance between the categorization approach and the solitary analysis approach. In order to preserve “a limitation on the power of Congress,”¹¹⁴ the *Moghadam* court looked to the limitations in the Copyright Clause. Further, in order to give full effect to the broader power, the Commerce Clause, the court found the anti-bootlegging provisions constitutional despite the fact that they technically violated the writings requirement.

While lower courts considering similar issues have adopted the *Moghadam* fundamental inconsistency test, they have not applied it consistently. In *Kiss Catalog, Ltd. v. Passport International Productions*, the district court upheld the civil prohibition on bootlegging, § 1101, purporting to use the fundamental inconsistency approach.¹¹⁵ The court first held that the Commerce Clause provided ample authority to uphold the act absent any Copyright Clause violation.¹¹⁶ The court then held that the statute was not “fundamentally inconsistent” with the Copyright Clause, and

109. *Id.* at 1280-81.

110. *Id.*

111. *Id.* at 1280. 17 U.S.C. § 101 (2000) contains a definition of “fixed work” that includes a live performance that is simultaneously transmitted and recorded. The *Moghadam* court noted that this provision remains untested against a possible Copyright Clause challenge. *Moghadam*, 175 F.3d at 1281.

112. *Moghadam*, 175 F.3d at 1281.

113. *Id.*

114. *Ry. Labor Executives Ass’n v. Gibbons*, 455 U.S. 457, 469 (1982).

115. *Kiss Catalog, Ltd. v. Passport Int’l Prods. (Kiss II)*, 405 F. Supp. 2d 1169 (C.D. Cal. 2005), *rev’g on reh’g*, *Kiss Catalog, Ltd. v. Passport Int’l Prods. (Kiss I)*, 350 F. Supp. 2d 823 (C.D. Cal. 2004).

116. *Kiss II*, 405 F. Supp. 2d at 1171-72.

characterized § 1101 as complementary to the purposes of copyright.¹¹⁷ The court held that because both copyright and the anti-bootlegging provisions protect original works of authorship from unauthorized copying, the anti-bootlegging provisions were consistent with the Copyright Clause.¹¹⁸ However, the court also applied elements of the *Gibbons* categorization approach, holding that the Copyright Clause was irrelevant to the outcome of the case because the Copyright Clause only regulated congressional action pursuant to fixed works.¹¹⁹ Because live performances are unfixed works, the court held, the Copyright Clause had no relevance to their regulation.¹²⁰

Another district court, in *United States v. Elcom*, applied *Moghadam*'s "fundamental inconsistency" test in upholding provisions of the Digital Millennium Copyright Act ("DMCA"), which were challenged on Copyright Clause grounds.¹²¹ The statute at issue prohibited trafficking in devices that could bypass technological protection measures that prevented unauthorized copying of copyrighted works.¹²² The prohibition on trafficking such devices prohibited the sale of bypassing mechanisms even to bypass a technological protection measure over an uncopyrighted or uncopyrightable work (such as a phonebook).¹²³ Therefore, the DMCA extended copyright-like protection to works that would be ineligible for copyright for constitutional reasons (such as lack of originality). Like the *Kiss II* court, the *Elcom* court first found that Congress had the authority under the Commerce Clause to enact the anti-trafficking provisions.¹²⁴ In order to determine if the trafficking ban was inconsistent with the Copyright Clause, the court found that the purpose of the Copyright Clause was to "promote the useful arts and sciences" and that granting exclusive rights

117. *Id.* at 1173, 1176.

118. *See id.* at 1176.

119. *Id.* at 1175 ("[O]nce the Court concludes that the Statute does not fall within the purview of the Copyright Clause, it need no longer consider whether it complies with the limitations of the Copyright Clause. To do so imports into the Commerce Clause limits that clause does not have. That the Statute might provide 'copyright-like' or 'copyright-related' protection to matters clearly not covered by the Copyright Clause is not important. One need only find an alternative source of constitutional authority. This Court finds such authority in the Commerce Clause.").

120. *Id.* at 1174-1176.

121. 203 F. Supp. 2d at 1141.

122. *Id.* at 1128, 1141. *See* 17 U.S.C. § 1201 (2000).

123. *See* 17 U.S.C. § 1201 (2000); *Feist Publ'ns., Inc. v. Rural Tel. Serv. Co.*, 499 U.S. 340 (1991).

124. *Elcom*, 203 F. Supp. 2d at 1138.

is the constitutionally sanctioned method of getting that result.¹²⁵ Because the anti-trafficking measures of the DMCA made it more difficult for pirates to make unauthorized copies of copyrighted works, these provisions strengthened the exclusive rights sanctioned by the Copyright Clause.¹²⁶ Thus, because the law was consistent with the purposes of copyright, the court upheld its constitutionality.¹²⁷

The solitary analysis, categorization, and fundamental inconsistency methods each determine how much of the Constitution is relevant to a statute's constitutionality. The solitary analysis approach only looks at the one power that can uphold the law; the categorization approach looks at the entire Constitution in its first step, but narrows to only one clause once it determines the area of law relevant to the statute; and the fundamental inconsistency approach keeps the whole Constitution in view at all stages. When considering the constitutionality of the anti-bootlegging provisions, the fundamental inconsistency approach is best because it gives teeth to all of the limitations in the Copyright Clause but acknowledges the ambiguous position the provisions have between the Copyright Clause and the Commerce Clause.¹²⁸

IV. THE *MARTIGNON* DECISION

The *Martignon* court applied a categorization analysis to the anti-bootlegging provisions, but it mischaracterized copyright law in the process. A thorough evaluation of the *Martignon* decision may shed light on the pitfalls courts should avoid when applying the categorization approach to the anti-bootlegging provisions. This Part will outline the facts of the and the holdings of the district court and Second Circuit. Finally, it will argue that the decision was a mischaracterization of copyright law because criminal laws do enforce copyrights.

A. The Facts and the District Court Decision

In 1978, Jean Martignon opened Midnight Records.¹²⁹ He sold “hard to find” recordings through a catalog and on the Internet.¹³⁰ The Recording

125. *Id.* at 1140.

126. *Id.*

127. *Id.* at 1142. The court also found that the anti-trafficking provisions did not unduly burden the fair use of copyrighted materials nor did they effectively establish perpetual copyrights. *Id.* at 1141-42.

128. *See infra* Part V.

129. Welcome to Midnight Records, <http://www.midnightrecords.com> (last visited Dec. 7, 2007).

Industry Association of America (“RIAA”)¹³¹ initiated an investigation into Martignon’s activities, and in September of 2003, he was arrested.¹³²

Martignon was charged with violation of 18 U.S.C. § 2319A, the criminal prohibition of bootlegging.¹³³ Martignon moved to dismiss the charges on constitutional grounds. He argued that § 2319A violated the Copyright Clause’s requirements that copyright protection last for “limited times” and be a fixed “writing.”¹³⁴ He also argued that because the anti-bootlegging provisions do not include an exception for fair use, the statute is facially invalid on First Amendment grounds.¹³⁵ The district court held that § 2319A violated the “limited times” provision of the Copyright Clause, but the appellate court reversed, holding that the Commerce Clause gave sufficient authorization for the statute, and remanded for a reconsideration of the First Amendment challenge.¹³⁶

The *Martignon* district court ruled that § 2319A violated the limited times and the writings requirements of the Copyright Clause using both a *Gibbons* categorization analysis and a *Moghadam* fundamental consistency method.¹³⁷ Furthermore, it held that the criminal bootlegging prohibition was a copyright statute, or “copyright-like” enough that the limitations in the Copyright Clause should apply.¹³⁸ For this reason, the court followed *Gibbons* in holding that Congress is not authorized to enact laws expressly prohibited by one part of the Constitution but that are impliedly authorized by a separate part.¹³⁹ The court further held that § 2319A fundamentally conflicted with the Copyright Clause because it granted per-

130. *Id.*

131. The RIAA is a trade group that represents the United States recording industry. RIAA members create and distribute approximately 90% of all music in the United States. RIAA.org, Who We Are, <http://www.riaa.org/aboutus.php> (last visited Feb. 1, 2008).

132. *United States v. Martignon*, 346 F. Supp. 2d 413, 417 (S.D.N.Y. 2004), *rev’d*, 492 F.3d 140 (2d Cir. 2007).

133. *Id.*

134. *Id.* at 416-17.

135. *Id.* at 429 n.22.

136. *United States v. Martignon*, 492 F.3d 140 (2d Cir. 2007).

137. *Martignon*, 346 F. Supp. 2d at 428 (“This Court finds that the fixation and durational limitations inherent in the Copyright Clause restrict Congress’ power to legislate in the quasi-copyright field.”).

138. *Id.* at 422 (“[I]t is clear that [the anti-bootlegging statute] was enacted primarily to cloak artists with copyright-like protection”).

139. *Id.* at 424; *see also* *Ry. Labor Executives Ass’n v. Gibbons*, 455 U.S. 463, 469 (1982).

petual protection.¹⁴⁰ It found that the limited times provision of the Copyright Clause was integral to the grant of monopoly rights in order to protect the public.¹⁴¹

B. The *Martignon* Rationale

The Court of Appeals for the Second Circuit reversed the district court, holding that Congress was empowered under the commerce clause to criminalize bootlegging.¹⁴² The court used two distinct rationales to reach its decision: a textual approach and an historical approach. Proceeding textually, the court found that the Copyright Clause empowers Congress to “secure rights” to authors, which the court construed as giving authors some enforceable legal right. The court reasoned that because § 2319A is a criminal statute, it secures no rights to authors since only the government can enforce criminal laws.¹⁴³ Therefore, according to the court, Congress was not acting pursuant to the Copyright Clause in enacting § 2319A.

The court found that, “[Copyright laws] all seem to share a common feature: They allocate property rights in expression.”¹⁴⁴ Relying on *College Savings Bank v. Florida Prepaid Postsecondary Education Expense Board*, the court held that § 2319A is missing the essential feature of a property right: the right to exclude others.¹⁴⁵ It explained that because this essential stick in the bundle of rights is allocated to the state in § 2319A, § 2319A is not, as the framers would have conceived, a copyright law.¹⁴⁶ The court then concluded that Congress had ample authority under the Commerce Clause to pass the law because the criminal anti-bootlegging provision substantially affects interstate trade.¹⁴⁷

The *Martignon* court’s rationale was similar to the *Gibbons* categorization approach in reconciling the potential congressional power conflict. The *Martignon* court first determined that it was not appropriate to apply the Copyright Clause to § 2319A because copyright was not the applicable area of law. The court next held that § 2319A regulates “activities at the

140. *Martignon*, 492 F. Supp. 2d at 429.

141. *Id.*

142. *Martignon*, 492 F.3d at 153.

143. The district court opinion makes clear, however, that the RIAA was involved in the prosecution of *Martignon*. *Martignon*, 346 F. Supp. 2d at 417.

144. *Martignon*, 492 F.3d at 150.

145. 527 U.S. 666, 673 (1999) (“The hallmark of a protected property interest is the right to exclude others. That is one of the most essential sticks in the bundle of rights that are commonly characterized as property.”) (internal quotation marks omitted).

146. *Martignon*, 492 F.3d at 150-51.

147. *Id.* at 152-53.

core of the Commerce Clause.”¹⁴⁸ Because the Commerce Clause is a broad power, with only very weak limitations, the court held § 2319A constitutional.¹⁴⁹

C. The *Martignon* Court’s Mischaracterization of Copyright Law

Despite the court’s thorough analysis, its reasons for determining that § 2319A is not a copyright law are not persuasive. To begin with, the court’s textual analysis is not convincing because the criminal prohibition of bootlegging is part of a larger legislative system designed to protect live performers. The court never discussed how the civil prohibition of bootlegging, § 1101, affects the analysis.¹⁵⁰ Because § 1101 grants to performers a civil right to exclude bootleggers from making recordings of their performances, § 2319A complements the performer’s property rights rather than supplanting them.¹⁵¹ Indeed, the RIAA instigated the investigation into *Martignon*’s business.¹⁵² The owners of the right were the parties enforcing it, with government help. In truth, the *Martignon* court was being overly formalistic by looking only at § 2319A. It failed to take into account both the real world activities of the recording industry and the entire legislative scheme that protects the recording industry.

Secondly, criminal prohibition of bootlegging is a method of granting incentives to authors so that they produce more works of authorship, thus promoting progress.¹⁵³ This purpose is exactly in line with the purposes of copyright.¹⁵⁴ Section 2319A protects “the fruits of intellectual labor,”¹⁵⁵ original works of authorship. In light of these contextual clues, basing the constitutional focus of the law entirely on a counterintuitive construction of the word “secure,” meaning that the author can be the only one doing the securing, is not persuasive.

Furthermore, Congress passed § 2319A to make United States copyright law consistent with copyright law in other countries. § 2319A was passed as part of the URAA, which implemented the Uruguay Round of

148. *Id.* at 152.

149. *Id.*

150. The court did distinguish § 2319A from § 1101 for purposes of the Commerce Clause, and held only that § 2319A, because it requires a commercial motive to violate the law, was authorized by the Commerce Clause. *Martignon*, 49 F.3d at 153 n.8.

151. *See* 17 U.S.C. § 1101 (2000).

152. *United States v. Martignon*, 346 F. Supp. 2d 413, 417 (S.D.N.Y. 2004), *rev’d*, 492 F.3d 140 (2d Cir. 2007).

153. *See supra* Section II.A.1.

154. *See id.*

155. *The Trade-Mark Cases*, 100 U.S. 82, 94 (1879).

Agreements of the General Agreement on Tariffs and Trade.¹⁵⁶ That agreement implemented the Agreement on Trade-Related Aspects of Intellectual Property (“TRIPS”), designed to give member states consistent and complementary intellectual property laws.¹⁵⁷ TRIPS mandates “criminal procedures and penalties to be applied at least in cases of willful . . . copyright piracy on a commercial scale.”¹⁵⁸ Because TRIPS classes bootlegging among “copyright and related rights,” it clearly mandates criminal penalties for the commercial dissemination of unauthorized recordings of live performances.¹⁵⁹ It is hard to support the proposition that a law reflecting the standards required of TRIPS signatories is in no sense a “copyright” law.

The *Martignon* court’s historical rationale is similarly unconvincing for two reasons. First, criminal enforcement of copyright is not an historical anomaly. It has been a crime to violate copyright since the Copyright Act of 1909.¹⁶⁰ Given the importance the *Martignon* court places on the criminality of § 2319A, it is surprising that the court spends barely a sentence analyzing 17 U.S.C. § 506 or 18 U.S.C. § 2319, which provide for criminal enforcement of the more traditional copyrights.¹⁶¹ According to the court’s rationale, these provisions are not copyright laws at all and therefore need not respect the limitations in the Copyright Clause. Yet it would be inconsistent if Congress could evade the limited times requirement in criminal law, but could not do the same in civil law because both secure exclusive rights to works of authorship. Furthermore, under the Statute of Anne, England’s first modern copyright statute,¹⁶² a fine (i.e., criminal penalty) of one half penny was recoverable by the Crown for

156. Uruguay Round Agreements Act, Pub. L. No. 103-465, 108 Stat. 4809 (codified at 19 U.S.C. § 3511 (2000)).

157. General Agreement of Tariffs and Trade: Multilateral Trade Negotiations Final Act Embodying the Results of the Uruguay Round of Trade Negotiations, April 15, 1994 annex 1C, art. 1, 33 I.L.M. 1125, 1197-98.

158. *Id.* at 1220.

159. *Id.* at 1202.

160. Copyright Act of 1909, ch. 320 § 28, 35 Stat. 1075 (1909) (“[A]ny person who willfully and for profit shall infringe any copyright secured by this Act, or who shall knowingly and willfully aid or abet such infringement, shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be punished by imprisonment for not exceeding one year or by a fine of not less than one hundred dollars nor more than one thousand dollars, or both, in the discretion of the court.”).

161. *United States v. Martignon*, 492 F.3d 140, 151 (2d Cir. 2007) (noting that § 2319A is in between the laws criminalizing copyright violations and trafficking counterfeit goods in the statute book).

162. HARRY RANSOM, THE FIRST COPYRIGHT STATUTE 15 (1956).

“every Sheet which shall be found in [the copyright infringer’s] Custody . . . contrary to . . . this Act.”¹⁶³ Parliament passed the Statute of Anne in 1710,¹⁶⁴ and it has many similarities with the first copyright act passed by the United States, including an initial fourteen-year term, and a provision for the deposit of books.¹⁶⁵ It is unlikely, therefore, that the Framers of the Constitution would have categorically held criminal enforcement of exclusive rights in original works of authorship to be non-copyrights.

Secondly, copyrights and property rights are too dissimilar to be conditioned on the same “essential stick.” The *Martignon* court relied on the proposition that because copyright acts have historically all “allocate[d] property rights in expression,” § 2319A is not a copyright law, as it grants only the government a right to exclude.¹⁶⁶ This argument presupposes that copyright protects rights analogous to common law property. The historical understanding of copyright, however, is that literary rights are not analogous to common law property rights. In England, after the passage of the Statute of Anne, the House of Lords decided that any common law property right in literary works was superseded by the statute.¹⁶⁷ Indeed, it decided that one of the cornerstones of a property right, perpetuity, did not inhere in copyrights.¹⁶⁸

The Supreme Court decided essentially the same issue in *Wheaton v. Peters*.¹⁶⁹ There the Court held that there was no common law property right in literary works in the United States and that the Copyright Clause granted Congress the authority to create such a right totally apart from the

163. *Id.* at 100, 101.

164. *Id.* at 98 (noting confusion about the date of passage due to differences between the legal year and the calendar year).

165. Copyright Act of 1790 ch. 15, §§ 1, 3, 1 Stat. 124 (1790) (providing for the deposit of books with the local district court and an initial copyright term of fourteen years with the possibility of an additional fourteen year term if the author were still living); RANSOM, *supra* note 162, at 102-03 (explaining that section five of the Statute of Anne required deposit of copies of the copyrighted works to both the royal library as well as various college libraries); JOHN FEATHER, PUBLISHING, PIRACY AND POLITICS: AN HISTORICAL STUDY OF COPYRIGHT IN BRITAIN 70 (Mansell 1994) (explaining that the Statute of Anne provided for an initial copyright term of fourteen years with the possibility of an additional fourteen year term if the author was still living).

166. *United States v. Martignon*, 492 F.3d 140, 150 (2d Cir. 2007).

167. FEATHER, *supra* note 165, at 92 (noting that the Statute of Anne created new rights that are limited in time, contrary to common law property rights which are perpetual).

168. *Id.*

169. 33 U.S. 591 (1834).

common law property system.¹⁷⁰ Though the *Martignon* court relied on *Wheaton* to show that a copyright must “create, bestow, and allocate” property rights to authors,¹⁷¹ what *Wheaton* really stands for are the propositions that copyrights are not common law property rights and that the rules the two rights regimes follow are not the same.¹⁷²

The *Martignon* court’s holding that copyright laws universally give authors an exclusive right to their works of authorship is not consistent with copyright law as it now stands. Several sections of the Copyright Act limit the “exclusive” rights an author has to her works. These limitations include statutory licensing schemes that allow anyone, upon payment of a fee set by the government, to exercise certain § 106 rights.¹⁷³ They also include wholesale exemptions to the § 106 rights for certain nonprofit users or publicly beneficial uses of copyrighted works.¹⁷⁴ If a copyright were “property” in the common law understanding with rights of exclusivity and perpetuity, these activities would be takings. They are not, however, because copyright is a different animal. In other words, the *Martignon* court’s holding that all copyright laws grant exclusive rights to the owners of copyrighted works was a misinterpretation of copyright law.

V. THE CONSTITUTIONALITY OF THE BOOTLEGGING PROVISIONS

The rationale in the Court of Appeals for the Second Circuit mischaracterized copyright law; therefore, a proper basis for the constitutionality of the anti-bootlegging provisions has yet to emerge. The right method for resolving conflicts of power granted to Congress must be determined in order to properly evaluate the constitutionality of the anti-bootlegging provisions. In making this analysis, the solitary analysis method may be rejected out of hand, as it is inadequate to protect constitutional safeguards. The categorization approach is workable, but suffers from a near-

170. *See id.* at 661 (“The word secure, as used in the constitution, could not mean the protection of an acknowledged legal right.”).

171. *Martignon*, 492 F.3d at 150.

172. *See Wheaton*, 33 U.S. at 661.

173. *See, e.g.*, 17 U.S.C. §§ 114(d)(2), 114(f) (2000) (providing for statutory licensing of digital audio transmissions under certain circumstances); 17 U.S.C. § 115 (2000) (providing for statutory licensing of making and distributing phonorecords of non-dramatic musical works).

174. *See, e.g.*, 7 U.S.C. § 107 (providing that certain uses of copyright material which are beneficial to the public and cause little to no economic harm to the copyright owner are not infringements of copyright); 17 U.S.C. § 117 (2000). (providing that certain uses of copyrighted computer programs are not infringements of copyright).

fatal flaw in that the final outcome of the statute's constitutionality is arbitrary.¹⁷⁵ The fundamental inconsistency approach solves this problem by supplying a definite answer, while giving some force to all constitutional provisions.¹⁷⁶ This Section will discuss each method in turn as applied to the anti-bootlegging provisions, and conclude that Congress does have the power to enact the anti-bootlegging provisions, but it must limit the term of protection it grants to live performances.

A. Solitary Analysis Applied to the Anti-Bootlegging Provisions

The solitary analysis approach used in *Heart of Atlanta* is not appropriate for the conflict between the Copyright Clause and the Commerce Clause. In *Gibbons*, a categorization approach was more appropriate because the Commerce Clause had the potential to swallow the Bankruptcy Clause whole.¹⁷⁷ That is, bankruptcies are intimately associated with commerce and bankruptcy law substantially affects interstate commerce.¹⁷⁸ If the solitary analysis approach had been applied to the fact pattern in *Gibbons*, then the whole requirement that bankruptcy laws be uniform would have been erased from the Constitution.¹⁷⁹ Particularized bankruptcy laws for individual corporate entities would then be possible.¹⁸⁰ Applying the solitary analysis approach to the Commerce Clause and Copyright Clause would produce a similar result because the creative industries protected by copyright certainly substantially affect interstate commerce. Furthermore, like in *Gibbons*, the Copyright Clause has affirmative limitations on Congress's power that the court would erase if it held that the Commerce Clause could enact copyright laws. It would be inappropriate to rely on a test that reads whole clauses out of the Constitution, and therefore the solitary analysis approach is not suited to the conflict between the Commerce Clause and the Copyright Clause.

B. Categorization

The categorization approach, unlike the solitary analysis approach, does not end once it finds a congressional power capable of upholding the statute in question. For purposes of the categorization approach, any law

175. See Oliar, *supra* note 69, at 498.

176. Dotan Oliar argues that the fundamental inconsistency test is the more satisfying approach because it forces courts to confront the tension between the Commerce Clause and the Copyright Clause. *Id.*

177. See *Ry. Labor Executives Ass'n v. Gibbons*, 455 U.S. 463, 466 (1982).

178. See *id.*

179. See *id.* at 469.

180. See *id.*

that purports to grant exclusive rights in works of original authorship falls under the Copyright Clause, despite the Commerce Clause. That is, the purpose of the Copyright Clause is to grant Congress the power to give monopoly rights to the originators of intellectual goods. In the *Trade-Mark Cases*, the Court found that the Copyright Clause authorizes Congress to grant rights in the “fruits of intellectual labor.”¹⁸¹ The Court held that writings suitable for copyright protection must be “founded in the creative powers of the mind.”¹⁸² This accords with *Feist*’s reminder that, “originality remains the sine qua non of copyright.”¹⁸³ Because the categorization approach uses the purpose of the law at issue to decide what congressional power the law best fits under,¹⁸⁴ any law that gives exclusive rights to works of original expression should be categorized under the Copyright Clause. Because the Commerce Clause is such a broad power, it can authorize statutes that are not uniquely about commerce.¹⁸⁵ Nonetheless, statutes can fall uniquely under the Commerce Clause, as in the *Head Money Cases*, by regulating commerce as such—the movement of goods and people, for instance.¹⁸⁶

The flaw with the categorization approach is that determining whether or not anti-bootlegging laws grant exclusive rights in the “fruits of intellectual labor” is difficult. On the side of the Copyright Clause, the anti-bootlegging provisions grant a performer exclusive rights to any recording of his or her performance. The recording is a “fruit[] of intellectual labor” because the performance itself is an artistic endeavor, and the recording of it has value precisely because of the unique artistic qualities of the performance. As a result, § 2391A and § 1101 fall within the scope of the Copyright Clause and must abide by duration limitations. Because the rights granted in the anti-bootlegging provisions are perpetual, the anti-bootlegging provisions would be unconstitutional.

On the other hand, however, the anti-bootlegging provisions do not protect the performance itself, but rather the right to record the performance.¹⁸⁷ That is, a rival performer could stage a substantially similar show the night after a box-office hit debuts and not violate the anti-bootlegging

181. 100 U.S. 82, 94 (1884).

182. *Id.*

183. *Feist Publ’ns., Inc. v. Rural Tel. Serv. Co.*, 499 U.S. 340, 348 (1991).

184. *See supra* Section III.B.

185. *See, e.g.*, *The Lottery Case*, 188 U.S. 321 (1903).

186. *See Edye v. Robertson (The Head Money Cases)*, 112 U.S. 580, 595 (1884).

187. *See Oliar, supra* note 69, at 491; 17 U.S.C. § 1101 (2000); 18 U.S.C. § 2319A (2000).

provisions. Sections 1101 and 2319A do not protect an original performer from direct competition even where the competitor is stealing the original performer's act. The anti-bootlegging statutes are more like federal rights of publicity in that the right of publicity protects the image of the performer performing and not the performance itself.¹⁸⁸ Interpreted in this way, § 1101 and § 2319A are not within the scope of the Copyright Clause because they do not protect the actual "fruit of intellectual labor" with respect to the original artist. Thus, because bootlegging concededly substantially affects interstate commerce, the Commerce Clause authorizes them.

The categorization approach has the advantage of giving effect to all limitations on Congress's constitutional powers. It is a constitutional interpretation appealing in its simplicity because under it, every law is enacted under one power only and only the limitations in that power apply. It has the disadvantage, however, of pigeonholing statutes so that they are analyzed under only one part of the Constitution, when they may actually relate to several areas of the law. For example, § 1101 and § 2319A have aspects of copyright laws even though they are not entirely copyright laws. This has led numerous courts to classify them as "copyright-like."¹⁸⁹ In the face of statutes like § 1101 and § 2319A, the categorization approach used in *Gibbons* is arbitrary.¹⁹⁰ There is no way to tell, in close cases, which constitutional power the law at issue actually falls under.

C. Fundamental Inconsistency

Unlike the categorization approach, the fundamental inconsistency approach analyzes the statute according to the fundamental limitations of every applicable constitutional power. Under this approach, in order to rule on the constitutionality of the anti-bootlegging provisions, it is necessary to identify the fundamental limitations in the Copyright Clause. Notably, the Copyright Clause has at least two fundamental limitations: a work protected by copyright must be original¹⁹¹ and copyright protection cannot last for perpetuity.¹⁹² In contrast, that a work must be fixed is not a fundamental limit on the Copyright Power, because of the very wide definition of "fixed" in copyright law.¹⁹³

188. See *Zacchini v. Scripps-Howard Broad. Co.*, 433 U.S. 562 (1977).

189. See, e.g., *United States v. Moghadam*, 175 F.3d 1269, 1280 (11th Cir. 1999).

190. See *Oliar*, *supra* note 69, at 498.

191. See *supra* Section II.A.3.

192. See *supra* Section II.A.2.

193. See *supra* Section II.A.3.

The anti-bootlegging provisions easily pass fundamental inconsistency with regard to originality. The Copyright Clause only requires a “modicum” of originality and the variations that naturally occur in any live performance are enough to meet this test.¹⁹⁴ However, the anti-bootlegging statutes violate the “limited times” provision of the Copyright Clause. A bootlegger may never sell an unauthorized videotape of a live performance, even seventy years after the performer dies. No bootlegs of live performances will ever fall into the public domain, frustrating the benefit to the public on which copyright is based.¹⁹⁵ Thus, under the fundamental inconsistency test, § 2319A and § 1101 are unconstitutional due to their perpetual nature. In fact, the district court in *Martignon*, the only court to apply the fundamental inconsistency test to the anti-bootlegging provisions, found the statute unconstitutional.¹⁹⁶ While both the Second Circuit Court of Appeals in *Moghadam* and the *Kiss II* court acknowledged the incompatibility between the perpetual nature of the anti-bootlegging provisions and the Copyright Clause, neither court applied the fundamental inconsistency test.¹⁹⁷ The *Moghadam* court declined to rule on the limited times provision because the issue was not properly before it.¹⁹⁸ Because the *Kiss II* court held that the Copyright Clause did not protect unfixed works (i.e., live performances), it found that the Copyright Clause was irrelevant to the constitutionality of the anti-bootlegging provisions.¹⁹⁹ It then held that the Commerce Clause independently authorized the anti-bootlegging provisions and that, therefore, no duration limitation was necessary.²⁰⁰ While the *Kiss II* court purported to apply the *Moghadam* fun-

194. See, e.g., *Moghadam*, 175 F.3d 1280 (“A live musical performance clearly satisfies the originality requirement.”).

195. See Heald & Sherry, *supra* note 15, at 1165.

196. *United States v. Martignon*, 346 F. Supp. 2d 413, 428 (S.D.N.Y. 2004), *rev'd*, 492 F.3d 140 (2d Cir. 2007).

197. See *Moghadam*, 175 F.3d 1269; *Kiss Catalog, Ltd. v. Passport Int'l Prods. (Kiss II)*, 405 F. Supp. 2d 1169 (N.D. Cal. 2005).

198. See *id.* at 429 n.22

199. See *Kiss II*, 405 F. Supp. 2d at 1176 (“In contrast to *Railway Labor*, the question is not whether legislation empowered by the Copyright Clause-but invalid under it-can otherwise be empowered by the Commerce Clause. The question is whether matters not encompassed within the Copyright Clause can be addressed by the Commerce Clause free of the restrictions of the Copyright Clause. The answer to that question is, clearly, yes.”).

200. *Id.*

damental inconsistency test,²⁰¹ it actually applied an analysis similar to the *Gibbons* categorization approach.²⁰²

While the precedent on the proper method is ambiguous, the fundamental inconsistency test has the virtue of holding the entire Constitution in view. That is, broad powers have their full effect even when a statute authorized by the broader power conflicts with a narrower power. It also gives effect to limitations on Congress's power where those limitations are important in the larger constitutional scheme; for example, the anti-bootlegging provisions are not unconstitutional because of their conflict with the fixation requirement, which is a weak limitation, but they are unconstitutional because of their conflict with the duration requirement, which is a much more fundamental limit on congressional power to enact copyright laws. The method has the disadvantage, however, of stretching narrow powers. Because copyright law substantially affects interstate commerce, if the Copyright Clause did not exist, Congress could enact copyright laws free of all the restraints in the Copyright Clause. Applying the fundamental inconsistency test, therefore, requires designating some of the limits the Copyright Clause fundamental and others not so. This causes some of the limitations in the Copyright Clause, such as the fixation requirement, to lose effectiveness.²⁰³ The alternatives, however, to fundamental inconsistency have disadvantages that make them worse choices. The *Heart of Atlanta*²⁰⁴ solitary analysis approach completely erases limits on congressional powers by upholding a law as soon as any one power can be found that would uphold it. The *Gibbons*²⁰⁵ categorization approach arbitrarily pigeonholes a law under one congressional power or another with no guidance about how to make that decision in close cases. Fundamental inconsistency is therefore the method best suited to maintaining the limitations on congressional power that ought to be maintained. Moreover, the fundamental inconsistency approach is capable of stretching the constitutional requirements that, like the fixation requirement, are not part of the foundations of copyright law.

201. *See id.* at 1173.

202. *See supra* text accompanying notes 119-120.

203. *See Moghadam*, 175 F.3d 1280.

204. *Heart of Atlanta Motel, Inc. v. United States*, 379 U.S. 241 (1964).

205. *Ry. Labor Executives Ass'n v. Gibbons*, 455 U.S. 463 (1982).

VI. CONCLUSION

Ultimately, the *Martignon* court's holding that § 2319A is not a copyright law was misguided. The criminal nature of the law is not determinative because copyright laws have had criminal aspects in the United States since 1909, and the United States has entered into a multi-national agreement giving copyright criminal enforcement the world-over.²⁰⁶ Additionally, § 2319A has a civil corollary in § 1101, which grants the performer the right to exclude; the criminal provision, therefore, is another tool that secures the author's intellectual property. Finally, the *Martignon* rationale, that criminal copyright laws need not abide by the limitations in the Copyright Clause implies that criminal copyright enforcement could be perpetual, while the civil remedies could not be. This undermines the limited times requirement in the Copyright Clause.

The best method to determine the constitutionality of the anti-bootlegging statutes is the fundamental inconsistency approach pioneered by the *Moghadam* court. This approach holds the entire Constitution in view, and only invalidates a law if it breaks an important constitutional rule. Measured against this approach, the anti-bootlegging provisions are unconstitutional because they confer perpetual rights in violation of the "limited times" requirement in the Copyright Clause.

The appropriateness of the fundamental inconsistency test is not surprising. The *Moghadam* court designed it specifically within the context of the anti-bootlegging provisions and the Copyright Clause. It is a specifically engineered tool, adept at separating out important underpinnings of the copyright regime (like duration and originality) from the ones with a bit of stretch (like the promotion of progress and fixation). The categorization approach, used by the Second Circuit in *Martignon*, does not have the flexibility required to maintain the coherency of copyright. The Second Circuit's reasoning makes it look like any criminal copyright law is actually governed by the Commerce Clause. This is a *reductio ad absurdum* that underscores the categorization approach's rigidity. In a technologically advancing society, in which copyright laws require adaptability, our constitutional system needs to give copyright that room. The choice should not be, however, between giving up the basic quid pro quo of intellectual property rights (legal protection for public access) and preventing the exploitation of creative individuals; copyright law requires both. In the end, the fundamental inconsistency test strikes the appropriate balance because it allows Congress to use its broad Commerce Clause powers to pro-

206. See *supra* Section IV.C.

protect the works of live performers, but it does not erase the fundamental limitations imposed on Congress by the Copyright Clause.

LET IT BE? THE CHALLENGES OF USING OLD DEFINITIONS FOR ONLINE MUSIC PRACTICES

By Joshua Keesan

I. INTRODUCTION

The music industry, once robust and profitable, is in the midst of a crisis. Its prevailing business model struggles to keep up with changing technology in a world in which the Internet has become music's central medium. More consumers are listening to music on the web than ever before, mostly in the form of streaming web radio stations and digital downloads of their favorite artists. For example, about fifty-five million Americans listen to internet radio every week, up twenty-six percent from last year alone.¹ This shift away from traditional music channels, such as radio stations and record stores, has forced the industry to completely re-conceptualize its business model. Record labels, publishers, and artists are struggling to earn a profit in the music industry's new online age.

The intellectual property rights attached to music have always been complex because every song actually contains two separate protectable works: the underlying musical composition and the sound recording. Consequently, various separate and distinct rights organizations have formed to collect royalties and licensing fees for each of the rights embodied in a single song. These organizations formed with generally shared understandings of the various ways music could be used and the rights that those uses implicated. As the Internet becomes music's primary medium, however, new uses have arisen for which the old definitions do not so directly apply. Consequently, this system of rights administration has become ever more complex.

This Note offers an understanding of the current system of internet music-rights administration in light of recent case law and developments in industry practices in the digital space. Part II will serve as a primer on the basics of music copyright, explaining the divergent rights involved in a piece of music and tracing the development of the collective rights organizations that formed to administer these rights. Part III will provide a background on two major points of controversy in the area of digital rights for music: 1) the problem of "double dipping" as it has arisen in the context of downloads and online streaming and 2) the issue of how much the licenses

© 2008 Joshua Keesan.

1. Shaun Assael, *Online and on the Edge*, N.Y. TIMES, Sept. 23, 2007, at Arts 32.

and royalties should cost for internet-based purveyors of music. Part IV will explain the current status of these issues, as reflected in recent litigation and policy-making decisions. This Note will conclude, in Part V, with an exploration of how the record labels and collective rights agencies could make vital changes to their business models in order to remain current, and how such changes would function within the new understandings of online music licensing.

II. COPYRIGHT AND MUSIC: STATUTORY FRAMEWORK

This Part will explain the basics of music copyright law, including in particular a discussion of the various rights embodied within a single song. It will then examine the various organizations that formed to administer each of these rights.

Under copyright law, a musical recording includes two works: a “musical composition” and a “sound recording.”² The “musical composition” is the underlying composition of a song, such as the sequence of notes and rhythms put together by the songwriter. A “sound recording” is a recorded performance of a musical work. It is a “fixation of sounds, including a fixation of a performance of someone playing [and/or] singing a musical work.”³ The song’s composer and lyricist own the musical composition copyright jointly, but they typically assign this right to a publishing house, which manages all rights and royalty distribution.⁴ Likewise, the artist’s record label, not the artist himself, typically owns the song’s sound recording right.⁵

Under § 106 of the Copyright Act, the holder of each of these rights has the exclusive rights to, among others, reproduce the song and perform the song publicly (either as a live performance or by means of audio transmission).⁶ There are, however, exceptions to the exclusivity of these rights. The holder of the copyright in the musical composition is required to license the composition to anyone who wants to use it in a “phonorecord” (a term defined in § 115 of the Copyright Act as “material objects in which sounds . . . are fixed . . . and from which the sounds can be per-

2. 17 U.S.C. §§ 102(a)(2), (7) (2000).

3. R. Anthony Reese, *Copyright and Internet Music Transmissions: Existing Law, Major Controversies*, 55 U. MIAMI L. REV. 237, 241 (2001). The sound recording right is designated as ©.

4. DONALD S. PASSMAN, *ALL YOU NEED TO KNOW ABOUT THE MUSIC BUSINESS* 206-11 (6th ed. 2006).

5. Congress created this “sound recording” copyright in 1972, in an effort to curtail music piracy. See PASSMAN, *supra* note 4, at 309.

6. 17 U.S.C. § 106 (2000).

ceived, reproduced, or otherwise communicated”) and at a price set by the Copyright Office.⁷ This is known as a mechanical compulsory license, and it is what will allow any other artist to make a “cover” recording of the song, that is, to create a new version of a pre-existing musical composition with different musicians.⁸ Most musicians who wish to cover a song will likely negotiate the compulsory license through the Harry Fox Agency (HFA).⁹ HFA formed in 1927 to administer the musical composition reproduction right.¹⁰ It is the largest such agency in the nation and deals primarily with music publishers, who tend to own the copyright in the musical composition. The National Music Publisher’s Association established HFA to deal specifically and solely with the administration of the reproduction and distribution right for musical compositions.¹¹ Traditionally, reproduction and distribution licenses only addressed rights for musical compositions, not sound recordings. Thus, if someone wished to include (and distribute) Whitney Houston’s recording of “I Will Always Love You” on a CD compilation, he would need to license the composition from HFA, and also obtain permission directly from the sound recording rights-holder, who would be allowed to charge whatever she wished.¹² The costs of the compulsory mechanical licenses are set by statute, and the HFA charges an additional processing fee of \$15 for each composition licensed.¹³

Licensing the right to reproduce and distribute a song on a CD compilation is entirely separate from the right to publicly perform a copyrighted work. Public performance, under the Copyright Act, is “to perform or display [a work] at a place open to the public . . . or to transmit or otherwise communicate a performance or display of the work . . . to the public by means of any device or process.”¹⁴ Public performance, unlike reproduction, does not carry a compulsory license.¹⁵ In the early years of the twen-

7. 17 U.S.C. § 115 (2000).

8. Reese, *supra* note 3, at 242.

9. *Id.* at 243.

10. Harry Fox Agency, About HFA, <http://harryfoxagency.com/public/HFA.jsp> (last visited Jan. 24, 2008).

11. *Id.*

12. Reese, *supra* note 3, at 243. This permission is also known as the “master use” right. *Id.*

13. Harry Fox Agency, Frequently Asked Questions, <http://harryfoxagency.com/songfile/faq.html> (last visited Jan 24, 2008). The current statutory rate is \$0.091 per song per unit for compositions up to five minutes in length. For compositions over five minutes in length, the rate increases by \$0.0175 per minute or fraction thereof. *Id.*

14. 17 U.S.C. § 101 (2000).

15. Reese, *supra* note 3, at 245.

tieth century, performing rights societies formed to administer the public performance rights of a musical composition. These societies were created to address the impossibility of artists being able to bargain with every single place of public accommodation and media entity that wished to play their songs.¹⁶ Songwriters' rights are usually held by their publishers, who contract with the performing rights societies to license these public performances, and in turn, to dole out blanket licenses to the organizations that engage in public performances, such as radio stations and restaurants.¹⁷ The American Society of Composers and Publishers (ASCAP) is the largest such organization in the United States. ASCAP formed in 1914, the days of Tin Pan Alley and John Phillips Sousa.¹⁸ Throughout its history, ASCAP's goal has been to assure that the creators of musical compositions are fairly compensated for the public performance of their works and that their rights are protected.¹⁹ In addition to issuing blanket licenses, ASCAP monitors songs played across various public outlets and divvies up the proceeds based on a pro rata formula.²⁰ In 1939, another performing rights society, Broadcast Music Incorporated (BMI), formed for the purpose of serving a similar function.²¹ The third performing rights organization is SESAC, which was formed in 1930 and was originally named the Society of European Stage Authors and Composers.²² SESAC, which is based out of Nashville, controls only about one percent of public performance rights.²³ The performing rights societies deal with the public performance rights in the composition; the public performance rights for sound recordings are managed by an entity called SoundExchange, which was formed in 2000.²⁴

The major entities involved in each of these rights are represented in the following table:

16. See Robert P. Merges, *Contracting Into Liability Rules: Intellectual Property Rights and Collective Rights Organizations*, 84 CALIF. L. REV. 1293, 1328 (1996).

17. The performing rights societies cannot, however, collect large-scale public-performance monies for music used in, for example, domestic motion pictures. PASSMAN, *supra* note 4, at 227.

18. ASCAP, History of ASCAP: The Early 1900s, <http://www.ascap.com/about/history/1900s.html> (last visited Jan. 24, 2008).

19. ASCAP, History of ASCAP, <http://www.ascap.com/about/history> (last visited Jan. 24, 2008).

20. Merges, *supra* note 16, at 1329.

21. BMI, Tradition, <http://www.bmi.com/about/entry/C1508> (last visited Jan. 24, 2008).

22. SESAC, About Us, <http://www.sesac.com/aboutsesac/about.aspx> (last visited Feb. 28, 2008).

23. PASSMAN, *supra* note 4, at 225.

24. Sound Exchange, <http://www.soundexchange.com> (last visited Jan. 24, 2008).

Specific Right	Administered by:	In the form of:	Triggered by, for example:
© Reproduction	Harry Fox Agency (HFA)	Compulsory mechanical license	Reproduction of a song in a compilation record (underlying composition) or making a cover recording of an existing composition
Ⓜ Reproduction	No middleman—direct from rights-holder	Master use license	Reproduction of a song in a compilation record (sound recording)
© Public Performance	Performing rights societies—ASCAP, BMI, SESAC	Blanket license	Playing or performing a song in a bar (underlying composition)
Ⓜ Public Performance	SoundExchange	Statutory royalties set by Copyright Royalty Board (CRB)	Playing or performing a song in a bar (sound recording)

This is the framework that has developed over the last century, during the pre-internet age. As will be discussed in Part III, these rights have consequently become muddled by the rise of new uses for music scarcely conceivable at the time of the framework's inception.

III. POINTS OF CONTROVERSY UNDER THE EXISTING FRAMEWORK

The statutory framework for music copyright law has been shaken by the rise of the Internet. The problem with the use and distribution of music on the Internet is that no one is quite sure which new activities correspond

to the *traditional* understandings of activities that trigger certain licenses and royalties. One point in agreement is that the transmission of any song on the Internet will require rights clearances for both the underlying musical composition (copyright), and the sound recording (phonorecording right), assuming neither of those is in the public domain.²⁵ Yet, as discussed below, the traditional middlemen—HFA, ASCAP and the performing rights societies, and Sound Exchange—argue that certain ambiguous categories fall under their purview, and that the rights holders they represent should receive full compensation for use of music by these new activities. Specifically, HFA argues that the stream of a song online is a reproduction, while performing arts societies contend that a download of an .mp3 file constitutes a public performance.²⁶ This results in a situation in which, if everything is paid out according to their suggestions, rights-holders are engaging in “double dipping,” that is, being paid twice when their music is only used once.²⁷ Such a practice over-compensates the rights-holders and simultaneously makes the use of music cost-prohibitive for most internet broadcasters. This Part examines the developments in digital copyright since the mid-1990s that have led to this predicament.

Congress has made changes to the copyright law in the last decade in an attempt to clarify how certain new activities square with traditional understandings of music copyright. In 1995, Congress updated the statutory understanding of musical “reproduction” to include the reproduction and distribution of musical works via a “digital phonorecord delivery,” (DPD) which the Copyright Act defined as a digital transmission that results in a file being stored on a hard drive (i.e., a download).²⁸ The compulsory license thus gave the right to make DPDs of musical works, but not the right to make DPDs of sound recordings. Additional permission would be necessary in order to download a sound recording of a particular work.²⁹ Thus, in order to download an .mp3 of Whitney Houston’s “I Will Always Love You,” a license for the DPD of the underlying composition would be required, as well as permission from the record label that owned the rights in Whitney Houston’s sound recording of that composition.

25. Reese, *supra* note 3, at 251, 258.

26. *See* United States v. Am. Soc’y. of Composers, Authors, & Publishers, 485 F. Supp. 2d 438, 446 (S.D.N.Y. 2007).

27. *See generally* Laurence R. Helfer, *World Music on a U.S. Stage, A Berne/TRIPS and Economic Analysis of the Fairness in Music Licensing Act*, 80 B.U. L. REV. 93, 116 (2000).

28. 17 U.S.C. § 115 (2000).

29. Reese, *supra* note 3, at 243.

Also in 1995, Congress updated sound recordings owners' public performance right by adding a right to a "digital audio transmission."³⁰ This new right addressed the contemporaneous streaming of music on the Internet, subject to certain limitations.³¹ Congress recognized four distinct types of digital audio transmissions: a transmission made by an "interactive service" at the user's request (an on-demand model such as Rhapsody, in which users pay a monthly fee to stream any of the recordings in Rhapsody's catalog³²), and three types of "non-interactive service" transmissions: non-subscription broadcast transmissions, online-only non-interactive transmissions, and web stations that exclusively play the music of one artist.³³

Although interactive digital transmissions certainly trigger the sound recording right-holder's digital transmission performance right, Congress struggled over whether this right is also implicated by the three types of non-interactive transmissions. The first of this type, non-subscription broadcast transmissions, result when traditional terrestrial radio stations stream their broadcasts over the Internet. Congress originally left these transmissions exempt from the digital transmission performance right. After a petition from the Recording Industry Association of America in 2000, the Copyright Office, which is the agency charged with administering Congress's copyright provisions, changed its regulations and decided that internet simulcasts by terrestrial radio stations were *not* exempt from the digital transmission performance right.³⁴ Based on the Copyright Act's designation of the exclusive right to perform sound recordings "publicly by means of a digital audio transmission," the Copyright Office felt that it made sense for record labels to receive royalties for all songs streamed over the Internet. The National Association of Broadcasters unsuccessfully challenged the Copyright Office's decision in *Bonneville International Corp. v. Peters*,³⁵ in which the Third Circuit held that the transmission of

30. As of 2003, SoundExchange is designated by the Copyright Office as the only collective permitted to distribute the royalties resulting from the sound recording owner's public performance rights under 17 USC § 114(g)(2). *See* Sound Exchange, Notice of Designation as Collective Under Statutory License, <http://www.soundexchange.com> (last visited Jan. 24, 2008).

31. Reese, *supra* note 3, at 246.

32. *See* Rhapsody, What is Rhapsody, http://learn.rhapsody.com/?src=rcom_navside (last visited Jan. 24, 2008).

33. Reese, *supra* note 3, at 247-9.

34. *Id.* at 247-48.

35. *Bonneville Int'l Corp. v. Peters*, 347 F.3d 485 (3d Cir. 2003); *see also* Tomomi Harkey, Note, *Bonneville International Corp. v. Peters: Considering Copyright Rules to Facilitate Licensing for Webcasting*, 20 BERKELEY TECH. L.J. 625 (2005).

AM/FM streaming was not exempt from the sound recording public performance right.³⁶

The next category of non-interactive services involves online-only non-interactive transmissions, which are not exempt from the digital performance transmission right, but are nevertheless subject to a compulsory license of that right.³⁷ This was Congress's attempt to deal with the activities of internet radio stations and webcasters. As understood at the time, a transmitter that qualified for this compulsory license for the musical composition would also need to obtain a public performance license from one of the performing rights societies, since the compulsory license only addressed the sound recording digital transmission performance right.³⁸ In order to qualify for this compulsory license, the webcasters had to meet a variety of conditions, including requirements that they provide no advance notice of what was being broadcast (to prevent listeners from recording upcoming songs), and that they refrain from transmitting more than three tracks from the same album or four tracks from the same artist within a three-hour period.³⁹ The majority of web radio stations, in addition to popular services such as Pandora, fall under this category.⁴⁰

The final category involves non-interactive transmissions that are not terrestrial broadcast transmissions and do not meet the rather stringent compulsory license requirements for webcasters. This category, which Congress established in 1995, includes online radio stations devoted to playing the music of, for example, exclusively one musician. These radio stations do not qualify for any statutory compulsory license, and so permission must be obtained directly from the rights-holders for both the sound recordings and the underlying musical compositions.⁴¹

As a whole, the rights implicated by the use of music on the Internet have been hotly debated from the outset. One central argument has been whether streaming transmissions constitute both public performance of the works transmitted *and* reproduction of the works.⁴² Most commentators believe that a stream is clearly a public performance because it is akin to the traditional definition of public performance, because it is a transmission to "the public, by means of any device or process, [where] members

36. *Bonneville*, 347 F.3d at 500.

37. Reese, *supra* note 3, at 248.

38. *Id.* at 249.

39. 17 U.S.C. § 114(d)(2)(C) (2000).

40. Pandora, About Pandora, <http://www.pandora.com/corporate> (last visited Jan. 24, 2008).

41. Reese, *supra* note 3, at 249.

42. *Id.* at 252.

of the public . . . receive it in the same place or in separate places and at the same time or at different times.”⁴³ Likewise, these same commentators believe that a download of a song is clearly a reproduction because it is akin to the traditional notion of reproduction: a song is reproduced and then distributed to an end user.⁴⁴ The fact that different organizations control these rights, however, has led such organizations to claim that both activities implicate their rights. This creates the problem of double dipping.⁴⁵ For example, although a stream is like a traditional public performance, HFA claims that streaming is also a reproduction because, as it is being streamed, a song is also temporarily stored in a listener’s random-access memory (RAM).⁴⁶ Thus, as early as 2000, HFA has argued that every streaming transmission is a reproduction as well as a public performance due to RAM storage.⁴⁷

On the other hand, downloads have been generally understood to be reproductions from the outset. Downloading a copyright-protected song is understood to involve a reproduction of a sound recording, for which permission is required from the copyright owner.⁴⁸ In addition, permission is required to make a phonorecord of the underlying musical work by means of a DPD, which would come in the form of a compulsory mechanical license or through the HFA.⁴⁹ While it is generally accepted that downloads are reproductions, the debate is whether they are also performances. The performing rights associations have been quick to assert that downloads *do* implicate the public performance right, in part because home users can begin to listen to a song as it is being downloaded.⁵⁰ Many fall on the other side of the debate, however. In 2000, the Clinton Administration’s White Paper, which addressed intellectual property rights, stated clearly that download transmissions do not involve public performance rights.⁵¹

43. 17 USC § 101 (2005).

44. Reese, *supra* note 3, at 259.

45. *See id.* at 252; *United States v. Am. Soc’y. of Composers, Authors & Publishers (ASCAP)*, 485 F. Supp. 2d 438, 446 (S.D.N.Y. 2007).

46. Reese, *supra* note 3, at 252.

47. *Id.* at 254.

48. *Id.* at 258.

49. *Id.*

50. *ASCAP*, 485 F. Supp. 2d 438, 446 (S.D.N.Y. 2007); Posting of David Oxenford to Broadcast Law Blog, District Court Finds No Public Performance In Download - Could Affect Fees on Podcasts and Video Downloads, <http://www.broadcastlawblog.com/archives/on-line-media-district-court-finds-no-public-performance-in-download-could-affect-fees-on-podcasts-and-video-downloads.html> (Apr. 29, 2007).

51. UNITED STATES PATENT & TRADEMARK OFFICE, INTELLECTUAL PROPERTY AND THE NATIONAL INFORMATION INFRASTRUCTURE: THE REPORT OF THE WORKING GROUP

The Copyright Office echoed this view in 2001, stating, “We do not endorse the proposition that a digital download constitutes a public performance even when no contemporaneous performance takes place. . . . It is our view that no liability should result from a technical ‘performance’ that takes place in the course of a download.”⁵² The Copyright Office’s position was based on its view that any “performance” occurring during a download is “merely a technical by-product of the transmission process that has no value separate from the value of the download.”⁵³ This report repudiated the theory that a download could be considered a musical broadcast merely because a user could listen to pieces of the song as it was downloading,

Since double dipping results in a demand for licenses and consequently much higher costs for internet broadcasters and download providers, another major issue involves the actual cost of royalties and licenses. The Copyright Act sets the cost of the compulsory mechanical licenses needed for a DPD. From 1909 to 1976 (a pre-DPD world), the statutory rate for compulsory mechanical licenses (for phonorecords) remained at \$0.02 per song.⁵⁴ In 1976, the rate was raised to \$0.0275, and the Copyright Royalty Board (CRB) was created to administer future changes.⁵⁵ The CRB is composed of three administrative judges who set the rates for all compulsory licenses.⁵⁶ Traditionally, changes in rates happened infrequently (every ten years, for example), although the CRB has been moving towards an approach in which rates are set for shorter periods to account for a digital age in which everything is changing rapidly.⁵⁷

The cost of mechanical licenses remains central to arguments over rights in the digital age because an increased number of rights logically means an increased cost.⁵⁸ Moreover, the CRB’s growing propensity for making changes to the costs of these licenses greatly impacts the online purveyors of music. For this reason, the CRB’s recent decisions cannot be ignored, as discussed further in Part IV below.

ON INTELLECTUAL PROPERTY RIGHTS 71 (1995), available at <http://www.uspto.gov/go/com/doc/ipnii/>.

52. U.S. COPYRIGHT OFFICE, DIGITAL MILLENNIUM COPYRIGHT ACT SECTION 104 REPORT TO THE UNITED STATES CONGRESS xxvii-xxviii (2001).

53. See *ASCAP*, 485 F. Supp. 2d at 445.

54. 1909 Copyright Act § 1(e) (1909).

55. *PASSMAN*, *supra* note 4, at 203.

56. *Id.*

57. *Id.* at 204.

58. See *Reese*, *supra* note 3, at 265.

The debates over royalty costs and the rights implicated by downloading and streaming music on the Internet highlight the ways in which new uses of music have created ambiguity and controversy. A working knowledge of how these controversies developed provides the necessary background for understanding the most recent developments in each of these debates.

IV. CURRENT DEBATE OVER DOUBLE DIPPING AND ROYALTIES

Though major policymakers have asserted for years that double dipping must be avoided, the issue is still disputed and ambiguous. This Part will explore recent developments surrounding double dipping with respect to downloading, streaming, and the updates and changes in royalty rates and fees. Specifically, it will address whether or not downloads should be considered “public performances” and whether the streaming of songs should be considered “reproductions” under the Copyright Act. This Part will then address the current debate over how much internet-based uses of music should actually cost.

A. Downloading

Various sources, such as the Copyright Office and the White Paper, have contended that the act of downloading a music file does not constitute a “public performance.”⁵⁹ In April 2007, the U.S. District Court for the Southern District of New York decided a case that brings some temporary resolution to the issue.⁶⁰ As a result of ongoing antitrust enforcement dating back to 1941, this court now resolves disputes arising over ASCAP’s fees and rates.⁶¹ *United States v. ASCAP* arose from a disagreement between ASCAP and three purveyors of music on the Internet: AOL, Yahoo!, and RealNetworks.⁶² AOL, Yahoo!, and RealNetworks (“the Applicants”) distributed music to their subscribers through both streams and downloads.⁶³ The parties sought a determination of the royalty fees payable to ASCAP for the use of music in their catalog in the Applicants’ services.⁶⁴ After the rate proceeding began, the parties each moved for partial

59. UNITED STATES PATENT & TRADEMARK OFFICE, *supra* note 51; U.S. COPYRIGHT OFFICE, *supra* note 52.

60. *United States v. Am. Soc’y. of Composers, Authors & Publishers (ASCAP)*, 485 F. Supp. 2d 438 (S.D.N.Y. 2007).

61. *Id.* at 440; *see also* Merges, *supra* note 16, at 1340.

62. *ASCAP*, 485 F. Supp. 2d at 440.

63. *Id.* at 441.

64. *Id.*

summary judgment on the divided question of whether the downloading of a music file constituted a public performance for which ASCAP would need to be compensated.⁶⁵ The court held that it did not constitute such a performance.⁶⁶

The court looked to the § 101 definition of public performance in order to make its decision. It found that “[t]he statutory language itself . . . makes clear that the *transmission of a performance*, rather than just the transmission of a data constituting a media file, is required in order to implicate the public performance right in a copyrighted work.”⁶⁷ The issue was whether the “transmission of a signal not capable of contemporaneous perception, but designed to deliver a digital file that the recipient can later play at his pleasure, constitutes a performance.”⁶⁸ To bolster its argument, ASCAP cited *David v. Showtime/The Movie Channel, Inc.*, a case in which the defendant broadcasted ASCAP-licensed music to local cable broadcasters, who then transmitted that signal to consumers’ homes.⁶⁹ The court held that such a broadcast was a public performance, but only in terms of the transmissions to the local cable broadcasters.⁷⁰ Consequently, the ASCAP court did not find the *David* decision useful in deciding whether or not the transmission *itself* was a public performance, an issue that the *David* court did not address.⁷¹ ASCAP also argued that downloads could be considered a performance because the consumer who purchases the download can begin to listen to the music file after a certain amount of data has been transmitted to the consumer’s computer, while the download is still in progress.⁷² The court dismissed this argument by way of analogy: “Surely ASCAP would not contend that if a retail purchaser of musical records begins audibly playing each tape or disc as soon as he receives it the *vendor* is engaging in a public performance.”⁷³ The court ultimately held that neither situation would constitute public performance: “We can discern no basis for ASCAP’s sweeping construction of section 101.

65. *Id.*

66. *Id.* at 442. Although the issue of streaming was not under consideration in this summary judgment proceeding, the court acknowledged in dicta that the streaming of a musical work constitutes a public performance (without addressing if streaming also involved reproduction). *Id.*

67. *Id.* at 446.

68. *Id.*

69. *David v. Showtime/The Movie Channel, Inc.*, 697 F. Supp. 752, 758 (S.D.N.Y. 1988).

70. *Id.* at 759.

71. *ASCAP*, 485 F. Supp. 2d 438, 446 (S.D.N.Y. 2007).

72. *Id.*

73. *Id.*

Moreover, in light of the distinct classification and treatment of reproductions under the act, we agree . . . that Congress did not intend the two uses to overlap to the extent proposed by ASCAP in the present case.”⁷⁴

The *ASCAP* holding brought at least temporary resolution to the issue of downloading double dipping. As a result of the decision, ASCAP is currently precluded from collecting public performance royalties for downloads.⁷⁵ Prior to the case, ASCAP and the other performing rights societies had provided public performance license agreements for downloads to music services, some of which signed them under the assumption that they owed royalties for these downloads.⁷⁶ If the District Court’s decision is not overturned, it will mean that a service that provides music downloads will only need reproduction licenses, which require permission from the copyright holders in both the sound recording (typically the record company) and the underlying composition (typically through the publishing company or HFA).⁷⁷ Thus, the District Court decision has brought some tentative resolution to ambiguities surrounding the rights implicated in a download because it is the first authoritative body that has definitively ruled against ASCAP’s position, thus shutting down the possibility of double dipping in the context of downloading services.

B. Streaming

Like downloading, some progress has been made in the context of double dipping for streams. The issue of whether the streaming of a song online, through both interactive and non-interactive services, involves the “reproduction” of the musical work was the focus of the Copyright Office in a June 2007 roundtable.⁷⁸ The participants considered the use of a statutory license to “make and distribute digital phonorecords, including for a limited period, and to make phonorecords that facilitate streaming.”⁷⁹ Royalties for the public performance of a sound recording are already paid through SoundExchange.⁸⁰ However, the roundtable focused on when, in a

74. *Id.* at 447.

75. *Id.*

76. Oxenford, *supra* note 50.

77. *Id.* Alternatively, such a service could also choose to pay a statutory royalty for the compositions through a complex series of filings through the Copyright Office. *Id.*

78. Notice of Roundtable Regarding the Section 115 Compulsory License for Making and Distributing Phonorecords, Including Digital Phonorecord Deliveries, 72 Fed. Reg. 30039 (May, 30, 2007), available at <http://www.copyright.gov/fedreg/2007/72fr30039.html>.

79. *Id.*; Andrew Noyes, *Antiquated Rule On Music Royalties Defies Reform*, NAT’L J., June 15, 2007, <http://www.nationaljournal.com/pubs/techdaily/pmedition/tp070615.htm#5>.

80. See SoundExchange, *supra* note 24.

digital world, the use of a composition in making a record or CD triggers an obligation to pay a § 115 mechanical license.⁸¹ As a threshold matter, the Copyright Office still has not resolved the question of whether a legal distinction is required between on-demand interactive streaming (through services such as Rhapsody), and non-interactive streaming (webcasting). The Copyright Office acknowledged that the problem with asserting a reproduction right for the streaming of music is that it will result in double dipping, with the songwriters being paid twice for the use of their music.⁸²

The June 2007 Roundtable is the most recent movement addressing the problem of double dipping vis-à-vis music streaming. The current lack of resolution will become increasingly important with the rise in popularity of the music streaming services, since these services will be greatly impacted financially if they are required to compensate rights-holders in both the public performance and the reproduction rights.

C. Royalties

The issue of royalties is inextricably connected to the cost of providing music on the Internet. In March 2007, the CRB raised the royalty fees for internet radio stations, which includes simulcasts of terrestrial stations and online-only radio stations.⁸³ For every song streamed online, radio stations were ordered to pay \$0.0011 per performance for 2007, \$0.0014 per performance for 2008, \$0.0018 for 2009, and \$0.0019 per performance for 2010.⁸⁴ For most internet radio stations broadcasting thousands of songs online a year, this rapid increase in rates would have devastating effects. Before this royalty spike, webcasters that had annual revenues of less than \$1.25 million paid either ten percent of their revenues or seven percent of their expenses to cover their royalties (whereas the larger online radio stations paid per song).⁸⁵ However, the CRB's decision meant that all webcasters would be charged on a per-song basis. Not surprisingly, this decision has been met with outrage from internet broadcasters, college DJs and established public radio stations alike.⁸⁶ Moreover, Congressional bills have been introduced to strike down the CRB's rate increases.⁸⁷ The out-

81. Noyes, *supra* note 79; *see also* Oxenford, *supra* note 50.

82. *See* Oxenford, *supra* note 50.

83. *In re* Digital Performance Right in Sound Recordings & Ephemeral Recordings, Docket No. 2005-1 CRB DTRA (U.S. Copyright Royalty Bd. March 2, 2007) (initial determination), available at <http://www.loc.gov/crb/proceedings/2005-1/rates-terms2005-1.pdf>.

84. *Id.*

85. Assael, *supra* note 1.

86. *Id.*

87. H.R. 2060, 110th Cong. (2007); S. 1353, 110th Cong. (2007).

rage is motivated primarily by economic concerns: a recent *New York Times* article profiled a typical hobbyist webcaster whose royalty payments skyrocketed from \$120 a month under the old system to \$6,500 a month under the March 2007 arrangement.⁸⁸

SoundExchange's position on this issue is simple. John Simson, its executive director, made clear: "Our research shows that there is scant evidence that [the webcasters] are getting people to buy music. If our artists aren't making money from CD sales, we think they should make money from those listens."⁸⁹ Its position is crucial since the future of many online radio stations will depend on the success of the proposed pieces of legislation and on a potential negotiation with SoundExchange.⁹⁰ While SoundExchange's position is understandable given the state of the music industry, amateur web broadcasters seem an unfair target. An alternative solution to blanket rates would be to set rates in a manner somehow proportional to the size and scale of the internet radio station.

The squabble over royalty rates is ultimately analogous to the disagreements over downloading and streaming, with an established middleman (SoundExchange) working to ensure continued profits even in a vastly changed landscape. With ever-shrinking overall revenue from music, the industry players are fighting ever harder to hold onto their pieces of the diminishing pie.

V. POTENTIAL CHANGES FOR THE FUTURE

Moving forward in the midst of disagreements over licensing, broadcasting, and performing music online will require forward-thinking solutions and clear-minded analysis. This Part provides an examination of some of the proposed solutions under consideration by industry players and academics. In particular, this Part explores the possibility of revising the Copyright Act to remove ambiguity, the formation of a unified subscription-based digital music model, and concludes with the suggestion that a streamlined system in which one middleman handled all rights clearances for music on the Internet might be the most efficient solution.

The middlemen—HFA, ASCAP, BMI, SESAC, and SoundExchange—are instigating the current disputes over double dipping and royalty rates. After all, the rights-holders are compensated in some way for the use of their properties, regardless of how their music is being used (whether a performance or a reproduction). Assuming that the ASCAP de-

88. Assael, *supra* note 1.

89. *Id.*

90. *See id.*

cision is upheld (or not overturned), it will resolve the issue of whether or not the streaming of music involves a reproduction, and hopefully provide a distinction between interactive and non-interactive streaming services.⁹¹ Barring these resolutions, one way to streamline the system and avoid double dipping would be to designate one agency—one middleman—to collect all royalties for a piece of music used on the Internet. The Register of Copyrights at the June 2007 Roundtable made such a proposition; it suggested that the designated agency represent practically all copyright holders for all internet purposes.⁹² This proposal also echoed a suggestion by Professor R. Anthony Reese:

A radical change . . . would be for a new collective licensing agency to emerge. This agency would have the authority to license . . . for any type of Internet transmission The agency could grant blanket and per-work licenses to all types of Internet transmitters. If the agency represented copyright owners of both musical works and sound recordings, it would essentially provide one-stop shopping⁹³

Such a shift would likely reduce transaction costs for copyright owners and facilitate a much greater ease of digital licensing, as secondary users would only have to deal with one agency to get rights for everything. Reese's hesitation with this suggestion is that "existing licensors may perceive the development of a new collective licensing agency for internet transmissions as a threat, given the possibility that a substantial portion of all music performances and reproductions may shift to the Internet in the not-too-distant future."⁹⁴

Of course, this shift is already substantially underway, so existing licensors may already recognize that they need to get onboard if they do not want to sink. Although a unified licensing agency would eliminate the possibility of double dipping, the Register's suggestion was dismissed.⁹⁵ One commentator reporting on the Roundtable noted: "With the various entrenched stakeholders, [the Register's] proposal didn't fly, thus we continue to have different groups representing composers for the public performance of music and for the mechanical royalty."⁹⁶ The variety of entrenched stakeholders is precisely the problem, however, and a streamlined system would benefit everyone except some of the existing stake-

91. See discussion of ASCAP, *supra* Part III.A.

92. Oxenford, *supra* note 50.

93. Reese, *supra* note 3, at 265.

94. *Id.* at 266.

95. Oxenford, *supra* note 50.

96. *Id.*

holders—specifically, the middlemen—themselves. The benefits of a streamlined approach have already been explored on a micro level in the area of the sound recording performance right, in which SoundExchange is the only recognized middleman.⁹⁷ As the Copyright Royalty Board stated in April 2007, “the royalty payment and collection system that we adopt must promote administrative efficiency and economy and reduce transaction costs wherever possible We find that selection of a single Collective represents the most economically and administratively efficient system for collecting royalties under the blanket license framework created by the statutory licenses.”⁹⁸ This logic could be applied to the digital licensing system for music on the Internet as a whole. The creation of what one scholar has dubbed an “uber-middleman” could consist of “joint ventures between the various industry interests,” or could be a task assumed by the Copyright Office.⁹⁹

The alternative to streamlining the system is continued ambiguity in the administration and collection of music property rights and escalating costs. Additionally, the presence of so many distinct stakeholders could easily lead to the emergence of a wholly inefficient “anticommons,” defined by Professor Michael Heller as a system in which “multiple owners are each endowed with the right to exclude others from a scarce resource, and no one has an effective privilege of use.”¹⁰⁰ Heller argues that, “when there are too many owners holding rights of exclusion, the resource is prone to underuse—a tragedy of the anticommons.”¹⁰¹ The sheer number of middlemen rights organizations each demanding licenses and royalty payments creates a situation in which providing music on the Internet becomes economically inefficient, and in which the economic conditions in turn discourage innovative new uses of music.¹⁰²

There is also the possibility of a legislative solution. Perhaps 17 U.S.C. § 115, which provides the compulsory license for phonorecords, could be revised or updated to reflect changes in music distribution on the Internet.¹⁰³ Additionally, new definitions could resolve the existing ambiguities

97. See *supra* Part III.

98. *In re* Digital Performance Right in Sound Recordings & Ephemeral Recordings, Docket No. 2005-1 CRB DTRA, 72 Fed. Reg. 24084, 24104 (U.S. Copyright Royalty Bd. April 23, 2007) (final determination) (codified at 37 C.F.R. pt. 380).

99. W. Jonathan Cardi, *Uber Middleman: Reshaping the Broken Landscape of Music Copyright*, 92 IOWA L. REV. 835, 888 (2007).

100. Michael A. Heller, *The Tragedy of the Anticommons: Property in the Transition from Marx to Markets*, 111 HARV. L. REV. 621, 624 (1998).

101. *Id.*

102. Cardi, *supra* note 99, at 838.

103. 17 U.S.C. § 115 (2000).

and pave the way for a more efficiently managed system.¹⁰⁴ Such changes could allow for on-demand listener streaming services to become the industry standard, provided that § 115 enabled all of the rights-holders involved to collect for their works. The Register herself testified earlier this year before Congress that such changes were sorely needed.¹⁰⁵ However, the Copyright Roundtable addressed the possibility of legislative reform and concluded that “Congressional action did not look imminent.”¹⁰⁶ As it has been noted, however, Congress is in the best position to make these changes and to force the industry to adopt a more reasonable and efficient licensing framework through legislation with which the industry is required to comply.¹⁰⁷

Resolution of the ambiguities surrounding music streaming and of whether legal differences exist between interactive and non-interactive streaming services should be considered of paramount importance to an industry in which the new model increasingly involves distributing music online. In response to all of these problems and changes, the music industry appears to be forging ahead with its own solution—the subscription-based model. Recently, legendary producer and Columbia Records’ new co-head Rick Rubin explained what such a model might consist of:

You would subscribe to music You’d pay, say, \$19.95 a month, and the music will come anywhere you’d like. In this new world, there will be a virtual library that will be accessible from your car, from your cellphone, from your computer, from your television. Anywhere. The iPod [would] be obsolete, but there would be a Walkman-like device you could plug into speakers at home And once that model is put into place, the industry will grow ten times the size it is now.¹⁰⁸

This model would require the major labels to band together under one umbrella, so that a monthly subscription would include recordings from every major label’s vast catalog. The subscription would likely operate

104. See Marcy Rauer Wagman & Rachel Ellen Kopp, *The Digital Revolution is Being Downloaded: Why and How the Copyright Act Must Change to Accommodate an Ever-Evolving Music Industry*, 13 VILL. SPORTS & ENT. L.J. 271, 310 (2006); Skyla Mitchell, Comment, *Reforming Section 115: Escape From the Byzantine World of Mechanical Licensing*, 24 CARDOZO ARTS & ENT. L.J. 1239 (2007).

105. *Copyright Law in the Digital Age: Hearing on H.R. 5553 Before the Subcomm. on Courts, the Internet, and Intellectual Property of the H. Comm. on the Judiciary*, 110th Cong. (2007) (statement of Marybeth Peters, Register of Copyrights, U.S. Copyright Office).

106. Oxenford, *supra* note 50.

107. Cardi, *supra* note 99, at 890.

108. Lynn Hirschberg, *The Music Man*, N.Y. TIMES, Sept. 2, 2007, at Section 6, 14.

akin to Rhapsody, in which music is essentially streamed rather than downloaded, a development that would also encourage the resolution of the debate over streaming rights. Widespread industry acceptance of this model would be a major step towards reconciling the intellectual property rights in music with the ways in which music is purchased and listened.

Doug Morris and Jimmy Iovine, both executives at Universal, have also supported this new subscription-based model, which likely influenced their decision not to renew Universal's annual contract to sell music through iTunes. The record company, like many others, felt increasingly frustrated and constrained by Apple's policies on song pricing (every song is priced the same, regardless of contemporariness or popularity) and the iPod's lack of compatibility with music services other than iTunes.¹⁰⁹ The major record executives' increasingly frequent suggestions of a subscription-based music system signals the likelihood that such a system may be put into practice in the near future. In fact, the classical music world has already implemented it. Naxos Records, one of the biggest names in classical music distribution, offers a service for \$19.95 a year, which provides subscribers with access to all of the Naxos recordings available online. The service currently has eleven thousand subscribers.¹¹⁰ Klaus Heymann, Naxos' founder, said: "This is the most promising model we have seen. Downloads are limited. In the States, sales are . . . leveling off. In Europe, there is very little traction outside the U.K. Germany is a disaster. So I am looking past downloads to subscriptions."¹¹¹

Nevertheless, downloads remain an important part of the landscape, as they continue to be a lucrative revenue stream for the music industry. For example, in October 2007, Radiohead, freed from their long-term contract with record label EMI, opted to distribute their new album, "In Rainbows," online, letting their fans choose the price of the download. This radical decision was heralded by one music producer as "[a] spiritual model."¹¹² Of course, such a decision would only be economically viable for a superstar act such as Radiohead. Had the *ASCAP* decision gone the

109. In response to record executives' complaints, Steve Jobs of Apple argued that all DRM protection on music sold via iTunes and other channels should be lifted in order to encourage more compatibility with devices/services. Steve Jobs, CEO, Apple Inc., Thoughts on Music (Feb. 6, 2007), <http://www.apple.com/hotnews/thoughtsonmusic/>.

110. Alex Ross, *The Well-tempered Web*, THE NEW YORKER, Oct. 22, 2007, at 78.

111. *Id.* Most of the compositions sold through Naxos are in the public domain, and so are irrelevant for the purposes of performing arts societies. However, the business model is indeed notable, and *New Yorker* writer Alex Ross notes the improbability of the major labels starting to take cues from "German classical-music producers." *Id.*

112. Jeff Leeds, *In Radiohead Price Plan, Some See A Movement*, N.Y. TIMES, Oct. 11, 2007, at E7.

other way, ASCAP would be able to collect a piece of every download of “In Rainbows.” However, this is only an issue for supporters of ASCAP and the other middlemen, rather than the artists and rights-holders themselves, who are already compensated from the sale of the music.¹¹³

VI. CONCLUSION

With legislative reform unlikely, the possibility of a streamlined licensing agency seems both the most feasible and most effective solution. Accepting that the music business has profoundly shifted to the point where the industry’s future rests largely on the Internet, it is only a matter of time before Columbia Records and the other major labels come together to embrace Naxos’s subscription model. Indeed, some form of cooperation will be required in order to bring the industry as a whole into an efficient and profitable new age. The music industry has outgrown the definitions and understandings that led to the formation of distinct rights and collective rights organizations. It is imperative, however, to understand the various rights involved, and to understand how everyone from ASCAP to independent webcasters is affected by the recent litigation and rulings of 2007. The possibility of a streamlined rights organization would significantly reduce transaction costs for all parties, and would provide, at last, some clarity to a tangled imbroglio of rights-holding that has long outgrown its necessity and usefulness. The specter of double dipping would be exorcised, resulting in a fairer system for all. After all this time, this would be a truly pleasant tune.

113. *United States v. Am. Soc’y. of Composers, Authors & Publishers (ASCAP)*, 485 F. Supp. 2d. 438 (S.D.N.Y. 2007).

PERFECT 10 V. *AMAZON.COM*: A STEP TOWARD COPYRIGHT'S TORT LAW ROOTS

By Meng Ding

I. INTRODUCTION

“With great power comes great responsibility.”¹ The Ninth Circuit Court of Appeals apparently believed so in *Perfect 10, Inc. v. Amazon.com, Inc.*² The internet brings to the public unprecedented access to information. Internet search engines allow users to find information quickly and more accurately. However, some of the information the search engines locate consists of copyright-infringing material. Internet search engines’ liability in such a situation presents an interesting and challenging problem for the courts. In *Perfect 10*, the Ninth Circuit held that internet search engine Google Inc. (“Google”) was not liable for providing users with “thumbnail” versions of Perfect 10 Inc.’s (“Perfect 10”) copyrighted photographic images of nude models.³ While Google’s storing and displaying of such thumbnail images could have constituted direct infringement of Perfect 10’s copyrights, the Ninth Circuit concluded that such use was transformative and therefore likely a fair use under the Copyright Act of 1976.⁴ On the issue of Google’s contributory liability, the Ninth Circuit held that Google substantially assisted infringing websites to distribute their infringing copies to a worldwide market and assisted a worldwide audience to access infringing materials.⁵ The court remanded the case to the district court to find whether Google had knowledge of the infringing images accessible through its search engine and could have, but did not take “simple measures” to prevent further damage to Perfect 10’s copyrighted works.⁶

The *Perfect 10* decision sets a favorable standard for internet search engines on the “transformative” nature of an appropriation of a copyrighted work. The Ninth Circuit ruled that because Google used the “thumbnail” images for facilitating information searches, a purpose other

© 2008 Meng Ding.

1. The last lines of Peter Parker, the Spider-Man. *SPIDER-MAN* (Columbia Pictures 2002).

2. 508 F.3d 1146 (9th Cir. 2007), *modifying* 487 F.3d 701 (9th Cir. 2007). The later opinion modified the discussion on the burden of proof for copyright fair use.

3. *Id.* at 1168.

4. *Id.*

5. *Id.* at 1172.

6. *Id.*

than the purpose for which the images were initially intended (which was consumption by internet users), the use of such “thumbnail” images is protected under the copyright fair use doctrine.⁷ The Ninth Circuit’s fair use determination was undoubtedly a victory for the internet search engine giant. In deciding in favor of Google, the Ninth Circuit emphasized the public benefits Google’s search engine provided in enabling the public to find and access information.⁸

On the question of contributory liability, the Ninth Circuit tried to steer the copyright contributory liability standard back to the well-established framework rooted in tort law.⁹ Although the court could have easily ruled against a finding of contributory liability under the jurisprudence of both *Sony Corporation v. Universal City Studios, Inc.*¹⁰ and *MGM Studios Inc. v. Grokster, Ltd.*,¹¹ the court rightly declined to do so. The “simple measures” standard¹² that the Ninth Circuit articulated for the remand resonates with the “reasonable alternative design” approach¹³ in product liability tort cases. The Ninth Circuit’s opinion indicates that the court found it difficult to apply *Sony*’s legacy “staple article of commerce” doctrine¹⁴ to cases involving internet technologies and was reluctant to apply it. Although the standard articulated by the Ninth Circuit in *Perfect 10* is not yet perfect and adds uncertainty to the outcome of the case on remand, it marks a significant effort by the court for returning the copyright contributory liability analysis onto the right course.

This Note focuses on the two important issues presented by *Perfect 10*: fair use and contributory liability. Part II provides backgrounds on both issues. Part III provides a short case summary on *Perfect 10*. Part IV presents analysis on both fair use and contributory liability within the context of the case. Part V concludes that *Perfect 10* continues the trend of liberal interpretation of the copyright fair use doctrine and marks the Ninth Circuit’s effort to steer the copyright contributory liability jurisprudence to its tort law roots.

7. *Id.* at 1165.

8. *Id.* at 1166.

9. See Peter S. Menell & David Nimmer, *Unwinding Sony*, 95 CALIF. L. REV. 941, 994 (2007) [hereinafter *Unwinding Sony*].

10. 464 U.S. 417 (1984).

11. 545 U.S. 913, 937-41 (2005).

12. *Perfect 10*, 508 F.3d at 1172.

13. See *Unwinding Sony*, *supra* note 9, at 1010, 1012, 1018.

14. *Sony*, 464 U.S. at 442.

II. BACKGROUND

A. Copyright's Fair Use Doctrine

The Copyright Act protects the copyright owner's exclusive rights, including the right to reproduce, distribute, and display her copyrighted work.¹⁵ At the same time, the Copyright Act puts certain limitations on these exclusive rights and provides fair use as an affirmative defense for infringement of copyrighted materials.¹⁶ The rationale behind the fair use protection is that fair use fulfills copyright's very purpose of "[promoting] the progress of Science and useful Arts."¹⁷ It has long been recognized that new and original works are almost always built upon previous works.¹⁸ Consequently copyright law embodies an inherent tension in the need to simultaneously protect copyrighted material and allow others to build upon it.¹⁹

American courts have long recognized the fair use doctrine without explicit reference to it.²⁰ In 1841, in *Folsom v. Marsh*, Justice Story stated: "So, it has been decided that a fair and bona fide abridgment of an original work, is not a piracy of the copyright of the author."²¹ Until the Copyright Act of 1976, fair use remained an "exclusively judge-made doctrine."²² The Supreme Court stated that the fair use doctrine "permits [and requires] courts to avoid rigid application of the copyright statute when, on occasion, it would stifle the very creativity which that law is designed to foster."²³

15. 17 U.S.C. § 106 (2000).

16. 17 U.S.C. § 107 (2000). The Act enumerates several non-exclusive uses of copyright materials as examples of fair use: "criticism, comment, news reporting, teaching (including multiple copies for classroom use), scholarship, or research." *Id.* See also 4 MELVILLE B. NIMMER & DAVID NIMMER, NIMMER ON COPYRIGHT § 13.05 (2007) [hereinafter NIMMER ON COPYRIGHT].

17. U.S. CONST. art. I, § 8, cl. 8; *Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569, 575 (1994).

18. *Emerson v. Davies*, 8 F. Cas. 615, 619 (C.C.D. Mass. 1845) (No. 4,436) ("In truth, in literature, in science and in art, there are, and can be, few, if any, things, which, in an abstract sense, are strictly new and original throughout. Every book in literature, science and art, borrows, and must necessarily borrow, and use much which was well known and used before.").

19. *Campbell*, 510 U.S. at 575.

20. *Id.* at 575-65.

21. *Folsom v. Marsh*, 9 F. Cas. 342, 345 (C.C.D. Mass. 1841) (No. 4,901).

22. *Campbell*, 510 U.S. at 576.

23. *Id.* at 577 (quoting *Stewart v. Abend*, 495 U.S. 207, 236 (1990)).

The Copyright Act provides four factors to be considered in a fair use determination:²⁴

- (1) the purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational use;
- (2) the nature of the copyrighted work;
- (3) the amount and substantiality of the portion used in relation to the copyrighted work as a whole and;
- (4) the effect of the use upon the potential market for or value of the copyrighted work.

The Supreme Court explicated these factors in a series of decisions including the landmark case *Campbell v. Acuff-Rose Music, Inc.*²⁵ According to the Court, the four statutory factors should not be treated in isolation, but rather, “[a]ll are to be explored, and the results weighed together, in light of the purposes of copyright.”²⁶ In other words, courts must not simplify the factors with bright-lines rules; instead, the statute calls for “case-by-case analysis.”²⁷ In practice this amorphous analysis standard has made it difficult for courts to apply fair use doctrine consistently.

The first factor balances the transformative nature of the infringing use and its commercial use.²⁸ In general, transformative character weighs in favor of fair use and commercial purpose weighs against it.²⁹ The *Campbell* Court expressly rejected the notion that “every commercial use of copyrighted material is presumptively . . . unfair”³⁰ Nonetheless, the standards for the “transformative nature” adopted by the courts have been far from uniform. In *Campbell* the Court stated that transformative means that instead of “merely superseding” the objects of the original creation, the new work “adds something new, with a further purpose or different character, altering the first with new expression, meaning, or message.”³¹ Under such a guide, the *Campbell* Court decided that parody could qualify for fair use because parody conjured up and commented on the original work.³² In the same opinion, however, the *Campbell* Court held that satire,

24. 17 U.S.C. § 107 (2000).

25. See *Campbell*, 510 U.S. at 576-77; see also *Stewart v. Abend*, 495 U.S. 207, 237 (1990); *Harper & Row, Publ’rs, Inc. v. Nation Enters.*, 471 U.S. 539, 560-61 (1985); *Sony Corp. of Am. v. Universal City Studios, Inc.*, 464 U.S. 417, 447-48 (1984).

26. *Campbell*, 510 U.S. at 578.

27. *Id.* at 577.

28. *Id.* at 578-79.

29. *Id.*

30. *Id.* at 583-84 (quoting *Sony*, 464 U.S. at 451).

31. *Id.* at 578-79, 588.

32. *Id.* at 588.

which often aims at lampooning or ridiculing the society at large and not commenting on the original work, needed more justification for fair use protection.³³ The dichotomy in the *Campbell* Court's reasoning regarding parody and satire indicated that an appropriation of a copyrighted work simply for a different purpose (e.g. satirizing the society at large) without commenting on the original work deserved less protection from the fair use doctrine. In comparison, the Supreme Court ruled in *Sony* that the home taping of a television program for time-shifting viewing was a fair use although it only served a different purpose; the taping was an exact copy of the original program and arguably did not add anything new or alter the original "with new expression, meaning, or message."³⁴ Also, in a recent case, *Bill Graham Archives v. Dorling-Kindersley Ltd.*, the Second Circuit ruled that the defendants' complete reproduction of seven of the plaintiff's graphic images in a biography constituted fair use.³⁵

For the second statutory factor, "the nature of the copyrighted work," the *Campbell* Court recognized that fair use was difficult to establish for copying certain types of copyrighted works such as artistic, creative, and expressive works which "are closer to the core of intended copyright protection than others."³⁶ Under this standard, copying novels arguably should be subject to more stringent fair use scrutiny than copying factual compilations; copying un-published work should be subject to more stringent scrutiny than copying published work; and copying Mozart's symphony should be subject to more stringent scrutiny than copying a grocery list.³⁷

For the third factor, "the amount and substantiality of the portion used in relation to the copyrighted work as a whole," the *Campbell* Court looked at whether there was a "reasonable" relation between the "quantity and value of the materials used" and the "purpose of the copying."³⁸ In

33. *Id.* at 581.

34. *Campbell*, 510 U.S. at 579; *Sony Corp. of Am. v. Universal City Studios, Inc.*, 464 U.S. 417, 442-47 (1984).

35. *Bill Graham Archives v. Dorling-Kindersley Ltd.*, 448 F.3d 605 (2d Cir. 2006).

36. *Campbell*, 510 U.S. at 586.

37. *See* 4 NIMMER ON COPYRIGHT § 13.05[A][2] (positing that the comparisons may include: contrasting fictional short story with factual works, contrasting soon-to-be-published memoir with published speech, contrasting motion pictures with news broadcasts, and contrasting creative works with bare factual compilations); *see also* David Nimmer, "Fairest of Them All" and Other Fairy Tales of Fair Use, 66 LAW & CONTEMP. PROBS. 263, 284-85 (2003) [hereinafter Nimmer, *Fairest of Them All*]; Pamela Samuelson, *Mapping the Digital Public Domain: Threats and Opportunities*, 66 LAW & CONTEMP. PROBS. 147, 150 (2003).

38. *Campbell*, 510 U.S. at 586.

Harper & Row v. Nation Enterprises,³⁹ the Supreme Court found that a publishing house's verbatim copying of about 300 words from President Ford's unpublished memoir constituted the "heart" of the work and was not fair use.⁴⁰ On the other hand, for parody, taking the "heart" of the original work may not be excessive.⁴¹ Further, in *Kelly v. Arriba Soft Corporation*, the Ninth Circuit ruled that even an exact replication of a work was reasonable so long as the copy serves a different function than the original work.⁴²

The fourth factor, the "market harm" factor, calls attention to the harm done to both the original and derivative markets.⁴³ The *Campbell* Court recognized that for original market harm, when the use is transformative, "market substitution is at least less certain, and market harm may not be so readily inferred."⁴⁴ The derivative market harm analysis requires courts to consider whether unrestricted and widespread conduct "would result in a substantially adverse impact on the potential market for the original."⁴⁵ The Court also established that "[t]he market for potential derivative uses includes only those that creators of original works would in general develop or license others to develop."⁴⁶

The outcomes of fair use cases have been far from uniform.⁴⁷ The amorphous range of standards different courts adopted also indicates that the codification of the fair use four factors did not create a rigid framework for the fair use determination. In fact, Congress meant the codified fair use doctrine "to restate the present judicial doctrine of fair use, not to change, narrow, or enlarge it in any way" and intended that the courts continue the common-law tradition in their fair-use adjudication.⁴⁸ Because of the subjectivity and the malleability associated with the four factors, the variation in fair use outcomes is not surprising.⁴⁹ For the foreseeable fu-

39. 471 U.S. 539 (1985).

40. *Id.* at 565, 569.

41. *Campbell*, 510 U.S. at 588.

42. *Kelly v. Arriba Soft Corp.*, 336 F.3d 811, 818-19 (9th Cir. 2003).

43. *Campbell*, 510 U.S. at 590.

44. *Id.* at 591.

45. *Id.* at 590.

46. *Id.* at 592.

47. For a general survey of the fair use cases after the Supreme Court ruling in *Campbell*, see Nimmer, *Fairest of Them All*, *supra* note 37.

48. *Campbell*, 510 U.S. at 577 (quoting H.R. REP. No. 94-1476, p. 66 (1976) and S. REP. No. 94-473, p. 62 (1975)).

49. See Nimmer, *Fairest of Them All*, *supra* note 37.

ture, the courts will most likely stick to the liberal reading of the four factors in deciding copyright fair use case.⁵⁰

B. Secondary Liability Standards

Secondary liability typically includes both contributory liability and vicarious liability.⁵¹ Before secondary liability can be asserted, there must be direct infringement by a third party.⁵² Traditionally, a contributory infringer was defined as “one who, with knowledge of the infringing activity, induces, causes or materially contributes to the infringing conduct of another”⁵³ The “knowledge” requirement did not necessarily mean actual knowledge; constructive knowledge (having reasons to know) was sufficient.⁵⁴ “[O]ne may be vicariously liable if he has the right and ability to supervise the infringing activity and also has a direct financial interest in such activities.”⁵⁵

Copyright liability originated from tort liability principles,⁵⁶ which included the idea of joint liability between direct and indirect infringers.⁵⁷ When enacting the Copyright Act of 1976, Congress maintained the common law concept of contributory liability and employed the phrase “to do and to authorize” to refer to the exclusive rights of a copyright owner.⁵⁸ Congress made it clear that the use of the phrase “to authorize” was intended to “avoid any questions as to the liability of contributory infring-

50. See e.g., Jeannine M. Marques, *Fair Use in the 21st Century: Bill Graham and Blanch v. Koons*, 22 BERKELEY TECH. L.J. 331, 354 (2007).

51. *Perfect 10, Inc. v. Amazon.com, Inc.*, 508 F.3d 1146, 1168-69 (9th Cir. 2007).

52. *A&M Records v. Napster, Inc.*, 239 F.3d 1004, 1013 n.2 (9th Cir. 2001).

53. *Gershwin Publishing Corp. v. Columbia Artists Management, Inc.*, 443 F.2d 1159, 1162 (2d Cir. 1971).

54. *Id.*

55. *Id.*; see also *Dreamland Ball Room, Inc. v. Shapiro, Bernstein & Co.*, 36 F.2d 354, 355 (7th Cir. 1929) (“[T]he owner of a dance hall at whose place copyrighted musical composition are played in violation of the rights of the copyright holder is liable, if the playing be for the profit of the proprietor of the dance hall.”).

56. See *Ted Browne Music Co. v. Fowler*, 290 F. 751, 754 (2d Cir. 1923); *Lawrence v. Dana*, 15 F. Cas. 26, 61 (C.C.D. Mass. 1869); *Unwinding Sony*, *supra* note 9, at 994.

57. *Fishel v. Lueckel*, 53 F. 499, 500 (S.D.N.Y. 1892); *Screen Gems-Columbia Music, Inc. v. Mark-Fi Records, Inc.*, 256 F. Supp. 399, 403 (D.N.Y. 1966) (holding that common law concepts of tort liability are relevant in fixing the scope of the statutory copyright remedy, and that one who knowingly participates in or furthers a tortious act is jointly and severally liable with the prime tortfeasor is applicable in suits arising under the Copyright Act.).

58. 17 U.S.C. § 106 (2000) (“the owner of copyright under this title has the exclusive rights to do and to authorize any of the following . . .”).

ers.”⁵⁹ Congress also adopted the common law vicarious liability principle of “control” plus “financial interest” in copyright law.⁶⁰ However, the Supreme Court’s ruling in *Sony Corporation v. Universal City Studios, Inc.*,⁶¹ in 1984, only a few years after the Copyright Act went into effect, ignored this well-established tort law principle of secondary liability in copyright protection and adopted the “staple article of commerce” doctrine borrowed from the Patent Act⁶² without adequate justification.⁶³ Twenty years of confusion over the copyright secondary liability standard ensued.

1. *The Sony Standard on Contributory Liability*

*Sony Corporation v. Universal City Studios, Inc.*⁶⁴ is a landmark case in the development of copyright secondary liability. Sony developed video tape recording format Betamax in the 1970s.⁶⁵ Motivated by fear of potential infringement, Universal Studios sued Sony for contributory infringement because Sony provided individual Betamax consumers the tools for infringement.⁶⁶ The Central District Court of California ruled for Sony, but on appeal the Ninth Circuit reversed, finding Sony liable for secondary infringement.⁶⁷ The Supreme Court granted certiorari.⁶⁸ In early drafts of the opinion, the Supreme Court affirmed the Ninth Circuit’s decision because the case fit the traditional scope of contributory infringement.⁶⁹ However, a slim majority of the Supreme Court gradually gravitated toward shielding Sony from liability.⁷⁰ Several justices looked to the Patent

59. H.R. REP. No. 94-1476, at 61 (1976) (“For example, a person who lawfully acquires an authorized copy of a motion picture would be an infringer if he or she engages in the business of renting it to others for purposes of unauthorized public performance.”); see also *Unwinding Sony*, *supra* note 9, at 995.

60. H.R. REP. No. 94-1476, at 159-60 (1976); see also *Unwinding Sony*, *supra* note 9, at 995-96.

61. *Sony*, 464 U.S. 417 (1984).

62. See 35 U.S.C. § 271(c) (2000) (selling of a patented invention that is a staple article or commodity of commerce suitable for substantial noninfringing use is not contributory infringement).

63. 464 U.S. 417 (1984). For a comprehensive study of the Court’s adaptation of the “staple article of commerce” doctrine into copyright law, see *Unwinding Sony*, *supra* note 9.

64. *Sony*, 464 U.S. 417 (1984).

65. *Id.* at 419-20.

66. *Id.*

67. *Id.* at 420.

68. *Id.* at 421.

69. See *Unwinding Sony*, *supra* note 9, at 964-65; see also *Sony*, 464 U.S. at 496-500 (Blackmun J., dissenting).

70. See *Unwinding Sony*, *supra* note 9, at 964-69, 973, 1024 (“With the release of the correspondence of the justices surrounding this case, we can confirm that the delib-

Act because of the alleged “kinship” between patent and copyright.⁷¹ Using the Patent Act’s “staple article of commerce” doctrine, the Court reversed the Ninth Circuit and found that Sony was not liable for contributory liability.⁷² The *Sony* Court held that video tape recorders, like other articles of commerce, were widely used for legitimate, unobjectionable purposes. The Court opined that a staple article of commerce “need merely be capable of substantial noninfringing uses.”⁷³ The *Sony* Court then proceeded to find that the Betamax tape recording device had substantial noninfringing uses, notably an individual user’s authorized time-shifting viewing, which constituted a fair use.⁷⁴

Commentators are divided on the *Sony* ruling and on the Supreme Court’s wisdom to apply the “staple article of commerce” doctrine to copyright law. Some commentators have praised the *Sony* rule.⁷⁵ Others have sharply criticized the “engrafting” of the patent “staple article of commerce” into copyright liability analysis.⁷⁶ For example, after an exhaustive review of the legislative history of the enactment of the Copyright Act of 1976, Professors Menell and Nimmer found that Congress’s reliance on the Patent Act in drafting the copyright statute was at best scarce and disparate.⁷⁷ The “historic kinship” between patent law and copyright law, so heavily relied upon by the *Sony* majority, does not exist in the legislative history of the Copyright Act.⁷⁸ Instead, the legislative history “specifically declined to alter from established case law” on the

erations involved little consideration of legislative materials or systematic analysis of copyright jurisprudence, but instead displayed considerable jockeying to build a five-member coalition to shield Sony from liability.”).

71. *Sony*, 464 U.S. at 439.

72. *Id.* at 440-42.

73. *Id.* at 442.

74. *Id.* at 442-47. The Court also found many other noninfringing uses such as making copies of authorized televised sports events, religious broadcasts, and educational programs. *Id.* at 446.

75. See Pamela Samuelson, *The Generativity of Sony v. Universal: The Intellectual Property Legacy of Justice Stevens*, 74 *FORDHAM L. REV.* 1831, 1831 (2006). Professor Samuelson regarded the *Sony* decision as the most significant legacy of Justice Stevens in the field of intellectual property law and “its significance is likely to continue in mediating dispute between copyright industries and creative information technology developers and users of information technology.” *Id.* at 1831-32.

76. See *Unwinding Sony*, *supra* note 9, at 944, 978.

77. See *id.* at 989-93.

78. See *id.*

question of secondary liability.⁷⁹ The real kinship between patent law and copyright law is actually their common wellspring: tort law.⁸⁰

More than twenty years after *Sony*, the limitation and the difficulty of applying the “staple article of commerce” doctrine were magnified in the 2005 case of *MGM Studios Inc. v. Grokster, Ltd.*⁸¹

2. *The Grokster Standard on Inducement Under Contributory Liability Theory*

In *MGM Studios Inc. v. Grokster, Ltd.*,⁸² the Supreme Court held that “[o]ne infringes contributorily by intentionally inducing or encouraging direct infringement,”⁸³ In *Grokster*, defendant companies Grokster, Ltd. (“Grokster”) and StreamCast Networks, Inc. (“StreamCast”) distributed free software that allowed users to swap electronic files directly with each other through peer-to-peer networks (P2P).⁸⁴ The network was apparently designed to avoid the problems that had shut down Napster Inc.⁸⁵ The Court found that although the users could use Grokster’s software to share any type of digital file, they had primarily engaged in sharing copyrighted music and video files without authorization from the copyright owners.⁸⁶

The Court also held that when Grokster and StreamCast distributed their software, they clearly voiced the objective that recipients used it to download copyrighted works, therefore taking active steps to encourage and induce infringement.⁸⁷ Moreover, the Court determined that Grokster and StreamCast generated most of their revenue by selling advertisements

79. *See id.* at 993 (citing H.R. REP. NO. 94-1476 at 61, 159-60 (1976)).

80. *See id.* at 994.

81. 545 U.S. 913 (2005).

82. *Id.*

83. *Id.* at 930.

84. *Id.* at 919-20.

85. Grokster and StreamCast’s adoption of P2P, instead of a central server for the purpose of file swapping, was apparently responding to the Ninth Circuit’s decision in *A&M Records v. Napster, Inc.*, 239 F.3d 1004 (9th Cir. 2001), where the court found Napster secondarily liable for its users’ infringing activities, i.e., swapping copyrighted music files, because Napster Inc.’s operation of central server systems gave Napster the ability to control the infringing users and Napster failed to do so. *Napster*, 239 F.3d at 1023-24.

86. *Grokster*, 545 U.S. at 920, 923.

87. *Id.* at 923-24, 937-38. For example, StreamCast had designed its software specifically targeting Napster’s huge user base, in anticipation that Napster users would switch to its “OpenNap” software after Napster’s shutdown by the court. *Id.* According to its own statements, “StreamCast planned to be the next Napster.” *Id.* at 924-25. Similar evidence revealed that Grokster had the same goal of capturing the market of former Napster users. *Id.* at 925.

to their infringing users during their infringing activities.⁸⁸ The Court found that neither Grokster nor StreamCast made any effort to filter copyrighted material from users' downloads or otherwise impede the sharing of copyrighted files,⁸⁹ and held that this evidence underscored Grokster's and StreamCast's intentional facilitation of their users' infringement.⁹⁰ However, the Court cautioned that failure to install a filtering mechanism was not evidence of intent per se, "[o]f course, in the absence of other evidence of intent, a court would be unable to find contributory infringement liability merely based on a failure to take affirmative steps to prevent infringement, if the device otherwise was capable of substantial noninfringing uses."⁹¹ In conclusion, the Court held that "one who distributes a device with the object of promoting its use to infringe copyright, as shown by clear expression or other affirmative steps taken to foster infringement, is liable for the resulting acts of infringement by third parties."⁹² The Court emphasized that its ruling should not be interpreted to discourage development of new technologies with both lawful and unlawful potential.⁹³ Mere knowledge of infringing potential or of actual infringing uses would not be enough to subject a product distributor to liability.⁹⁴ The inducement rule premises liability on "purposeful, culpable expression and conduct."⁹⁵ Based on Grokster and StreamCast's conduct and expressions, the Court concluded that their unlawful objective of inducing infringement was unmistakable and therefore found them liable for the "gigantic scale" third party infringement.⁹⁶ The Court tried to distinguish the case from *Sony*, noting that *Sony* "struck a balance between the interests of protection and innovation by holding that the product's capability of substantial lawful employment should bar the imputation of fault and consequent secondary liability for the unlawful acts of others."⁹⁷ The Court emphasized the importance of the two defendants' expressions and conduct in reaching its finding of liability, holding that "[i]f liability for inducing infringement

88. *Id.* at 926.

89. *Id.* at 926-27 ("Although Grokster appears to have sent e-mails warning users about infringing content . . . it never blocked anyone from continuing to use its software to share copyrighted files.").

90. *Id.* at 939.

91. *Id.* at 939 n.12.

92. *Id.* at 936-37.

93. *Id.* at 937.

94. *Id.* (citing *Sony Corp. of Am. v. Universal City Studios, Inc.*, 464 U.S. 417, 439 n.19 (1984) (finding no intentional inducement despite Sony's knowledge that its VCR could be used to infringe)).

95. *Grokster*, 545 U.S. at 937.

96. *Id.* at 937-41.

97. *Id.* at 941.

is ultimately found, it will not be on the basis of presuming or imputing fault, but from inferring a patently illegal objective from statements and actions showing what that objective was.”⁹⁸

In *Grokster*, although the Supreme Court found that more than 90% of Grokster’s software’s usage was for illegal swapping of copyrighted music files, the Court did not attempt to base its liability findings on the “substantiality” factor of the “staple article of commerce” doctrine.⁹⁹ This indicated, to some extent, that the Supreme Court was not comfortable with the extent, scope, and applicability of this doctrine in the context of copyright protection. Under the facts of *Sony*, the doctrine heavily favored the new technology despite widespread evidence of infringement.¹⁰⁰ Moreover, the doctrine permitted technology that was “merely be capable of substantial noninfringing uses.”¹⁰¹ It would be difficult for the *Grokster* Court to argue that the P2P network was not even capable of substantial noninfringing use. Further, the *Grokster* Court was probably concerned that setting a numerical threshold, e.g. at 90%, for the “substantiality” factor and using it to dispose of a case could lead to chaos in future court proceedings. The reluctance of the Court to engage in such a pursuit indicated the difficulty of applying the “substantial non-infringing use” doctrine to copyright protection.

The *Grokster* Court likely believed that Grokster was liable for contributory copyright infringement. Yet, to find Grokster liable, the Court was not willing to wrestle with the “staple article of commerce” doctrine, arguably because it was reluctant to disturb the *Sony* ruling. Eventually, the *Grokster* Court introduced the “inducement” standard requiring “purposeful culpable expression and conduct” for a finding of contributory infringement.¹⁰² The Court imposed this requirement in an effort to distinguish *Grokster* from *Sony*, so as not to let Grokster escape liability under the protection of *Sony*’s broad “staple article of commerce” doctrine. In

98. *Id.*

99. The trial attorney, Mr. Michael Page, for Grokster conceded that he anticipated that the Supreme Court would rule against Grokster in the case, but acknowledged that he was expecting that the Court would rule on the basis that Grokster’s software did not have substantial noninfringing use and thus did not qualify for the “staple article of commerce” doctrine’s protection. Michael Page, *Contributory and Vicarious Copyright Liability in the wake of Grokster: Observations from the trenches*, Address at the Berkeley Center for Law & Technology Lunch Series (Nov. 6, 2007).

100. See *Unwinding Sony*, *supra* note 9.

101. See *Sony Corp. of Am. v. Universal City Studios, Inc.*, 464 U.S. 417, 442 (1984) (emphasis added).

102. *Grokster*, 545 U.S. at 937.

hindsight, such an inducement standard looked almost tailored to fit the self-incriminating behaviors of Grokster.

The *Grokster* Court listed the failure to install a filtering mechanism as evidence of intentional inducement.¹⁰³ However, immediately after this finding, the Court in footnote twelve explained that the mere failure to install a filtering mechanism, in the absence of other evidence of intent, was not enough to find contributory liability.¹⁰⁴ The Court's caution indicates that its reasoning regarding the lack of a filtering mechanism should not to be read too broadly so as to negate *Sony*. During the *Sony* litigation, "broadcast flag," a coded message sent in the data stream of a television program, was proposed to be incorporated into Sony's VTR machines to instruct the machine to record only programs authorized by the copyright owners.¹⁰⁵ The district court rejected it.¹⁰⁶ Likewise the Supreme Court ignored the "broadcast flag" and established a blanket rule exonerating Sony under the "staple article of commerce" doctrine. The "broadcast flag" was, in large part, analogous to the "filtering mechanism" mentioned in *Grokster*. Since the *Sony* Court did not require it, it is hard for the *Grokster* Court to require it without disturbing *Sony*.

The *Grokster* ruling, on its face, was an appropriate ruling because the evidence clearly pointed to contributory liability. However, the Court probably found itself trapped inside *Sony*'s "staple article of commerce" doctrine. Not willing to rule for Grokster, the Court fashioned an inducement test, which appeared to specifically have targeted Grokster. The requirements of the "purposeful and culpable expression and conduct" standard enumerated in *Grokster* are so stringent that it is unlikely that future courts will be able to apply it meaningfully. Moreover, producers and distributors of future P2P programs will know to avoid explicit encouragement of infringement. The *Perfect 10* case, discussed in the next Part, is a perfect example of these limits of the *Grokster* inducement test.¹⁰⁷

103. *Id.* at 926-27.

104. *Id.* at 939 n.12 (emphasis added).

105. See *Unwinding Sony*, *supra* note 9, at 949 n.39; Thomas S. Fletcher, Note, American Library Association v. FCC: *Charting the Future of Content Protection for Digital Television*, 21 BERKELEY TECH. L.J. 613, 617-19 (2006).

106. See *Unwinding Sony*, *supra* note 9, at 949 n.39.

107. See *Perfect 10, Inc. v. Amazon.com, Inc.*, 508 F.3d 1146 (9th Cir. 2007).

III. CASE SUMMARY

A. Facts of the Case

Perfect 10, Inc. markets and sells copyrighted photographic images of nude models on its website.¹⁰⁸ It sued Google for infringement of its copyrighted photographs.¹⁰⁹ Perfect 10 also sued Amazon.com and its subsidiary A9.com for similar claims.¹¹⁰ Google's search engine accesses websites on the internet and automatically indexes them in a database stored on Google's computers.¹¹¹ When an internet user types a search query on the Google website, Google's software searches its database for websites responsive to that query and sends relevant information from its index of websites to the user's computer.¹¹² In addition to standard text search, Google also operates a "Google Image Search" service where, in response to an image search query, it identifies text in its database responsive to the query and then communicates to users the images associated with relevant text.¹¹³ The search results are presented in thumbnail-form and those thumbnails are stored in Google's servers.¹¹⁴ "[T]humbnail images are reduced, lower-resolution versions of the full-sized images stored on third-party computers."¹¹⁵ Google also stores webpage content in its cache,¹¹⁶ which only contains the text of the webpage, including the URL of the images but not the images themselves.¹¹⁷

108. *Id.* at 1157.

109. *Id.* at 1154.

110. *Id.* Amazon.com, Inc. ("Amazon") is an internet e-commerce company that sells books, magazines, music CDs, movie DVDs, and various other products through its website Amazon.com. A9.com is an internet search engine and is a subsidiary of Amazon.A9.com helps people find what they want on e-commerce websites. *Id.* Google had an agreement with Amazon.com that allowed Amazon.com to "in-line link" to Google's search results. *Id.* at 1157. "Amazon.com routed users' search queries to Google and automatically transmitted Google's responses . . . back to its users." *Id.*

111. *Perfect 10*, 508 F.3d at 1155.

112. *Id.*

113. *Id.*

114. *Id.*

115. *Id.*

116. *Id.* at 1156. "Google's cache saves copies of a large number of webpages so that Google's search engine can effectively organize and index these webpages." *Id.* at 1156 n.3.

117. *Id.* at 1156. However, the cached version of the webpage does not automatically update once the webpage owner modifies the webpage. *Id.* So, even if the webpage owner removed the link to a certain image in its website, a browser communicating with cached version of the website may still be able to access the image while a browser communicating directly with the owner's webpage would not be able to access the image. *Id.* If the owner of the webpage changed the address of the image or otherwise rendered

Perfect 10 operates a subscription website and subscribers pay a monthly fee to view its images by logging into a password-protected “members’ area” of its website.¹¹⁸ Google does not include the password-protected images in its index or database.¹¹⁹ Perfect 10 also licensed Fonestarz Media Limited to sell and distribute Perfect 10’s reduced-size images for download to cell phones.¹²⁰ Some websites republish these images without authorization from Perfect 10.¹²¹ Google’s automatic process also indexes these webpages and provides thumbnail versions of those infringing images in response to user queries.¹²²

From May 2001 through 2005, Perfect 10 continuously notified Google that its use of thumbnail images and its links to the full-size images on infringing websites infringed Perfect 10’s copyright.¹²³ Perfect 10 sued Google on November 19, 2004 and sued Amazon.com on June 29, 2005 in the U.S. District Court for the Central District of California for copyright infringement, seeking preliminary injunctions.¹²⁴

B. Procedural History

The district court consolidated the case against Google and the case against Amazon.com.¹²⁵ The district court found that the use of the thumbnail images was a direct infringement of Perfect 10’s copyrighted materials and enjoined Google from creating and publicly displaying thumbnail versions of Perfect 10’s images, but did not enjoin Google from linking to infringing third-party websites.¹²⁶ Perfect 10 and Google both appealed to the Ninth Circuit.¹²⁷ On June 15, 2006 the district court temporarily stayed the preliminary injunction pending the outcome of the appeal.¹²⁸

The Ninth Circuit reviewed the district court’s grant of preliminary injunction for abuse of discretion and reviewed the district court’s conclusions de novo.¹²⁹ The Ninth Circuit held that for a preliminary injunction,

the image unavailable, a browser communicating with the cached copy of the webpage will also not be able to locate the image. *Id.*

118. *Id.* at 1157.

119. *Id.*

120. *Id.*

121. *Id.*

122. *Id.*

123. *Id.*

124. *Id.*

125. *Id.*

126. *Id.* at 1154.

127. *Id.*

128. *Id.* at 1157.

129. *Id.*

once the plaintiff has shown a likelihood of success on the merits, the burden shifts to the defendant to show a likelihood that its affirmative defenses will succeed.¹³⁰ The Ninth Circuit concluded that Perfect 10 had succeeded in showing that it would prevail in its prima facie case of infringement and the burden shifted to Google to show that it would likely succeed in establishing the fair use defense.¹³¹ The Ninth Circuit, after weighing the four statutory fair use factors, concluded that Google's use of Perfect 10's thumbnails was a fair use and vacated the preliminary injunction.¹³² The court also reversed the lower court's holding of no secondary liability because the district court failed to consider Google and Amazon.com's knowledge of the infringing activities and possible deterrence measures.¹³³

IV. DISCUSSION: A FAIR USE VICTORY FOR INTERNET SEARCH ENGINES AND A REVERSION TO TORT LAW PRINCIPLE ON CONTRIBUTORY LIABILITY

A. Fair Use

The Ninth Circuit's finding that Google's use of thumbnail versions of Perfect 10's images was fair use under the Copyright Act¹³⁴ is a sensible ruling in the age of internet. This Part analyzes the court's reasoning regarding the four fair use factors and relates the analysis to the modern trend of fair use in the twenty-first century.

1. The Ninth Circuit Made a Sensible Ruling

For the first factor of the fair use determination, the purpose and character of the use, the court held that Google's use of the thumbnails was highly transformative because the search engine put the images "in a different context," and therefore "transformed [them] into a new creation."¹³⁵ The thumbnail images serve a new function: improving access to information on the internet (as opposed to the original images, which some would argue furthered artistic expression).¹³⁶ The Ninth Circuit emphasized that a search engine provided "social benefit by incorporating an original work into a new work, namely, an electronic reference tool."¹³⁷ The Ninth Cir-

130. *Id.* at 1158.

131. *Id.* at 1163.

132. *Id.* at 1168.

133. *Id.* at 1176-77.

134. *See id.* at 1168.

135. *Id.* at 1165.

136. *See id.*

137. *Id.*

cuit stated that the fact that Google used the entire Perfect 10 image into the search engine results “does not diminish the transformative nature of Google’s use.”¹³⁸

Google also derives some financial benefit and generates a portion of its revenue by partnering with certain websites through its “AdSense” program.¹³⁹ Under this program, AdSense participants share such advertising revenues with Google.¹⁴⁰ The Ninth Circuit held that the district court failed to determine the monetary significance of the thumbnails.¹⁴¹ Furthermore, the Ninth Circuit disagreed with the district court’s conclusion that Google’s use of thumbnail images superseded Perfect 10’s right to sell its reduced-size images for use on cell phones, stating that the superseding use was not significant because downloads for mobile phone use had not been found.¹⁴² The Ninth Circuit emphasized the fact that Google’s search engine promotes the purposes of copyright and serves the interest of the public.¹⁴³ It concluded that, “the significantly transformative nature of Google’s search engine, particularly in light of its public benefit, outweighs Google’s superseding and commercial use of the thumbnails in this case.”¹⁴⁴

For the second fair use factor, the nature of the copyrighted work, the Ninth Circuit agreed with the district court that Perfect 10’s images possessed artistic value.¹⁴⁵ The court determined that this factor tipped only slightly in favor of Perfect 10 because all the images had been previously published before Google displayed them as thumbnails.¹⁴⁶

For the third fair use factor, the amount and substantiality of the portion used, the Ninth Circuit concluded that it was reasonable for Google to use the entire photographic image in light of the purpose of a search engine because if only part of image was used the user would not be able to recognize the image and this would diminish the usefulness of a visual

138. *Id.*

139. *Id.* at 1156; see Google AdSense, <http://www.google.com/adsense> (last visited Feb. 6, 2008); see also Wikipedia, AdSense, <http://en.wikipedia.org/wiki/AdSense> (last modified Apr. 11, 2008).

140. See Google AdSense, <http://www.google.com/adsense> (last visited Feb. 6, 2008); see also Wikipedia, AdSense, <http://en.wikipedia.org/wiki/AdSense> (last modified Apr. 11, 2008); see also *Perfect 10*, 508 F.3d at 1156.

141. *Perfect 10*, 508 F.3d at 1166.

142. *Id.*

143. *Id.*

144. *Id.*

145. *Id.* at 1167.

146. *Id.*

search engine.¹⁴⁷ The court concluded that this factor did not favor either party.¹⁴⁸

For the fourth fair use factor, the effect of use on the market, the Ninth Circuit agreed with the district court that the thumbnail images did not harm the market for full-size images because the thumbnails were not a substitute for the full-sized images.¹⁴⁹ The court acknowledged that Perfect 10 had a market for reduced-size images but repeated its reasoning in factor one that no downloads of the thumbnails images had been found.¹⁵⁰ It concluded that this factor favored neither party.¹⁵¹

The Ninth Circuit's fair use analysis fits the courts' historical pattern of using diverse standards to judge the four fair use factors.¹⁵² The Ninth Circuit appropriately relied on its own ruling in *Kelly v. Arriba Soft Corporation*,¹⁵³ stating that "even making an exact copy of a work may be transformative so long as the copy serves a different function than the original work."¹⁵⁴ Indeed, the facts in *Kelly* are quite similar to those of *Perfect 10*. In *Kelly*, Arriba's search engine program "crawled" the web looking for images to index.¹⁵⁵ The crawler downloaded full-sized copies of the images onto Arriba's server and used those copies to generate smaller, lower-resolution thumbnails of the images.¹⁵⁶ After the thumbnails were created, the program deleted the full-sized originals from the server.¹⁵⁷ A user could copy these thumbnails to his computer or disk, but could not increase the resolution of the thumbnail.¹⁵⁸ The Ninth Circuit ruled that although Arriba made exact replications of Kelly's images, the thumbnails served an entirely different function than Kelly's original images.¹⁵⁹ The court stated that Kelly's images were artistic works intended to engage the viewer in an aesthetic experience while Arriba's search engine functioned as a tool to help index and improve access to images on

147. *Id.*

148. *Id.* at 1167-68.

149. *Id.* at 1168.

150. *Id.*

151. *Id.*

152. *See generally* Nimmer, *Fairest of Them All*, *supra* note 37.

153. 336 F.3d 811 (9th Cir. 2003).

154. *Perfect 10*, 508 F.3d at 1165 (citing *Kelly*, 336 F.3d at 818-19).

155. *Kelly*, 336 F.3d at 815.

156. *Id.*

157. *Id.*

158. *Id.*

159. *Id.* at 818.

the internet.¹⁶⁰ In addition, it explained that Arriba's use of Kelly's images in the thumbnails was unrelated to any aesthetic purpose.¹⁶¹

This line of reasoning reflected, to some extent, the courts' willingness in recent years to set a more liberal standard for the definition of "transformative nature" and to de-emphasize market harm once transformation is found.¹⁶²

In the early years of fair use, the Supreme Court was more focused on the so-called productive work that added "something new" to the original work to be considered transformative.¹⁶³ In light of these precedents, why should a wholesale copying of an image merely for a different purpose (searching) be declared fair use, like in *Perfect 10*? The answer lies within the context of information search. While an author may exercise his own ingenuity to satirize the society at large without appropriating other people's creative work, an image search engine cannot fulfill its basic functionality of locating the exact information without appropriating the whole image. Adding "something new" to the search result would totally defeat the purpose of a search engine. It was probably for this reason that the Ninth Circuit ruled that providing search capability rendered the use of the appropriated work transformative enough to warrant fair use protection. In *Perfect 10*, the Ninth Circuit argued that a search engine might be more transformative than a parody "because a search engine provides an entirely new use for the original work, while a parody typically has the same entertainment purpose as the original work."¹⁶⁴ This argument, although broad, is justifiable given the search engine's basic functionality of providing accurate results for the information searched.

160. *Id.*

161. *Id.* The Ninth Circuit also stated that this case involves more than merely a re-transmission of Kelly's images in a different medium, which typically does not qualify for fair use protection. *Id.* at 818-19.

162. *See* Marques, *supra* note 50, at 333.

163. *Compare Campbell*, 510 U.S. at 579 with *Dr. Seuss Enterprises v. Penguin Books USA, Inc.*, 109 F.3d 1394, 1401 (9th Cir. 1997). In *Dr. Seuss*, authors Alan Katz and Chris Wrinn wrote and illustrated *The Cat Not in the Hat!*, a book that borrowed the title, the lead character, and the narrator ("Dr. Juice") of the late Dr. Seuss' famous children's book *The Cat in the Hat*. *Id.* at 1396. The court applied the *Campbell* standard and concluded that the work was not a parody because it served mostly as a satire of the different subject—the O.J. Simpson double murder trial. *Id.* at 1396, 1401. It failed to comment, at least in part, on the original book and it also failed to "conjure up" the original book. *Id.*

164. *Perfect 10, Inc. v. Amazon.com, Inc.*, 508 F.3d 1146, 1165 (9th Cir. 2007).

What is surprising in *Perfect 10* is that the Ninth Circuit ignored *Sony* in its fair use deliberation.¹⁶⁵ In *Sony*, the Supreme Court found that taping copyrighted television programs for time-shifting viewing was fair use.¹⁶⁶ This position is quite similar to the Ninth Circuit's reasoning in *Perfect 10*. In both cases, the copying was an exact copying of the entire work. The copying was not of a productive nature, meaning that the original work was not modified and no new elements were added to create a new work of expression.¹⁶⁷ In both cases, the copying was found to be fair use because the copying served a different purpose: in *Sony* it was for time-shifting viewing and in *Perfect 10* it was for facilitating the search. One explanation for both holdings is that in both scenarios, in order to achieve the intended purpose, there is really no other alternative to copying the entire work. One cannot achieve time-shift viewing of a program without taping the program in its entirety. If the program was modified, or new elements added, it would hardly serve the viewer's purpose of viewing the original program merely at a different time. Similarly, in *Perfect 10*, there was no alternative way of providing an accurate search result without providing the picture in its entirety, unaltered. From this point of view, there is a strong argument favoring a finding of fair use if wholesale copying of the original is the only way to serve the user's intended purpose. Therefore, *Sony* seems to be able to serve as a strong support to the *Perfect 10* court's reasoning. However, the Ninth Circuit ignored such an obvious support.¹⁶⁸ This puzzle is discussed further in Section IV.B, which argues that the Ninth Circuit avoided *Sony*'s "staple article of commerce" doctrine in its discussion of secondary liability as well as in its fair use analysis in order to prevent a non-uniform treatment of *Sony*.

2. *The Fair Use Reasoning Is Not Perfect*

The Ninth Circuit made the sensible ruling on the fair use issue, but its fair use analysis was not without defect. At several points, the court treated the absence of evidence as the evidence of absence. It concluded that because evidence of users downloading thumbnail images to a mobile phone had not been introduced, the superseding use was therefore not significant.¹⁶⁹ The court also concluded that because the district court failed to determine the commercial scope of Google's AdSense program, the commercial dimension of Google's displaying of thumbnail images was

165. *See id.* at 1163-68.

166. *Sony Corp. v. Universal City Studios, Inc.*, 464 U.S. 417, 442-47 (1984).

167. *See Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569, 579 (1994).

168. *See Perfect 10*, 508 F.3d at 1163-68.

169. *Id.* at 1166.

not significant.¹⁷⁰ According to the logic of the Ninth Circuit, if downloading of the reduced-size images to cell phones or other handheld devices were found, or if the commercial benefits Google derived from displaying the thumbnail images could be ascertained, the lower court arguably should then reconsider the first factor of the fair use determination. Since the Ninth Circuit found that the district court failed both to discover the downloads to cell phones and to ascertain the significance of the alleged use's commercial scope, shouldn't the Ninth Circuit have remanded these questions back to the district court for further fact finding instead of summarily closing the issue of fair use? The fact that Perfect 10 licensed to Fonestarz Media the right to market its reduced-size copyrighted images for cell phone downloads indicates that further fact-findings might have yielded different conclusions.¹⁷¹ Given that the Ninth Circuit emphasized that the burden was on Google to show its likely success in the fair use defense for preliminary injunction,¹⁷² those factual findings could have been important in determining Google's likely success.

As a matter of fact, the court's such arguments are unnecessary. The Supreme Court never set an absolute level of superseding or commercial use above which fair use cannot be found. The Court only required the weighing of the transformative nature of the use against the superseding and commercial use, specifically stating "[t]he more transformative the new work, the less will be the significance of other factors. . . ."¹⁷³ Given the Ninth Circuit's successful efforts in establishing the highly transformative nature of Google's use, as well as the search engine's positive role of promoting the purposes of copyright and serving the public interest, the court could have arrived at the same conclusion by weighing these fair use characteristics of a search engine against any superseding and commercial uses.

3. *Future Implications*

In finding Google's use of the thumbnail images fair use, the Ninth Circuit established that using the original work in order to provide internet search references could be considered a fundamentally different function from what the original work was intended to serve.¹⁷⁴ Thus, the public interest tipped strongly toward a fair use finding.¹⁷⁵ It appears that the Ninth

170. *Id.*

171. *See id.* at 1157.

172. *Id.* at 1163.

173. *Campbell*, 510 U.S. at 579.

174. *Perfect 10*, 508 F.3d at 1168.

175. *See supra* note 136 and accompanying text.

Circuit was even ready to extend the fair use protection to cases where a search engine displays the full-size exact copy of the original image, if the use serves a different function than the original images has intended.¹⁷⁶ To support its reasoning, the Ninth Circuit cited *Nunez v. Caribbean International News Corporation*, where a newspaper's republication of photos taken from a modeling portfolio in their entirety was found transformative because the photos served to inform, as well as entertain.¹⁷⁷ In other words, the *Perfect 10* court did not restrict its discussion to cases that dealt only with "thumbnail" pictures, like those in *Kelly*. This indicates the Ninth Circuit's willingness to find fair use for storing and displaying full-size pictures for the purpose of internet search. In other words, if a thumbnail image is fair use because a search engine puts it "in a different context" so as to transform it into to a "new creation," it is legitimate to conclude that a full-size image is fair use pursuant to exactly the same reasoning.

The Ninth Circuit's such subtle indication could have significant implications. It could have an important impact on the fair use determination on Google's ambitious project of digitizing all of the world's books.¹⁷⁸ If storing an exact copy of an original picture for the purpose of providing access to internet searches constitutes fair use because it serves a different function, storing exact copies of a book digitally for the purpose of providing access to an internet search could also constitute fair use.

B. Contributory Liability

In *Perfect 10*, the Ninth Circuit attempted to steer the copyright contributory liability standard back to its tort law roots. This was part of a larger trend in the internet age's judicial decisions that has effectively whittled away *Sony's* authority.¹⁷⁹

1. *The Reversion to Tort Principles*

A finding of secondary liability requires the presence of direct infringement by third parties.¹⁸⁰ Regarding the issue of direct infringement by a third party, the Ninth Circuit in *Perfect 10* focused its inquiry on the undisputed fact that third-party websites directly infringed *Perfect 10's*

176. See *Perfect 10*, 508 F.3d at 1165.

177. *Id.*; *Nunez v. Caribbean Int'l News Corp.*, 235 F.3d 18, 22-23 (1st Cir. 2000).

178. Google Books Library Project, <http://books.google.com/googlebooks/library.html> (last visited Feb. 8, 2008).

179. See Peter S. Menell & David Nimmer, *Legal Realism in Action: Indirect Copyright Liability's Continuous Tort Framework and Sony's De Facto Demise*, 55 UCLA L. REV. 143, 203-04 (2007).

180. See *supra* note 52 and accompanying text.

copyrights by reproducing, displaying, and distributing unauthorized copies of Perfect 10's images.¹⁸¹

The Ninth Circuit held that Google could not be held liable *solely* for providing a search engine that could be used for infringing use but also had substantial noninfringing use.¹⁸² Neither side in the case contested that Google's search engine had substantial noninfringing uses. On the question of intentionally inducing infringement, the court acknowledged that Google's activities did not meet the "inducement" test set forth in *Grokster* because Google did not promote the use of its search engine specifically to infringe copyrights through statements and acts.¹⁸³ Nonetheless, the Ninth Circuit stated that the Supreme Court's holding in *Grokster* did not prevent finding contributory liability under common law's fault-based liability (tort law) where intent could be imputed.¹⁸⁴ It therefore adopted the standard that failure by an internet service provider (ISP) to remove known infringing materials on its network could constitute contributory infringement.¹⁸⁵ The Ninth Circuit probably relied on the *Grokster* Court's language that "[Sony] was never meant to foreclose rules of fault-based liability derived from the common law."¹⁸⁶ The Ninth Circuit then held: "[t]here is no dispute that Google substantially assists websites to distribute their infringing copies to a worldwide market and assists a worldwide audience of users to access infringing materials," concluding that "Google could be held contributorily liable if it had knowledge that infringing Perfect 10 images were available using its search engine, could take *simple measures* to prevent further damage to Perfect 10's copyrighted works, and failed to take such steps."¹⁸⁷ The court remanded this issue for further fact finding.¹⁸⁸

In such a ruling, the Ninth Circuit adopted the contributory liability framework of *Gershwin*¹⁸⁹ and added the "take simple measures" dimen-

181. *Perfect 10*, 508 F.3d at 1169-70.

182. *Id.* at 1170.

183. *Id.* at 1171 n.11; *see also supra* notes 95,97,98 and accompanying text.

184. *Perfect 10*, 508 F.3d at 1170-71 (quoting *MGM Studios Inc. v. Grokster, Ltd.*, 545 U.S. 913, 934-35 (2005)).

185. *Id.* at 1171. The Ninth Circuit recited its own ruling in *Napster*, "if a computer system operator learns of specific infringing material available on his system and fails to purge such material from the system, the operator knows of and contributes to direct infringement." *Id.*

186. *MGM Studios Inc. v. Grokster, Ltd.*, 545 U.S. 913, 934-35 (2005).

187. *Perfect 10*, 508 F.3d at 1172 (emphasis added).

188. *Id.* 1172-73.

189. *Gershwin Publishing Corp. v. Columbia Artists Management, Inc.*, 443 F.2d 1159, 1162 (2d Cir. 1971).

sion, which was first proposed in *Religious Technology Center. v. Netcom*.¹⁹⁰ At first glance, the Ninth Circuit's decision to adopt such a rule seemed unexpected. After all, the Ninth Circuit had arduously argued for a fair use safe harbor for Google's direct infringement largely based on the public benefits Google's search engine provided. The Ninth Circuit could have completely shielded Google from contributory liability in a doctrinally permissible way. It is clear that under *Sony*, Google would not be found contributorily liable for third-party infringing websites because of the search engine's substantial noninfringing use. The only way that Google could be found contributorily liable is through *Grokster*'s inducement standard, carved out from the *Sony* rule, where intent must be manifested by "purposeful, culpable expression and conduct,"¹⁹¹ which Google arguably did not do.

Apparently, the Ninth Circuit refused, rightly, to give Google such unbounded power and demanded Google to assume its share of responsibility for copyright protection. It is plausible that the Ninth Circuit did not want Google to avoid the liability so cleanly, as what happened in *Sony*. Further, the Ninth Circuit might have been legitimately concerned about the extreme ease and the massive scale of internet copyright infringement in the new digital age in which digital copies can be produced cleanly and cheaply. The fact that the Ninth Circuit was forced to go back to common law tort principles to seek a proper standard for contributory copyright liability indicates that the applicability of both *Sony*'s and *Grokster*'s rigid rules in the internet age are tenuous at best.

From a policy standpoint, therefore, the Ninth Circuit's holding on the question of contributory liability is reasonable. The Ninth Circuit's finding of fair use on the question of direct infringement, combined with its remanding of the question of contributory liability, served as a kind of carrot and stick for Google, approving the search engine's objectives while at the same time forcing the improvement of its means.¹⁹² The Ninth Circuit was arguably asking Google to develop technologies to curb copyright infringement on the internet. The "simple measures" language in the court's

190. *Perfect 10*, 508 F.3d at 1171-72; *Religious Tech. Ctr. v. Netcom On-Line Commun. Servs.*, 907 F. Supp. 1361, 1375 (N.D. Cal. 1995) ("Thus, it is fair, assuming Netcom is able to take simple measures to prevent further damage to plaintiffs' copyrighted works, to hold Netcom liable for contributory infringement where Netcom has knowledge of Erlich's infringing postings yet continues to aid in the accomplishment of Erlich's purpose of publicly distributing the postings.").

191. *Grokster*, 545 U.S. at 937.

192. See generally *Unwinding Sony*, *supra* note 9, at 1005-23. The authors applied tort law principles to Sony's Betamax technology. The analysis utilized a balancing test where three prongs were involved: intention/knowledge, utility/harm, control/design.

new standard resonates, to some extent, with the “reasonable alternative design” standard in product liability tort law.¹⁹³

Perfect 10 reflected a tension between the traditional content provider and the new technologies capable of both noninfringing use and infringing use. Product liability tort law has recognized that liability should be imposed on the technology provider “whenever the designer or marketer of a product is in a relatively better position than are users and consumers to minimize product-related risk.”¹⁹⁴ Tort principles also sanction allocating the risk of harmful activities to the party best situated to avoid the harm and spread the costs more equitably and efficiently.¹⁹⁵ In *Perfect 10*, it appears reasonable to impose liability on the search engine company, which is in a relatively better position than the copyright owners to take “simple measures” to minimize the related copyright infringement risk because of its expertise in developing computing technologies.

The Ninth Circuit’s “simple measures” standard for contributory liability should have different meanings for different types of internet services. Take Google and Grokster as two examples. Google should not be required to implement intensely complicated tools to counter access to infringing material because its general-purpose search engine serves a very wide audience, and the difficulty of blocking access to infringing material is high. Grokster, on the other hand, should be subject to a more stringent requirement of implementing filtering mechanisms to filter out infringing material because unlike Google, Grokster was exclusively engaged in music posting. To put it in another way, an internet tool that has a very general functionality, like Google’s search engine, should be subject to a lesser burden of preventing copyright infringement, while an internet tool that has a more specific functionality and can easily be used as a tool for copyright infringement, should be subject to a heavier burden of preventing copyright infringement. Under this context, “reasonable measures” is probably a more pertinent phrase than “simple measures.”

Similar “simple measures” have already been suggested and even codified by the legislature. The Digital Millennium Copyright Act’s (“DMCA”) safe harbor protections¹⁹⁶ for certain types of ISPs may well reflect some of these “simple measures” contemplated by Congress to

193. See *id.* at 1010, 1012, 1018.

194. See *id.* at 1006 n.357 (citing RESTATEMENT (THIRD) TORTS: PROD. LIAB. § 2 cmt. a (1998) and James Henderson, Jr. & Aaron D. Twerski, *Closing the American Products Liability Frontier: The Rejection of Liability Without Defect*, 66 NYU L. REV. 1263 (1991)).

195. See *Unwinding Sony*, *supra* note 9, at 1011.

196. See 17 U.S.C. § 512 (2000).

shield, at least partly, ISPs from contributory liability.¹⁹⁷ The legislation of the safe harbor provision themselves also demonstrates, to some extent, that Congress did not take *Sony's* “staple article of commerce” doctrine to heart. It is fair to say that almost all ISPs (at least those contemplated by Congress for the safe harbor protection)¹⁹⁸ have, or are capable of, substantial noninfringing use and thus qualify for protection under the “staple article of commerce” doctrine.¹⁹⁹ If Congress had endorsed the “staple article of commerce” doctrine for copyright protection, it would have been unnecessary to expressly establish these simple measures to shield ISPs from contributory liability.

Google could have implemented one such “simple measure”: digital watermark recognition. Like a “broadcast flag,” which was ignored by the *Sony* Court,²⁰⁰ copyright owners use “digital watermark” technology to indicate when they have authorized reproduction of their works. Google could devise an algorithm to recognize such digital watermarks as its search engine crawls the internet and grabs images for indexing and shrinking into thumbnails. If the digital watermark indicates that the image can be copied, Google is free to index it. If the digital watermark indicates that the image cannot be copied, Google will first decide whether the website belongs to a legitimate copier, i.e. one with the copyright owner’s permission.²⁰¹ If the website is legitimate, Google will index the website and the image. If the website is illegitimate, Google will neither index it nor create a thumbnail version so that internet users will not be directed to such illegitimate websites by Google.²⁰²

This measure might qualify as a “simple measure.” It does not require human involvement and software could do it automatically. It would not require much additional time or many resources to carry out the additional

197. *See id.*

198. Search engine is one of the categories of ISPs protected by the safe harbor rule. *See* 17 U.S.C. § 512 (d) (2000). Other types of ISPs that were protected by safe harbors include conduit providers like telephone companies (17 U.S.C. § 512(a) (2000)), web storing or caching services (17 U.S.C. § 512(b) (2000)), and web hosting services (17 U.S.C. § 512(c) (2000)).

199. *See Sony Corp. v. Universal City Studios, Inc.*, 464 U.S. 417, 442 (1984).

200. *See Unwinding Sony*, *supra* note 9, at 949 n.39.

201. The information of such authorization could be included in the digital watermark itself so that Google could read from the digital watermark whether the images are hosted in a legitimate site or an infringing site.

202. Of course, an internet user can still access those websites by directly going to such websites’ web addresses. However, such actions do not involve Google.

computation proposed.²⁰³ Most importantly, this measure would serve the dual purposes of facilitating internet users' access to images and protecting copyright by not directing users to infringing websites. Furthermore, anyone who tampers with the digital watermark²⁰⁴ would be subject to the "anti-circumvention" prohibition stipulated by the DMCA.²⁰⁵

2. *Uncertainty in the Wake of Perfect 10*

While the Ninth Circuit's newly stipulated contributory standard is a step in the right direction, it could also face criticism and cause uncertainty in its application.

First, the court stated, "[t]here is no dispute that Google substantially assists websites to distribute their infringing copies to a worldwide market and assists a worldwide audience of users to access infringing materials."²⁰⁶ The Ninth Circuit appeared to say that Google "materially" contributed to other parties' direct infringing activities. However, conventionally, contributory liability was incurred when the defendant materially contributed to the direct infringing activities *at the same time* the direct infringing activities occurred. In *Elektra Records v. Gem Electronic Distributors*,²⁰⁷ defendant Gem Electronic Distributors, a retail store selling blank audiocassettes as well as copyrighted tapes, installed a coin-operated cassettes duplicating system called "Make-a-Tape" in the store.²⁰⁸ The defendant's customers could select from the retail store's catalog copy-

203. *But see* Mark A. Lemley, *Rationalizing Internet Safe Harbors 2* (Stanford Pub. Law Working Paper No. 979836, 2007), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=979836 (claiming that "Google has no realistic way of knowing which of the over 10 billion Web pages it searches might have information on it that violates the rights of someone else. If we forced Google to try to find out which Web pages have problematic materials on them, there is no way it could return automated search results."). Actually, every time Google conducts a search, it searches a local copy of the internet, instead of scanning the whole internet from scratch. So, certain scrutiny on the content of the websites could be done, and might be done only once, when Google is indexing the internet and is building the local copy. Such scrutiny, like the one Prof. Lemley proposed above, will result in exclusions of certain infringing materials from Google's local internet copy so as to render them unable to be searched. In this sense, the additional computation involved with such scrutiny will not happen every time a search is conducted.

204. First of all, tampering with a digital watermark requires sophisticated understanding of computer science as well as high-level skills in computer programming. Such occurrences would be rare at best.

205. *See* 17 U.S.C. § 1201 (2000) (making it illegal to circumvent a technological measure that effectively controls access to a protected work).

206. *Perfect 10, Inc. v. Amazon.com, Inc.*, 508 F.3d 1146, 1172 (9th Cir. 2007).

207. *Elektra Records v. Gem Elec. Distribs.*, 360 F. Supp. 821 (E.D.N.Y. 1973).

208. *Id.* at 822.

righted music tapes and use the “Make-a-Tape” system in the defendant’s store to make copies of the copyrighted tapes.²⁰⁹ The Eastern District of New York found that the store was liable for contributory infringement.²¹⁰ In *Elektra Records*, the store clearly had knowledge of specific infringement activities and also provided material support (the “Make-a-Tape” system) at the same time the copyrighted tape was duplicated. In *Perfect 10*, the third-party infringers themselves already published infringing materials on their websites. Thus, unauthorized distribution had occurred *before* the users accessed the infringing materials using Google. In fact, internet users could have directly visited the infringing websites without ever touching Google’s search engine. Google did not help the infringers either create the infringing websites or acquire the infringing images. From this point of view, it seems somewhat unfair to hold that Google materially contributed to the infringers’ direct infringement. The *Perfect 10* court itself acknowledged that Google *incidentally* indexed the infringing websites without knowledge that particular websites were infringing websites.²¹¹ In a sense, Google, automatically cataloguing all websites in a digital format, acted like a giant yellow page book in the digital age. Google’s only fault seems to be that it is a too powerful a search engine. Should the law blame a powerful magnifying glass for revealing too many details of the object being examined?

Second, although the Ninth Circuit in *Perfect 10* skillfully stipulated a tort law-like contributory liability standard without directly contradicting either *Sony* or *Grokster*, both *Sony* and *Grokster* are still the laws of the land and are difficult obstacles to overcome. As the court itself acknowledged, although only implicitly, the *Perfect 10* ruling did not fully comport with the Supreme Court’s *Sony* and *Grokster* rulings.²¹² The Supreme Court in *Grokster* actually reaffirmed *Sony*: “where evidence goes beyond a product’s characteristics or the knowledge that it may be put to infringing uses, and shows statements or actions directed to promoting infringement, *Sony*’s staple-article rule will not preclude liability.”²¹³ The Supreme Court’s language seems to be clear that for products that qualify for the staple article of commerce doctrine, i.e., products, like Google’s search engine, with substantial noninfringing uses, the evidence upon which inducement intent could be “imputed” must go beyond “a product’s charac-

209. *Id.* at 822-23.

210. *Id.* at 824-25.

211. *Perfect 10*, 508 F.3d at 1164 n.8 (emphasis added).

212. *Id.* at 1171 n.11 (“Google’s activities do not meet the ‘inducement’ test explained in *Grokster* . . .”).

213. *MGM Studios Inc. v. Grokster, Ltd.*, 545 U.S. 913, 934-35 (2005).

teristics or the knowledge that it may be put to infringing use” and must show “statements or actions” directed to “promoting” infringement.²¹⁴ In *Grokster*, the Supreme Court stated that the defendants’ failure to install any filtering mechanism “underscore[ed]” the defendants’ intentional facilitation on their users’ infringement.²¹⁵ However, the *Grokster* Court also stated that in the absence of other evidence of intent, contributory liability could not be found merely based on a failure to take affirmative steps to prevent infringement, if the device was capable of substantial non-infringing use.²¹⁶

Third, although the Ninth Circuit in *Perfect 10* reasonably instructed Google to take “simple measures,” the Ninth Circuit did not specify by what standard the “simple measures” would be judged. The Ninth Circuit might be referring to some sort of filtering mechanism that could block the access to the infringing sites. However, a danger exists in that this type of technology could filter out protected First Amendment speech.²¹⁷ In truth, intelligent and accurate filtering mechanisms are very hard to design and to implement.²¹⁸ The lack of a clear standard for “simple measures” will add difficulty and uncertainty for the district court’s adjudication of this case on remand.

Fourth, the Ninth Circuit was not clear about whether it intended “knowledge” to mean “general knowledge” or “specific knowledge.” From the court’s reliance on *Napster* in defining the “knowledge” requirement, it seems that the Ninth Circuit meant “specific knowledge.”²¹⁹ Case law also supports “specific knowledge.” In *Elektra Records*, the store knew or had reason to know about the occurrence of each specific tape

214. The Supreme Court continued, “Evidence of ‘active steps . . . taken to encourage direct infringement,’ . . . show[s] an affirmative intent that the product be used to infringe, and . . . overcomes the law’s reluctance to find liability when a defendant merely sells a commercial product suitable for some lawful use . . .” *Id.* at 936.

215. *Id.* at 939.

216. *Id.* at 939 n.12.

217. See, e.g., Marcel H. Faulkner, *Filter Schmilter: Libraries and Internet Filtering Software*, 2 POST-TRACKS (2006), <http://www.webjunction.org/do/DisplayContent?id=14621> (last visited Feb. 15, 2008) (showing evidence that some simplistic filtering software intended to filter out on-line sexual content ended up blocking access to many legitimate educational and medical websites).

218. Private conversation with Google engineers.

219. *Perfect 10, Inc. v. Amazon.com, Inc.*, 508 F.3d 1146, 1171 (9th Cir. 2007) (citing *A&M Records v. Napster, Inc.*, 239 F.3d 1004, 1021 (9th Cir. 2001) (“[I]f a computer system operator learns of specific infringing material available on his system and fails to purge such material from the system, the operator knows of and contributes to direct infringement.”)).

duplicating incident and as a result was found liable.²²⁰ However, in *Perfect 10*, it would be unlikely that Google knew or had reason to know of specific infringing activities because Google's search engine automatically indexed the content on the internet. Similarly to *Sony*, where Sony could not have known and had no reason to know of specific infringement involving its Betamax devices but knew or had reason to know that generally, somewhere someone used Betamax to engage in copyright infringing activities, Google should have "general knowledge" of such infringement. Therefore, if the Ninth Circuit intended "knowledge" to mean "specific knowledge," the standard would have little force in prodding Google to implement "simple measures" because Google would not fit into the premise of this liability. On the other hand, if the Ninth Circuit intended "knowledge" to mean "general knowledge," it would appear to be inconsistent with both its own prior ruling in *Napster* and the mighty *Sony*. The Ninth Circuit's vagueness on this issue may have reflected this dilemma, but it is also likely to create confusion for the lower courts.

3. *Future Implications*

One of the fastest growing segments of the internet is in the social networking and user-generated-content arena where copyright issues arise on a massive scale. YouTube, one of the most popular websites in this arena, hosts numerous video clips generated by the general public as well as numerous copyrighted video clips. How big an impact the *Perfect 10* ruling will have on the secondary liability question for such websites and on the broader question of how to protect people's creativity while simultaneously protect copyright remains to be seen. One thing is certain: the blanket protection provided by *Sony's* "staple article of commerce" doctrine is losing its force. Furthermore, the impact of the *Perfect 10* ruling is unlikely to be confined to the courts of the Ninth Circuit. In *Grokster*, the Supreme Court probably felt that reliance on *Sony* would inevitably lead to an unjust finding of no contributory liability in favor of Grokster; thus the Court adopted a new "inducement" rule to find Grokster liable. Similarly here, if the current case goes to the Supreme Court, the Court could eventually decide to go beyond *Sony's* "staple article of commerce" doctrine and stipulate new rules. For the reasons outlined above, these rules should be closer to copyright liability's historic tort law roots.

220. Elektra Records v. Gem Elec. Distribs., 360 F. Supp. 821, 822-23 (E.D.N.Y. 1973).

V. CONCLUSION

The internet and the digital age present great opportunities to internet service providers while also giving them tremendous power in facilitating the flow of information among the general public. The tension between the two purposes of copyright, protecting the original author's exclusive rights and encouraging the public's creativity by promoting the public's access to information, is exacerbated by internet technologies. Internet search engines play a pivotal role in disseminating and facilitating access to knowledge and information. While the *Perfect 10* ruling strengthens search engines' function in promoting public knowledge, it simultaneously leaves them responsible for deterring infringement committed using their technology. The *Perfect 10* ruling signified the continued trend of liberal interpretation of the copyright fair use doctrine and it also marked the Ninth Circuit's efforts both to rectify the confusions caused by Sony's misplaced copyright contributory liability jurisprudence and to steer the course back to its tort law roots. Considering all of these, the impact of the *Perfect 10* ruling is likely to be significant and far-reaching.

A GOOD VALUE CHAIN GONE BAD: INDIRECT COPYRIGHT LIABILITY IN *PERFECT 10 v. VISA*

By David Haskel

I. INTRODUCTION

Digitization and the Internet have radically complicated the challenges of copyright enforcement. In the digital age, anyone can make and distribute copies instantaneously anywhere in the world at very little cost. National borders are less relevant online, making it more difficult to enforce copyright against foreign infringers. Faced with the double threat of infringement by their own consumers and by foreign websites, content owners have sought to hold liable those who facilitate infringement. Credit card companies that provide payment services to foreign websites are a particularly attractive target. Beginning in 2000, Perfect 10, a pornographic website, sued a range of defendants, including credit card companies, for indirect copyright infringement. In *Perfect 10, Inc. v. Visa International Service Ass'n*,¹ the Ninth Circuit held the credit card companies were neither contributorily nor vicariously liable, as the link between payment services and direct infringement was too attenuated.

This Note argues that when enforcement against foreign websites is not a realistic option, the problem is best solved by imposing a limited form of liability sufficient to dissuade the provision of credit card services. Part II provides the background to the *Visa* case and the law of secondary copyright liability. Part III reports the decision and Judge Alex Kozinski's vigorous dissent. Part IV analyzes the optimal stage in the chain of infringement for enforcing copyright, and concludes that holding credit card companies liable is an appropriate solution so long as the law protects them from monetary damages.

II. CASE AND LEGAL BACKGROUND

This Part introduces the context and legal background to Perfect 10's suit against the credit card companies. Section II.A describes the infringement problems faced by Perfect 10 and the suits it brought in re-

© 2008 David Haskel. The author hereby permits the reproduction of this Note subject to the Creative Commons Attribution No Derivatives 3.0 License, the full terms of which can be accessed at <http://creativecommons.org/licenses/by-nd/3.0/legalcode>, and provided that the following notice be preserved: "Originally published in the Berkeley Technology Law Journal 23:1 (2008)."

1. 494 F.3d 788 (9th Cir. 2007).

sponse. Section II.B explains the two forms of secondary liability, vicarious and contributory, and how they have been applied in the digital age. Section II.C shows how the Digital Millennium Copyright Act (DMCA) protects online service providers from secondary liability.

A. Perfect 10's Piracy Challenges and Legal Strategy

Perfect 10 publishes a print magazine and hosts a website featuring nude photographs of "the world's most beautiful natural models."² Websites based in the United States and abroad sold Perfect 10's photographs without authorization.³ Facing financial ruin, Perfect 10 embarked on a multi-pronged legal strategy in the hope of reducing piracy and drawing users to its own offerings. In addition to suing a stolen-content website for direct infringement,⁴ Perfect 10 sued four sets of defendants for secondary liability: 1) a search engine for reproducing thumbnails of the pirated images,⁵ 2) a web service provider for hosting a pirate site,⁶ 3) a company for providing age-verification and subscription services,⁷ and 4) financial institutions for processing subscription fees.⁸

This multi-faceted attack recognizes that an infringing act does not occur in isolation, many different activities make it possible. It is useful to view the collection of facilitating activities as a "value chain."⁹ Different types of infringement, from textbook photocopying to movie bootlegging, are made possible by different sets of technologies and different actors. These value chains can be divided into a number of distinct stages: technology enablement, copy creation, distribution, publicity, monetization, and consumption.¹⁰ Figure 1 illustrates the value chain of a stolen content website.

2. *Id.* at 793.

3. *Id.*

4. *See* Perfect 10, Inc. v. Talisman Commc'ns Inc., No. 99-10450, 2000 U.S. Dist. LEXIS 4564 (C.D. Cal. Mar. 27, 2000).

5. *See* Perfect 10, Inc. v. Amazon.com, Inc., 487 F.3d 701 (9th Cir. 2007).

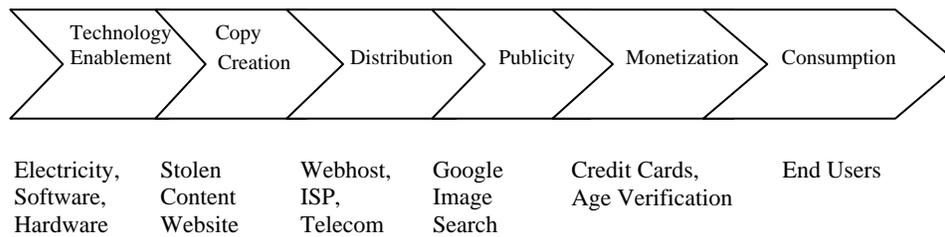
6. *See* Perfect 10, Inc. v. CCBill LLC, 481 F.3d 751 (9th Cir. 2007), *amended and superseded*, 488 F.3d 1102 (9th Cir. 2007).

7. *See* Perfect 10, Inc. v. Cybernet Ventures, Inc., 213 F. Supp. 2d 1146 (C.D. Cal. 2002).

8. *See* CCBill, 488 F.3d 1102; *See also* Visa, 494 F.3d at 793.

9. *See* Richard Gilbert & Michael Katz, *When Good Value Chains Go Bad: The Economics of Indirect Liability for Copyright Infringement*, 52 HASTINGS L.J. 961, 961 (2001).

10. *See id.* at 968-69.

Figure 1: Value Chain of a Stolen-Content Website

Perfect 10 sought to limit direct infringement by suing defendants at a number of stages in the value chain. First, in *Perfect 10 v. Talisman Communications Inc.*, Perfect 10 sued a stolen-content website for direct infringement.¹¹ Because the defendant, operator of supersex.com, failed to respond to Perfect 10's allegations that it had infringed six of its photographs, the court entered default judgment for \$312,810.¹²

Second, Perfect 10 sued Google for providing an image search engine, which copied and displayed smaller versions of images from stolen-content websites, and Amazon.com for providing access to Google Image Search.¹³ The Ninth Circuit held that "Google could be held contributorily liable if it had knowledge that infringing Perfect 10 images were available using its search engine, could take simple measures to prevent further damage to Perfect 10's copyrighted works, and failed to take such steps," and remanded for the district court to decide these questions.¹⁴ In defense, Google sought the protections of a DMCA safe harbor, an issue also to be considered on remand.¹⁵

Third, Perfect 10 sought to prevent two related companies, CWIE and CCBill, from providing web hosting and payment services to stolen-content websites.¹⁶ The same Ninth Circuit panel that decided *Visa* largely affirmed the lower court's holding that the defendants might qualify for a

11. *See Perfect 10, Inc. v. Talisman Commc'ns Inc.*, No. 99-10450, 2000 U.S. Dist. LEXIS 4564, *1 (C.D. Cal. Mar. 27, 2000).

12. *See id.* at *1, *4, *6.

13. *See Perfect 10, Inc. v. Amazon.com, Inc.*, 487 F.3d 701, 712 (9th Cir. 2007); *See also Meng Ding*, Note, *Perfect 10 v. Amazon.com: A Step Toward Copyright's Tort Law Roots*, 23 BERKELEY TECH. L.J. 373 (2008).

14. *Amazon.com*, 487 F.3d at 729.

15. *See Amazon.com*, 487 F.3d at 732.

16. *See Perfect 10, Inc. v. CCBill LLC*, 488 F.3d 1102, 1108 (9th Cir. 2007); *See also Brandon Brown*, Note, *Fortifying the Safe Harbors: Reevaluating the DMCA in a Web 2.0 World*, 23 BERKELEY TECH. L.J. 437 (2008).

DMCA safe harbor, and remanded to determine whether they satisfied all the requirements.¹⁷

Fourth, Perfect 10 sued Cybernet Ventures for the subscription support its Adult Check service provided to stolen-content websites.¹⁸ Adult Check served two main functions to pornographic websites: it allowed access to all the Adult Check sites for a single monthly fee (making it unnecessary for users to pay for individual subscriptions to each site), and it verified that users were of legal age.¹⁹ The district court issued a preliminary injunction, holding that there was a strong likelihood Cybernet would be found contributorily and vicariously liable.²⁰ While it was unclear to the court whether Cybernet was a service provider under the DMCA, the court determined that it did not meet certain requirements even if it did qualify.²¹

Finally, Perfect 10 sued Visa, MasterCard, Cardservice International, and Humboldt Bank for contributory and vicarious infringement for processing credit card payments to stolen-content websites.²² This case, *Perfect 10, Inc. v. Visa International Service Ass'n*, is the focus of this Note.

B. Indirect Copyright Liability

Almost all acts of copyright infringement involve tools, services, or venues provided by another party, or benefit someone other than the principal actor. Secondary, or indirect,²³ liability holds third parties to account for their relationship with the direct infringers. The driving economic rationale is to place the responsibility on the party who can stop infringement at the least cost.²⁴ Secondary liability is not unique to copyright law. The Supreme Court has noted that “vicarious liability is imposed in virtually all areas of the law, and the concept of contributory infringement is merely a species of the broader problem of identifying the circumstances

17. *See id.* at 1120.

18. *Perfect 10, Inc. v. Cybernet Ventures, Inc.*, 213 F. Supp. 2d 1146 (C.D. Cal. 2002).

19. *See id.* at 1157-58.

20. *See id.* at 1164.

21. *See id.*

22. *Perfect 10 v. Visa Int'l Serv. Ass'n*, 494 F.3d 788, 792 (9th Cir. 2007).

23. Secondary and indirect liability are largely synonymous, as courts have yet to hold fourth parties, those only related to secondary infringers, liable for tertiary liability. *See Benjamin Glatstein, Comment, Tertiary Copyright Liability*, 71 U. CHI. L. REV. 1605 (2004).

24. *See, e.g., WILLIAM LANDES & RICHARD POSNER, THE ECONOMIC STRUCTURE OF INTELLECTUAL PROPERTY LAW* 119 (2003).

in which it is just to hold one individual accountable for the actions of another.”²⁵

Indirect copyright liability is an outgrowth of tort law, adapted by courts to the concerns of copyright, particularly the challenges of enforcement.²⁶ Over the course of more than a century, secondary copyright liability evolved into two distinct species: contributory and vicarious.²⁷ As a general rule, elaborated in Sections II.B.1 and II.B.2, “benefit and control are the signposts of vicarious liability,” while “knowledge and participation [are] the touchstones of contributory infringement.”²⁸ Vicarious liability and contributory infringement are discrete doctrines with different elements, though courts often conflate the two.²⁹

1. Vicarious liability

The landmark case of vicarious liability under the Copyright Act of 1909, decided in the Second Circuit, formulated the test as follows:

When the right and ability to supervise coalesce with an obvious and direct financial interest in the exploitation of copyrighted material—even in the absence of actual knowledge that the copyright monopoly is being impaired—the purposes of copyright law may be best effectuated by the imposition of liability upon the beneficiary of that exploitation.³⁰

This three-part test for vicarious liability first requires an act of direct infringement.³¹ Second, the defendant must have the right to supervise or guard against the infringing conduct.³² Courts differ over whether an unexercised right suffices or whether the defendant must actually have exercised that right.³³ Third, the defendant must have a financial interest in the

25. *Sony Corp. of America v. Universal City Studios, Inc.*, 464 U.S. 417, 435 (1984).

26. See Peter S. Menell & David Nimmer, *Unwinding Sony*, 95 CAL. L. REV. 941, 994 (2007).

27. Some commentators have argued that the Supreme Court in *MGM v. Grokster*, 545 U.S. 913 (2005), created a new “inducement” theory of secondary liability, distinct from vicarious and contributory liability. See, e.g., WILLIAM PATRY, PATRY ON COPYRIGHT § 21:41 (2007). Others argue that inducement had long been a branch of contributory liability. See, e.g., Menell & Nimmer, *supra* note 26, at 1002.

28. *Demetriades v. Kaufmann*, 690 F. Supp. 289, 293 (S.D.N.Y. 1988).

29. See PATRY, *supra* note 27, § 21:41.

30. *Shapiro, Bernstein & Co. v. H.L. Green Co.*, 316 F.2d 304, 307 (2d Cir. 1963) (internal citations omitted).

31. See PATRY, *supra* note 27, § 21:66.

32. See *id.*

33. See *id.* § 21:67.

infringement, though courts differ on the degree of directness between the infringing act and the monetary benefit.³⁴

Vicarious liability grew out of the tort doctrine of *respondet superior*, which holds the principal liable for the wrongful acts of the agent.³⁵ Two lines of vicarious liability decisions developed under the 1909 Act: the dance-hall line and the landlord-tenant line.³⁶ In *Herbert v. Shanley Co.*, the Supreme Court held a restaurant operator vicariously liable for hiring musicians who played infringing music for customers.³⁷ Courts applied this decision to a variety of establishments that profited from infringing performances, including movie theaters,³⁸ horseracing tracks,³⁹ and dance halls.⁴⁰

These dance-hall cases are distinguishable from landlord-tenant situations. In general, a landlord is not responsible for the illegal activities of tenants, as he does not have an inherent right to supervise or any direct financial benefit beyond rent.⁴¹ Nevertheless, a line of cases developed where landlords were held vicariously liable as they were deemed to exercise sufficient control and had a direct financial interest in the infringement. In *Shapiro, Bernstein & Co. v. H.L. Green Co.*, the court held a storeowner vicariously liable for providing space to a concessionaire and sharing in their sales of bootleg records.⁴² Thus, a landlord could not escape indirect copyright liability by ignoring infringing activity, but was required to supervise the activities of lessees.

2. Contributory liability

The most common formulation of the contributory liability rule is: "one who, with knowledge of the infringing activity, induces, causes or materially contributes to the infringing conduct of another, may be held

34. *See id.* § 21:68.

35. *See id.* § 21:63.

36. *See id.*

37. *Herbert v. Shanley Co.*, 242 U.S. 591 (1917).

38. *M. Witmark & Sons v. Pastime Amusement Co.*, 298 F. 470 (E.D.S.C. 1924), *aff'd*, 2 F.2d 1020 (4th Cir. 1924); *Harms v. Cohen*, 279 F. 276 (E.D. Pa. 1922).

39. *Famous Music Corp. v. Bay State Harness Horse Racing & Breeding Ass'n*, 554 F.2d 1213 (1st Cir. 1977); *Broad. Music, Inc. v. Rockingham Venture, Inc.*, 909 F. Supp. 38 (D.N.H. 1995).

40. *See, e.g.*, *Irving Berlin, Inc., v. Daigle*, 26 F.2d 149 (E.D. La. 1928), *rev'd* 31 F.2d 832 (5th Cir. 1929); *Dreamland Ball Room v. Shapiro, Bernstein & Co.*, 36 F.2d 354 (7th Cir. 1929); *Buck v. Russo*, 25 F. Supp. 317 (D. Mass. 1938).

41. *See, e.g.*, *Deutsch v. Arnold*, 98 F.2d 686, 688 (2d Cir. 1938) (holding landlord and leasing agent not liable for leasing a booth on Coney Island to an operator who infringed copyright).

42. 316 F.2d 304, 308 (2d Cir. 1963).

liable as a ‘contributory infringer.’⁴³ There are three requirements for contributory infringement. First, as with vicarious liability, there must be an act of direct infringement.⁴⁴ Second, the defendant must know of the direct infringement, though courts differ over whether actual or constructive knowledge suffices.⁴⁵

The third, and most nuanced, prong examines the relationship between the defendant’s conduct and the direct infringement. While courts have formulated various tests, the most common version is that a defendant is liable if he “induces, causes or materially contributes to the infringing conduct.”⁴⁶ Other courts hold defendants liable merely for providing the means for infringement.⁴⁷ Some courts, as well as a leading treatise,⁴⁸ divide this prong in two: 1) personal conduct that assists the infringement, and 2) provision of the means to facilitate the infringement.⁴⁹

The doctrine of contributory liability was first applied in *Harper v. Shoppell*, where the defendant, not owning the copyright, sold a plate of an image to a publisher who used it to reproduce the image in its newspapers.⁵⁰ The court held the defendant liable for providing the plate, concluding that “knowing at the time . . . that it would be used by the purchaser for printing . . . [the defendant] is to be regarded as having sanctioned the appropriation of the plaintiffs’ copyrighted matter, and occupies the position of a party acting in concert with the purchaser who printed and published it, and is responsible with him as a joint tort-feasor.”⁵¹ Thus, the provider of a device used to infringe a copyright can be held contributorily liable.

43. *Gershwin Publ’g Corp. v. Columbia Artists Mgmt., Inc.*, 443 F.2d 1159, 1162 (2d Cir. 1971) (internal citations omitted). Although most well known for this formulation of contributory liability, *Gershwin* was in fact a case of vicarious liability. *Id.* at 1163.

44. *See, e.g., DSC Commc’n, Inc. v. Pulse Commc’n, Inc.*, 170 F.3d 1354, 1359 (Fed. Cir. 1999) (dismissing contributory infringement claim after direct infringement claim dismissed).

45. *See* PATRY, *supra* note 27, § 21:47

46. *Gershwin*, 443 F.2d at 1162.

47. *See, e.g., Fonovisa, Inc. v. Cherry Auction, Inc.*, 76 F.3d 259, 264 (9th Cir. 1996); *Design Craft Fabric Corp. v. K-Mart Corp.*, 1999 WL 1256258 (N.D. Ill. Dec. 21, 1999).

48. 3 MELVILLE NIMMER & DAVID NIMMER, NIMMER ON COPYRIGHT § 12.04[A][3] (2007).

49. *See, e.g., Matthew Bender & Co. v. West Pub. Co.*, 158 F.3d 693, 706 (2d Cir. 1998), *cert. denied*, 526 U.S. 1154 (1999); *see also* *Cherry Auction*, 76 F.3d at 264.

50. 28 F. 613 (C.C.S.D.N.Y. 1886).

51. *Id.* at 615 (internal citations omitted).

Harper v. Shoppell was followed by *Kalem Co. v. Harper Bros.*, the most famous of the early contributory infringement cases.⁵² The defendant produced a film based on the plaintiff's novel "Ben Hur."⁵³ Because copyright law at the time protected only the right to dramatize, the plaintiffs could only sue those who publicly performed the work. The defendant did not perform the work himself, but instead sold it to distributors, who then performed it in their theatres.⁵⁴ In ruling for the copyright owner, Justice Holmes declared "[i]f the defendant did not contribute to the infringement, it is impossible to do so except by taking part in the final act. It is liable on principles recognized in every part of the law."⁵⁵ While it held liable the provider of material that helped others to infringe, the Court foreshadowed the potential dangers and limitations of this doctrine: "[i]n some cases where an ordinary article of commerce is sold, *nice questions* may arise as to the point at which the seller becomes an accomplice in a subsequent illegal use by the buyer."⁵⁶ These "nice questions," whether the provider of equipment or services having legitimate purposes is contributorily liable when others use them to infringe, are a central issue of copyright enforcement in the digital age.

3. *Indirect liability in the digital age*

As content shifts from traditional to digital formats, indirect liability has become increasingly important. In the digital age, end-users have the tools to make and distribute perfect digital copies at essentially zero marginal cost, radically altering the dynamics of copyright enforcement. At the same time, these technologies have a range of non-infringing uses. The Supreme Court confronted this revolution in *Sony v. Universal Studios*, where the movie industry alleged that Sony's Betamax recording equipment contributed to infringement when consumers taped television broadcasts of copyrighted works.⁵⁷ The Court held that providing equipment that is used to infringe is not contributory infringement so long as the equipment has substantial non-infringing uses.⁵⁸ This rule provides an important safe harbor for a wide range of technologies that have both infringing and non-infringing uses, such as video cameras, MP3 players, and photocopying machines.

52. *Kalem Co. v. Harper Bros.*, 222 U.S. 55 (1911).

53. *Id.* at 60.

54. *Id.*

55. *Id.* at 62-63.

56. *Id.* at 62 (emphasis supplied) (internal citations omitted).

57. *Sony Corp. of Am. v. Universal City Studios, Inc.*, 464 U.S. 417, 417 (1984).

58. *Id.* at 442.

After *Sony*, the Ninth Circuit considered a case brought by a music-recording owner against an operator of a swap meet where infringing works were sold.⁵⁹ In *Fonovisa v. Cherry Auction*, the Ninth Circuit held that the operator's provision of the "site and facilities" of the infringement—including physical space, utilities, parking, advertising, plumbing, and customers—was sufficient to establish contributory liability.⁶⁰ The swap meet operator was also held vicariously liable because it had a direct financial interest in the infringement and "the right to terminate vendors for any reason whatsoever and through that right had the ability to control the activities of vendors on the premises."⁶¹ This holding represents a significant weakening of the standard for direct financial interest, as the defendant did not receive a percentage of the infringer's revenue, but "reap[ed] substantial financial benefits from admission fees, concession stand sales and parking fees, all of which flow[ed] directly from customers who want to buy the counterfeit recordings."⁶² This "draw theory" is a far more liberal approach to the direct financial benefit requirement, making it easier for plaintiffs to prove vicarious liability.

The Ninth Circuit then considered the first indirect liability case against a peer-to-peer file sharing service, in which it held Napster contributorily and vicariously liable for the massive infringement that took place over its network.⁶³ The Napster system consisted of a software "client" program that users installed on their computers to upload and download files directly to and from other users.⁶⁴ Napster's servers did not store any files itself, but maintained an index of the files on users' computers. When a user searched for a file, Napster consulted its index to determine the users offering to upload the file, and connected the users to each other.⁶⁵ After the district court granted a preliminary injunction, Napster argued on appeal that it could not pre-screen the works transmitted across its system and that it did not actually know of specific acts of infringement.⁶⁶ The Ninth Circuit rejected these arguments, and affirmed the lower court's conclusions that Napster had actual and constructive knowledge and provided the "site and facilities" of infringement.⁶⁷ The court noted that "[w]ithout the support services defendant provides, Napster us-

59. *Fonovisa, Inc. v. Cherry Auction, Inc.*, 76 F.3d 259, 261 (9th Cir. 1996).

60. *See id.* at 264.

61. *Id.* at 262.

62. *Id.* at 263.

63. *See A&M Records, Inc. v. Napster, Inc.*, 239 F.3d 1004 (9th Cir. 2001).

64. *See id.* at 1011-12.

65. *See id.*

66. *See id.* at 1020.

67. *Id.* at 1022.

ers could not find and download the music they want with the ease of which defendant boasts.”⁶⁸ Even though Napster had substantial non-infringing uses, the *Sony* safe harbor did not apply because Napster had actual, specific knowledge of direct infringement, whereas Sony only had constructive knowledge.⁶⁹ The Ninth Circuit also affirmed the district court’s finding of vicarious liability.⁷⁰ The court ruled that Napster’s revenue depended on increases in users drawn to the infringing material, and that it could have blocked infringers’ access to the network.⁷¹

In *MGM Studios, Inc. v. Grokster, Ltd.*, the Supreme Court confronted the next generation of peer-to-peer technologies designed to be different enough from Napster to escape liability.⁷² Whereas Napster maintained a list of users’ files, without which the system could not operate,⁷³ Grokster did not use a centralized list. Instead, Grokster maintained a directory through a distributed system by sending search requests to other users, rather than storing all the information on Grokster own servers. Therefore, if Grokster were shut down, the system and infringement could continue. Grokster hoped that since it could not stop the infringement itself, it could convince the courts that it did not have the right and ability to supervise, nor materially contributed to the infringing downloads.⁷⁴ Nevertheless, the Supreme Court found Grokster liable, holding that one who distributes “a device with the object of promoting its use to infringe copyright, as shown by clear expression or other affirmative steps taken to foster infringement, going beyond mere distribution with knowledge of third-party action, is liable . . . regardless of the device’s lawful uses.”⁷⁵ This inducement theory creates an exception to the *Sony* safe harbor, as it holds a distributor of a staple article of commerce liable if it is promoted as a device that helps to infringe.⁷⁶

These decisions provide the backdrop to the recent Perfect 10 cases. In *Amazon.com*, the Ninth Circuit held Google and Amazon.com could be held contributorily liable for assisting the reproduction, display, and distribution of Perfect 10’s images by third-party websites.⁷⁷ Google Image Search allows the user to search for keywords associated with an image,

68. *Id.*

69. *See id.* at 1020.

70. *Id.* at 1024.

71. *Id.* at 1023-24.

72. 545 U.S. 913 (2005).

73. *Napster*, 239 F.3d at 1011.

74. *Id.* at 928.

75. *Id.* at 914.

76. *See Grokster*, 545 U.S. at 915.

77. *Perfect 10 v. Amazon.com*, 487 F.3d 701 (9th Cir. 2007).

returning a page of miniaturized “thumbnail” images, which the user can click to link to the originating website.⁷⁸ The court relied in part on *Napster*, where they had found contributory liability for facilitating access to infringing material.⁷⁹ The Ninth Circuit remanded to the lower court with the instruction that “Google could be held contributorily liable if it had knowledge that infringing Perfect 10 images were available using its search engine, could take simple measures to prevent further damage . . . and failed to take such steps.”⁸⁰

C. DMCA Safe Harbors

The DMCA safe harbors protect online service providers from secondary liability, and were raised as a defense in several of the Perfect 10 suits. At common law, online service providers, such as webhosts, search engines, and internet service providers, incur the risk of direct and indirect liability for infringement by their users.⁸¹ In response to this legal uncertainty, the internet industry successfully lobbied Congress for clarification,⁸² resulting in the Online Copyright Infringement Liability Limitation Act (OCILLA) of 1998.⁸³ Codified as § 512 of the DMCA, the OCILLA protects qualifying service providers from monetary and most forms of injunctive relief, while leaving the law of secondary liability unchanged. It has been described as a shield, not a sword, as it permits a defendant to avoid damages rather than allowing a plaintiff to establish liability for failure to qualify for a safe harbor.⁸⁴

For the purposes of this Note, a general overview of the safe harbors suffices to understand the law and policy behind indirect copyright liability.⁸⁵ The four DMCA safe harbors protect different types of activities, each with varying requirements and effects. The first safe harbor, § 512(a), applies to services that automatically, transiently, and transparently store and forward digital online communication.⁸⁶ A qualifying service provider that implements a policy to terminate repeat infringers and does not inter-

78. *Id.* at 711.

79. *See id.* at 728.

80. *Id.* at 729.

81. See JAY DRATLER, CYBERLAW: INTELLECTUAL PROPERTY IN THE DIGITAL MILLENNIUM §§ 5A.02 & A.03 (2006).

82. *See id.* § 6.01[2].

83. 17 U.S.C. § 512 (2000).

84. DRATLER, *supra* note 81, § 5A.01.

85. For a more complete explanation *see id.*; *see also* Diane Barker, Note, *Defining The Contours of the Digital Millennium Copyright Act*, 20 BERKELEY TECH. L.J. 47 (2005).

86. 17 U.S.C. § 512(a) (2000); *see* Dratler, *supra* note 81, § 6.03.

fere with standard technical measures will only be forced to terminate a subscriber's account or block access to an infringing site.⁸⁷

The three remaining safe harbors—for caching, posting, and linking—are similar in important respects.⁸⁸ In addition to the repeat-infringer policy and standard technical measures of the § 512(a) harbor,⁸⁹ the service provider must implement a notice and takedown system. If a copyright owner notifies the service provider of infringing material on their site, they must remove it and notify the alleged infringer.⁹⁰ The alleged infringer can then send back a counter notice, which the service provider forwards to the copyright owner, who then has fourteen days to bring an infringement suit or else the work is re-posted.⁹¹ These safe harbors limit the relief to orders blocking access to particular material, requiring termination of a subscriber's access, or other forms of “least burdensome” relief in the discretion of the court.⁹²

In the Perfect 10 suits, several defendants raised safe harbor defenses. Figure 2 summarizes the findings regarding safe harbors in these cases, introduced in Section II.A.

87. 17 U.S.C. § 512(a) (2000).

88. 17 U.S.C. §§ 512(b)-(d) (2000).

89. 17 U.S.C. § 512(i) (2000).

90. 17 U.S.C. § 512(g) (2000).

91. 17 U.S.C. § 512(g) (2000).

92. 17 U.S.C. § 512(j) (2000).

Figure 2: DMCA Safe Harbors in Perfect 10 Suits

Activity	Actor	Qualified “Service Provider”	Safe Harbor
Stolen-Content Website	Talisman Comm’ns	No	Not a service provider, ineligible for safe harbors.
Credit Card Services	CCBill	Yes	Might qualify as service provider under 512(a), remanded for further findings. ⁹³
Credit Card Services	Visa	No	Not a service provider, ineligible for safe harbors. ⁹⁴
Age Verification	Cybernet	Perhaps	“Close question” whether it would qualify as a service provider under 512(c) or (d). But even if it did, the other requirements were not met. ⁹⁵
Webhosting	CWIE (co-defendant of CCBill)	Yes	Might qualify as service provider under 512(c), remanded for further findings. ⁹⁶
Image Search	Google (co-defendant in Amazon.com)	Yes	Might qualify as service provider under 512(d), remanded for further findings. ⁹⁷

The availability of these safe harbors affects the analysis, undertaken in Part IV, of whether enforcing copyright against credit card companies is appropriate.

III. *PERFECT 10 v. VISA*: REPORT OF CASE

In a 2-1 decision, the Ninth Circuit affirmed the district court’s dismissal of Perfect 10’s suit against the credit card companies for failure to state a claim, ruling that the relationship between infringement and processing credit card transactions was too tenuous to impose secondary liability. In a forceful dissent, Judge Alex Kozinski argued for finding contributory and vicarious liability, and accused the majority of “straining to ab-

93. See *Perfect 10, Inc. v. CCBill LLC*, 488 F.3d 1102, 1115-16 (9th Cir. 2007).

94. *Perfect 10 v. Visa Int’l Serv. Ass’n*, 494 F.3d 788, 795 n.4 (9th Cir. 2007).

95. See *Perfect 10, Inc. v. Cybernet Ventures, Inc.*, 213 F. Supp. 2d 1146, 1175 (C.D. Cal. 2002)

96. See *CCBill*, 488 F.3d at 1117.

97. See *Perfect 10 v. Amazon.com*, 487 F.3d 701, 732 (9th Cir. 2007).

solve defendants of liability, [thereby leaving] our law in disarray.”⁹⁸ This Part discusses the facts of *Visa* and the proceedings at the district court (Section III.A), the majority’s opinion (Section III.B), and Judge Kozinski’s dissent (Section III.C).

A. Facts and Procedural History

In January 2004, Perfect 10 sued Visa, MasterCard, Cardservice International, and Humboldt Bank for their roles in processing credit and debit card payments for websites selling infringing photographs.⁹⁹ Perfect 10 sent the defendants notices identifying infringing websites and informing them that consumers were using credit cards to purchase infringing images, for which the defendants earned a commission fee.¹⁰⁰ The defendants did not respond to these notices. In order to join the Visa and MasterCard networks, member banks must agree to terminate merchants who engage in illegal activity, presumably including copyright infringement.¹⁰¹ Perfect 10 sued for indirect copyright and trademark infringement, as well as violations of the right of publicity, unfair competition, and false advertising under state law.¹⁰² The district court dismissed the case with prejudice for failure to state a claim for which relief could be granted.¹⁰³ Reviewing *de novo*, the Ninth Circuit denied Perfect 10’s appeal, its petitions for rehearing, and rehearing *en banc*.

B. The Majority Opinion

Judge Milan Smith, joined by Judge Stephen Reinhardt, held the defendants were not contributorily or vicariously liable.

1. Contributory copyright infringement

The majority’s formulation of the basic test for contributory infringement finds the defendant liable “when he (1) has knowledge of another’s infringement and (2) either (a) materially contributes to or (b) induces that infringement.”¹⁰⁴ Since the court found the facts insufficient to establish material contribution or inducement, it did not decide the knowledge requirement.¹⁰⁵ As the stolen-content websites were distributing exact copies of the original works and Perfect 10 had sent them notices, Perfect 10

98. *Visa*, 494 F.3d at 811 (Kozinski, J., dissenting).

99. *Id.* at 793.

100. *Id.*

101. *Id.* at 804.

102. *Id.* at 793.

103. *Perfect 10, Inc. v. Visa Int’l Serv. Ass’n*, 73 U.S.P.Q. 2D 1736, *2 (N.D. Cal. 2004).

104. *Perfect 10, Inc. v. Visa Int’l Serv. Ass’n*, 494 F.3d 788, 795 (9th Cir. 2007).

105. *Id.*

likely could have established that the websites knew of the infringement. As for material contribution, the court formulated two categorical requirements: the conduct must have a “direct connection” to the infringement and it must be a “but-for cause” of the infringement.¹⁰⁶ According to the court, credit card services fell outside these lines.

First, the court distinguished credit card processing from cases where the defendant was directly connected to the infringement. Prior courts had found that providing the site and facilities of infringement,¹⁰⁷ passing infringing material through a network,¹⁰⁸ and offering tools to locate infringing material¹⁰⁹ were all sufficiently directly tied to the actual infringement. Conversely, processing credit card payments fell short of material contribution because it did not aid duplicating or distributing the infringing works. The court stressed that the defendants did not “create, operate, advertise, or otherwise promote” the stolen-content websites, they “merely provide[d] a method of payment, not a ‘site’ or ‘facility’ of infringement.”¹¹⁰ To hold otherwise would also impose liability on “a number of peripherally-involved third parties, such as computer display companies, storage device companies . . . and even utility companies that provide electricity to the Internet.”¹¹¹ The court noted that processing credit cards makes infringement more profitable, which tends to increase the incentive to infringe, which tends to increase infringement.¹¹² Whereas providing the site, network, or location services directly increases infringement.¹¹³ The court held that this “additional step in the causal chain” insulated the credit card companies from liability.¹¹⁴

Second, in addition to an insufficient nexus to the direct infringement, the court decided that processing credit card transactions was not a material contribution because it was not a “but-for cause” of the direct infringement.¹¹⁵ Under this test, the defendant is not liable if there are substitutes for the accused conduct: “[i]f users couldn’t pay for images with credit cards, infringement could continue on a large scale because other

106. *See id.* at 796.

107. *Fonovisa, Inc. v. Cherry Auction, Inc.*, 76 F.3d 259 (9th Cir. 1996).

108. *A&M Records, Inc. v. Napster, Inc.*, 239 F.3d 1004 (9th Cir. 2001).

109. *Perfect 10, Inc. v. Amazon.com*, 487 F.3d 701 (9th Cir. 2007); *MGM Studios, Inc. v. Grokster, Ltd.*, 545 U.S. 913 (2005); *Napster*, 239 F.3d 1004.

110. *Visa*, 494 F.3d at 799-800.

111. *Id.* at 800.

112. *See id.* at 797.

113. *See id.*

114. *Id.*

115. *Id.*

viable funding mechanisms are available.”¹¹⁶ The court noted that websites could switch to revenue from advertising or develop their own payment mechanism if credit cards were unavailable.¹¹⁷

Finally, the court rejected Perfect 10’s inducement theory, as they had failed to allege any of the specific acts intended to encourage or induce infringement required by *Grokster*.¹¹⁸

2. *Vicarious copyright infringement*

The court held that Perfect 10 failed to state a claim for vicarious copyright infringement because the credit card companies did not have the right and ability to supervise the infringing conduct.¹¹⁹ The court therefore did not decide whether the defendants had a direct financial interest in the infringement.¹²⁰ This would likely have been straightforward to establish as the credit card companies retained a percentage of each infringing transaction.¹²¹ The court required a showing of a *direct* right and ability to stop infringement. Perfect 10 alleged that in order to join the payment networks, merchants and member banks had to agree to rules requiring the termination of merchants engaged in certain illegal activity.¹²² The court acknowledged that insofar as some stolen-content websites might stop infringing if credit card companies threatened to terminate them, the defendants had some measure of control.¹²³ But the court noted, “the mere ability to withdraw a financial ‘carrot’ does not create the ‘stick’ of ‘right and ability to control’ that vicarious infringement requires.”¹²⁴ Indirect economic or financial pressure, rather than an affirmative exercise of contractual rights to stop the infringement, is insufficient to find vicarious liability.¹²⁵

C. Judge Kozinski’s Dissent

Judge Kozinski rejected the majority’s categorical tests as “neither required nor permitted” by case law, and would have held the defendants liable based on their service’s importance to the stolen-content websites.¹²⁶

116. *Id.*

117. *Id.*

118. *Id.* at 800-02.

119. *Id.* at 805.

120. *Id.* at 806

121. *See id.*

122. *Id.* at 802.

123. *Id.* at 804.

124. *Id.* at 803.

125. *Id.* at 805.

126. *Id.* at 825 (Kozinski, J., dissenting).

1. *Contributory copyright liability*

Judge Kozinski argued that the majority's conclusion that payment services are a step removed from the actual infringement was irrelevant.¹²⁷ He reasoned that, "[m]ateriality turns on how significantly the activity helps infringement, not on whether it's characterized as one step or two steps removed from it."¹²⁸ He dismissed as a "pedantic factual distinction" the majority's requirements that material contribution have a physical or tangible nexus to the infringement, such as providing the site, facilities, location tools, or distribution network.¹²⁹

According to Judge Kozinski, the majority erred twice by holding that helping an infringer get paid cannot constitute material contribution since the actual process of infringement—"reproduction, alteration, display, and distribution"¹³⁰—does not include payment.¹³¹ First, payment is a part of the infringing process because the stolen-content websites are alleged to infringe the right of distribution "by sale," and it is not possible to distribute by sale without receiving compensation.¹³² Second, Google was held to have materially assisted even though locating infringing images was not part of the "reproduction, alteration, display [or] distribution."¹³³

Furthermore, precedent did not support the majority's test of whether there were substitutes available, according to Judge Kozinski.¹³⁴ If the test really were whether there were "other viable . . . mechanisms . . . available," then Google should not have been held liable because, as the majority admitted, users could have found the infringing material through other search engines.¹³⁵ "Infringement can always be carried out by other means; if the existence of alternatives were a defense to contributory infringement then there could never be a case of contributory infringement based on material assistance."¹³⁶ Whether there were alternatives to credit cards for purchasing infringing material does not determine liability in Judge Kozinski's view.

Instead of these categorical rules, Judge Kozinski argued that materiality should turn on how significantly the conduct contributes to the direct

127. *Id.* at 812 (Kozinski, J., dissenting).

128. *Id.*

129. *Id.* at 815 (Kozinski, J., dissenting).

130. *Id.* at 796.

131. *Id.* at 814 (Kozinski, J., dissenting).

132. *Id.*

133. *Id.* at 796.

134. *Id.* at 814 (Kozinski, J., dissenting).

135. *Id.* at 813.

136. *Id.* at 814.

infringement; and credit cards are equally, if not more, important than the activities prior courts had found to be material.¹³⁷ In his view, payment processing is just as central to infringement as Google Image Search, since “[i]f infringing images can’t be found, there can be no infringement; but if infringing images can’t be paid for, there can be no infringement either.”¹³⁸ Payment services are even more material than the swap meet facilities in *Fonovisa* since “[a] pirate kicked out of a swap meet could still peddle his illicit wares through newspaper ads or by word of mouth, but you can’t do business at all on the Internet without credit cards.”¹³⁹ In summary, Judge Kozinski views credit cards not as a tangential service marginally affecting sales, but as the “financial lifeblood of the Stolen Content Websites.”¹⁴⁰

2. *Vicarious copyright liability*

Judge Kozinski would also have held the defendants vicariously liable because the terms of the service contracts gave them the right and ability to supervise the stolen-content websites.¹⁴¹ In his view, it does not matter that there are alternatives, the issue is whether the defendant has the ability to stop or limit the infringement.¹⁴² It also should not make any difference whether the credit card companies control only the means of payment and not the mechanism of distribution, because if payments are not processed then the material is not delivered.¹⁴³ Furthermore, Judge Kozinski rejected the majority’s distinction between financial pressure and actual direct control, arguing that it should only matter whether the defendant has the practical ability to stop or limit the infringement, regardless of the methods at its disposal.¹⁴⁴ Since at least some stolen-content websites would have responded to the threat of losing payment services by taking down infringing material, the defendants could at least limit infringement.¹⁴⁵

IV. ANALYZING THE VALUE CHAIN OF INFRINGEMENT

While Judge Kozinski revealed a number of doctrinal inconsistencies in the majority’s decision, ultimately, materiality and ability and right to

137. *Id.*

138. *Id.* at 812 (Kozinski, J., dissenting).

139. *Id.* at 814-815.

140. *Id.* at 815.

141. *Id.* at 816.

142. *See id.*

143. *Id.* at 818.

144. *Id.*

145. *Id.*

control should not be determined by strict comparisons between precedent and the challenged conduct, but by policy.¹⁴⁶ Section IV.A reviews the objectives of secondary liability. Section IV.B introduces an economic analysis proposed by Professors Richard Gilbert and Michael Katz to assess at what stages in the value chain copyright should be enforced. Section IV.C applies this framework to show that when enforcement against direct infringers is not practical, it is optimal to hold the credit card companies liable to some degree. Section IV.D describes the ongoing efforts of credit card companies to prevent their services from being used for illegal purposes. Section IV.E addresses the potential burdens of liability by proposing a safe harbor requiring credit card companies to implement a notice and termination policy.

A. Objectives of Secondary Liability

One of the main purposes of secondary liability is to stop infringement at the least cost to society.¹⁴⁷ Judge Posner and Professor Landes describe the rationale as “similar to the economic rationale of the tort of inducing a breach of contract. If a breach of contract (or violation of a copyright license, which is a contract) can be prevented by either A (a party to the contract or license) or B, and the cost of prevention is lower for B, it makes sense to have a legal mechanism for placing the ultimate liability on B.”¹⁴⁸ These “costs of prevention” can be classified into general categories.¹⁴⁹ First, there are enforcement costs associated with policing, litigating, and transacting a copyright. Second, enforcement leads to static efficiency losses when it hampers the creation, distribution, and use of non-infringing works. Third, enforcement reduces dynamic efficiency when it impedes the development of technologies with non-infringing uses. An optimal secondary liability rule minimizes these three type of costs.¹⁵⁰

B. Gilbert and Katz’s Indirect Liability Framework

Professors Gilbert and Katz propose a framework for determining the optimal stage of enforcement. As economists, they focus primarily on maximizing total welfare, rather than on distributive fairness considerations. The optimal stage is determined by balancing seven factors: 1) the ease with which enforcement authorities (both government and private

146. See Mitchell Zimmerman, *Third Strike for Perfect 10?*, 12 CYBERSPACE LAWYER 9, 10 (Sept. 2007).

147. LANDES & POSNER, *supra* note 24, at 119.

148. *Id.*

149. See Gilbert & Katz, *supra* note 9, at 963.

150. See *id.* at 964-65.

rights holders) can observe and police activities at various stages in the infringing value chain; 2) the existence of substitutes in the infringing value chain; 3) the total economic value of the affected non-infringing value chains; 4) the existence of substitutes in the affected non-infringing value chains; 5) the ease with which a party at a given stage can distinguish between infringing and non-infringing uses of its services; 6) the economic environment for bargaining between the rights-holders and parties at a given stage; and 7) the availability of other enforcement tools.¹⁵¹ While it is helpful to think of *the* best stage, the optimal policy may in fact attack *several* stages simultaneously.¹⁵²

C. Application of Gilbert and Katz's Framework to Credit Card Services

This section applies these seven factors to the circumstances faced by Perfect 10, concluding that careful enforcement at the stage of credit card companies is necessary to combat foreign-stolen-content websites.

1. *Ease with which enforcement authorities can observe and police activities at various stages in the infringing value chain*

This factor assesses the administrative costs of detecting and suing infringers. In Perfect 10's pornography business, enforcement at stages other than payment services is either too costly or unlikely to significantly affect foreign piracy. Detection costs increase with the number of parties engaged in an activity and decrease with the level of openness in which they operate. For example, finding a multitude of downloaders operating in the privacy of their homes costs far more than identifying the single public website from which they all download. Enforcement costs depend in large part on the ability of a plaintiff to serve process on an alleged infringer in U.S. courts or bring an action in a foreign jurisdiction.

Even if Perfect 10 had won its other indirect infringement suits, there would have been little effect on foreign-stolen-content websites. Often the most effective strategy is to stop the direct infringers, as Perfect 10 successfully did in *Talisman Communications*.¹⁵³ However, it is highly impractical, if not impossible, to enforce an effective remedy against stolen-content websites that are based entirely abroad. As the *Visa* case was an appeal from a dismissal for failure to state a claim, the court took as true Perfect 10's allegation that the stolen-content websites "maintain[ed] no

151. *See id.* at 964-65.

152. *Id.* at 969.

153. *See* Perfect 10, Inc. v. Talisman Commc'ns Inc., No. 99-10450, 2000 U.S. Dist. LEXIS 4564, *1 (C.D. Cal. Mar. 27, 2000)

physical presence in the United States in order to evade criminal and civil liability for their illegal conduct.”¹⁵⁴ International law principles of personal jurisdiction would allow Perfect 10 to sue a foreign website, but unless the damages are substantial, the defendant is unlikely to appear and the case will result in a default judgment.¹⁵⁵ The real problem then is turning this judgment into meaningful economic relief.¹⁵⁶ Typically, a defendant’s domain name is the only asset that can be reached by U.S. courts, but they can easily register a new name and continue the illegal activity.¹⁵⁷

In order for Perfect 10 to enforce its copyrights against foreign infringers, secondary liability must attach at some secondary stage of the infringing value chain. Enforcement at stages other than credit cards, however, would not likely curb foreign piracy. Targeting webhosts, such as CCBill,¹⁵⁸ is effective only if the host is located in the United States. Perfect 10 could eliminate the infringement either by sending a DMCA takedown notice or by suing for indirect infringement. Similarly, blocking age-verification services, like Cybernet’s Adult Check,¹⁵⁹ is only effective if the stolen-content website is based in the United States. Age-verification services limit a site’s liability under U.S. child obscenity laws, a largely irrelevant consideration for foreign pirate sites. Furthermore, Adult Check is not a crucial component for websites, as they could do without it by verifying users’ ages themselves. Cybernet’s other service, a bundled subscription to multiple websites, is similarly not indispensable. Finally, removing infringing material from Google Image Search will not significantly reduce foreign piracy, as the search engine is but one path for finding stolen-content websites (see Figure 4). This analysis suggests that none of Perfect 10’s other suits would satisfactorily control foreign piracy. This weighs in favor of enforcement against credit card companies, though the costs of enforcement must also be considered.

Copyright owners can observe and police the activities of credit card companies at relatively low administrative cost. They can readily ascertain

154. *Perfect 10 v. Visa Int’l Serv. Ass’n*, 494 F.3d 788, 810 (9th Cir. 2007) (Kozinski, J., dissenting) (quoting *First Am. Compl.* at 8 ¶ 26).

155. See Henry Perritt, Jr., *Will the Judgment-Proof Own Cyberspace?*, 32 INT’L LAW. 1121, 1123 (1998).

156. *Id.* at 1123.

157. For example, a Russian pirate music site, *AllofMP3.com*, was shut down, only to reopen a few weeks later under the name *MP3sparks.com*. Nate Mook, *AllofMP3 Shuts Down, Resurfaces as ‘MP3Sparks’*, BETANEWS, Jul. 3, 2007, http://www.betanews.com/article/AllofMP3_Shuts_Down_Resurfaces_as_MP3Sparks/1183495726.

158. See *Perfect 10, Inc. v. CCBill LLC*, 488 F.3d 1102, 1108 (9th Cir. 2007).

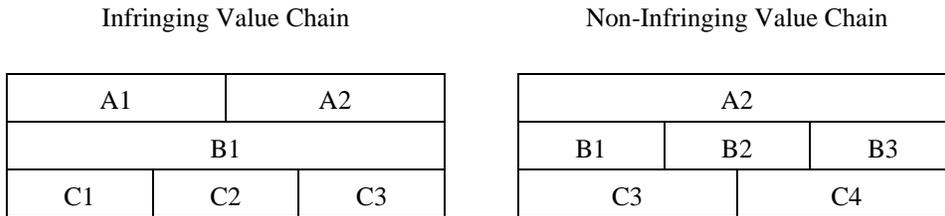
159. See *Perfect 10, Inc. v. Cybernet Ventures, Inc.*, 213 F. Supp. 2d 1146, 1157 (C.D. Cal. 2002).

whether a stolen-content website accepts credit card transactions simply by visiting the site. Unlike the multitude of foreign fly-by-night pirate sites, there are only a handful of credit card networks, which can all be easily served with process and have judgments enforced against them.

2. *Existence of substitutes in the infringing value chain*

This factor considers the benefits of enforcement at a particular stage of the value chain, specifically to what degree it would stop or limit infringement. If there are many alternative technologies at a stage, there is little value in enforcing copyright against only one of them, as infringement would continue unimpeded.¹⁶⁰ Figure 3 illustrates this situation: A, B, and C denote stages in the value chain (e.g. technology enablement, distribution), while the subscripts refer to alternative technologies (e.g. search engines, messaging boards, e-mail).¹⁶¹

Figure 3: Stylized Value Chains



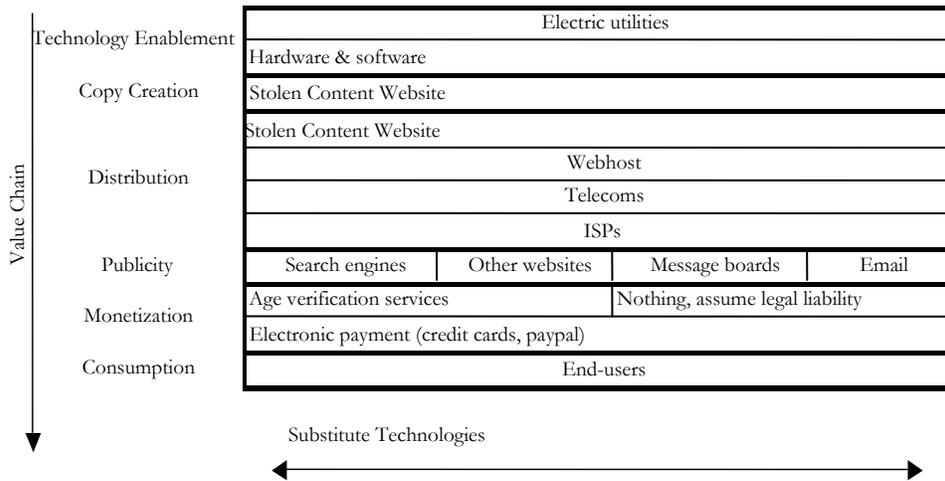
If enforcement takes place at stage A, infringement can continue unless both technologies A₁ and A₂ are blocked. Conversely, stopping B₁ would stop the infringement because there are no substitute technologies. The next three factors address the effects of blocking an activity on non-infringing value chains.

Figure 4 applies the stylized charts of Figure 3 to the value chain of stolen-content websites. Significantly, in the value chain of the stolen-content website, there are no effective substitutes for electronic payment services. Online payment services, such as PayPal, WebMoney, and Pay-SafeCard, are similar enough to credit cards to be considered a single “electronic payment” technology for the purposes of this analysis. Any rule that would find credit card companies secondarily liable should also apply to these other online-payment systems.

160. See Gilbert & Katz, *supra* note 9, at 971.

161. *Id.* at 988.

Figure 4: Infringing value chain—stolen content websites



The majority in *Visa* found otherwise, that there were alternatives to credit cards, suggesting for example that a website could rely on advertising or develop its own payment system.¹⁶² But substitutability is a matter of degree, and though advertising and other payment mechanisms could replace credit cards to some extent, they are highly imperfect substitutes. To begin with, advertising is a different revenue model from subscription fees. A website supported by advertising seeks to expose as many users to as many advertisements as possible, whereas a subscription site targets a much smaller number of committed users willing to pay for access. This has implications for content, site design, marketing, and overall strategy. Likewise, there are no effective substitutes to the convenience, security, and speed of credit cards in online commerce. Few customers would risk sending a check or money order to a website, especially a foreign one, in the hope that days or weeks later the site will allow access.¹⁶³ Electronic payments transmit in a matter of seconds, and assure the purchasers that if the goods are not delivered, the payment will be reversed.¹⁶⁴ The speed, convenience, and security of electronic payment for online purchases is unmatched, which is why virtually all commercial websites accept them as their preferred form of payment.¹⁶⁵

162. See *Perfect 10, Inc. v. Visa Int’l Serv. Ass’n*, 494 F.3d 788, 797 (9th Cir. 2007).

163. *Id.* at 814 (Kozinski, J., dissenting).

164. *Id.* at 817 (Kozinski, J., dissenting).

165. According to a recent market research survey, credit cards are the only form of accepted payment on 76% of commercial websites. See Helen Leggatt, *More online stores offering non-traditional payment methods*, BIZREPORT, Apr. 17, 2007, http://www.bizreport.com/2007/04/more_online_stores_offering_nontraditional_payment_methods.html.

Since there are no effective substitutes for electronic-payment systems, enforcing copyright at this stage in the value chain would drastically limit infringement. It is important to note that electronic payment enables monetizing the infringing content relatively late in the value chain (see Figure 4). Enforcement at this stage will not prevent the copying, distributing, and publicizing of infringing material, as the majority noted, only the ability to profit from it.¹⁶⁶ Nevertheless, a profit-seeking infringer will stop infringing if they lose the ability to generate revenue. Although the lack of substitutes weighs in favor of enforcement at this stage, the effects on non-infringing value chains must also be balanced.

3. *Total economic value of the affected non-infringing value chains*

If an activity or technology is part of both infringing and non-infringing value chains, it is most efficient to enforce at the stage with the lowest total economic value in the non-infringing value chains.¹⁶⁷ Credit cards are used in a wide variety of transactions, for example purchases from legitimate content websites (Figure 5) and restaurants (Figure 6). In the words of the *Sony* Court, credit cards are not just “capable of substantial non-infringing uses,” but are “widely used for legitimate, unobjectionable purposes.”¹⁶⁸ The vast majority of credit card transactions are for entirely legal purchases. Indeed, the court could have looked to *Sony* to support its ruling that Visa was not contributorily liable.

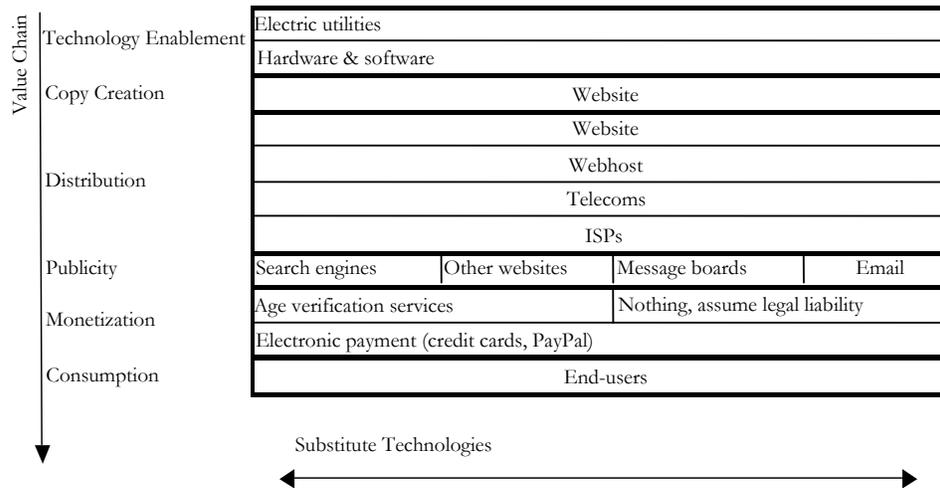
Ideally, one could target enforcement to a stage that would not affect legitimate activities. Unfortunately, the value chains of infringing and non-infringing websites are essentially identical. This is because the only difference between the two is the source of the content: an infringing site takes the work from another, whereas the non-infringing site creates the content itself. Since every activity in the infringing value chain has substantial non-infringing uses, carefully tailoring the enforcement mechanism is necessary to minimize the costs to legitimate value chains.

166. *Visa*, 494 F.3d at 797.

167. *See* Gilbert & Katz, *supra* note 9, at 971.

168. *Sony*, 464 U.S. at 442.

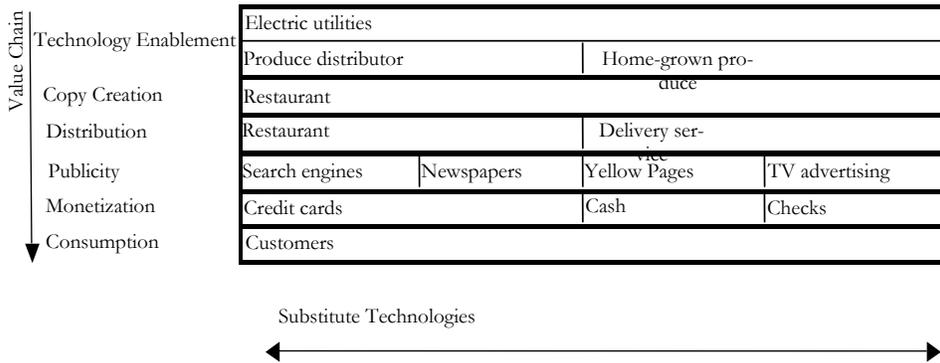
Figure 5: Non-infringing value chain—purchases from other websites



4. *Existence of substitutes in the affected non-infringing value chains*

As with stolen-content websites, legitimate sites lack a suitable substitute for credit cards. This factor examines the harm of targeting an activity that is part of non-infringing value chains. Costs are relatively low if there are close substitutes in the non-infringing chain. As Figure 6 illustrates, in certain value chains there are effective substitutes, for example, one can pay by cash instead of credit card at restaurants.

Figure 6: Non-infringing value chain—purchases from a restaurant



But in other situations, including non-infringing websites (Figure 5), there are no alternative technologies. As the value chain of stolen-content websites is identical to that of legitimate-content websites, targeting any stage of the infringing chain similarly affects non-infringing activity. For that reason, this factor does not weigh towards enforcement at one stage

over another. But because enforcement at any stage will similarly affect non-infringing activity, enforcement must be carefully tailored so as not to disproportionately harm legitimate value chains. This consideration weighs heavily in the safe harbor proposed in Section IV.E.

5. *Ease with which a party at a given stage can distinguish between infringing and non-infringing uses of its services*

On their own, credit card companies cannot easily distinguish infringing from non-infringing works. Thus, enforcement at this stage is a poor solution unless the copyright owner and alleged infringer can be compelled to help determine infringement. This factor is relevant if activities, such as credit card processing, appear in both infringing and non-infringing value chains.¹⁶⁹ In such a situation, a party will incur administrative costs in distinguishing legitimate from stolen works.¹⁷⁰ If these costs are too high, the party will likely block non-infringing works, resulting in efficiency losses.

If credit card companies were solely responsible for determining infringement, the administrative costs would be prohibitively high for two reasons. First, credit card companies never come in contact with the content of the sites they serve. Unlike a peer-to-peer network or ISP, the infringing files never pass over the credit card system.¹⁷¹ In order to determine infringement, the credit card companies would need access to the works of their network members. Second, the credit card companies would need to know which works their members' content is alleged to infringe. A notice system whereby copyright owners police the Internet and notify the credit card companies of suspected infringement could resolve these two information asymmetries. Section IV.E discusses how a notice system could minimize the administrative and efficiency costs of assessing and blocking infringing works.

6. *Economic environment for bargaining between rights-holders and parties at a given stage in the infringing value chain*

Credit card companies and copyright holders are unlikely to negotiate an efficient settlement regarding payment services for stolen-content websites. Even if a rights holder could force a defendant to cease activities, it might choose not to and instead negotiate an agreement allowing the activity to continue.¹⁷² The economic positions of the parties play an important

169. See Gilbert & Katz, *supra* note 9, at 972.

170. *Id.*

171. See Visa, 494 F.3d at 800.

172. See Gilbert & Katz, *supra* note 9, at 973.

role in whether they will reach an efficient bargain, which is one where neither party can be made better off without making the other worse.¹⁷³ Three conditions can prevent reaching such an agreement. First, the more parties to a negotiation, the higher the transaction costs and chances of bargaining breakdown.¹⁷⁴ Second, sunk costs may create holdup opportunities.¹⁷⁵ If one side has made an investment in a potentially infringing activity, which would lose its value if the parties could not reach an agreement, the other side can holdout for socially sub-optimal terms. Third, asymmetric information—when only one side has crucial information—can also lead to a breakdown in bargaining.¹⁷⁶ This factor favors enforcing copyright at a stage in the value chain where the negotiation is most efficient.

An efficient agreement between the credit card companies and copyright holders is unlikely because of the large number of parties, sunk costs, and asymmetric information. First, almost any copyright owner could conceivably have their work infringed by a website in the credit card networks. There is no collective rights society (such as the American Society of Composers, Authors and Publishers for public performance licenses) to negotiate with the credit card company on behalf of all these diverse copyright owners. Thus, the transaction costs of negotiating with each of these parties would be enormous. In any case, the copyright owners want to stop the infringement far more than a share of the credit card company's commissions. Second, given the breadth of potential infringement, it is unlikely a copyright holder would initiate negotiation before the credit card company has sunk costs into providing payment services to the website. Third, information asymmetries are significant because the credit card company is likely unaware of which works the rights holder believes to be infringing. Together, these three factors create an economic environment unfavorable to an efficient bargain.

7. *Availability of other enforcement tools*

Copyright holders might have tools beyond copyright enforcement, so called “self-help” measures, to protect their works. When such tools are available, it weakens the arguments for indirect liability. Gilbert and Katz point specifically to the use of digital rights management (“DRM”).¹⁷⁷ Digital rights management employs access-control technologies to limit

173. *See id.*

174. *See id.* at 974.

175. *Id.*

176. *Id.*

177. *Id.* at 980.

usage of digital media or devices, and has been deployed principally in online music distribution.¹⁷⁸ Digital rights management cannot effectively protect digital images because of the so-called “analog hole” vulnerability:¹⁷⁹ once digital information is converted to a human-perceptible (analog) form, it is relatively simple to recapture it in an unrestricted digital form. For example, if Perfect 10 were to encrypt its digital images in DRM, a user could simply take a screenshot of the website and would have an identical, but unencrypted, image. This factor does not disfavor enforcing at the level of credit card companies.

8. *Synthesis of the factors*

The factors proposed by Gilbert and Katz lead to the conclusion that when the direct infringers are beyond the reach of U.S. courts, it is optimal to enforce copyright at the level of the credit card companies. To reiterate, when the stolen-content website is based within the United States, the common law of secondary liability and the notice and takedown system of the DMCA provide a sufficient remedy. These tools are ineffective when dealing with foreign-stolen-content websites. As demonstrated by the analysis of Gilbert and Katz’s factors, it is appropriate to enforce copyright at the stage of the credit card companies. However, it is important to carefully tailor the enforcement mechanism so as not to unduly burden non-infringing value chains. Section IV.D argues that the credit card companies already undertake effective policies to limit illegal activity. Section IV.E proposes a solution to enforce copyright at this stage while minimizing administrative and efficiency costs.

D. Credit Card Companies’ Present Efforts to Combat Illegal Activity

In its response to Perfect 10’s petition for rehearing, Visa argued that holding them liable would have a “devastating impact”¹⁸⁰ on their activities, presumably due to the costs of monitoring and terminating infringers. Unlimited and sole responsibility for discovering and determining infringement would indeed be an undue burden. But credit card companies currently try to prevent their networks from being used for a range of illegal activity. The companies have cooperated with government agencies to

178. See BILL ROSENBLATT ET AL., DIGITAL RIGHTS MANAGEMENT: BUSINESS AND TECHNOLOGY 57-76 (2002).

179. See WIKIPEDIA, *Analog Hole*, http://en.wikipedia.org/wiki/Analog_hole (last modified Mar. 27, 2008).

180. Brief of Defendant-Appellee at 16, *Perfect 10, Inc. v. Visa Int’l Serv. Ass’n*, 494 F.3d 788 (9th Cir. 2007)

terminate websites selling cigarettes,¹⁸¹ gambling,¹⁸² child pornography,¹⁸³ and in one high-profile case, a foreign-stolen-content website selling digital music.¹⁸⁴ For example, as part of its anti-child-pornography program, Visa performs due diligence to thwart such sites from joining their system, and hires a consultant to continually sweep the web to make sure none have fraudulently accessed their network.¹⁸⁵ These efforts show that the credit card companies have the right and ability to control the use of their networks for illegal activity, and have exercised that power effectively in the past. These procedures could be extended to copyright infringement, bringing them in line with their policy of not facilitating illegal activity.

The case of AllofMP3.com illustrates the challenges of enforcing copyright against foreign-stolen-content websites, and the feasibility of terminating their access to credit card services. The Russian website offered for sale an expansive catalogue of copyrighted U.S. music for a few cents each, claiming it did not violate Russian law because it paid a royalty to a Russian licensing group.¹⁸⁶ Under pressure from the recording industry, Visa and MasterCard ejected the site from their networks, explaining that its action was in line “with basic international copyright and intellectual property norms.”¹⁸⁷ According to news reports, this severely affected the Russian site’s ability to operate.¹⁸⁸

181. See Press Release, Office of the Attorney Gen., State of Cal., Attorney General Lockyer Announces Joint Effort By State And Federal Law Enforcement, Credit Card Firms To Stop Illegal Online Sale Of Cigarettes (Mar. 17, 2005), available at <http://ag.ca.gov/newsalerts/release.php?id=588&year=2005&month=3>.

182. See Press Release, Office of the Attorney Gen., State of N.Y., Ten Banks End Online Gambling With Credit Cards (Feb. 11, 2003), available at http://www.oag.state.ny.us/press/2003/feb/feb11b_03.html.

183. See *Deleting Commercial Pornography Sites From the Internet: The U.S. Financial Industry’s Efforts to Combat This Problem: Before the Subcomm. On Oversight and Investigations of the Comm. on Energy and Commerce*, 109th Cong. 48 (2006) (statement of Arne L. Christenson, Senior Vice President, Federal Government Affairs, American Express Co.).

184. See *Credit card firms cut off AllofMP3.com*, ASSOCIATED PRESS, Oct. 9, 2006, available at <http://www.msnbc.msn.com/id/15323093>.

185. See *Deleting Commercial Pornography Sites From the Internet: The U.S. Financial Industry’s Efforts to Combat This Problem: Before the Subcomm. On Oversight and Investigations of the Comm. on Energy and Commerce*, 109th Cong. 48 (2006) (statement of Mark McCarthy, Senior Vice President, Public Policy, VISA U.S.A., Inc.).

186. *Credit card firms cut off AllofMP3.com*, *supra* note 184.

187. *Id.*

188. See Mook, *supra* note 157.

Soon thereafter, the major record labels sued AllofMP3.com, seeking an injunction and damages.¹⁸⁹ While the plaintiffs encountered difficulty in serving the defendant in Russia, the U.S. Trade Representative convinced the Russian government to shut down the site as a precondition to joining the World Trade Organization.¹⁹⁰ Only a few weeks later, the site reopened under the name MP3Sparks.com, and as of the publication of this Note, continues to offer an expansive catalogue of unauthorized downloads.¹⁹¹ This case represents a clear acknowledgement by the credit card companies, as evidenced by their statements to the press,¹⁹² of their responsibility to cease assisting copyright infringement. Rather than in response to pressure from the music industry, this enforcement tool could be made available on an equal basis to all copyright owners seeking to eradicate stolen-content websites.

E. A Safe Harbor Proposal

Although enforcing copyright at the stage of credit card service providers is appropriate under certain circumstances, the monetary damages of secondary copyright infringement are too drastic a remedy. If credit card companies were liable for such damages, they would be overly cautious in determining who to provide services to. As explained in Section IV.C.5, credit card companies cannot easily vet whether their network members are infringing. Facing the prospect of massive liability, they would likely err on the side of denying non-infringing activities participation in their networks. The majority in *Visa* noted this problem:

[W]hat would stop a competitor of a web-site from sending bogus notices to a credit card company claiming infringement by its competitor in the hope of putting a competitor out of business, or, at least, requiring it to spend a great deal of money to clear its name? Threatened with significant potential secondary liability . . . perhaps the credit card companies would soon decline to finance purchases that are more legally risky.¹⁹³

If copyright is to be enforced against credit card companies, a notice and termination system could be tailored to fit these circumstances. Con-

189. See Brief for Recording Industry Association of America as *Amici Curiae* in Support of Panel Rehearing or Rehearing *En Banc* at 12, *Perfect 10 v. Visa Int'l Serv. Ass'n*, 494 F.3d 788 (9th Cir. 2007) (No. 05-15170).

190. See Mook, *supra* note 157.

191. WASH. INTERNET DAILY, *AllofMP3.com Successor Back Online, Taking Credit Card Payments* (Jul. 20, 2007).

192. See Barker, *supra* note 187.

193. *Perfect 10, Inc. v. Visa Int'l Serv. Ass'n*, 494 F.3d 788, 798 n.9 (9th Cir. 2007).

gress could pass legislation creating a safe harbor limiting the liability of credit card companies for indirect copyright infringement. This safe harbor would resemble in certain respects those of the DMCA.¹⁹⁴

As discussed in Section IV.C.5, it would unduly burden credit card companies if they had to determine infringement without the aid of the alleged infringers and copyright owners. The notice and termination system resolves this information asymmetry by removing the credit card company from this role. The notice and takedown procedures of § 512(c) and (d) do not entirely apply, because unlike the providers of posting and linking services, credit card companies do not control access to the infringing work itself, and therefore could not take it down in response to a request.

One solution would be to require the credit card companies to forward an infringement notice to an accused member along with a warning that their payment service would be terminated unless they reply with a counter notice. If a counter notice is not forthcoming, service would be terminated. If the credit card company receives a counter notice, however, the copyright owner would then have to sue the direct infringer. The credit card companies would only terminate service once the material is ruled infringing by a court of law. If the copyright owner is unable to serve process or enforce a judgment because the alleged infringer is located abroad, they could then inform the credit card company, who would then terminate the service.

This procedure would be an improvement over the current DMCA safe harbors. Some have criticized the § 512 protections for erring too easily on the side of copyright owners.¹⁹⁵ Their research indicates that material is often taken down even when the infringement claim is of dubious merit, for example because of a fair use defense.¹⁹⁶ To address these due process and fairness concerns, they have suggested delaying the takedown until after an opportunity for counter notice has been offered, and requiring the service provider to re-post the material upon receipt of a counter notice.¹⁹⁷ The proposed safe harbor implements both of these suggestions: the alleged infringer would be terminated only if they failed to respond with a counter notice, were judged to be infringing by a court, or were based abroad and out of the reach of effective enforcement.

194. See 17 U.S.C. § 512 (2000).

195. See Jennifer M. Urban & Laura Quilter, *Efficient Process or "Chilling Effects"? Takedown Notices Under Section 512 of the Digital Millennium Copyright Act*, 22 SANTA CLARA COMPUTER & HIGH TECH. L.J. 621, 667-74 (May 2006).

196. *Id.*

197. *Id.* at 688.

In effect, this system would only operate when the direct infringer is operating with impunity in a foreign jurisdiction, or was so blatantly infringing as not to respond with a counter notice. Recall from Section IV.C that enforcing copyright against the credit card companies was efficient only when one could not pursue direct infringers. This proposal would narrowly address the problem faced by Perfect 10 without overly burdening credit card companies or drastically affecting non-infringing value chains.

V. CONCLUSION

Secondary liability is a powerful but problematic enforcement tool, allowing copyright owners to target least cost avoiders but potentially disrupting non-infringing activities. Perfect 10's trials illustrate the difficulty of protecting copyrighted works against foreign websites, and the potential role of secondary liability. When direct infringers are out of the reach of enforcement, an appropriate solution might be to block the processing of credit card payments. Caution must be exercised, however, as credit card companies are an integral part of a far larger number of non-infringing value chains. Although credit card companies would surely protest it as overly burdensome, requiring a notice and termination system forcing them to stop providing, and profiting from, payment services to foreign-stolen-content websites may be the most practical solution to a difficult problem.

FORTIFYING THE SAFE HARBORS: REEVALUATING THE DMCA IN A WEB 2.0 WORLD

By Brandon Brown

I. INTRODUCTION

As technology develops, so must the laws that govern it. Congress enacted the Digital Millennium Copyright Act (DMCA) in order to meet the growing need for copyright regulations on the Internet.¹ One of the most important elements of the DMCA was the codification of “safe harbors” for online service providers (OSPs).² As a form of quid pro quo between OSPs and copyright owners, the law provides limited immunity to OSPs if they meet certain minor burdens of copyright enforcement and cooperate with copyright owners looking to protect their works.

New developments in internet business models, however, may make the quid pro quo an unfair exchange for copyright holders. These new business models are embodied in websites utilizing what is known as the “Web 2.0” approach to web development. The websites created are almost completely based upon user-generated content, encouraging their own visitors to upload and control the content available on the website.³ In return for the use of this service, visitors experience online advertisements tailored specifically to the type of content they view. The top websites implementing these systems (including YouTube, MySpace, Facebook)⁴ were on track to amass over \$1 billion in advertising revenue in 2007, which is expected to double by 2008. In some cases, these sites profit from high viewership significantly from pages that involve infringing content. For instance, some calculations predict that YouTube may be making as

© 2008 Brandon Brown.

1. See S. REP. No. 105-190, at 8 (1998) (“Due to the ease with which digital works can be copied and distributed worldwide virtually instantaneously, copyright owners will hesitate to make their works readily available on the Internet without reasonable assurance that they will be protected against massive piracy.”); see also Peter S. Menell, *Envisioning Copyright Law's Digital Future*, 46 N.Y.L. Sch. L. Rev. 63, 134 (2002) (discussing the concerns behind the DMCA).

2. 17 U.S.C. § 512 (2000).

3. See generally Tim O'Reilly, *What is Web 2.0?*, O'REILLY (Sept. 30, 2005), <http://www.oreillynet.com/pub/a/oreilly/tim/news/2005/09/30/what-is-web-20.html>; see *infra* Section II.B for a discussion of Web 2.0.

4. These websites represent the most successful Web 2.0 applications on the Internet at the time of this Note. Facebook is available at <http://www.facebook.com>, MySpace at <http://www.myspace.com>, and YouTube at <http://www.youtube.com>.

much as \$15 million directly from the presence of infringing material on their website, in addition to profits based on the traffic that the content lures into the website.⁵ In exchange for this profit, these sites are only obligated to make the most minimal of efforts to prevent copyright infringement. Weighing those efforts against the financial gain of the service providers highlights a blatant inequity.

This Note posits that the Web 2.0 environment has altered the landscape of the Internet in a way that calls into question several DMCA requirements. In particular, the DMCA-embedded concepts of direct financial benefit, interference with standard technical measures, and the legislative red flag test for identifying infringing material are significantly challenged by the new ways that intellectual property is distributed on the Internet. The general policy inherent in the DMCA is that the burden for policing the Internet for copyright infringement is primarily on the copyright owner, and that online service providers must only cooperate when necessary to eliminate copyright infringement. This Note argues that this burden may be inequitable in light of the Web 2.0 movement and that a balancing test would be more appropriate for determining when OSPs should be expected to do more than simply cooperate with copyright owners.

Part II explains the legal background for secondary liability and lay the groundwork for an analysis of the Web 2.0 revolution. Next, Part II introduces the new litigation between Web 2.0 sites, such as YouTube and media conglomerate, Viacom. Part III summarizes the Millennium Copyright Act and the Online Copyright Infringement Liability Limitation Act. Part III also explores the case law and legislative history of the major safe harbor requirements and then applies the current standards to the current *YouTube* litigation.

Based on the application of the current DMCA safe harbor requirements to the *YouTube* litigation, Part IV offers a possible solution for a more flexible and equitable safe harbor test. Part IV establishes that DMCA is unnecessarily redundant when courts interpret the Act as a codification of certain parts of the common law language. The outcome of that redundancy is an inequitable application of safe harbors to some OSPs, which inevitably shields copyright infringement and could potentially discourage innovation. Since this appears counter to the Congressional intent and impetus behind the DMCA, it may be necessary to re-analyze the judicial approach to interpreting the language of the safe harbor provisions.

5. See *infra* Sections II.C and III.A.2.

II. BACKGROUND

A. Secondary Liability in the Digital Age

The Supreme Court was most notably presented with the issue of secondary liability in *Sony Corp. v. Universal City Studios, Inc.*⁶ The defendant in *Sony* was the manufacturer of the Betamax VCR system, which at the time was a new technology that enabled the analog (but convincingly accurate) home copying of television broadcasts.⁷ The plaintiffs, owners of copyrighted television content, brought suit out of concern that the new technology allowed for wide-spread infringement of their copyrighted material.⁸ Unable to stop every individual home-user from recording their shows, the plaintiffs sought an injunction against the manufacturer and damages against the Betamax creator under a secondary liability theory.⁹ After analyzing the value of the new technology and its significant legal uses, the Court held that when “copying equipment” is “capable of substantial noninfringing use,” the manufacturer of that equipment cannot be held liable for contributory infringement.¹⁰

The analog copying of the Betamax was merely the beginning of a series of technological developments that would forever change the way information is reproduced. As the Internet became a more viable way of transmitting information, with the transition from dial-up networks to high-speed broadband lines in nearly every household, the possibility of wide-spread distribution of perfect digital copies of copyrighted material became a reality. In *MGM Studios, Inc. v. Grokster, Ltd.*,¹¹ the Court investigated an online file sharing service to determine if the defendants were shielded from liability under the *Sony* doctrine. Grokster is a peer-to-peer file sharing network used to transmit media files between users.¹² Although the early peer-to-peer file sharing networks developed a reputation for hosting the illegal dissemination of copyrighted material, Grokster and others defended its technology as one of the most economically efficient methods of transmitting large files, including non-infringing works.¹³

6. 464 U.S. 417 (1984).

7. *Id.* at 419.

8. *Id.* at 419-20.

9. *Id.*

10. *Id.* at 442.

11. 545 U.S. 913 (2005).

12. *See id.* at 919-20.

13. *See, e.g.,* Pablo Rodriguez et al., *On the Feasibility of Commercial, Legal P2P Content Distribution*, 36 ACM SIGCOMM 75 (2006), available at <http://delivery.acm.org/10.1145/1120000/1111339/p75-rodriguez.pdf> (describing P2P networks as a cost-effective solution for the distribution of large files).

Thus, in *Sony*'s terms, *Grokster* argued that its product had "substantial non-infringing uses."¹⁴ The plaintiffs, however, produced significant evidence that the bulk of *Grokster*'s corporate policy involved its system's use for distributing copyrighted material.¹⁵ In fact, its marketing plan primarily sought to attract those who were interested in downloading copyrighted music for free.¹⁶ Pulling from both patent law and principles of secondary liability, the *Grokster* Court held that the defendant's actions had actively induced copyright infringement and thus were not protected by the *Sony* substantial non-infringing use defense.¹⁷ Importantly, it further elaborated that "mere knowledge of infringing *potential*" would still be insufficient to make a provider liable.¹⁸

Although both *Sony* and *Grokster* have some fundamental differences from Web 2.0 applications,¹⁹ they comprise the current legal doctrine for secondary liability on the Internet and are still applicable in an analysis of Web 2.0 copyright liability. As demonstrated by *Grokster*, the Internet could host a vast nebula of potential copyright infringement, and copyright owners often viewed its continual growth as a continual threat to their content.²⁰ As such, the technologies that make up the backbone of the Internet—the service providers, web hosts, and search tools—would soon come under attack for similar secondary liability claims. In 1998, in partially codifying the defenses available from *Sony* and in helping protect the systems that make up the structure of the Internet from continual litigation, Congress enacted the Digital Millennium Copyright Act.²¹

14. See *Grokster*, 545 U.S. at 946.

15. See *id.* at 924.

16. See *id.* at 924-27.

17. See *id.* at 934-36.

18. *Id.* at 937 (emphasis added).

19. Although *Grokster* was an Internet application, it included a client-side component that was downloaded and executed from the end-user's computer. This is in contrast with Web 2.0 applications, which function from central servers and are not downloaded to the end-user's computer. As explained *infra* Section II.C, that difference may raise slightly different questions of liability.

20. See generally LAWRENCE LESSIG, *THE FUTURE OF IDEAS: THE FATE OF THE COMMONS IN A CONNECTED WORLD* (2001); WILLIAM FISHER, *PROMISES TO KEEP: TECHNOLOGY, LAW, AND THE FUTURE OF ENTERTAINMENT* (2004).

21. Statement by the President on Digital Millennium Copyright, 1998 WL 754861 (Oct. 29, 1998); 145 Cong. Rec. S15228-01 (1999).

B. What is Web 2.0?

Significant confusion and discussion exists over the term “Web 2.0” and its true meaning.²² The name alone draws much consternation from veteran internet developers, who argue that such a term erroneously implies that there is a delineated and categorical difference between types of websites.²³ Some developers are also concerned about using a term which may falsely attribute progress or improvement to something that is simply different.²⁴ The originator of the term, Tim O’Reilly,²⁵ concedes that although the name might not be completely appropriate, it suffices as a decent “meme”²⁶ for defining this particular cultural practice.²⁷

Based on the predominant abstract definition, a Web 2.0 framework exists on a website when the bulk of that website’s content, growth, and development come from individual end-users.²⁸ User behavior is never anticipated nor predetermined, and the underlying technology of Web 2.0 applications grows with the growth of the user base.²⁹ The concept requires decentralization of activity and a focus on active user participation.³⁰ It harnesses the collective wisdom of a large user base and organizes it effectively.³¹

In practical application, Web 2.0 websites as they exist today rely on the content of their end-users but the programming of their own developers.³² The materiality of the content can range from posted articles to digital family movies and from personal profiles to online photo albums.

22. Compare O’Reilly, *supra* note 3 with Tim Bray, *Web 2.0 or Not?*, Aug. 11, 2005, <http://www.tbray.org/ongoing/When/200x/2005/08/09/Web-2.0> (arguing that such a classification is unneeded and irrelevant).

23. Bray, *supra* note 22.

24. *Id.*

25. Tim O’Reilly is the founder of O’Reilly Media, Inc., an American media company and publisher focusing on computer programming and technology books.

26. Posting of Tim O’Reilly to O’Reilly Radar, *Not 2.0?* (Oct. 5, 2005), http://radar.oreilly.com/archives/2005/08/not_20.html.

27. *Id.*

28. O’Reilly, *supra* note 3.

29. *Id.* at § 7.

30. *Id.* at §§ 1-2.

31. *Id.* at § 1.

32. This may be a tempting place to argue that open-source Web 2.0 environments allow their users to take full control of the system. However, such an advocate would be hard-pressed to find an online service that is actively open-source. There are significant security risks involved in allowing end-users to, in a manner similar to Wikipedia, alter the code of the website at will. As such, Web 2.0 applications do not develop in time with the users; rather, their programmers try to take the pulse of their users as often as possible and adjust the system to match.

While the content is provided by the end-users, the forum in which the content is posted is designed by the OSP.³³

The distinction between the role of the end-user and the role of the OSP is important for a legal analysis of secondary liability in this area. It is true that a Web 2.0 environment is heavily shaped by the posting of its users. This, in turn, creates significant difficulties for OSPs who wish to police material posted to their website. However, the posted material is still shaped by the limits of the software and thus by the will of its programmers.³⁴ Since the software does not evolve organically, but rather is only changed by conscious choices made by its developers, the theory of a Web 2.0 environment being completely out of the hands of the online service providers is a legal and technological fiction.³⁵

As use of the term Web 2.0 becomes increasingly prevalent, there is a large trend towards referring to many websites as user-generated content (UGC) sites.³⁶ For most copyright issues, the two concepts are synonymous; however, there are some philosophical and technical differences and, in general, UGC websites represent a subset of Web 2.0 environments.³⁷

C. YouTube and Viacom

One of the premier examples of a Web 2.0 website on the Internet today is YouTube. YouTube is an online video-sharing website.³⁸ Founded in February 2005, YouTube has grown exponentially: it now amasses well over 100 million video views daily³⁹ and is the third-most viewed website

33. To be fair, there are certainly Web 2.0 applications that do allow this sort of growth. Open-source development, as found on sites like SourceForge, allow for implementation of the more theoretical elements of a Web 2.0 framework. The advancement of certain operating systems, like Linux, is dependent on the input of users and each release is heavily shaped by decentralized programmers who dedicate some of their time to improving the flaws in the system. However, these are the underlying frameworks of a Web 2.0 website; they do not represent the content posted on the website or play a visible role in its presentation.

34. Bray, *supra* note 22.

35. *See id.*

36. *See, e.g.*, Wikipedia, User Generated Content, http://en.wikipedia.org/wiki/User-generated_content (last modified Feb 1, 2007).

37. *See generally* O'Reilly, *supra* note 3, §§ 1-2.

38. YouTube—What is YouTube?, <http://www.google.com/support/youtube/bin/answer.py?answer=55749&topic=10509> (last visited Dec. 1, 2007).

39. *YouTube Serves up 100 Million Videos a Day Online*, USATODAY.COM, http://www.usatoday.com/tech/news/2006-07-16-youtube-views_x.htm? (July 16, 2006.com).

on the Internet.⁴⁰ The website hosts, at best estimate, around 61 million videos.⁴¹ It operates under a typical Web 2.0 format, utilizing user-based content as the bulk of its online material and employing user feedback and comments to rank videos and assign them priority in search methods.⁴² In November 2006, it was purchased by Google Inc. for \$1.65 billion.⁴³

In March 2007, Viacom, an American media conglomerate, filed suit against YouTube for both direct and secondary copyright infringement allegedly occurring on the YouTube servers. Viacom alleges in its complaint that it has detected over 150,000 infringing “clips of copyrighted programming” on the YouTube servers that have amassed a total of 1.5 billion views.⁴⁴ This represents one of the first times that a Web 2.0 website has been legally challenged for this level of copyright infringement, and as such, is a perfect example to explore the application of the DMCA’s provisions to a Web 2.0 website.

III. DMCA PROVISIONS

The Digital Millennium Copyright Act (DMCA), signed into law on October 28, 1998, was written to address the growing threat of digital copyright infringement. It criminalizes the production and dissemination of technology designed to circumvent digital protection schemes,⁴⁵ but contains provisions for shielding service providers from liability for copyright infringement.⁴⁶ According to President Bill Clinton, who signed the bill into law, the DMCA “grant[s] writers, artists, and other creators of copyrighted material global protection from piracy in the digital age.”⁴⁷

40. Youtube.com—Traffic Details from Alexa, http://www.alexa.com/data/details/traffic_details?url=http://www.youtube.com (last visited June 1, 2007).

41. YouTube—Search, http://www.youtube.com/results?search_query=*%26search=Search (last visited Dec. 1, 2007). Although this number is not published anywhere, a search for the universal wildcard character [“*”] should reveal all the items contained in YouTube’s database; at this time, the number of files retrieved was “about 61,100,000.”

42. YouTube—How Do Videos Get Featured?, <http://www.google.com/support/youtube/bin/answer.py?answer=55751&ctx=sibling> (last visited Dec. 1, 2007).

43. Ben Charny, *Google to Acquire YouTube for \$1.65 Billion in Stock*, MARKETWATCH, <http://www.marketwatch.com/News/Story/Story.aspx?guid=%7B05306ED9-F56E-467C-BBA3-AFD9EB7335F8%7D&siteid=yhoo&dist=yhoo> (last visited Dec. 1, 2007).

44. Complaint at 3, *Viacom Int’l v. YouTube, Inc.*, No. 1:07CV02103, 2007 WL 775695 (S.D.N.Y. Feb. 30, 2007).

45. 17 U.S.C. § 1201 (2000).

46. 17 U.S.C. § 512 (2000).

47. Statement by the President on Digital Millennium Copyright, 1998 WL 754861 (Oct. 29, 1998).

The provisions meant to protect service providers from liability are known as the Online Copyright Infringement Liability Limitation Act (OCILLA) and are codified in Title II of the DMCA.⁴⁸ The provisions offer “safe harbor” protections, or immunity from copyright liability, to qualifying internet entities known as “OSPs”.⁴⁹ An OSP must meet two general conditions in order to receive the protections of the OCILLA: first, it must publicly “adopt and reasonably implement a policy” of addressing and terminating accounts of users who are found to be “repeat infringers;”⁵⁰ and, second, the OSP must accommodate and not interfere with “standard technical measures.”⁵¹

The statute defines standard technical measures as technological means of detecting online copyright infringement which have been developed via inter-industry discussions and are both available to any person on reasonable terms and do not impose substantial costs on service providers.⁵² The legislative history notes that “the Committee believes that technology is likely to be the solution to many of the issues facing copyright owners and service providers in this digital age.”⁵³ The idea is that by building in measures that develop with industry standards, the statute will have the flexibility to grow with the technology, rather than codifying any particular system of detecting infringement.⁵⁴

The OCILLA extends protections to several different types of OSPs. Only one protection is relevant for this Note: § 512(c), which limits the liability of OSPs for hosting infringing material on their servers. In order to acquire this immunity, § 512(c) requires: that an OSP 1) must not receive a financial benefit directly attributable to the infringing activity;⁵⁵ 2) must not be aware of the presence of the infringing material⁵⁶ or know any

48. 17 U.S.C. § 512 (2000).

49. Online service providers (“OSPs”) are “entit[ies] offering the transmission, routing, or providing of connections for digital online communications . . . [and] of material of the user’s choosing, without modification to the content of the material as sent or received.” 17 U.S.C. § 512(k)(1)(A) (2000). Safe harbor protections extend to OSPs involved in “transitory communications,” “system caching,” “storage of information on systems or networks at the direction of users,” and “information location tools.” 17 U.S.C. § 512(a)-(d) (2000).

50. 17 U.S.C. § 512(i)(1)(A) (2000).

51. 17 U.S.C. § 512(i)(1)(B) (2000).

52. 17 U.S.C. § 512(i)(2) (2000).

53. H.R. REP. NO. 105-551, at 61 (1998). The irony of this statement is that technology is a double-edged sword: it is both the cause and solution to the copyright infringement problems that the DMCA was written to address.

54. *See* H.R. REP. NO. 105-551, at 61 (1998).

55. 17 U.S.C. § 512(c)(1)(B) (2000).

56. 17 U.S.C. § 512(c)(1)(A)(i) (2000).

facts or circumstances that would make infringing material apparent,⁵⁷ and 3) upon receiving statutorily-proper notice from copyright owners or their agents, must act expeditiously to remove any claimed infringing material.⁵⁸ These requirements are in addition to the underlying prerequisites of complying with standard technical measures and removing repeat infringers.⁵⁹

One of the key features found in the DMCA and its history is the concept of an economic balancing test for the burden of policing for copyrighted material on the Internet.⁶⁰ Traditionally, this burden has rested solely on the copyright owner.⁶¹ However, with the development of vicarious liability in *Sony* and *Grokster*, OSPs now have a duty to avoid inducing or directly contributing to online copyright infringement.⁶² The DMCA goes further, offering a quid pro quo for OSPs: OSPs may receive immunity from secondary liability if they cooperate with a copyright owner who has a good-faith belief that direct infringement is occurring within the confines of that OSP's services.⁶³ In essence, OSPs seeking safe harbor immunity must take on part of the copyright enforcement burden. The extent to which they are expected to take on that burden, however, is often weighed in the courtroom and plays a major role in the analysis of the requirements of whether they are entitled to immunity under § 512(c) delineated above.

The scope, depth, and application of those requirements will be explored individually below. Following that, each Section will be individually applied to both real and hypothetical situations in a Web 2.0 context in order to evaluate their flexibility and unveil any inconsistencies that may make their application unappealing or injudicious.

A. Direct Financial Benefit

1. Legislative History

Section 512(c)(1)(B) of the Digital Millennium Copyright Act requires that an OSP not receive any "financial benefit directly attributable to the infringing activity" in order to enjoy safe harbor immunity from secondary

57. 17 U.S.C. § 512(c)(1)(A)(ii) (2000).

58. 17 U.S.C. § 512(c)(1)(C) (2000).

59. *See* 17 U.S.C. § 512(i)(1)(A)-(B) (2000).

60. *See* H.R. REP. NO. 105-796, at 83-84 (1998), available at http://www.hrrc.org/File/H.R._2281_conf_report.pdf.

61. *See* S. Rep. No. 105-190, at 8 (1998).

62. *See infra* Section II.A.

63. *See generally* 17 U.S.C. § 512 (2000).

liability for copyright infringement.⁶⁴ However, since most OSPs function for profit, that statement requires more clarity to identify which types of financial benefit Congress sought to target.

The legislative history is dichotomous. It states that, on one hand, a service that receives a “one-time set-up fee and flat, periodic payments for service from a person engaging in infringing activities” is not receiving a direct financial benefit, but, on the other hand, a provider whose “value . . . lies in providing access to infringing material” is considered to be receiving a direct benefit.⁶⁵ The absence of any substantive metric (e.g., “whose *primary* value lies in provided access to infringing material,” which would significantly clarify the standard) creates a confusing analysis of modern internet service providers.⁶⁶

The language of the statute itself appears to be derived from the general elements of vicarious liability for copyright infringement. Its appearance in the DMCA is consistent with this concept: if there is a direct financial benefit from the infringement, then the OSP is secondarily liable; if not, it has a significant defense to the claim, and so should be protected against undue litigation by a DMCA safe harbor.⁶⁷ However, because the DMCA is intended to make “important improvements” to current intellectual property laws⁶⁸ and to provide “global protection from piracy in the digital age,”⁶⁹ it seems reasonable to expect a more modernized and specific statutory scheme than the common law rule for vicarious liability for addressing when and where direct financial benefit exists in online transactions.

2. Case Law

The Ninth Circuit in *Perfect 10, Inc. v. CCBill, LLC* sought to clarify this situation by revisiting the common law roots of the term “direct financial benefit.”⁷⁰ CCBill (with commercial partner, CWIE) is an online web hosting and credit card processing company that caters primarily to the web-based adult entertainment community.⁷¹ Perfect 10 is a publisher of online adult content whose copyrighted works were found to be on multi-

64. 17 U.S.C. § 512(c)(1)(B) (2000).

65. H.R. REP. NO. 105-551, at 54 (1998).

66. *Id.*

67. *See, e.g., Perfect 10, Inc. v. CCBill, LLC*, 488 F.3d 1102 (9th Cir. 2007).

68. 145 CONG. REC. S15228-01 (1999).

69. Statement by the President on Digital Millennium Copyright, 1998 WL 754861 (Oct. 29, 1998).

70. *Perfect 10, Inc. v. CCBill, LLC*, 488 F.3d 1102, 1117 (9th Cir. 2007).

71. *See id.* at 1108.

ple sites hosted by CCBill/CWIE.⁷² CCBill sought safe harbor under the § 512 provisions as a web host and was challenged by Perfect 10, who argued that CCBill was receiving a financial benefit from the infringing material and should thus be held secondarily liable for it.⁷³ Although the Ninth Circuit remanded on the facts, the court also held that “‘direct financial benefit’ [under § 512(c)] should be interpreted consistent with the similarly-worded common law standard for vicarious copyright liability.”⁷⁴ In order to analyze how that common law standard has developed, and its limits when applied to internet technology, an examination of prior case history of the common law standard of vicarious copyright liability is necessary.

The Ninth Circuit in *A&M Records, Inc. v. Napster, Inc.*⁷⁵ examined the liability of a service provider whose primary (one might even say sole) purpose was in facilitating the distribution of copyrighted material. Napster was an online peer-to-peer file sharing distribution system that utilized a centralized database system to track songs available for download. The system facilitated the large-scale distribution of media files (primarily music) across a network of, at one point, 26.4 million users.⁷⁶

Restating the common law rule of traditional vicarious infringement, the *Napster* court held that a direct financial benefit exists when the availability of infringing material “acts as a ‘draw’ for customers.”⁷⁷ The court found that Napster’s revenue was “directly dependent” upon the size of its userbase, and that as that base increased, so did the “quality and quantity of available [copyrighted material].”⁷⁸ That is, Napster’s revenue was tied directly to the number of times advertisements were viewed on the system, and that number was directly proportional to the number of users on the system. Since the only reason these users accessed Napster’s system was to exchange and download media files, the court concluded that the copyrighted material available on Napster’s system acted as “draw” for customers and thus found that Napster was receiving a direct financial benefit from the presence of infringing material.

72. *See id.* at 1117.

73. *See id.* at 1116.

74. *See id.* at 1117.

75. *A&M Records, Inc. v. Napster, Inc.*, 239 F.3d 1004 (9th Cir. 2001).

76. Press Release, Jupiter Media Metrix, Global Napster Usage Plummetts, But New File-Sharing Alternatives Gaining Ground, July 20, 2001, <http://www.comscore.com/press/release.asp?id=249>.

77. *See Napster*, 239 F.3d at 1023.

78. *Id.*

A few years later, the Ninth Circuit arguably attempted to close some of the wider doors that *Napster* had opened in *Ellison v. Robertson*.⁷⁹ In *Ellison*, the court addressed the larger question of whether an internet provider which simultaneously cached and stored messages from various online discussion groups could be liable for infringing material found in those stored messages.⁸⁰ USENET, which stems from “user network,” was a large-scale news-group network, upon which any user may post material, comments, news, or engage in discussions.⁸¹ The network relied on cooperating service providers to receive, transmit, and store messages in order to achieve its wide-spread distribution and syndication.⁸² As part of their service to customers, the service provider, America Online (AOL), operated servers to and upon which USENET messages were forwarded and stored.⁸³

The case stemmed from one particular message transmitted to USENET servers, in which a digital version of the plaintiff’s copyrighted fictional work was included and distributed.⁸⁴ As a USENET service provider, AOL’s servers received, retained, and provided copies of this message to its users.⁸⁵ The *Ellison* court examined whether AOL’s profit from the presence of the infringing material was sufficient to establish a direct financial benefit.⁸⁶

The district court in *Ellison* attempted to distinguish the facts involving AOL from *Napster* by declaring that a financial benefit must represent a “substantial” proportion of the provider’s income.⁸⁷ The Ninth Circuit, however, expressed concern, noting that any subset of income will be unsubstantial when compared to the whole to a large service provider.⁸⁸ The Ninth Circuit instead distinguished between whether activity constituted a “draw” or whether it was simply an added benefit to customers.⁸⁹ The Ninth Circuit went no further in explaining the difference between the two alternatives than to find that since AOL neither “attracted [n]or retained

79. *Ellison v. Robertson*, 357 F.3d 1072 (9th Cir. 2004).

80. *See id.* at 1074-75.

81. *See generally* Wikipedia, Usenet, <http://en.wikipedia.org/wiki/Usenet> (last modified Nov. 21, 2007).

82. *See generally id.*

83. *See Ellison*, 357 F.3d at 1075.

84. *See id.* at 1074-75.

85. *See id.*; *see also* Wikipedia, Usenet, *supra* note 81.

86. *See Ellison*, 357 F.3d at 1078-79.

87. *Id.*

88. *See id.*

89. *See id.*

. . . [n]or lost . . . subscriptions” because of the infringing material, there was no direct financial benefit to AOL.⁹⁰

It is unclear whether, in dismissing the district court’s “substantial” analysis in favor of its own “draw” standard articulated in *Napster*, the Ninth Circuit attempted in *Ellison* to clarify the financial benefit requirement. The concept of the “draw” standard seems to hinge not on the economic balancing instilled in the DMCA,⁹¹ but rather on the terms found in secondary copyright infringement liability.⁹² The “draw” standard measures customer attraction and attempts to indirectly determine if the OSP has induced this behavior.⁹³ In contrast, a “substantial” analysis explores whether the OSP has the economic ability to take on some of the burden of copyright policing.⁹⁴ Part IV of this Note will argue that the “substantial” test is a more adequate analyzer of whether or not the OSP can assume some of the burden of policing for copyrighted material and is thus more true to the purpose of the DMCA.

The application of this standard has not yet been clarified in *CCBill*, which is on remand for this issue, but future decision making with a similar fact pattern will most likely require such clarification. In *CCBill* or a similar situation (i.e., addressing online web hosting providers and online financial transaction providers), courts will be called upon to examine a service provider whose activity lies somewhere between Napster and AOL. *CCBill* acts as a middleman in the transactions involving infringing material and is also involved in providing server space for those who may wish to infringe. Whereas Napster is more obviously peddling in copyrighted material, and whereas AOL’s storage and access represents a very minor amount of copyrighted material, *CCBill* serves as a web hosting service for potentially infringing material and also handles credit card processing for those websites. This appears to be well beyond the financial effects in the AOL scenario because of the possibility that a significant amount of *CCBill*’s income may be derived from websites hosting infringing material. However, it does not appear to reach the Napster level of income being derived nearly purely from infringing material.

90. *See id.*

91. *See supra* Part II.

92. *See supra* Section II.A.

93. *See supra* text accompanying note 11. As will be argued in Section III.A.2 and Part IV, *infra*, there is no purpose to an overlapping financial benefit test in the DMCA safe harbor provisions. Such a redundancy accomplishes nothing and prevents the DMCA from satisfying its Congressional purpose. *See supra* notes 47 & 60; *see generally* Part II.

94. *See infra* Part IV.

One can see how the analysis of the direct financial benefit in *CCBill* could turn either way. On one hand, CCBill likely hosts many non-infringing sites.⁹⁵ Indeed, it is plausible that CCBill hosts more non-infringing sites than infringing sites.⁹⁶ The substantial “draw” that CCBill offers its customers is that it provides web-hosting services; that draw does not vary according to whether or not its customers wish to have infringing material hosted.⁹⁷ Further, CCBill does not appear to be providing a haven for copyright infringement, as there are no facts in the record indicating that, like Napster, CCBill attracted customers solely because it facilitated online transactions of infringing material.⁹⁸ Thus, under the *Ellison* standard of a “draw,” it would be impossible for a web host to ever be found to have a direct financial benefit from infringing material because there are so many non-infringing uses for their servers. The ability to host infringing material is simply, perhaps, an “added benefit.”⁹⁹

However, on the other hand, it is possible that the sites that CCBill does host are often involved in some form of copyright infringement, and therefore CCBill could be liable for vicarious copyright infringement. The Ninth Circuit, however, struck the “substantial[ity]” analysis in *Ellison*. Although that may have been appropriate when dealing with a large-scale internet provider like AOL (where a substantial analysis may prove unwieldy for a court), it may improperly immunize certain web-hosting providers for whom a significant amount of profit is derived from hosting infringing material. The analysis becomes even more complex when an OSP begins to profit in-line with infringing material.

3. *Direct Financial Benefit in a Web 2.0 Environment*

The standards set by *Ellison* and *CCBill* may prove unwieldy when applied to a Web 2.0 website. Using the *YouTube* litigation introduced *su-*

95. See *CCBill*, 488 F.3d at 1108.

96. See *id.*

97. CCBill’s business model is not built around the content of the websites that it hosts, but is based on attracting customers who wish to have a reliable web hosting service combined with an integral credit-card billing service. Since CCBill doesn’t regularly advertise its client base or the contents of their websites, a new client would be unaware that the company has clients that post infringing materials. As such, an argument that CCBill is “drawing” customers because of their commercial activity in infringing content will fail. See *CaveCreek Web Hosting*, <http://www.cavecreek.com/> (last visited 12/1/07) (stating that CCBill’s web hosting partner’s website has no way to determine who its clients are or what types of sites it hosts).

98. See *CCBill*, 488 F.3d at 1102 (noting that nothing in record suggested customers were attracted solely, or at all, to host infringing content); see also *supra* note 97.

99. See *supra* Section II.A (discussing the *Betamax* case).

pra, this section will apply the “direct financial benefit” standard of the DMCA to a Web 2.0, user-generated content website.

YouTube derives a substantial part of its income through advertisements it displays on webpages with its videos.¹⁰⁰ Because it is likely that the infringing content on YouTube draws a significant amount of users to the site, YouTube almost certainly generates a substantial amount of income from infringing material.¹⁰¹

In its complaint, Viacom contends that it has identified 150,000 clips on YouTube that violate its copyrights.¹⁰² The total number of views for those videos cumulatively equals 1.5 billion.¹⁰³ For this analysis, this Note will put aside YouTube’s future plans for display advertisements in-line with videos¹⁰⁴ and prior to videos playing¹⁰⁵ (which would greatly increase the user’s exposure to advertisements, and thus likely increase advertising revenue) and focus solely on the banner advertisements displayed in various locations on YouTube’s movie pages.

For example, advertisements in Google’s scheme are typically paid out based on a “price per click” system (PPC), where advertisers pay based on how many users actually click on the advertisements on the hosting webpage.¹⁰⁶ The average PPC varies based on the site, and is usually based on the type of viewers who visit that site. In other words, because customers who are actively looking to buy something are considered more valuable, search engines tailored to shopping websites may receive a higher PPC

100. DON TAPSCOTT ET. AL., WIKINOMICS: HOW MASS COLLABORATION CHANGES EVERYTHING 270-71 (2007).

101. The analysis that follows is based on information alleged in the Viacom complaint and reasonable estimates based on readily available information about the YouTube service. This analysis is only an attempt to draw conclusions based on the available information and should not be taken as a complete analysis of the economic situation.

102. Complaint at 3, Viacom Int’l v. YouTube, Inc., No. 1:07CV02103, 2007 WL 775695 (S.D.N.Y. Feb. 30, 2007).

103. *Id.* These numbers may be contestable, considering the total number of videos and the views they receive on YouTube. See *YouTube Serves up 100 Million Videos [Views] a Day Online*, USATODAY.COM, http://www.usatoday.com/tech/news/2006-07-16-youtube-views_x.htm? (July 16, 2007).

104. Posting of Liz Gannes to Newteevee.com, Youtube’s New In-Line Ads, <http://newteevee.com/2007/05/11/youtubes-new-inline-ads-screenshots/> (May 11, 2007).

105. Directtraffic.org, Google Announces YouTube Video Advertising in 2008, http://www.directtraffic.org/OnlineNews/Google_announces_YouTube_video_advertising_for_2008_18125991.html (April 23, 2007).

106. See Google.com, Adwords Program Explanation, <https://adwords.google.com/select/Signup1/index.html> (last visited Feb. 10, 2008).

than a site where users are more actively involved in a non-commercial pursuit.¹⁰⁷

The PPC for all sites has been on the rise significantly over the last few years.¹⁰⁸ Although it is difficult to track down the exact value for a specific website or a specific page in that website, for this analysis it will suffice to take the low-end and estimate that an advertisement on YouTube's webpage (if it follows the Google method) will have a PPC of approximately \$1.00.¹⁰⁹

The next metric required is a determination of how many visitors to a site will actually click on an advertising link. This is known as the "click-through rate" ("CTR").¹¹⁰ This information, as well, is difficult to define and is also completely dependent on the advertisement being shown.¹¹¹ Given the presence of *some* available data on standard website advertising trends, the low estimate of a 1% CTR will be used to present a conservative analysis for YouTube.¹¹²

Performing a profit calculation on these two estimations and Viacom's numbers, with 1%¹¹³ of 1.5 billion users¹¹⁴ clicking on an advertisement paying \$1.00 per click¹¹⁵, one finds that 15 million users will click through and bring YouTube \$15 million in advertising revenues based purely on infringing content.

107. *See, e.g.*, Posting of Nathan Weinberg to Inside Google, Price Per Click Up 25% Last Year, <http://google.blognewschannel.com/archives/2006/03/22/price-per-click-up-25-last-year/> (March 22, 2006) (showing that the average cost-per-click for shopping search engines is higher than for a general webpage); *see also* DOUBLECLICK, SEARCH TREND REPORT Q4 2006 (2007), http://www.doubleclick.com/insight/pdfs/dc_search_q42006.pdf; DOUBLECLICK PERFORMICS, Q1 2007 SEARCH TREND REPORT (2007), http://www.doubleclick.com/insight/pdfs/DoubeclickPerformics50_Q1_2007.pdf [hereinafter DoubleClick Search Trend Reports].

108. DoubleClick Search Trend Reports, *supra* note 107.

109. Weinberg, *supra* note 107; *see also supra* note 101.

110. *See* Lee Sherman et al., *Banner Advertising: Measuring Effectiveness and Optimizing Placement*, 15 J. OF INTERACTIVE MARKETING 61 (2005) (defining a click-through rate as a measure of audience response to banner advertising).

111. *See, e.g., id.*

112. *See, e.g.*, Press Release, ADTECH Analysis Reveals Online Advertising Click-through Rates are Falling (May 10, 2007), <http://www.adtech.info/en/pr-07-10.html> (click through rates vary based on search terms, type of advertisement, and user locations, but video ads receive a 5% click through rate typically). Extrapolating from this data, a 1% CTR estimate seems reasonable. It is still relatively conservative for a site of YouTube's success and user base, but more accurate numbers are simply not available.

113. *See id.*

114. *See* Complaint, *supra* note 102, at 3.

115. *See* Weinberg, *supra* note 109 and accompanying text.

This data can be aggregated across the bulk of Web 2.0-style sites. According to a recent study, user-generated content sites will amass over \$1 billion in advertisement revenue in 2007 and are on track to nearly double that sum in 2008.¹¹⁶

This very real profit was not envisioned by the DMCA. Although YouTube must promptly respond to notices generated pursuant to § 512(c)(3)(a),¹¹⁷ in the interval they will have generated substantial income from infringing material. Viacom's estimates imply that the majority of views on YouTube's website infringe on *its* copyrights, a fact that is questionable.¹¹⁸ Assuming, instead, that infringing material represents a low 5-10% of content on YouTube,¹¹⁹ current case law implies that YouTube would not be receiving a "direct financial benefit" from that content.¹²⁰ However, when deciding who bears the burden for copyright enforcement on the Internet, general profitability should enter into the equation even if the large majority of the content on a Web 2.0 user-generated website is non-infringing.

B. Knowledge of Infringement

1. Legislative History and Case Law (Notice and Red Flags)

One of the key policy roles of the safe harbor provisions is to shift the burden of policing and identifying infringing material from OSPs to the most knowledgeable source: the copyright owner. The legislative history supports this concept, explaining that a service provider "need not monitor its service or affirmatively seeks facts indicating infringing activity."¹²¹ This concept is supported by numerous provisions of § 512, particularly in that it requires action when the OSP has actual knowledge or when the OSP has received near-perfect notice from the copyright owner.¹²²

There are two ways that an OSP might receive notice of infringement. The first is through proper notice of infringement from copyright owners. In order to protect against unduly burdening providers, an OSP is not obli-

116. eMarketer Reports, http://www.emarketer.com/Reports/All/ Emarketer_2000421.aspx?src=report_head_info_reports (last visited Dec. 5, 2007).

117. See *infra* Section III.B.1 on knowledge and take-down notices.

118. See *YouTube Serves up 100 Million Videos a Day Online*, USATODAY.COM, http://www.usatoday.com/tech/news/2006-07-16-youtube-views_x.htm? (July 16, 2006).

119. See *Sony*, *supra* note 6, at 443 (estimating that copyright owners in suit owned between 5-10% of all broadcasted television content).

120. It is worth noting that if Viacom's numbers are accurate, or the 5-10% estimate is low, a court could find that YouTube *is* receiving a direct financial benefit. In such a case, YouTube would lose their safe harbor.

121. H.R. REP. NO. 105-551, at 53 (1998).

122. See 17 U.S.C. §§ 512(c)(1)(A)(i) & 512(c)(1)(C) (2000).

gated to actively monitor its service for infringement. Instead, it is only required to act upon receiving knowledge or notice of infringement on its system.

When notice comes from a copyright owner, it must satisfy six requirements of § 512(C)(3)(a).¹²³ Although the statute reads that compliance with these elements must only be “substantial,” the court in *CCBill*¹²⁴ recognized that the language of the statute in fact requires “substantial compliance with *all* of 512(c)(3)’s clauses.”

The lenient aspect of the “substantial” requirement is in the technical details of the notice. First noted by the court in *RIAA v. Verizon Internet Services, Inc.*,¹²⁵ the legislative history identifies that errors such as “misspelling a name” or “supplying an outdated area code” will not render ineffective an otherwise complete notification.¹²⁶

The strict notice requirement serves an important purpose. The effort required for a provider to actively monitor and attempt to identify possible infringing material would be both substantial and expensive.¹²⁷ The policy, then, represents an allocation of the initial burden for identifying and policing infringing material to the most knowledgeable source: the copyright owner.¹²⁸ Notices that do not satisfy the strict requirements do not place the service provider on notice of the potential infringement.

Further attempting to reduce the burden on OSPs, the *CCBill* court held that properly-constructed notice must exist within the bounds of a single correspondence.¹²⁹ The court noted that permitting a copyright owner to “cobble together adequate notice from separately defective notices” would represent an undue burden on the provider, who would then have to track all incoming correspondence and attempt to identify when that correspondence finally reached the levels required by § 512(c)(3).¹³⁰ Further, even though *CCBill* did receive some form of notice regarding potential copyright infringement, according to the court, that defective notice could not be read to give *CCBill* the knowledge required by § 512(C)(1)(a).¹³¹

123. See 17 U.S.C. § 512(c)(3)(A) (2000).

124. *Perfect 10, Inc. v. CCBill, LLC*, 488 F.3d 1102, 1108 (9th Cir. 2007).

125. *Recording Indus. Ass’n of Am., Inc. v. Verizon Internet Servs., Inc.*, 351 F.3d 1229, 1239 (D.C. Cir. 2003).

126. H.R. REP. NO. 105-551 (II), at 50 (1998).

127. See, e.g., *CCBill*, 488 F.3d at 1113 (finding such a burden to be substantial).

128. See *id.*; *supra* Part III.

129. See *CCBill*, 488 F.3d at 1113.

130. *Id.*

131. *Id.*

When a provider receives proper notice, it is deemed as “on notice” for a limited length of time regarding the specific infringing material identified in the notice.¹³² In other words, a copyright holder may not attempt to “blanket” notice a provider for all current and future infringing materials. In *Hendrickson v. Amazon.com*, the Central District of California explored this issue on first impression and found that the “actual language of the DMCA is present tense.”¹³³ In an attempt to shift the burden away from internet providers, the court noted that the amount of labor required to keep track of such blanket notices and filter out that material would be too onerous.¹³⁴ Instead, the court reasoned, notice only effectively concerns infringing activity that is occurring at the time the provider receives the communication.¹³⁵

The second way an OSP can obtain knowledge of infringing activity is embodied in § 512(c)(1)(A)(ii), which is referred to in its legislative history as the “red flag” test.¹³⁶ The statute requires that an OSP not be “aware of facts or circumstances from which infringing activity is *apparent*.”¹³⁷ The legislative history explains that the test to determine whether infringing activity is “apparent” contains both a subjective and an objective element. While the subjective element examines the OSP’s knowledge during the time it was hosting or otherwise providing service to the infringing material, the objective element requires that the court examine the relevant facts to determine if a “reasonable person operating under the same or similar circumstances” would find that infringing activity was apparent.¹³⁸

This absence of immunity when a provider possesses actual knowledge of infringement parallels the inducement concept in traditional copyright infringement law. Where traditional copyright law finds that evidence of “active steps . . . taken to encourage direct infringement”¹³⁹ is often sufficient to establish secondary liability, such steps are also sufficient to impute knowledge or awareness of a red flag, which thereby strips a service provider’s immunity.¹⁴⁰

132. *Hendrickson v. Amazon.com, Inc.*, 298 F. Supp. 2d 914 (C.D. Cal. 2003).

133. *Id.*

134. *See id.* at 917.

135. *See id.* at 916-17.

136. H.R. REP. NO. 105-551, at 25 (1998).

137. 17 U.S.C. § 512(c)(1)(A)(ii) (2000) (emphasis added).

138. *See* H.R. REP. NO. 105-551 (II) at 53 (1998).

139. *Oak Indus., Inc. v. Zenith Elec. Corp.*, 697 F. Supp. 988, 992 (N.D. Ill. 1988).

140. *See* *MGM Studios, Inc. v. Grokster, Ltd.*, 545 U.S. 913, 936 (2005).

In application, the identification and isolation of red flags may not be as simple as it seems. In *CCBill*, the Ninth Circuit explored several potential “red flags.”¹⁴¹ *CCBill* hosted several “password-hacking websites” that provided passwords furnishing access to presumably protected data.¹⁴² The plaintiffs argued that this amounted to enabling users to infringe upon copyrights, and that *CCBill*’s apparent knowledge of the content of these websites was sufficient to establish their actual knowledge of infringement.¹⁴³ Dismissing this argument, the court found that password-hacking sites are not per se copyright infringement.¹⁴⁴ It reasoned that passwords may have been provided as a short-term promotion or to collect anonymous information from viewers.¹⁴⁵

In truth, the Ninth Circuit’s reasoning indicates a concern about placing nearly any burden on the service providers. Although the legislative history makes clear that providers are not expected to police their own networks and content, *CCBill* arguably lays out an even broader expectation.¹⁴⁶ Yet if courts require service providers to actively police their hosted content by holding them liable for potentially infringing sites (e.g., the above password-hacking site), it is likely that they would shut down websites where content was questionable rather than risk liability. This creates a disconcerting slippery slope that turns service providers into censoring organizations. Out of fear for liability, OSPs would likely shut down any site which appeared to be, if only on its face, involved in copyright infringement. The password-hacking websites in *CCBill* would be shut down immediately, even if they were not actually involved in copyright infringement and merely claimed to be doing something illicit in order to attract a larger audience. The result of this would be a much less expressive Internet, and in turn, an Internet upon which the freedoms of expression protected under the First Amendment are lost as websites are shut down by OSPs out of fear of losing their immunity.

2. *Red Flags in Web 2.0*

In a Web 2.0 scheme, particularly a site on the magnitude of YouTube, identifying and examining red flags is even more complicated. Given the automated process in which videos are uploaded, it is hard to assume that any human employee at YouTube would see “red flags” if they were in-

141. See *Perfect 10, Inc. v. CCBill, LLC*, 488 F.3d 1102, 1113-14 (9th Cir. 2007).

142. *Id.*

143. See *id.* at 1114.

144. See *id.*

145. See *id.*

146. See 145 CONG. REC. S15228-01 (1999) (red flag test); see also *CCBill*, 488 F.3d at 1113-14 (finding suggested red flags to be unconvincing).

cluded in the titles of videos or in the videos themselves. The obvious circumvention is a “hack:” a program that disallows the naming or tagging of any items that have been identified as including copyrighted terms.¹⁴⁷ Thus, when somebody searches for “South Park” (an example from the Viacom complaint), the search will return no results. However, there are two somewhat obvious problems with this solution. First, a video with the title of “South Park” may not necessarily contain infringing content; various copyright exceptions and protections indeed encourage parodies and fair use, which often use titles of copyright material, thus unfairly limiting free expression.¹⁴⁸ Second, this technique has already been tried on other internet applications, but clever infringers circumvented the strategy by coining terms that allow users but not filters to identify infringing content.¹⁴⁹ For example, an infringer would convert the label “South Park” into “S0uth Park” or something similar, creating an endless variety of pseudonyms for potentially infringing material.

Given the complexity of this process and the reasoning behind the red flag test, it appears as though there is no necessary purpose for the test. Generally, the reason the burden of noticing copyright infringement is shifted to the copyright owner is because the copyright owner is in the best position to identify when his material is being infringed upon.¹⁵⁰ In truth, there are few scenarios that would raise clear and certain red flags of copyright infringement to the OSP directly. In fact, short of a service running completely for the purpose of enabling copyright infringement,¹⁵¹ courts have yet to isolate specific red flags of infringement. There almost

147. See CDT Issue Brief: Blocking and Filtering Content on the Internet after the CDA: Empowering Users and Families Without Chilling the Free Flow of Information Online, http://www.cdt.org/speech/971015rating_issues.html (last visited Dec 1, 2007); see generally Wikipedia, Content Filtering, http://en.wikipedia.org/wiki/Content_filtering (last modified Dec 2, 2007).

148. See Press Release, Electronic Freedom Foundation, Fair Use Advocates Issue Principles for Protecting Online Videos (Oct. 31, 2007) available at <http://www.eff.org/press/archives/2007/10/31>. Additionally, YouTube remains a source of critical and parody works, many of which may fall into fair use categories. See *Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569 (1994) (applying fair use defense to copyright infringement); see also *Mattel, Inc. v. MCA Records*, 296 F.3d 894 (9th Cir. 2002) (applying nominative and parody defense to trademark infringement).

149. The terms ‘Warez,’ ‘Gamez,’ and ‘Appz’ have gained popularity as alternative terms to find infringing Software, Games, and Applications available for free download online. See, e.g., Wikipedia, Warez, <http://en.wikipedia.org/wiki/Warez> (last modified Feb. 7, 2008).

150. See *CCBill*, 488 F.3d at 1114 (“We impose no . . . investigative duties on service providers.”).

151. See, e.g., *MGM Studios v. Grokster, Ltd.*, 545 U.S. 913 (2005).

always seems to be rational reasons why alleged red flags may not actually point to infringing material.

Given the profitability of hosting infringing material, however, and the somewhat general awareness (although perhaps not legally sufficient notice) of ongoing activity occurring on its servers, it is hard to imagine any Web 2.0 provider that is not sensitive if not completely aware of the infringing uses available on its system. The question of whether it is equitable to allow, expect, and even encourage OSPs to put their heads in the sand and feign ignorance will be explored in Part IV, *infra*.

Despite its complexities, new technology may offer a solution. Google announced in October 2007 that it would begin testing a video identification service designed to filter out infringing content.¹⁵² The concept is a basic comparison of content: copyright owners would provide clips of their content to Google for storage in a database, and Google would compare each uploaded movie against those in the database.¹⁵³ Uploaded files that too closely resembled a file in the database would be removed.

In addition to the potential technical complexities that might arise from this (or any) technological solution, there are significant legal issues that must be addressed. One of the primary issues would be fair use: digital critiques of movies and shows, parodies, and various other potential legitimate uses of copyrighted works could be unduly censored.

Certainly, Google's algorithm represents a good-faith effort to detect infringing material and that enterprises to automatically detect infringing material are technically feasible. Given the future technological capabilities of an automated method of this kind, which will make policing infringing content easier, the legislative concern for burdening online service providers may be outdated. If this type of screening method (similar to the requested filtering methods contemplated in *Grokster* and hinted at in Google's verification system)¹⁵⁴ can be implemented at a low cost, then it may be reasonable to expect OSPs to play at least a minor role in the policing of content on their websites. This concept will be explored more in Part IV, *infra*, and considered as a potential new remedy for easing what may be an unfairly located burden.

152. *YouTube Rolls Out Filtering Tools*, BBC NEWS <http://news.bbc.co.uk/2/hi/technology/7046916.stm> (Oct. 16, 2007).

153. *Id.*

154. *See, e.g., Grokster*, 545 U.S. at 916 (regarding Grokster's potential ability to develop filtering tools); *supra* Section III.B.2 (regarding YouTube's new video filtering technology).

C. Interference with Standard Technical Measures

1. Legislative History and Case Law

Section 512(i)(B) was enacted in order to allow copyright owners to exercise their due burden of monitoring the use of their copyrighted material. It requires that service providers accommodate and not interfere with “standard technical measures” used by copyright owners for identifying and protected copyrighted works.¹⁵⁵ In many situations, the copyright owner uses the same method available to the standard user in order to identify infringing material. For instance, the Recording Industry Association of America (RIAA) has automated its analysis of online peer-to-peer file sharing networks by implementing technology that runs on top of the software available to the average end-user.¹⁵⁶ The RIAA utilizes a software suite, made available by information security company MediaSentry,¹⁵⁷ which systematically searches file sharing networks for infringing content. In reality, the system does not appear to do much more than use publicly available end-user software to search the network.¹⁵⁸ In general, this is synonymous with a copyright owner using a search engine to find his material on sites not licensed to use it. When techniques like these represent the “standard technical measures” being employed by copyright owners, there is no burden on OSPs to avoid interfering with the measures since the technical measures utilize the publicly available functions of the OSP’s service.

However, the statute’s requirement for not interfering with standard technical measures does not always yield a simple or readily apparent analysis. For instance, in *CCBill*,¹⁵⁹ the court had to determine whether access to a website, which was impeded by password-protected websites,

155. See 17 U.S.C. § 512(i)(1)(B) (2000).

156. Transcript of Cross-Examination of Gary Millin, *BMG Canada et al. v. John Doe*, 2005 FCA 193, Court File No. T-292-04, question and answers 75, 96, 178-179, 200-03, available at http://www.ilrweb.com/viewILRPDF.asp?filename=bmg_doecanada_millindeposition (explaining that MediaSentry’s technology for searching for infringing material ran on top of standard peer-to-peer file sharing applications).

157. MediaSentry appears to have changed their company name to SafeNet but retain the product name MediaSentry to describe their services. Since the information cited regarding the company’s techniques refer to MediaSentry, that name will be used throughout in order to preserve accuracy.

158. See, e.g., SafeNet Website / Media Sentry, http://www.safenet-inc.com/products/sentinel/mediasentry_intellectual_property_protection.asp (last visited Nov. 15, 2007); Transcript of Cross-Examination of Gary Millin, *BMG Canada et al. v. John Doe*, Court File No. T-292-04, question and answers 75, 96, 178-179, 200-03, available at http://www.ilrweb.com/viewILRPDF.asp?filename=bmg_doecanada_millindeposition.

159. See *supra* Section III.A.2.

was a “standard technical measure” with which CCBill was required not to interfere. In order to protect access to its hosted content, and thus gain income by selling subscriptions, CCBill facilitates a process of password-protecting websites and then uses its financial transaction system to grant access to those who pay. These sites are, in what is otherwise a commercially reasonable way, blocking access to their internal content.¹⁶⁰ In *CCBill*, the plaintiff Perfect 10, Inc., argued that this type of system interfered with its standard technical measures for identifying infringing material because it could not determine whether CCBill affiliated websites contained infringing material.¹⁶¹

The *CCBill* court remanded to determine whether “access to a website” constitutes a standard technical measure.¹⁶² Although it is likely that the lower court will hesitate to conclude that any service provider password protecting some of its hosted material automatically waives its safe harbor immunity, each side of the argument has interesting merits that will be discussed in the following Section.

2. *Accessing Protected User-Content in a Web 2.0 Environment*

The question of whether or not access to online content is a “standard technical measure” also arose in the recent complaint filed against Google and YouTube by media conglomerate Viacom.¹⁶³ In its complaint, Viacom claimed that YouTube interferes with standard technical measures in two ways. First, YouTube allows users to restrict access to content that they post.¹⁶⁴ In other words, a user may upload a video and then only allow his or her “friends” to access it.¹⁶⁵ According to YouTube, this restriction is intended to be a privacy measure that enables users to retain control over who views their videos.¹⁶⁶ For instance, it allows users to both post family

160. These sites function on a pay-to-view system. They are not interfering with technical measures so much as they are protecting access to something that requires paid admission to enter. Movie theaters do not block standard technical measures simply because they require a ticket to enter.

161. *See* Perfect 10, Inc. v. CCBill, LLC, 488 F.3d 1102, 1115 (9th Cir. 2007).

162. *Id.*

163. Complaint at 1-9, Viacom Int'l v. YouTube, Inc., No. 1:07CV02103, 2007 WL 775695 (S.D.N.Y. Feb. 30, 2007).

164. *Id.* at 16.

165. I place friends in quotes to emphasize the important distinction between “real” friends and friends in a virtual community: the widespread, anonymous nature of internal circles of “friends” on YouTube contrasts greatly with the smaller scale infringement that would be possible in an actual, personal circle of friends.

166. YouTube: How Do I Make My Video Private?, <http://www.google.com/support/youtube/bin/answer.py?answer=59208&topic=10519> (last visited Dec. 1, 2007);

videos and protect the privacy of those depicted in personal videos. It is one of many steps taken by Web 2.0 websites to protect the privacy of their users while simultaneously encouraging content posting and site growth.¹⁶⁷ However, as alleged in Viacom's complaint, these privacy settings may also have the side effect of creating hidden caches of infringing material.¹⁶⁸ Since the material is effectively hidden from all but the allowed users' searches, copyright owners and their agents who are searching the site for infringing content will be unable to access potentially infringing material.

In addition to permitting users to restrict access, YouTube also offers a search function allowing visitors to search through the descriptions of posted videos in order to locate and watch specific types or genres of content.¹⁶⁹ Likewise, copyright owners also use the search feature to identify intellectual property present on YouTube. However, the search function on YouTube has been crippled in a way that Viacom contends interferes with the standard technical measures available to copyright owners: it returns only the first 1,000 video clips matching any search query, making it much less effective for Viacom's policing efforts.¹⁷⁰ Furthermore, Viacom alleges in its complaint that this was only a recent change to the search functionality, thus implying that the limitation may be more of a selective than a technical restriction.¹⁷¹ Viacom claims that the addition of this limitation prevents it from identifying all infringing material on any given website because it will never be able to explore beyond 1,000 files containing certain key terms.¹⁷²

Given the widespread use of passwords and other privacy features for protecting both user-generated and publisher-generated content, a holding

YouTube: Who Can See My Private Video?, <http://www.google.com/support/youtube/bin/answer.py?answer=57739&topic=10519> (last visited Dec. 1, 2007).

167. See, e.g., Christi Cassel, Note, *Keep out of MySpace! Protecting Students from Unconstitutional Suspensions and Expulsions*, 49 WM & MARY L. REV. 643 (2007); Jennifer Epstein, *Who's Reading Your Facebook?*, DAILY PRINCETONIAN, <http://www.dailyprincetonian.com/archives/2006/02/10/news/14416.shtml> (Feb. 2, 2006).

168. Complaint at 16-17, *Viacom Int'l v. YouTube, Inc.*, No. 1:07CV02103, 2007 WL 775695 (S.D.N.Y. Feb. 30, 2007).

169. *Id.* at 10-11.

170. *Id.* at 16.

171. *Id.* at 16. The allusion in the complaint is that this functionality is not the result of some technical limitation, but is an intentional attempt to limit copyright enforcement on YouTube.

172. The author of this Note was able to search the entire contents of the YouTube site at the time of writing. See *supra* note 41. It is unclear whether this represents an inaccuracy in the Viacom complaint or a technical change made by YouTube.

that access to a website constitutes a “standard technical measure” could be catastrophic. If these access restrictions are found to be an interference with standard technical measures, many OSPs will be forced to remove them in order to retain their DMCA safe harbor immunity. As a result, user privacy will become an even more challenging issue: how will OSP’s protect the identities of their users and the privacy of their user’s content if they cannot prevent access? Further, will social networking sites—already challenged by privacy advocates to grant users control over who can see their profiles and content—become an amusement of the past as users flee, fearing that their personal information will be viewable by all?¹⁷³

On the other hand, a decision finding that access is not a standard technical measure, however, may seriously erode the scope of “standard technical measures” and further restrict the copyright owner’s ability to police the Internet for infringing uses of his own content. The potentially infringing material in question lurks behind virtual locked doors, hidden from the view of the copyright owners. The availability of civil policing methods to access the content (e.g., a subpoena) fail to be useful when the copyright owner can only contemplate that infringement might be occurring, but cannot be certain where, when, how, or even if it is at all. Complete opacity is possibly the most obvious problem that a complete burden shift creates when implemented. Traditionally, copyright owners deal with opacity by simply ignoring it.¹⁷⁴ Although they pursue copyright infringement when it is visible, open, and notorious, they ignore it when it is secured behind closed doors. The rational basis for this behavior may be found in an economic argument: if copyright infringement is performed behind closed doors, where access by anonymous users (and copyright owners disguised as the same) is heavily limited, then the damages of the infringement must necessarily be limited as well.¹⁷⁵ Put another way, the relative illegality and damages of online copyright infringement are inversely correlated with the level of anonymity that the users accessing it retain. The more identification and credentials that must be acquired to view the infringing content, the less likely it is that the distribution is widespread. The less widespread the distribution, the less actual damages exist.

173. See *supra* note 167 and accompanying text.

174. See generally Transcript of Deposition of Gary Millin, BMG Canada et al. v. John Doe, Court File No. T-292-04, available at http://www.ilrweb.com/viewILRPDF.asp?filename=bmg_doe canada_millin deposition (last visited Nov. 15, 2007) (stating that infringement detection technology only sought to find file-sharing on known peer to peer networks).

175. See *supra* note 167 and accompanying text.

Applied to the current *YouTube* controversy, the most damaging infringing content is the videos that are posted openly, meaning those posted without the aforementioned privacy restrictions. Thus, paradoxically, by potentially interfering with “standard technical measures,” the privacy controls are also actively engaged in limiting the damages caused by the inherent posting of infringing content on a Web 2.0 site.

Certainly, this analysis does not imply that hiding material behind layers of access requirements exculpates the infringement. However, it does create a unique situation where a balance between copyright owners and end-users may be properly sought and is almost naturally present. Privacy concerns weigh heavily on one side of that balance, joined by a general concern for the protection of the Web 2.0 schema. As discussed above, user interaction and contribution on networking sites will drop significantly if users are not able to protect some of their content from the eyes of employers, family members, or undesirables.¹⁷⁶ The Constitutionally mandated duty to promote the useful arts and sciences represents the other side.¹⁷⁷ Because copyright enforcement serves an important role in the encouragement of creative endeavors, the potential impact of the unauthorized dissemination of protected materials over the Internet could be disastrous. Part IV will take this balance into account when examining the possibility of a burden shift in online copyright infringement detection.

IV. RECOMMENDATIONS

Written in 1995, the DMCA made it clear that OSPs should not have the burden of policing their own servers.¹⁷⁸ The DMCA was written in response to concerns that a requirement for OSPs to police their own servers would cripple OSP activity, prohibitively raise the costs of doing business on the Internet, and greatly restrict the First Amendment rights of their users.¹⁷⁹ Thus, in an attempt to shift the burden to the least-cost-avoider, Congress held strong to the tradition that a copyright owner should bear the complete burden of policing infringing material.¹⁸⁰ However, secondary liability provided a reservation: Online service providers who induce infringement or profit directly from infringement are liable for copyright infringement. In its various provisions, the DMCA addresses these de-

176. See *supra* note 167 and accompanying text.

177. U.S. CONST. art. I, § 8, cl. 8.

178. See *supra* note 54 and accompanying text.

179. *Id.*

180. See S. REP. No. 105-190, at 8 (1998).

fenses by offering what are solely binary rules: do not profit directly, do not have knowledge, and do not block access.¹⁸¹

Web 2.0 environments blur these binary environments.¹⁸² It is unclear when an OSP hosting user-generated content is profiting directly from copyrighted material. Further, what happens when an OSP simultaneously profits from user-generated content and yet does not have actual knowledge under the DMCA that it is doing so? Given these concerns, the requirements should be modified. Although the rationale behind the DMCA and its safe harbor provisions is sound in that it simplifies the process of categorizing online service providers and allows a relatively easy determination of where immunity falls, the binary categorization it employs does not adequately reflect the nature of the Internet as it stands now, with Web 2.0 applications, nor how it will stand as it develops further. In order to more adequately address growing technology, this categorization requires more flexibility.

The judicial gateways governing the term “direct financial benefit” have closed tightly around that term, requiring that the infringing material reflect a primary draw to an OSP’s customers. This inflexibility might be attributed to the fact that finding such a benefit immediately removes immunity for OSPs that would not be otherwise protected. These two concerns must be taken together when adjusting the statutory language. As such, the author of this Note proposes: 1) changing the term “direct” to “substantial” and 2) appending that requirement with a proviso. The term “substantial” more adequately reflects the behavior of Web 2.0 environments, where several different features work together to attract users. It also adequately addresses the situations (e.g., YouTube) where the site derives substantial profit from infringing material, but where the infringing material may not represent (or is difficult to prove) a “direct” draw to customers.

As noted above, a proviso is required in order to achieve an appropriate balance in this situation. As explored in Section III.A.2, a burden-shift in liability away from copyright owners may be more technically and economically feasible in the pursuit of online infringing material. However, lowering the amount of financial benefit an OSP receives will do nothing but seem like an arbitrary shift. Thus, hand-in-hand with the “substantial” term, there must be a non-binary category, a legal gray area which will allow the judiciary to adapt its application to each new technology it faces.

181. Binary in the technical sense. It is either “on” or “off,” “yes” or “no.”

182. See generally *supra* Sections III.A.2, III.B.2, III.C.2.

If a copyright owner is able to prove that an OSP is receiving a substantial financial benefit from infringing material, then he will have effectively raised a question of affirmative duty on the OSP. In order to move the OSP fully out of the safe harbor protection, the copyright owner will be required to prove that the OSP would not be unduly burdened by implementing certain technological features and thus has not failed to take “good faith” efforts to prevent copyright infringement on its servers.

This standard will require an analysis of several elements of the OSP’s business model. It should allow for more flexibility around other concerns explored above, including a showing of whether an OSP has intentionally kept itself from becoming officially aware of infringement and whether it has taken technical measures to restrict access to material. Based on the analyses above, the following elements should be examined in the process:¹⁸³

- Amount of income derived from infringing material
- Amount of damages caused by copyright infringement on OSP’s servers
- Amount of properly-constructed notices received and processed by OSP
- Percentage of OSP’s hosted content that is infringing
- Popularity of infringing hosted content in comparison with OSP’s other content
- Technological sophistication of the OSP’s systems¹⁸⁴
- Presence of existing technology to perform adequate filtration and availability of that technology to the OSP in question
- Efforts by OSP to prevent detection of infringing activity by copyright owners¹⁸⁵

In many ways, these elements are drawn from the same theory of online infringement posited in Section III.C.2, *supra*. When anonymous and widespread, copyright infringement is more dangerous than smaller and more private infringement.¹⁸⁶ In cases of widespread infringement on extremely popular websites, these balancing factors will weigh heavily against the OSP: they tend to profit more significantly, they cause more damage, and are presumed to have received more notice. In those cases,

183. This list is intended to be illustrative, not exhaustive.

184. Compare, for instance, the technical complexity and sophistication of Google, with the relatively layman-ship of an open-source blog with comments enabled (thus presumably inviting potential third-party infringement).

185. *See supra* Section III.C.2.

186. *See id.*

likewise, it is more reasonable to expect that the OSP might have the resources to implement filtering systems where possible. Smaller cases of infringement, such as servers hosting online “blogs” or low-level commercial websites, will retain their immunity because a burden-shift would likely put them out of business and because the damage caused by the infringement hosted on their servers is not substantial enough to justify that result.¹⁸⁷ However, the copyright infringement aggregated across many of these small sites may still amount to substantial damages. Importantly, this proposal does not offer such sites immunity, but only an exception from having to independently develop filtering technologies. The existing DMCA provisions of notice and takedown, as well as the possibility that such sites could be receiving a “direct financial benefit,” will still protect copyright owners from undue infringement.

Although implicated in elements listed above, the DMCA’s other bright-line standards do not necessarily need to be changed by the proposed amendment. Just as before, actual knowledge of infringement accompanied by inaction certainly should repeal immunity, as should the direct blocking of standard technical measures used to detect infringing material (i.e., contributing to the infringement directly). However, since the basis of a burden adjustment is necessarily in the economics of more feasible solutions, it seems appropriate that the “financial benefit” requirement be located where this balancing test is nested.

V. CONCLUSION

In conclusion, Web 2.0 websites, particularly those heavily involved in publishing user-generated content, have created a noticeable change in the way the Internet is used to disseminate information. New material is posted nearly every second. Some of that information, however, is copyrighted and used without permission. It is extremely difficult for copyright owners to keep up with this flow of information in order to protect their constitutionally-granted rights.

The root of these difficulties lies in the fact that the DMCA’s safe harbors require an analysis that draws a bright line where there should be a dim one. Technology advances far too quickly and far too unexpectedly to wait for Congress to pass new versions of the DMCA, and so the judiciary is left to struggle with language that does not map properly onto the art.

187. *See id.* Small businesses who cannot adequately develop filtering technology would not survive the prospect of liability. The “direct financial benefit” analysis should play a role in the legal resolution of this issue in order to prevent such an unfortunate circumstance.

Additionally, given advances in technology, the copyright owner may no longer be the least-cost-avoider for detecting infringement online. In a Web 2.0 scheme, the possibility that technology can be used to filter out some infringing material is great and, in some cases, economically efficient. The current binary system of the DMCA's requirements does not allow for an adequate determination of that efficiency, and so a balancing test must be implemented in order to allow for an economical and just balance of the burden for preventing copyright infringement.

STEPPING IT UP AND TAKING IT TO THE STREETS: CHANGING CIVIL & CRIMINAL COPYRIGHT ENFORCEMENT TACTICS

By Kim F. Natividad

I. INTRODUCTION

At first glance, copyright law appears straightforward. The United States Copyright Act grants copyright owners a set of exclusive rights to their works.¹ Copyright infringement occurs when anyone, from a student in their dorm to the CEO of a Fortune 500 company, violates one or more of those exclusive rights.² However, for both copyright industries and law enforcement, attempting to actually enforce these rights in the face of infringement is not so straightforward. In the face of domestic and international challenges to copyright enforcement, industry groups and law enforcement are employing new tactics. These tactics range from civil suits against individual direct infringers to potential trade sanctions against foreign nations.

Part II of this Note explores how copyright holders, particularly those represented by the Recording Industry Association of America (RIAA), are using several different methods to enforce their copyrights against direct infringers through civil suits. Part III outlines the ways in which these copyright owners are working with law enforcement officials and government agencies to crack down on large-scale infringement on the criminal front. Lastly, Part IV examines the problems of copyright enforcement outside the United States, especially in China. The particular focus on China reflects both the importance of China to copyright holders and illus-

© 2008 Kim F. Natividad.

1. 17 U.S.C. § 106 (2000). The exclusive rights are: (1) to reproduce the copyrighted work in copies or phonorecords; (2) to prepare derivative works based upon the copyrighted work; (3) to distribute copies or phonorecords of the copyrighted work to the public by sale or other transfer of ownership, or by rental, lease, or lending; (4) in the case of literary, musical, dramatic, and choreographic works, pantomimes, and motion pictures and other audiovisual works, to perform the copyrighted work publicly; (5) in the case of literary, musical, dramatic, and choreographic works, pantomimes, and pictorial, graphic, or sculptural works, including the individual images of a motion picture or other audiovisual work, to display the copyrighted work publicly; and (6) in the case of sound recordings, to perform the copyrighted work publicly by means of a digital audio transmission. *Id.*

2. 17 U.S.C. § 501(a) (2000).

trates the methods that copyright owners and industry associations use to pursue direct infringers on the international front.

II. CIVIL ENFORCEMENT

Copyright owners such as record labels typically earn revenue from legal and authorized uses of their copyrighted works by the public. When the exclusive rights set forth in 17 U.S.C. § 106 are infringed, the Copyright Act entitles owners to institute civil copyright infringement actions.³

This Part examines civil enforcement efforts, focusing on the actions of the Recording Industry Association of America (RIAA), a leading entity in the copyright enforcement fight. Section II.A reviews the basic framework of civil copyright enforcement and the growing industry focus on direct liability. Section II.B introduces the RIAA and its use of civil suits to pursue direct infringers. Lastly, Section III.C assesses the RIAA's goals and likelihood of success.

A. Direct Liability Versus Secondary Liability

Copyright owners in the music, software, and movie industries face challenges in enforcing their exclusive rights. While infringement and piracy rapidly increase, technology becomes more sophisticated to evade infringement detection.⁴ Enforcement is further complicated by simple economics, as it is cost-prohibitive to sue the large population of individual infringers, given the costs of litigation.⁵

As a result, copyright owners have previously responded to rising infringement by focusing copyright enforcement on secondary liability, targeting easily identifiable organizations with greater confidence and hopes of compensation. Owners and groups with stakes in copyright enforcement initially focused their civil suits on infringement facilitators, such as Nap-

3. 17 U.S.C. § 501(b) (2000). These claims are subject to the defense of fair use, codified in section 107 of the Copyright Act of 1976. 17 U.S.C. § 107 (2000).

4. See Peter Biddle et al., *The Darknet and the Future of Content Distribution*, in PROCEEDINGS OF THE 2002 ACM WORKSHOP ON DIGITAL RIGHTS MANAGEMENT (2002), available at <http://crypto.stanford.edu/DRM2002/darknet5.doc>; see also Jordan S. Hatcher, *Mesh Networks: A Look at the Digital Future*, 11 J. Internet L. 1, 16 (2007) (discussing wireless mesh networks encrypted so as to be virtually impenetrable to RIAA or MPAA "detectives.").

5. Mark A. Lemley & R. Anthony Reese, *Reducing Digital Copyright Without Restricting Innovation*, 56 STAN. L. REV. 1345, 1373-77 (2004) (noting that "suing even a fraction of end users could bankrupt the content industries" given the costs of taking even a low-stakes case to trial).

ster or Grokster, under theories of secondary liability.⁶ In *MGM v. Grokster*, Justice Souter acknowledged this fact:

The argument for imposing indirect liability . . . is . . . a powerful one, given the number of infringing downloads that occur every day When a widely shared service or product is used to commit infringement, it may be impossible to enforce rights in the protected work effectively against all direct infringers, the only practical alternative being to go . . . for secondary liability.⁷

Despite the perceived impracticality of suing direct infringers, copyright owners have recently escalated their enforcement actions against direct infringers through a variety of means in the civil, criminal, and international arenas. Copyright owners are turning to civil actions against direct infringers to change societal norms by sending the message that infringement is a real crime with real consequences.⁸ To prove direct infringement, an owner must show: (1) that she owned a valid copyright, and (2) that a defendant copied original elements of her copyrighted work.⁹ For registered works, statutory damages obviate the need to show actual loss of revenue stemming from the infringement.¹⁰ In fact, recent research suggests that actual damages may be minimal.¹¹ As part of their civil enforcement efforts, industries are targeting infringers with sophisti-

6. See *Grokster*, 545 U.S. at 929-30; *Sony Corp. of America v. Universal City Studios*, 464 U.S. 417 (1984); *A&M Records, Inc. v. Napster, Inc.*, 239 F.3d 1004 (9th Cir. 2001).

7. *MGM Studios, Inc. v. Grokster, Ltd.*, 545 U.S. 913, 929-30 (2005).

8. See Motion Picture Association of America, Educational Outreach, http://www.mpa.org/Issues_EduOutreach.asp (last visited Apr. 6, 2008) (“An important part of [the Motion Picture Association’s] mission and responsibility is to educate . . . consumers . . . about the importance of intellectual property rights . . . and the consequences of breaking the law.”); Business Software Alliance, Copyright, <http://www.bsa.org/country/Public%20Policy/Copyright.aspx> (last visited Apr. 6, 2008) (stating that educational outreach regarding copyright law is a basis for the BSA’s copyright public policy agenda); see also Committee on Intellectual Property Rights, Computer Science & Telecommunications Board, *The Digital Dilemma: Intellectual Property in the Information Age—Executive Summary*, http://www.nap.edu/html/digital_dilemma/exec_summ.html (last visited Apr. 6, 2008) (“A better understanding of the basic principles of copyright law would lead to greater respect for [it] and greater willingness to abide by it . . .”).

9. *Feist Pub. v. Rural Tel. Serv.*, 499 U.S. 340, 361 (1991).

10. 17 U.S.C. § 501(c) (2000).

11. While there is still much debate on how big of an impact illegal file sharing on P2P networks has had on album sales, researchers from Harvard University and the University of Kansas recently published a study that illegal downloads have only reduced CD sales by 0.7 percent. Felix Oberholzer-Gee & Koleman Strumpf, *The Effect of File Sharing on Record Sales: An Empirical Analysis*, 115 J. POL. ECON. 1, 36 (2007).

cated surveillance tactics, pressuring ISPs and universities to help identify infringers, and filing lawsuits in which individual users are confronted with high legal bills and the potential for statutory liability far in excess of actual damages.

B. Direct Infringement Actions by the Recording Industry Association of America

The Recording Industry Association of America (RIAA) is leading the campaign against direct infringers. The RIAA is a trade group consisting of U.S. recording companies, such as Epic, Sony BMG, and Universal, which collectively control approximately ninety percent of all American sound recordings.¹² To achieve its mission, the RIAA began to use the Copyright Act's civil enforcement provisions against direct infringers in September 2003.¹³

1. Early Tactics in Direct Infringement Actions

The first hurdle the RIAA faced was identifying infringers. Under its initial strategy, the RIAA employed companies like MediaSentry, and its parent company SafeNet, to search peer-to-peer (P2P) networks for infringing files;¹⁴ this approach uses packet "sniffers" and users' IP addresses to identify alleged infringers.¹⁵ The Digital Millennium Copyright Act (DMCA), passed with RIAA support in 1998, allowed the RIAA to directly subpoena Internet Service Providers (ISPs) for the identities of

12. RIAA, Who We Are, <http://www.riaa.com/aboutus.php> (last visited Mar. 7, 2008) [hereinafter RIAA FAQ]. Formed in 1952, the RIAA's mission is to support a business and legal climate that protects its members' "intellectual property rights worldwide and the First Amendment rights of artists; conducts consumer, industry, and technical research; and monitors and reviews state and federal laws, regulations, and policies." *Id.*

13. *Id.*

14. RIAA FAQ, *supra* note 13.

15. As described by a MediaSentry Vice President, the company is hired by the motion picture, music, and software industries to engage in a process whereby MediaSentry (1) is provided with a list of copyrighted works believed to be available on P2P networks; (2) connects to various P2P networks and conducts a search for those works; (3) obtains the IP address of users offering those works for download via use of a packet "sniffer;" (4) searches that user's publicly available directory for other files that may match copyrighted works; (5) downloads at least one copyrighted work being offered by the user; and (6) logs all of this evidence and any other information about the user MediaSentry is able to obtain. Declaration of Thomas Mizzone In Support Of Miscellaneous Administrative Request for Leave to Take Discovery Prior to Rule 26 Conference, *Twentieth Century Fox Film Corp. v. Does 1-12*, No. 3:04CV0486, at 2-4 (N.D. Cal. Nov. 16, 2004). A user's IP address is unique and is automatically assigned to her by her Internet Service Provider when she logs on.

infringing subscribers.¹⁶ This was an efficient way for the RIAA to identify direct infringers because the DMCA subpoena does not require a formal complaint and has no proof requirement. However, a problem with this particular subpoena process is that it lacks substantial judicial oversight because it takes place outside of the context of a formal complaint and is issued by a clerk rather than a judge.¹⁷ Shortly after the RIAA began using this tactic, a federal appeals court held that ISPs that route material through their servers fall under the safe harbor provision of the DMCA and are not subject to the subpoena provision.¹⁸

2. *Recent RIAA Tactics in Direct Infringement Actions*

a) John Doe Suits

In January 2004, the RIAA pursued a new tactic, announcing over 500 “John Doe” lawsuits.¹⁹ The RIAA initiates these lawsuits by filing suit against unnamed defendants who use P2Ps and whose computer IP addresses have been flagged by SafeNet’s software.²⁰ A subpoena is then issued by the court via Rule 45 of the Federal Rules of Civil Procedure to obtain the identities of the defendants from their ISPs.²¹ The John Doe subpoenas are an improvement on the DMCA subpoenas in that they ensure there is some judicial oversight of the due process and privacy rights of Internet users because, unlike the DMCA subpoenas, the John Doe subpoenas are issued only within the context of pending litigation and are su-

16. 17 U.S.C. § 512(h)(1) (2000) (“A copyright owner or a person authorized to act on the owner’s behalf may request the clerk of any United States district court to issue a subpoena to a service provider for identification of an alleged infringer . . .”).

17. *Id.*; Susanna Frederick Fisher, *An Update on the Current State of the File Trading War for Universities: Legal Uncertainty and Educational Opportunity*, Catholic University Counsel of America Online (Spring 2004), <http://counselonline.cua.edu/archives/frontpage/filetrading.cfm> (last visited Mar 7, 2008).

18. *Recording Indus. Ass’n of Am., Inc. v. Verizon Internet Servs.*, 351 F.3d 1229, 1237 (D.C. Cir. 2003).

19. John Schwartz, *Recording Industry Is Accusing 532 People of Music Piracy*, N.Y. TIMES, Jan. 21, 2004, available at <http://www.nytimes.com/2004/01/21/business/21WIRE-MUSIC.html>.

20. Lori A. Morea, *The Future of Music in a Digital Age: The Ongoing Conflict Between Copyright Law and Peer-to-Peer Technology*, 28 CAMPBELL L. REV. 195, 203 (2006).

21. *Id.*

pervised by a judge.²² As of October 2007, the RIAA has filed, settled, or threatened John Doe lawsuits against over 20,000 individuals.²³

Capitol Records, Inc. v Thomas,²⁴ decided in October 2007, was the first of these John Doe lawsuits to go to trial.²⁵ Jammie Thomas, the defendant, was a thirty-year-old Native American, single mother of two, and resident of Brainerd, Minnesota.²⁶ Seven of the major record companies, all RIAA members, brought suit against Thomas alleging copyright infringement seeking punitive, but not actual damages.²⁷ During trial, the plaintiffs sought to link Thomas to the user account "Tereastarr" on the Kazaa file-sharing network based on her computer's IP address and the IP address identified by SafeNet's software on the night of February 21, 2005.²⁸ After brief deliberations, the federal jury found Thomas liable and ordered her to pay \$9,250 in penalties for each of twenty-four songs, for a total of \$222,000.²⁹ Thomas has since moved and is currently litigating for a new trial based on a claim that the penalty levied against her "is excessive and in violation of the Due Process Clause of the United States Constitution."³⁰

b) Letters to Colleges and Universities

In addition to the use of John Doe lawsuits to fight infringement, the RIAA has increased efforts to address infringement at the college level.³¹ In February 2007, the RIAA began a deterrence program to encourage col-

22. Fisher, *An Update on the Current State of the File Trading War*, *supra* note 17.

23. Susan Decker & Tom Wilkowske, *Vivendi, Music Industry Win First Downloading Trial*, Bloomberg.com, Oct. 4 2007, http://www.bloomberg.com/apps/news?pid=20601101&sid=a_GKOLbNs5Zs.

24. *Capitol Records, Inc. v. Thomas*, No. 06-cv-1497, 2007 WL 3054014 (D. Minn. Oct. 4, 2007).

25. Posting of Ray Beckerman to Recording Industry v. The People, First RIAA Jury Trial to Start Tuesday October 2nd in Duluth, Minnesota, in *Virgin v. Thomas*; Motion for "Summary Adjudication" Denied, <http://recordingindustryvspeople.blogspot.com/2007/09/first-riaa-jury-trial-to-start-monday.html> (Sept. 27, 2007, 10:42:00 a.m. EST)

26. David Kravets, *RIAA Rips Defendant in Nation's First Filesharing Jury Trial*, WIRED, Oct. 2, 2007, <http://blog.wired.com/27bstroke6/2007/10/riaa-rips-defen.html>.

27. Complaint at para. 18, *Capitol Records Inc. v. Thomas*, No. 06-CV-1497, 2006 WL 1431921 (D. Minn. Apr. 19, 2006); 17 U.S.C. § 504(c) (2006).

28. Jeff Leeds, *Labels Win Suit Against Song Sharer*, N.Y. TIMES, Oct. 5, 2007, at C1.

29. *Id.*

30. Defendant's Motion For New Trial, Or In the Alternative, for Remittitur, *Capitol Records Inc. v. Thomas*, No. 06-CV-1497, 2007 WL 4586690 (D. Minn. Oct. 15, 2007).

31. RIAA FAQ, *supra* note 12.

lege students to abide by copyright laws.³² Instead of initiating lawsuits, the RIAA first identified infringing university users according to their IP addresses. Then, in July 2007, the RIAA sent out 408 pre-litigation settlement letters to twenty-three universities it had identified as providing Internet access to infringing users.³³ The letters informed the universities of a forthcoming copyright infringement suit against the infringing user and requested that the school forward the letter to that user, who at that point was only identified by her IP address.³⁴ Because the RIAA's software only identifies the IP address of the supposed infringer, the RIAA depends on the use of the universities' own resources to match each IP address with its students or personnel.³⁵ These pre-litigation settlement letters offered the student twenty days "to resolve copyright infringement claims against them at a discounted rate" of \$3,000-\$6,000 before a formal lawsuit was filed.³⁶ According to RIAA officials, most infringers settled for \$4,000.³⁷ On August 16, 2007, the RIAA sent out another wave of 503 pre-litigation letters to fifty-eight universities.³⁸ As of January 2008, RIAA has sent a total of approximately 4,557 pre-litigation settlement letters to schools.³⁹

Responses from universities have varied. Some universities, such as the University of Kansas, Ohio University, and Stanford University, have adopted one-strike policies where, upon receipt of a pre-litigation letter, the university will disconnect the allegedly infringing user's internet access.⁴⁰ While Stanford and the University of California, Berkeley will re-

32. Press Release, Recording Industry Association of America, RIAA Launches New Initiatives Targeting Campus Music Theft (Feb. 28, 2007), http://www.riaa.com/news_room.php

33. Press Release, Recording Industry Association of America, 23 New Schools to Receive Latest Round of RIAA Pre-Lawsuit Letters (July 18, 2007), http://www.riaa.com/news_room.php.

34. *Id.*

35. RIAA FAQ, *supra* note 12.

36. Recording Industry Association of America, 23 New Schools to Receive Latest Round of RIAA Pre-Lawsuit Letters, *supra* note 33.

37. Leeds, *supra* note 28.

38. Press Release, Recording Industry Association of America, Music Theft at 59 Campuses Targeted in Latest Wave of Deterrence Program (Aug. 16, 2007), http://www.riaa.com/news_room.php.

39. Eric Bangeman, *RIAA Sees a 99.6% Capitulation Rate From Students at UT*, ARS TECHNICA, Jan. 29, 2008, <http://arstechnica.com/news.ars/post/20080129-less-than-1-of-u-of-tennessee-students-hold-out-against-riaa.html> (last visited Mar. 16, 2008).

40. University of Kansas, ResNet and Illegal Downloading, <http://www.resnet.ku.edu/newpolicy.jsp> (last visited Mar. 16, 2008); Ohio University, Ohio University Announces Changes in File-Sharing Policies, Apr. 25, 2007, <http://www.ohio.edu/students/filesharing.cfm> (last visited Mar. 16, 2008); Stanford University Office of the General

connect students to the university network after they pay a hefty fine, the University of Kansas permanently disconnects its students from the network for the duration of their on-campus residence.⁴¹ Others, like the University of Wisconsin and the University of Maine, have refused to forward the pre-litigation letters.⁴² According to a University of Maine official, the University adopted this policy because it did not see it as the university's role to "serve papers on [its] students for another party," nor did it "feel that it is [its] obligation to be the [enforcement] arm of the RIAA."⁴³

Universities that do not pass along the settlement letters are then subpoenaed for the identities of their students.⁴⁴ The University of Oregon, represented by the Oregon Attorney General Hardy Myers, is fighting against such a subpoena for the identities of seventeen of its students.⁴⁵ In a reply brief, Myers argued that under the Family Educational Rights and Privacy Act (FERPA)⁴⁶ only students' directory information could be turned over short of a court order. He further argued that connecting an IP address to a student is personally identifiable information and that the student's privacy would be violated if the university were to identify the students at issue.⁴⁷ Moreover, Myers stated that the RIAA's investigative tactics might have allowed it to obtain "private, confidential information unrelated to copyright infringement."⁴⁸ It is doubtful that Myers' arguments will be successful, as similar privacy arguments have met with little suc-

Counsel, Student DMCA Complaint Policy & Reconnection Fee, http://www.stanford.edu/dept/legal/Recent/DMCA_Reconnect_fee_Final1007.pdf (last visited Mar. 16, 2008).

41. University of Kansas, *supra* note 40; Gil Kaufman, *Campus Crackdowns: Universities Imposing Harsh Penalties For Illegal Downloaders*, MTVNEWS.COM, Aug. 21, 2007, <http://www.mtv.com/news/articles/1567539/20070821/index.jhtml> (last visited Mar. 16, 2008).

42. Nick Penzenstadler, *UW Warns Music Sharers*, BADGER HERALD, Mar. 19, 2007, available at http://badgerherald.com/news/2007/03/19/uw_warns_music_share.php; Tony Reaves, *UMS Refuses To Hand Student Info To RIAA*, MAINE CAMPUS, Mar. 26, 2007, available at <http://media.www.mainecampus.com/media/storage/paper322/news/2007/03/26/News/Ums-Refuses.To.Hand.Student.Info.To.Riaa-2792041.shtml>.

43. Reaves, *supra* note 42.

44. See, Duke University Dean of Students - Division of Student Affairs, Filesharing, <http://deanofstudents.studentaffairs.duke.edu/filesharing/index.html> (last visited Mar. 16, 2008).

45. Adam Liptak, *In the Heated Fight Over Music Piracy, a Rare Stand for Privacy*, N.Y. TIMES, Dec. 31, 2007, at A11.

46. See 20 U.S.C. § 1232(g) (2006).

47. *Oregon Attorney General Fires Back at RIAA P2P Tactics*, CONSUMER ELECTRONICS DAILY, Dec. 3, 2007, 2007 WLNR 24030233.

48. Liptak, *supra* note 45.

cess in other cases.⁴⁹ In another recent case, a University of Tennessee student invoked a similar privacy argument to quash an RIAA subpoena.⁵⁰ However, the District Court in Tennessee denied the student's motion on the grounds that the student's name, address, and telephone number were defined by the University of Tennessee's FERPA policy as directory information and did not need the student's consent to be released to third parties.⁵¹

C. Prospects of Success

Despite its aggressive tactics, no clear set of statistics or signs indicates that the RIAA's efforts against direct infringers have been effective in fulfilling its mission to "bring [infringement] to a level of manageable control so a legitimate marketplace can really flourish."⁵² The RIAA states that it prefers to sue businesses, not individuals, who profit from facilitating copyright infringement, but has turned to suits against individuals to educate and drive home the fact that music piracy is illegal.⁵³ Although these tactics might clearly express this view, they have come at a cost to the RIAA's reputation. The RIAA's suits against direct infringers have resulted in negative publicity because of the general unpopularity of the suits, especially those against innocent and deceased individuals, and the outcry of civil rights organizations and public interest groups.⁵⁴

49. *Id.*

50. Eric Bangeman, *U of Tennessee Student Says RIAA Subpoena Violates Federal Privacy Law*, ARS TECHNICA, Aug. 23, 2007, <http://arstechnica.com/news.ars/post/20070823-uof-tennessee-student-says-riaa-subpoena-violates-federal-privacy-law.html> (last visited Mar. 16, 2008).

51. *Virgin Records Am., Inc., et al. v. Does 1-33*, No. 3:07-CV-235, 2007 U.S. Dist WL 3145838, at *2-3 (E.D. Tenn. Oct. 24, 2007). For a more detailed look at the implications of intellectual property enforcement on privacy rights, see Sonia K. Katyal, *Privacy v. Piracy*, 7 YALE J. L. & TECH. 222 (2004-2005).

52. RIAA FAQ, *supra* note 12. Critics of the RIAA argue that its tactics are merely fueling the development of new darknet technologies such as private P2P circles and other technologies that are harder for the RIAA to monitor and infiltrate. ELECTRONIC FRONTIER FOUNDATION, *RIAA v. THE PEOPLE: FOUR YEARS LATER* (2007), <http://www.eff.org/riaa-v-people>.

53. RIAA FAQ, *supra* note 12.

54. See Kristina Groennings, Note, *Costs and Benefits of the Recording Industry's Litigation Against Individuals*, 20 BERKELEY TECH L.J. 571, 589-590 (2005); see also Eric Bangeman, *I Sue Dead People . . .*, ARS TECHNICA, Feb. 4, 2005, <http://arstechnica.com/news.ars/post/20050204-4587.html> (noting that the RIAA sued a deceased woman for copyright infringement) (last visited Mar. 16, 2008); Jari Ketola, *RIAA Withdraws Charges Against 65-Year Old*, AFTERDAWN.COM, Sept. 26, 2003, <http://www.afterdawn.com/news/archive/4529.cfm> (noting that the RIAA sued an innocent elderly woman for downloading rap songs) (last visited Mar. 16, 2008); Jefferson Graham, *Recording Indus-*

Furthermore, these suits are costly.⁵⁵ The RIAA must pay SafeNet, as well as its own legal team, to investigate infringement and pay the legal fees associated with initiating the lawsuits. During *Capitol v. Thomas*, Jennifer Pariser, head of Sony BMG's litigation department, testified that though record companies are spending millions on lawsuits against direct infringers, they have "lost money on this program."⁵⁶ Furthermore, Pariser testified that Sony BMG has no idea of the actual damages they are suffering due to downloading.⁵⁷ While it may seem counterintuitive that the RIAA, and the record labels and copyright holders it represents, would support the spending and subsequent loss of such large amounts of money, these copyright holders' goals are more than merely stopping people like Jammie Thomas from downloading songs. Ultimately, their long-term goals are to educate and change social norms with regards to copyright infringement and to convey the message that infringement is a wrong with consequences that will be enforced.⁵⁸ In the near term, the RIAA's willingness to take defendants such as Thomas to trial encourages accused infringers to settle with the RIAA upon receiving pre-litigation letters, which cost the RIAA far less than a trial.

Perhaps these efforts are having at least some effect in shaping the next generation of music consumers. A recent survey revealed that increasing numbers of teens are buying music from online services, up eight percent from last year, and that the market share of P2P has fallen by eight

try Sues Parents, USA TODAY, Sept. 14, 2003, at 4D, available at http://www.usatoday.com/life/music/news/2003-09-14-riaa_x.htm (noting that the RIAA sued a twelve-year-old girl in New York City housing project).

55. According to a 2003 American Intellectual Property Law Association's (AIPLA) economic survey, the median total costs of copyright infringement suits is as follows:

Low-Stakes Case	(<\$1 million)
Thru Discovery	\$101,000
Thru Trial and Appeal	\$249,000
Medium-Stakes Case	(\$1-\$25 million)
Thru Discovery	\$298,000
Thru Trial and Appeal	\$499,000
High-Stakes Case	(>\$25 million)
Thru Discovery	\$501,000
Thru Trial and Appeal	\$950,000

Mark A. Lemley & R. Anthony Reese, *Reducing Digital Copyright Infringement Without Restricting Innovation*, 56 STAN. L. REV. 1345, n.121 (May 2004).

56. Eric Bangeman, *RIAA Anti-P2P Campaign a Real Money Pit, According to Testimony*, ARS TECHNICA, Oct. 2, 2007, <http://arstechnica.com/news.ars/post/20071002-music-industry-exec-p2p-litigation-is-a-money-pit.html> (last visited Mar. 16, 2008).

57. *Id.*

58. RIAA FAQ, *supra* note 12.

percent.⁵⁹ Further, despite the bad publicity and the costly nature of pursuing direct infringers, the RIAA shows no sign of slowing down. Other trade associations, such as the Motion Picture Association of America (MPAA) and the Business Software Association (BSA), have engaged in civil suits against direct infringers but on nowhere near the scale of the RIAA.⁶⁰ But they are sure to be closely monitoring the progress, if any, of these lawsuits in alerting society to the legal consequences of file sharing. While suits against direct infringers may not be the best public relations move, their controversial nature ensures that copyright infringement and its legal consequences receive continual news coverage. Irrespective of how effective these particular tactics turn out to be in the long run, the RIAA, the MPAA, and the BSA are all increasing their copyright enforcement efforts along criminal and international lines.

III. CRIMINAL COPYRIGHT ENFORCEMENT

This Part examines recent activity regarding provisions that allow for criminal enforcement of copyright. Section III.A looks at the relationship between copyright holders and the government agencies charged with pursuing criminal copyright infringers. Section III.B examines various joint efforts between copyright holders and law enforcement, with special detail given to the largest piracy scheme uncovered to date, Operation Remaster. Lastly, Section III.C considers the effectiveness of criminal enforcement tactics and their relation to the civil enforcement tactics discussed in Part II.

A. Basics of Criminal Copyright Enforcement

1. *The Statutory Basis: 17 U.S.C. § 506*

Section 506 of the Copyright Act provides criminal sanctions for willful copyright infringement. According to the statute:

Criminal copyright infringement occurs when someone willingly infringes a copyright:
for commercial advantage or financial gain;

59. Antony Bruno, *Report: Teens Moving From P2P to Paid*, BILLBOARD, Oct. 20, 2007, http://www.billboard.biz/bbbiz/content_display/industry/e3ib81ef268e9ef9966f958b982e713a769.

60. *Compare* Electronic Frontier Foundation, MPAA v. The People, http://w2.eff.org/IP/P2P/MPAA_v_ThePeople/ (last visited Apr. 6, 2008) (documenting twelve suits by the MPAA against individuals), *with* Index of Litigation Documents, Recording Industry v. The People, <http://recordingindustryvspeople.blogspot.com/2007/01/index-of-litigation-documents.html> (last visited Apr. 20, 2008) (documenting over 100 suits by the RIAA against individuals).

by the reproduction or distribution, including electronically, during a 180-day period, of one or more copies of a copyrighted work having a total retail value more than \$1,000; or

by distributing a work being prepared for commercial distribution via a computer network, to the general public, if that person knew or should have known the work was meant for commercial distribution.⁶¹

These three copyright crimes have three common factors: 1) there must be a copyright; 2) there must be an infringement; and 3) the infringement must be willful.⁶²

According to the United States Department of Justice (DOJ), while civil enforcement may compensate rights-holders, criminal sanctions for copyright infringement are “warranted to punish and deter the most egregious violators: repeat and large-scale offenders, organized crime groups, and those whose criminal conduct threatens public health and safety.”⁶³ However, the scale of criminal enforcement of copyright crime pales in comparison to civil enforcement efforts. The DOJ only files about 100 criminal cases on intellectual property per year, including the trafficking of FBI Anti-Piracy labels, criminal copyright infringement, and the trafficking of counterfeit CDs and DVDs.⁶⁴

2. *Industry Participation*

A key component of criminal copyright enforcement is the cooperation of companies and trade associations like the RIAA, MPAA, and BSA, in identifying criminal infringers. The BSA uses several techniques to identify and locate infringers, including using software to identify sites selling copyrighted software without authorization⁶⁵ and offering rewards up to \$1 million for employees to anonymously report their employer’s use of unlicensed or counterfeit software.⁶⁶ Similarly, the RIAA employs a team of specialists and a 24-hour automated webcrawler to comb the Internet

61. 17 U.S.C. § 506(a)(1)(A)-(C) (2006).

62. U.S. DEP’T OF JUSTICE, PROSECUTING INTELLECTUAL PROPERTY CRIMES 17 (3d ed. 2006), available at <http://www.usdoj.gov/criminal/cybercrime/ipmanual/ipma2006.pdf> [hereinafter DOJ PIPC Manual].

63. *Id.* at 5-6.

64. JOHN GANTZ & JACK B. ROCHESTER, THE PIRATES OF THE DIGITAL MILLENNIUM 207-208 (2005).

65. *Id.* at 215.

66. *Software ‘Police’ Accused of Targeting Small Businesses*, FOXNEWS.COM, Nov. 28, 2007, <http://www.foxnews.com/story/0,2933,312948,00.html> (last visited Mar. 16, 2008).

for websites that make illegal recordings available.⁶⁷ They then turn over large-scale violations to the DOJ.⁶⁸

Once a case is under the control of law enforcement, the DOJ has a three-front approach “to ensure aggressive and effective prosecution.”⁶⁹ First, the DOJ Criminal Division’s Computer Crime and Intellectual Property Section (CCIPS) investigates and prosecutes both national and international copyright infringement.⁷⁰ CCIPS consists of expert IP prosecutors who help develop and execute the DOJ’s IP enforcement strategy and train Assistant U.S. Attorneys.⁷¹ Second, every one of the ninety-four U.S. Attorneys’ Offices has at least one, if not several, Computer Hacking and Intellectual Property (CHIP) Coordinators.⁷² These CHIP Coordinators are Assistant U.S. Attorneys specially trained in IP prosecution. As of 2006, there were 230 such CHIP prosecutors nationwide.⁷³ Third, twenty-five CHIP units have been strategically placed in areas that experience a large number of IP crimes, such as the manufacturing and trafficking of counterfeit CDs, DVDs, and FBI Anti-Piracy labels.⁷⁴ Each unit consists of a concentrated number of Assistant U.S. Attorneys trained in prosecuting high-tech and IP offenses in addition to training regional prosecutors and federal agents.⁷⁵ In all, there are eighty such CHIP Assistant U.S. Attorneys in addition to over 150 CHIP prosecutors in other districts and DOJ divisions.⁷⁶

Notably, the DOJ and the trade associations seem to be pursuing the same goals in copyright enforcement on both the criminal and civil levels. According to the DOJ, the enforcement of IP laws is a high priority both because of the importance of intellectual property to the national economy as well as the scale of intellectual property theft.⁷⁷ Much like the RIAA suing individual infringers, the DOJ cites what it calls “the deterrent effect of prosecution” as another justification for the criminal prosecution of copyright infringement, explaining that the more investigations and prose-

67. DAVID J. MOSER, MUSIC COPYRIGHT FOR THE NEW MILLENNIUM 71 (2002).

68. *Id.*

69. DOJ PIPC MANUAL, *supra* note 62, at 6.

70. *Id.*

71. *Id.*

72. *Id.*

73. *Id.*

74. *Id.*

75. *Id.*

76. *Id.* at 7.

77. *Id.* at 309.

cutions, the “more individuals will be deterred from committing intellectual property offenses.”⁷⁸

B. Criminal Enforcement Efforts

1. Operation Remaster

A prime example of the collaboration between criminal and civil agencies to enforce copyright owners' rights is Operation Remaster. After a two-year undercover investigation, federal law enforcement officials raided thirteen California and Texas locations on October 5, 2005, seizing over 494,000 CDs, 1 million CD inserts, thousands of DVDs and stampers capable of producing more than 300 million pirated counterfeit CDs and DVDs.⁷⁹ Operation Remaster shut down the largest piracy scheme uncovered to date⁸⁰ and led to the first prosecution of replicators⁸¹ in the Northern District of California.⁸² The operation was a joint effort between the DOJ, the FBI, the RIAA, Symantec Corp, Adobe Systems, Inc., and the MPAA.⁸³ Court documents show that crucial information leading to the raid was obtained from a cooperating witness who had pleaded guilty to

78. *Id.* at 311.

79. Press Release, U.S. Dep't of Justice, Remaining Two Defendants Sentenced In Largest CD and DVD Manufacturing Piracy and Counterfeiting Scheme Prosecuted In the United States to Date (Aug. 6, 2007), <http://www.usdoj.gov/criminal/cybercrime/wenSent.htm> (last visited May 25, 2008) [hereinafter Remaining Two Defendants]. Stampers are the molds used to replicate optical discs like CDs and DVDs. Thomas G. Bifano, et. al, *Precision Manufacture of Optical Disc Master Stampers*, 20 PRECISION ENGINEERING 53 (1997), available at <http://www.sciencedirect.com/> (search “Author” for “Bifano”).

80. Press Release, U.S. Dep't. of Justice, Final Defendant Charged Pleads Guilty in Largest CD Manufacturing Piracy Scheme Uncovered in United States to Date (May 22, 2006), <http://www.usdoj.gov/criminal/cybercrime/zhaiPlea.htm> [hereinafter Final Defendant].

81. According to court documents, piracy conspiracies often involve geographically separate businesses that secretly handle different stages of the pirating process. Brokers solicit the orders of copyrighted works, while replicators have the equipment to manufacture hundreds of thousands of CDs. Printers and packagers are responsible for making the infringing work appear legitimate by assembling the CD case, booklet, and artwork into a completed CD/DVD package that almost exactly resembles the copyrighted work. *Operation Remaster: Grand Jury Indicts Three*, TECH. NEWS DAILY, Oct. 13, 2005, <http://www.technologynewsdaily.com/node/1518> (last visited Mar. 16, 2008).

82. Susan Butler, *Seizures (Legal Matters)*, BILLBOARD, Oct. 29, 2005, available at <http://www.allbusiness.com/retail-trade/miscellaneous-retail-retail-stores-not/4555134-1.html>.

83. Remaining Two Defendants, *supra* note 79.

criminal copyright infringement the year prior and signed a plea agreement to provide assistance to law enforcement agencies.⁸⁴

The ringleader, Yaobin “Ben” Zhai, and two other participants were indicted in charges of criminal copyright infringement, conspiracy, and aiding and abetting.⁸⁵ Zhai was the principal owner of two companies in Hayward, California where the replication of the copyrighted works occurred.⁸⁶ According to the DOJ, replicators like Zhai are “the leaders and directors of piracy and counterfeiting schemes, [responsible for] the mass reproduction of copyrighted works that are then distributed around the country through retail networks.”⁸⁷ The equipment used by Zhai and other replicators costs hundreds of thousands of dollars and can manufacture CDs or DVDs in the tens to hundreds of thousands extremely quickly.⁸⁸ In August 6, 2007, Zhai was sentenced to thirty-seven months in prison, a three-year term of supervised release, a \$500 mandatory special assessment, and a \$6.9 million bill for restitution.⁸⁹ The remaining two defendants were sentenced to the same amount of prison time and supervised release, but were only assessed \$125,000 in fines.⁹⁰

2. *Other Efforts*

Operation Remaster is only the most recent of several “joint ventures” between federal law enforcement agencies and the RIAA, MPAA, and BSA. An earlier investigation, Operation Fastlink, joined together law enforcement from ten different countries working to dismantle some of the most prolific online piracy organizations.⁹¹ Furthermore, in May 2005, the first criminal enforcement action targeting copyright infringement on P2P networks, Operation D-Elite, involved a joint investigation by Immigration and Customs Enforcement, the MPAA, and the FBI.⁹² The DOJ specially cites the assistance of the BSA, MPAA, RIAA, and the Entertain-

84. *Id.*

85. Final Defendant, *supra* note 80.

86. *Id.*

87. Remaining Two Defendants, *supra* note 79.

88. *Id.*

89. *Id.*

90. *Id.*

91. Press Release, U.S. Dep’t of Justice, Justice Department Announces International Internet Piracy Sweep (June 30, 2005), http://www.usdoj.gov/opa/pr/2005/June/05_crm_353.htm (last visited May 25, 2008).

92. Press Release, U.S. Dep’t of Justice, Federal Law Enforcement Announces Operations D-Elite, Crackdown on P2P Piracy Network (May 25, 2005), http://www.usdoj.gov/opa/pr/2005/May/05_crm_291.htm.

ment Software Association (ESA) for their assistance in these and other operations.⁹³

The MPAA has also worked with local officials to combat the illegal videotaping of films in movie theaters. In May 2007 the city of New York increased the penalty for illegal videotaping from a violation on the same level of “a ‘dirty sidewalk’ ticket from the Department of Sanitation” to a misdemeanor crime.⁹⁴ Part of the City and the MPAA’s new enforcement campaign is an expansion of the “liaison relationship” between the MPAA and the New York City Police Department to include not only the MPAA locating distribution points for infringing works but also the MPAA’s assistance in planning and executing raids on vendors.⁹⁵ Further, the MPAA, NYPD, and other city organizations have worked to identify buildings where suspected DVD piracy operations may be located and taken legal action against the owners of those buildings who knowingly allow the infringement operations to remain on the property.⁹⁶

The Business Software Alliance, for its own part, has pursued large institutional end users, rather than individuals.⁹⁷ The targeting of large institutional infringers, rather than individual home users, is tied to the low value home users put on software, thereby implying much smaller gains from forcing the use of legitimate software in comparison to the larger gains to be obtained from enforcement against large institutions.⁹⁸ Further, the BSA has urged Congress to enact legislation to give the DOJ more funding for its criminal intellectual property enforcement, “treat cyber crime as organized crime,” and increase penalties.⁹⁹

93. Press Release, U.S. Dep’t of Justice, Justice Department Announces International Internet Piracy Sweep: ‘Operation Fastlink’ (Apr. 22, 2004), http://www.usdoj.gov/opa/pr/2004/April/04_crm_263.htm.

94. The City of New York, Mayor’s Office of Film, Television, and Broadcasting, Mayor Bloomberg and MPAA Unveil Anti-Video Piracy Campaign, May 2, 2007, http://www.nyc.gov/html/film/html/news/050107_mayor_bloomberg_mpaa.shtml (last visited Apr. 6, 2008).

95. *Id.*

96. P2P.net, New York City, MPAA, ‘Piracy’, Oct. 30, 2006, <http://www.p2pnet.net/story/10259> (last visited Apr. 6, 2008).

97. Rick Harbaugh & Rahul Khemka, *Does Copyright Enforcement Encourage Piracy?* (Claremont Colleges Working Papers, No. 2000-14, 2001), available at <http://econ.claremontmckenna.edu/papers/2000-14.pdf>.

98. *Id.*

99. Statement of Neil McBride, BSA Vice President, at the DOJ Intellectual Property and Cyber Crime Enforcement Forum, Business Software Alliance, Mar. 28, 2008, <http://www.bsa.org/country/News%20and%20Events/News%20Archives/en-03282008-mcbride-doj.aspx>.

C. The Outlook for Criminal Enforcement

Despite these increased efforts aimed towards criminal copyright enforcement, it is difficult to ascertain success; it is uncertain how many other organized replication syndicates exist within the United States. Increasingly, industry associations are working with law enforcement officials to directly pursue criminal infringers. In recent years, the DOJ's three-front approach "to ensure aggressive and effective prosecution"¹⁰⁰ has led to a 90% increase in the number of individuals prosecuted as well as a 50% increase in convictions for IP offenses.¹⁰¹ Government enforcement officials have cited the rise of IP crime as the reason for increased enforcement.¹⁰² Yet the role of industry associations in facilitating these enforcement efforts and in lobbying for increased penalties raises numerous questions as to whether taxpayers are in effect subsidizing these private associations' enforcement agendas. The collaboration of private industries and public agencies is, in that sense, steering government enforcement efforts towards the issues and crimes the RIAA, the MPAA, and the BSA wish to pursue.

IV. INTERNATIONAL ISSUES: CHALLENGES IN CHINA AND BEYOND

This Part examines international copyright enforcement generally, and then turns to China as a particularly challenging area for enforcement.

100. DOJ PIPC MANUAL, *supra* note 62, at 6.

101. Press Release, Bus. Software Alliance, Government and Industry Collaboration Vital to Crack Down on Criminal Counterfeiting and Piracy (May 23, 2007), <http://www.bsa.org/country/News%20and%20Events/News%20Archives/Government%20and%20Industry%20Collaboration%20on%20Criminal%20Counterfeiting%20and%20Piracy.aspx>.

102. *See, e.g.*, Prepared Remarks of Attorney General Alberto R. Gonzales at the U.S. Chamber of Commerce, June 20, 2006, *available at* http://www.usdoj.gov/archive/ag/speeches/2006/ag_speech_0606201.html; *Prosecution of Intellectual Property Crimes and the 'STOP!' Initiative: Hearing Before the Subcomm. on Oversight of Gov't Mgmt, the Fed. Workforce, and the District of Columbia of the S. Comm. on Homeland Security and Gov'tal Affairs*, 109th Cong. (2005) (statement of Laura H. Parsky, Deputy Assistant Attorney General), 2005 WL 1396295, *available at* <http://www.usdoj.gov/criminal/cybercrime/ParskyIPtestimony061405.htm>; Laura H. Parsky, Deputy Assistant Attorney General, Remarks at the Major Challenges of Intellectual Property Protection Conference in Rome, Italy (Oct. 14, 2004) (transcript at <http://www.usdoj.gov/criminal/cybercrime/parskySpeech.htm>); Statement by Attorney General Janet Reno at the Symposium of the Americas: Protecting Intellectual Property in the Information Age (Sept. 12, 2000) (transcript at <http://www.usdoj.gov/criminal/cybercrime/ipsymposium.htm>).

Section IV.A examines the general issues confronting those that wish to enforce U.S.-style copyright protections abroad. Section IV.A.1 examines the difficulties in reliably assessing the scope of international infringement. Section IV.A.2 surveys general issues with civil enforcement, while Section IV.A.3 identifies general issues with international criminal enforcement.

Section IV.B turns to China, an important locus of international copyright enforcement efforts.¹⁰³ Section IV.B.1 examines the scope of infringement activity in China. Section IV.B.2 looks at obstacles to enforcement in China. Section IV.B.3 looks at U.S. government efforts to curb infringement, while IV.B.4 looks at the efforts of industry groups. Finally, Section IV.B.5 assesses the prospects for stemming infringement.

A. Generally

1. *The Uncertain Scope of the Problem*

International copyright enforcement is central to halting the continued losses of the movie, music, and software industries as a result of copyright infringement. According to the BSA, software piracy cost the software industry just over \$39.5 billion globally in 2006.¹⁰⁴ Further, according to the MPAA, in 2005 the worldwide motion picture industry sustained \$18.2 billion in losses due to piracy.¹⁰⁵ However, the accuracy of industry-supplied figures has come into question in the past.¹⁰⁶ Industry associations cite losses to “illegal copying,” yet industry studies include “non-personal commercial backups” in their numbers, thereby inflating the losses they have sustained.¹⁰⁷ The methodology of calculating losses has been based in part on surveys of consumers that are then mapped to domestic and international populations.¹⁰⁸ Further, studies not only count the direct revenues of the content industries but also double- or triple-count

103. An exhaustive, country by country examination of international civil enforcement is outside of the scope of this Note.

104. BUS. SOFTWARE ALLIANCE, FOURTH ANNUAL BSA AND IDC GLOBAL SOFTWARE PIRACY STUDY 12 (2007), <http://www.bsa.org/globalstudy/upload/2007-Global-Piracy-Study-EN.pdf>.

105. Who Piracy Hurts: Economies, Motion Picture Association of America, http://www.mpa.org/piracy_WhoPiracyHurts.asp (last visited Mar. 16, 2008).

106. See *BSA or Just BS?: Software Piracy*, THE ECONOMIST, May 21, 2005, at 93, 2005 WLNR 8026746.

107. Ken Fisher, *The Problem with MPAA's Shocking Numbers*, ARS TECHNICA, May 5, 2006, <http://arstechnica.com/news.ars/post/20060505-6761.html>.

108. *Id.*

the additional revenue that flows to the industry suppliers, and then mischaracterize all of these figures as lost profits.¹⁰⁹

Although the actual losses sustained due to copyright infringement abroad are unclear, international IP protection is a large focus of both private entities and government agencies. Effective international IP protection is seen as allowing investors to recoup money expended on research and development as well as attracting more investment and stimulating economic development.¹¹⁰ Despite the harmonization of intellectual property rights with the Agreement on Trade Related Aspects of Intellectual Property (TRIPS) in 1994, enforcement rates vary from country to country.¹¹¹ In addition not every country is a member of TRIPS. While 151 countries have signed on, as of 2007 there were still some countries that are important global economic participants, including Russia and Ukraine,¹¹² that were not yet members.¹¹³

2. *Civil Enforcement Activities*

International civil enforcement of copyrights is complicated by the numerous different legal regimes across the world. Furthermore, the territorial limits to intellectual property rights require that enforcement efforts are looked at on a country by country basis. The domestic law of each country governs its enforcement of intellectual property rights.

Article 41 of TRIPS sets out the performance requirements for member countries with regards to domestic enforcement of copyright law.¹¹⁴ TRIPS requires that WTO members ensure that enforcement procedures “are available under their [domestic] law so as to permit effective action against any act of infringement of intellectual property rights covered by

109. Posting of Tim Lee to The Technology Liberation Front, Another IPI Piracy Study, <http://techliberation.com/2007/08/25/another-ipi-piracy-study> (Aug. 25, 2007).

110. Chun Hsien-Chen, *Explaining Different Enforcement Rates of Intellectual Property Protection in the United States, Taiwan, and the People's Republic of China*, 10 TUL. J. TECH. & INTELL. PROP. 211 (2007).

111. *Id.*

112. In February 2008 Ukraine entered the final stages of ratifying the terms of its accession into the World Trade Organization thereby coming closer to signing onto TRIPs. Press Release, World Trade Organization, WTO Welcomes Ukraine as a New Member (Feb. 5, 2008), available at http://www.wto.org/english/news_e/pres08_e/pr511_e.htm.

113. Understanding the WTO—Members, World Trade Organization, http://www.wto.org/english/thewto_e/whatis_e/tif_e/org6_e.htm (last visited Apr. 16, 2008).

114. JAYASHREE WATAL, *INTELLECTUAL PROPERTY RIGHTS IN THE WTO AND DEVELOPING COUNTRIES* 336 (2001).

[TRIPS].”¹¹⁵ In effect, member countries must establish domestic laws against copyright infringement to be enforced in domestic courts.¹¹⁶ This requirement does not, however, create any obligation to put in a separate judicial system for the enforcement of intellectual property rights distinct from country’s enforcement of law in general.¹¹⁷

Further, there can be a gap between legal obligations imposed by treaties or multilateral institutions, and actual implementation.¹¹⁸ Some countries are not effective at implementing any of their laws.¹¹⁹ The level of importance of IP laws and standards and their practical application will necessarily differ from country to country as a reflection of each country’s “national and legal cultures and historical experiences, languages, religions, economic development and prosperity, and ideologies/private sector-governmental relations.”¹²⁰ As a result, a country’s enforcement of copyright law has to be judged against its enforcement of law generally.¹²¹

Even assuming a country’s domestic laws contain adequate provisions for copyright infringement, copyright holders attempting to enforce their rights abroad run into several issues. Since national laws and practices of each country regarding intellectual property rights can differ despite recent trends toward harmonization, copyright owners seeking to enforce their rights in several international jurisdictions must do so with extreme care, considering the special circumstances of each jurisdiction.¹²² Moreover, there are “major substantive and procedural differences” between countries following the common law tradition, as in the United States, as opposed to countries following a civil law tradition, as in France.¹²³ It can be “quite difficult, expensive, and time-consuming to bring civil copyright

115. Agreement on Trade-Related Aspects of Intellectual Property Rights, art. 41, Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1C, 33 I.L.M. 1125, 1213-14 (1994) [hereinafter TRIPS Agreement].

116. Kevin Fayle, *Sealand Ho! Music Pirates, Data Havens, and the Future of International Copyright Law*, 28 HASTINGS INT’L & COMP. L. REV. 247, 251 (2005).

117. JAYASHREE WATAL, *supra* note 114, at 337.

118. G. GREGORY LETTERMAN, BASICS OF INTELLECTUAL PROPERTY IN AN INTERNATIONAL CONTEXT 14-15 (2001).

119. *Id.* at 15.

120. *Id.*

121. JAYASHREE WATAL, *supra* note 114, at 337.

122. LETTERMAN, *supra* note 118, at 16.

123. *Id.* at 68.

infringement cases” considering the need to obtain local legal counsel to navigate unfamiliar court systems far away.¹²⁴

Such costly global policing efforts are being taken up either by very successful artists with the resources to bring suits abroad¹²⁵ or by the collective action of similarly situated IP owners and the private associations representing them. For instance, the International Federation of the Phonographic Industry (IFPI), the RIAA-affiliated global association representing recording industries worldwide,¹²⁶ filed 8,000 lawsuits in seventeen countries in 2006.¹²⁷ These suits, consisting of both civil and criminal actions, targeted Brazil and Mexico, and Poland for the first time, as well as fourteen other countries previously targeted by IFPI suits.¹²⁸ According to the IFPI, Brazil in particular was targeted because of the fall of record company revenues by half since 2000.¹²⁹ These suits against individuals, ranging from “a laboratory assistant in Finland to a German parson”¹³⁰ are in addition to the almost 2,000 suits previously filed by the IFPI against direct infringers outside of the United States in 2005,¹³¹ bringing the total number of suits brought to 13,000.¹³² The IFPI claims that some 2,300 cases have settled for about \$3,030.¹³³ The IFPI modeled its efforts on the

124. Maria Strong, *Copyright Enforcement: Basic Considerations and Strategies to Protect Copyrights Abroad*, in INTERNATIONAL TRADEMARKS AND COPYRIGHTS: ENFORCEMENT AND MANAGEMENT 67 (John T. Masterson, Jr. ed., 2004)

125. See Greg Sandoval, *Prince to Sue The Pirate Bay*, CNET NEWS, http://www.news.com/8301-10784_3-9814504-7.html (last visited Apr. 20, 2008) (discussing music artist Prince’s filing of civil lawsuits against “The Pirate Bay” in the U.S., France, and Sweden).

126. International Federation of the Phonographic Industry, IFPI’s Mission, http://www.ifpi.org/content/section_about/index.html (last visited Apr. 20, 2008).

127. Eric Bangeman, *IFPI Files 8,000 New File-Sharing Lawsuits*, ARS TECHNICA, Oct. 17, 2006, <http://arstechnica.com/news.ars/post/20061017-8001.html> (last visited Apr. 20, 2008).

128. Press Release, Recording Industry Launches Fresh Wave of Actions Against Illegal File-Sharing, International Federation of the Phonographic Industries, Oct. 17, 2006, http://www.ifpi.org/content/section_news/20061017.html.

129. Bangeman, *IFPI Files 8,000 New File-Sharing Lawsuits*, *supra* note 129.

130. Press Release, Recording Industry Launches Fresh Wave of Actions Against Illegal File-Sharing, *supra* note 128.

131. Press Release, Music File-Sharers Face Biggest Round of Legal Actions Yet; Many Are Already Counting the Costs, International Federation of the Phonographic Industries, Apr. 11, 2005, http://www.ifpi.org/content/section_news/20050412.html (stating that as of 2005 there were 11,552 total number of lawsuits internationally with 9,900 of those cases being brought in the U.S.).

132. Press Release, Recording Industry Launches Fresh Wave of Actions Against Illegal File-Sharing, *supra* note 128.

133. Bangeman, *IFPI Files 8,000 New File-Sharing Lawsuits*, *supra* note 127.

RIAA's efforts in the U.S., based upon the IFPI's perception that the RIAA lawsuits are successful in alerting consumers to the consequences of copyright infringement.¹³⁴ Despite the difficulties for individual copyright holders to bring civil suits internationally, civil suits brought by large industry associations with resources like the IFPI's are likely to continue and increase against direct infringers in countries worldwide.¹³⁵

3. *International Criminal Enforcement*

International criminal enforcement of intellectual property crimes is limited. Ronald K. Noble, Secretary General of Interpol, states that "[Intellectual property crime] is a low priority for law enforcement agencies and investigations are poorly resourced" in comparison to high priority issues affecting communities, such as illicit narcotics or counter-terrorism investigations.¹³⁶ These law enforcement agencies also lack generalized expertise "in recognizing and investigating counterfeit and pirated goods."¹³⁷ In a limited number of cases, U.S. law enforcement collaborates with foreign counterparts, providing such expertise; one example is Operation Fastlink, in which the DOJ worked with law enforcement from ten different countries to dismantle online piracy organizations.¹³⁸

In response to a perceived dearth of international enforcement, industry groups and organizations are working hard to make copyright infringement crimes a priority for both foreign law enforcement agencies, and for United States trade negotiators bargaining with foreign governments.¹³⁹

134. Matt Hines, *File-Sharing Lawsuits Go Abroad*, CNET NEWS, Mar. 30, 2004, http://www.news.com/2100-1027_3-5181872.html (last visited Apr. 20, 2008).

135. For a sample breakdown of the IFPI's country by country civil lawsuits, see Press Release, Breakdown of legal cases against illegal file-sharing, International Federation of the Phonographic Industries, Nov. 11, 2005, http://www.ifpi.org/content/section_news/20051115h.html.

136. *Intellectual Property Crimes: Are Proceeds From Counterfeited Goods Funding Terrorism?* H. Comm. on Int'l Relations, 108th Cong. (2003) (testimony of Ronald K. Noble, Secretary General, Interpol), available at <http://www.interpol.int/Public/ICPO/speeches/SG20030716.asp>.

137. *Id.*

138. Press Release, U.S. Dep't of Justice, Justice Department Announces International Internet Piracy Sweep (June 30, 2005), http://www.usdoj.gov/opa/pr/2005/June/05_crm_353.htm.

139. See, e.g., INTERNATIONAL ANTI-COUNTERFEITING COALITION, INC., SUBMISSION OF THE INTERNATIONAL ANTI-COUNTERFEITING COALITION, INC. TO THE UNITED STATES TRADE REPRESENTATIVE: SPECIAL 301 RECOMMENDATIONS (Feb. 12 2007), <http://www.iacc.org/resources/resources.php>.

There are many intellectual property rights agencies and groups focused on international copyright enforcement, including the International AntiCounterfeiting Coalition (IACC), the International Intellectual Property Alliance (IIPA),¹⁴⁰ and the RIAA-affiliated IFPI—whose recent efforts in Brazil, Mexico, and Poland included a criminal component.¹⁴¹ U.S. government agencies that work closely with industry groups include the National Intellectual Property Law Enforcement Coordination Council (NIPLECC),¹⁴² and the Office of the United States Trade Representative, which can apply pressure to countries in which enforcement is a problem.¹⁴³

Some scholars question the increasing role of these IPR agencies and industry associations in pressuring countries to conform to the standards of the industrial world given the “vast diversity of races, cultures, beliefs, ideals, philosophies, societies, and economies in the world.”¹⁴⁴ Furthermore, the increased pressure of these groups focused on ensuring that countries comply with its international obligations can create problems for local enforcement officials who may be pulled away from more pressing local enforcement issues such as counterfeit medicines.¹⁴⁵

140. The International Intellectual Property Alliance is a private coalition representing the U.S. copyright-based industries in bilateral and multilateral efforts to improve international protection of copyrighted materials. It is composed of seven trade associations whose members represent 1,900 U.S. companies producing and distributing copyright-protected materials such as software, films, and CDs. Fact Sheet, International Intellectual Property Alliance, <http://www.iipa.com/aboutiipa.html> (last visited Mar. 7, 2008).

141. Press Release, Recording Industry Launches Fresh Wave of Actions Against Illegal File-Sharing, International Federation of the Phonographic Industry, Oct. 17, 2006, http://www.ifpi.org/content/section_news/20061017.html.

142. The NIPLECC is an interagency group created in 1999 by President Clinton. It is responsible for coordinating the United States’ domestic and international intellectual property enforcement activities. NIPLECC—National Intellectual Property Law Enforcement Coordination Council Introduction, U.S. Patent & Trademark Office, <http://www.uspto.gov/web/offices/dcom/olia/globalip/niplecc.htm> (last visited Mar. 16, 2008).

143. See SUBMISSION OF THE INTERNATIONAL ANTI-COUNTERFEITING COALITION, *supra* note 139.

144. Jack Bishop, *Building International Empires of Sound: Concentrations of Power and Property in the “Global” Music Market*, 28 POPULAR MUSIC & SOC’Y 443, 465 (2005) (discussing the tension between developing and developed countries with respect to intellectual property rights enforcement).

145. Michael D. Birnhack, *Global Copyright, Local Speech*, 24 CARDOZO ARTS & ENT. L.J. 491, 511 (2006).

B. Enforcement in China

China is the fourth largest economy in the world,¹⁴⁶ poised to become third largest,¹⁴⁷ and home to more than 1.3 potential consumers.¹⁴⁸ Furthermore, China is the world's second-largest and fastest growing personal computer market.¹⁴⁹ With such growth and opportunity, there is much concern over China's intellectual property enforcement regime. The Anti-Counterfeiting Coalition, NIPLECC and the IIPA have expressed particular concern with the enforcement of intellectual property rights in China.¹⁵⁰

1. Scope of the Problem

Despite anti-piracy campaigns in China and an increasing number of intellectual property rights cases in Chinese courts, overall piracy and counterfeiting levels in China were high in 2006.¹⁵¹ The sale of counterfeit goods in small retail shops like those in Beijing's Silk Street Market, cited by industry sources to be the most notorious market for copyright infringing goods, has increased.¹⁵² The China Small Commodities Market in Yiwu reportedly sells over 410,000 different items and is cited as a center for the wholesaling of infringing goods.¹⁵³ The Office of the United States Trade Representative (USTR) cites industry estimates that, in 2005, piracy was prevalent in eighty-five to ninety-three percent of copyright businesses in China.¹⁵⁴ Furthermore, according to the USTR, the share of intellectual property rights infringing products seized at the U.S. border originating in China increased to eighty-one percent in 2006 from sixty-nine percent in 2005.¹⁵⁵ Significantly, China, when considered together with Hong Kong's share (which the U.S. tracks separately), accounts for over

146. Keith Bradsher, *China Reports Another Year of Strong (or Even Better) Growth*, N.Y. TIMES, Jan. 25, 2006, at C5.

147. Jane Macartney, *China's Economy Heads to Global Third Place*, TIMESONLINE, Oct. 25, 2007, <http://business.timesonline.co.uk/tol/business/economics/article2738339.ece>.

148. Mikhaelle Schiappacasse, Note, *Intellectual Property Rights in China: Technology Transfers & Economic Development*, 2 BUFFALO INTELL. PROP. L.J. 164, 165 (2004).

149. David Kirkpatrick, *Inside China's PC Frenzy*, FORTUNE, Apr. 20, 2007, http://money.cnn.com/2007/04/19/technology/fastforward_china.fortune/index.htm.

150. Birnhack, *supra* note 145, at 511.

151. *Id.*

152. *Id.* at 7.

153. *Id.*

154. OFFICE OF THE UNITED STATES TRADE REPRESENTATIVE, 2007 SPECIAL 301 REPORT 18, http://www.ustr.gov/Document_Library/Reports_Publications/2007/2007_Special_301_Review/Section_Index.html. [hereinafter 2007 SPECIAL 301 REPORT]

155. *Id.*

eighty-five percent of infringing goods seized at the border, far more than any other U.S. trading partner.¹⁵⁶

2. *Obstacles to Copyright Enforcement in China*

The 2007 Special 301 report, which is an annual report published by the United States Trade Representative on the effectiveness of international property rights protection and compliance with the Special 301 provisions of the Uruguay Round Agreements Act of countries around the world, cites several key factors as the cause of China's lack of success in copyright enforcement.¹⁵⁷ In addition to China's underutilization of deterrent criminal remedies, which have led to the WTO dispute settlement proceedings, as discussed below, the report cites an absence of criminal penalties for certain infringing acts, as well as the requirement that a profit motive be shown to prove infringement, as additional legal obstacles.¹⁵⁸ Furthermore, the report cites high thresholds for initiating investigations and prosecuting criminal cases, lack of training, complaints by rights holders of corruption and lack of coordination, and an overall inadequate and non-transparent process.¹⁵⁹

a) Local Protectionism, Poor Coordination, and Agency Rivalries

While central Chinese authorities understand the relationship between China's economic development and strong copyright enforcement, effective enforcement is hampered by local protectionism and the limited influence of central Chinese authorities over local officials.¹⁶⁰ Rural communities play a large role in the manufacture, distribution, and consumption of pirated products.¹⁶¹ Local officials have little incentive to dismantle the trade in illegal goods that boosts their region's economic activities and local commerce.¹⁶² Furthermore, the complexity of laws and regulations related to copyright enforcement in China can result in overlapping jurisdiction among agencies.¹⁶³ As a result, two or more agencies with valid claims to jurisdiction in a case will compete for enforcement, resulting in bureaucratic rivalries as each agency attempts to assert its jurisdiction.¹⁶⁴

156. U.S. CUSTOMS AND BORDER PROTECTION, TOP IPR SEIZURES 2007 3-4, http://www.cbp.gov/xp/cgov/trade/priority_trade/ipr/seizure/trading/.

157. 2007 SPECIAL 301 REPORT, *supra* note 154, at 2, 17-19.

158. *Id.* at 19.

159. *Id.* at 19.

160. Eric Priest, *The Future of Music and Film Piracy in China*, 21 BERKELEY TECH. L.J. 795, 822-24 (2006).

161. *Id.* at 822.

162. *Id.*

163. *Id.* at 824.

164. *Id.*

Agency rivalries such as these exist because the agency “can reap significant benefits from handling an intellectual property infringement case in the form of increased staffing, increased budgets, and income generated through fines and confiscations.”¹⁶⁵ As a result of this bureaucratic rivalry, there is a lack of cooperation between government agencies.¹⁶⁶

b) High Thresholds for Investigation and Prosecution

The United States has expressed concern that China’s “[e]xcessively high” legal threshold for launching criminal prosecutions, as well as high thresholds for the prosecution and conviction of intellectual property crimes, result in a safe harbor for pirates and counterfeiters.¹⁶⁷ Pirates and counterfeiters must merely structure their operations to fit below China’s threshold amounts for value, profit, or number of counterfeit or pirated copies in order to avoid the possibility of criminal sanctions.¹⁶⁸ These thresholds are so high that pirates and counterfeiters are still able to operate on a commercial scale.¹⁶⁹ Since criminal remedies are effectively circumscribed, China’s enforcement authorities instead rely on its administrative enforcement system.¹⁷⁰ Yet this administrative enforcement system relies primarily on small fines, administrative injunctions, and other minor inconveniences for infringers.¹⁷¹ Further, knowledge of basic IP concepts is lacking at the local enforcement level, and many judges do not have the technical or legal background to properly adjudicate IP cases.¹⁷² For these

165. *Id.*

166. *Id.*

167. Press Release, Office of the United States Trade Representative, Trade Delivers: WTO Case Challenging Weaknesses in China’s Legal Regime for Protection and Enforcement of Copyrights and Trademarks, at 3 (April 2007), http://www.ustr.gov/assets/Document_Library/Fact_Sheets/2007/asset_upload_file908_11061.pdf (last visited Mar. 16, 2008), at 1.

168. *Id.*

169. For instance, while China dropped its quantity threshold for the number of pirated or counterfeit copies from 1000 to 500, the threshold allows a retailer to have 499 counterfeit copies and still not face the possibility of criminal prosecution. *Id.*

170. OFFICE OF THE U.S. TRADE REP., 2006 REPORT TO CONGRESS ON CHINA’S WTO COMPLIANCE 70 (2006), available at http://www.ustr.gov/assets/Document_Library/Reports_Publications/2006/asset_upload_file688_10223.pdf.

171. *Id.*

172. Chun-Hsien Chen, *Explaining Different Enforcement Rates of Intellectual Property Protection In the United States, Taiwan, and the People’s Republic of China*, 10 TUL. J. TECH. & INTELL. PROP. 211, 245-46 (2007). The lack of a legal background for China’s judges stems from their direct appointment by the Communist Party and the lack of a requirement that these judges have a law degree or legal background. *Id.*

reasons, China lacks an effective criminal deterrent to significant commercial-scale infringement.¹⁷³

c) Lack of Protection for Works Awaiting Censors' Approval

Moreover, China's copyright law denies copyright protection to imported works that are awaiting censorship approval to enter the Chinese market.¹⁷⁴ During this pre-distribution censorship review period, which could potentially become permanent for works that fail the review, pirates and counterfeiters are able to exist legally. Hence, the sale of copies does not infringe copyright or incur civil or criminal copyright liability.¹⁷⁵ The continued maintenance of such import restrictions that reduce and delay market access for legitimate products, especially movies, video games, and books, inadvertently helps to ensure that infringing products continue to dominate those sectors within China.¹⁷⁶

3. *U.S. Government Efforts to Enforce WTO/TRIPS Obligations*

China joined the WTO on December 11, 2001.¹⁷⁷ As a WTO member, China is obligated to adhere to the provisions of the WTO Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS). The TRIPS Agreement sets minimum standards for the protection and enforcement of copyrights in administrative, civil, and criminal actions.¹⁷⁸ Since joining the WTO, China has modified its legal regime in order to

173. China's lack of an effective criminal deterrent to commercial-scale piracy and counterfeiting is contrary to its obligations under Articles 41 and 61 of the TRIPS Agreement. Press Release, Office of the United States Trade Representative, Trade Delivers: WTO Case Challenging Weaknesses in China's Legal Regime for Protection and Enforcement of Copyrights and Trademarks, *supra* note 167, at 1.

174. *Id.* at 2.

175. *Id.*

176. 2006 REPORT TO CONGRESS ON CHINA'S WTO COMPLIANCE, *supra* note 170, at 70. Another concern of the U.S. is China's rules for disposal of copyright infringing goods seized by Chinese customs authorities. China's rules appear to permit those goods to be released into commerce once infringing features, such as fake labels, are removed, despite the fact that WTO rules dictate that these goods should be kept out of the market altogether. Press Release, United States Requests WTO Panel in Case Challenging Deficiencies in China's Intellectual Property Rights Laws, Office of the U.S. Trade Rep. (Aug 13, 2007), available at http://www.ustr.gov/Document_Library/Press_Releases/2007/August/United_States_Requests_WTO_Panel_in_Case_Challenging_Deficiencies_in_China's_Intellectual_Property_Rights_Laws.html.

177. Background Information on China's Accession to the World Trade Organization, Office of the United States Trade Representative (Dec. 11, 2001), http://www.ustr.gov/Document_Library/Fact_Sheets/2001/Background_Information_on_China's_Accession_to_the_World_Trade_Organization.html (last visited Mar. 16, 2008).

178. TRIPS Agreement, *supra* note 115, arts. 9-14.

better protect the intellectual property rights of domestic and foreign entities in China.¹⁷⁹ However, the United States has specific concerns that China is not meeting its TRIPS obligations in particular areas and that China is having little success in actually enforcing its laws and regulations in the face of widespread copyright piracy, counterfeiting, and other forms of infringement.¹⁸⁰

Despite cooperative efforts between the two countries to solve these problems, the China Copyright Alliance, an industry coalition including movie studios, producers, and the record industry, lobbied the Bush administration to file a formal legal complaint against China.¹⁸¹ The United States initiated a WTO dispute settlement in April 2007 over these matters.¹⁸² However, the WTO dispute settlement process often takes years to complete.¹⁸³ As such, U.S. government agencies are taking other routes for working with and pressuring China over the need to comply with the TRIPS Agreement.

One such route has been to increase and focus trade talks with China. Under Section 182 of the Trade Act of 1974 and the Special 301 Provisions of the Uruguay Round Agreements Act of 1994, the Office of the United States Trade Representative (USTR) must identify countries that deny adequate or effective protection for intellectual property rights or

179. Press Release, Office of the United States Trade Representative, Trade Delivers: WTO Case Challenging Weaknesses in China's Legal Regime for Protection and Enforcement of Copyrights and Trademarks, *supra* note 167, at 3, http://www.ustr.gov/assets/Document_Library/Fact_Sheets/2007/asset_upload_file908_11061.pdf (last visited Mar. 16, 2008). For a more comprehensive examination of changes to China's legal regime in order to comply with TRIPS, see Kate Colpitts Hunter, Comment, *Here There Be Pirates, How China is Meeting Its IP Enforcement Obligations Under Trips*, 8 SAN DIEGO INT'L L.J. 523 (Spring 2007).

180. 2006 REPORT TO CONGRESS ON CHINA'S WTO COMPLIANCE *supra* note 170, at 70.

181. Edmund L. Andrews, *Piracy Move on China Seen as Near*, N.Y. TIMES, April 7, 2007, at C1.

182. As of August 2007, Japan, Canada, the EU, and Mexico have joined the dispute settlement, and the United States has initiated the next step in the WTO Dispute Settlement process—a request for the Establishment of a Dispute Settlement Panel. Dispute Settlement, *China—Measures Affecting the Protection & Enforcement of Intellectual Property Rights*, WT/DS362 (Jan. 22, 2008), http://www.wto.org/english/tratop_e/dispu_e/cases_e/ds362_e.htm.

183. Though the WTO sets target figures for the duration of the dispute settlement process, the system is flexible and WTO members are able to “stretch out” the resolution process, from anywhere from three to six years. Policy Statement, International Chamber of Commerce Commission on Trade and Investment, ICC Proposals for Improvements to the WTO Dispute Settlement Understanding, Mar. 7, 2003, <http://www.iccwbo.org/policy/trade/id563/index.html> (last visited Mar. 16, 2008).

deny fair and equitable market access for persons that rely on intellectual property protection.¹⁸⁴ Those countries with the most onerous or egregious acts, policies, or practices, and that have the greatest actual or potential adverse impact on relevant U.S. products, are designated as “Priority Foreign Countries.”¹⁸⁵ Officially categorizing a country, such as China, on the “Priority Watch List” increases the government’s bilateral attention to that country and allows the USTR to monitor that country’s compliance with bilateral IP agreements and apply sanctions for its failure to comply.¹⁸⁶ China remains on the 2007 Priority Watch List.¹⁸⁷ In addition to its WTO dispute settlement consultation with China, the United States also conducted a special provincial review during 2007 to examine China’s intellectual property rights protection and enforcement at the provincial level.¹⁸⁸

4. *Copyright Industry Actions in China*

Recently, copyright holders and the coalitions that represent them are exporting their U.S. copyright enforcement tactics to China in the hopes of making progress. This Section takes a look at their recent efforts.

a) Operation Summer Solstice

Operation Summer Solstice was the first joint investigation by U.S. federal law enforcement agencies and their Chinese counterparts. The operation began in 2005¹⁸⁹ when the FBI (which has had a liaison office in Beijing since 2002) and the People’s Republic of China’s Ministry of Public Security (MPS) became concerned that piracy disputes were putting Chinese-U.S. trade relationships at risk.¹⁹⁰ According to the BSA, counterfeit software accounts for eighty-two percent of the software used in per-

184. OFFICE OF THE U.S. TRADE REP., 2007 SPECIAL 301 REPORT, at 17, *available at* http://www.ustr.gov/assets/Document_Library/Reports_Publications/2007/2007_Special_301_Review/asset_upload_file230_11122.pdf.

185. *Id.*

186. *Id.*

187. *Id.* at 18.

188. *Id.*

189. Press Release, Federal Bureau of Investigation—Los Angeles Div., International Investigation Conducted Jointly by FBI and Law Enforcement Authorities in People’s Republic of China Results in Multiple Arrests in China and Seizures of Counterfeit Microsoft and Symantec Software (July 23, 2007), <http://losangeles.fbi.gov/pressrel/2007/la072307.htm> [hereinafter FBI International Investigation].

190. Mure Dickie, *China Joins FBI in Piracy Operation*, FINANCIAL TIMES, July 24, 2007, *available at* <http://www.ft.com/cms/s/0/c1407788-3a0e-11dc-9d73-0000779fd2ac.html>.

sonal computers in China.¹⁹¹ In conjunction with the MPS and with the assistance of Microsoft, the FBI launched an investigation of the Ma Ke Pei organization, composed of multinational software pirates who manufacture and distribute copyright infringing software products worldwide.¹⁹² Microsoft's seventy-five-member anti-piracy team had been tracking the Chinese syndicate at the center of Operation Summer Solstice as far back as 2001, after bootleg disks turned up in California.¹⁹³ The MPS, FBI, and Microsoft investigators identified more than fourteen major producers and distributors located in Shenzhen who produced high-quality counterfeit software from several manufacturers, including Microsoft.¹⁹⁴ In China, the operation saw the arrest of twenty-five Chinese individuals, the raid of several businesses and residences in China, the seizure of assets worth over \$7 million dollars, and the seizure of over 290,000 counterfeit software CDs and certifications of authenticity (COAs) in China.¹⁹⁵ The FBI estimates that the counterfeit software seized had an estimated retail value of \$500 million.¹⁹⁶ In addition to the raids and seizures in China, the FBI's Los Angeles Field Office executed twenty-four searches and asset seizure warrants in Southern California seizing approximately another \$2 million in counterfeit software products.¹⁹⁷

Operation Summer Solstice also captured the leader of the Shanghai-based counterfeit ring, Ma Ke Pei. Previously, in 2003, Ma Ke Pei was indicted in New York for criminal copyright violations relating to the manufacture and distribution of counterfeit Microsoft products.¹⁹⁸ However, Ma fled the U.S. and returned to China where he allegedly continued his counterfeit operation by creating and directing an international organization to manufacture and distribute counterfeit Symantec software.¹⁹⁹ Many of the American-based distributors raided by the FBI's Los Angeles Field Office were allegedly being supplied by the Ma Ke Pei multinational criminal organization.²⁰⁰ According to estimates from Microsoft, the Ma Ke Pei criminal syndicate is responsible for manufacturing and distribut-

191. *Id.*

192. FBI International Investigation, *supra* note 189.

193. *Id.*

194. *Id.*

195. *Id.*

196. *Id.*

197. *Id.*

198. *Id.*

199. *Id.*

200. *Id.*

ing more than \$2 billion worth of counterfeit Microsoft software over the lifetime of its criminal career.²⁰¹

b) Other Copyright Industry Actions in China

In addition to targeting illegal replicators of copyrighted works like those at the center of Operation Summer Solstice, industry associations signed an anti-piracy memorandum with the National Copyright Administration of China to protect movies, television programs, software, and literary works from piracy via the Internet in China.²⁰² Among the signatories were the Motion Picture Association (MPA, the worldwide analogue of the MPAA), the BSA, the Association of American Publishers, and the U.K.'s Publishers Association.²⁰³ According to an MPA study, movie studios lost \$6.1 billion to worldwide piracy in 2005, of which \$2.4 billion was lost to bootlegging, \$1.4 billion was lost to illegal copying, and \$2.3 billion to Internet piracy.²⁰⁴ Along with working with the Chinese government, the MPA's operations in Asia investigated more than 34,000 cases of piracy and assisted law enforcement officials in conducting over 10,500 raids in 2005.²⁰⁵ These raids and investigations resulted in the seizure of 34 million illegal optical discs, fifty-five factory production lines, thousands of optical disc burners, and the initiation of more than 8,000 legal actions across the Asia-Pacific region.²⁰⁶

5. *Prospects for Stemming Infringement in China*

While alliances between the private and governmental sectors have been successful at international copyright enforcement for criminal infringement, transnational organized crime groups are increasingly becoming involved in intellectual property crimes.²⁰⁷ The working partnership of industry and government must focus its attention on these large-scale commercial violations as a distinct problem within international copyright enforcement if it hopes to make a significant dent in copyright infringement.

201. Scott Bekker, *The Chinese Connection*, REDMOND CHANNEL PARTNER, Nov. 1, 2007, <http://rcpmag.com/features/article.aspx?editorialid=2362>.

202. Press Release, Motion Picture Association, National Copyright Administration of China Sign Anti-Piracy Memorandum with MPA (Dec. 16, 2006), http://www.mpa.org/press_releases/2006-12-16.pdf.

203. *Id.*

204. *Id.*

205. *Id.*

206. *Id.*

207. Maureen Walterbach, Comment, *International Illicit Convergence: The Growing Problem of Transnational Organized Crime Groups' Involvement in Intellectual Property Rights Violations*, 34 FLA. ST. U. L. REV. 591, 592-594 (2007).

Perhaps copyright holders wishing to stem infringement should also consider increasing their educational initiatives to raise awareness of intellectual property in local communities.²⁰⁸ In contrast with educational initiatives, civil lawsuits are less likely to be successful in China, due to the aforementioned ineffectiveness of the Chinese administrative judicial system when it comes to enforcing intellectual property rights.²⁰⁹ Yet copyright holders must acknowledge that the price differential between genuine and counterfeit goods in China is larger than neighboring countries, while its socioeconomic development lags behind.²¹⁰ Consumers care more about the price of their goods rather than their source, a fact that no educational initiative can change.²¹¹

Perhaps all that foreign businesses can really do is wait. Historically, nations become larger proponents of IP protections as their economies grow and their citizens create more intellectual property.²¹² As of now only 0.03% of Chinese companies own intellectual property for “key” technologies.²¹³ The Chinese government, in spite of political pressure, lacks the incentives to provide strong mechanisms for IP enforcement because its own domestic industries rely heavily on “imported IP assets to produce competitive goods for sale on the world market” and do not themselves “produce substantial IP assets requiring such protection.”²¹⁴

The key to international copyright enforcement may be to support Chinese copyright holders’ own domestic copyright enforcement, educate Chinese consumers and law enforcement officials about IP rights, and take on the organized crime syndicates in a major way. None of these three things alone will be able to change the influence of socioeconomic factors on copyright infringement levels. Nor will they necessarily provide strong

208. See Peter K. Yu, *Still Dissatisfied After All These Years: Intellectual Property, Post-WTO China, and the Avoidable Cycle of Futility*, 34 GA. J. INT’L. & COMP. L. 143, 152 (2005) (arguing that education and not sanctions can improve IP enforcement in China).

209. For a further examination of how China’s administrative judicial system is flawed with respect to intellectual property rights enforcement) see Oliver Ting, Comment, *Pirates of the Orient: China, Film Piracy, and Hollywood*, 14 VILL. SPORTS & ENT. L.J. 399, 424-28 (2007).

210. Chun Hsien-Chen, *supra* note 172 at 244.

211. *Id.* at 245.

212. Peter K. Yu, *The Copyright Divide*, 25 CARDOZO L. REV. 331, 434-35 (2003) (comparing eighteenth-century America, twentieth-century China, and twenty-first century “cyberspace”).

213. YONGNIAN ZHENG & MINJIA CHEN, CHINA POLICY INST., CHINA PLANS TO BUILD AN INNOVATIVE STATE 12 (2006), http://www.nottingham.ac.uk/china-policy-institute/publications/documents/Briefing9_China_Innovative_State.pdf.

214. Chun Hsien-Chen, *supra* note 172 at 253.

incentives for the Chinese government to strength its IP regime. Without this strengthening, China will remain a problem for copyright enforcement for several years to come.

V. CONCLUSION

Copyright holders, largely through industry associations, are increasingly investigating and prosecuting direct infringers with the goal of changing social norms regarding copyright infringement. Additionally, these copyright holders and industry associations are expending large amounts of resources to build cases against criminal infringers in the U.S. and abroad, which they then turn over to law enforcement agencies. On the home front, stepping up criminal and civil enforcement actions sends a message to both those who profit from infringement and those who continue to perpetuate the notion that infringement is acceptable, whether malicious or not. It remains to be seen what effect these actions against direct infringers will have on the next generation's perception and actions regarding copyright infringement.

These private industry alliances with public agencies are changing the nature of copyright infringement in both positive and negative ways. These alliances are positive in that they bring the value of intellectual property rights to the forefront of government initiatives and awareness. Yet public-private enforcement alliances may be negative in that private industries with relatively narrow interests, rather than political bodies that represent citizens as a whole, are steering the agenda in such ways that have open them to serious criticism and a loss of good will with consumers.

Such issues play out both domestically and in China, the center of large efforts of copyright enforcement. China will remain a difficult area for intellectual property rights protection so long as it lacks sufficient incentives to strengthen its IP regime, its socioeconomic development is such that end-users prefer counterfeit goods, and knowledge of IP law remains low.

Nonetheless, the growing partnership between industry and government actors suggests that the number of copyright infringement actions—especially against direct infringers—will continue to grow in China, in the U.S., and throughout the world.

ADDITIONAL DEVELOPMENTS— COPYRIGHT

N.Y. MERCANTILE EXCHANGE, INC. v. INTERCONTINENTAL EXCHANGE, INC.

497 F.3d 109 (2d Cir. 2007)

The United States Court of Appeals for the Second Circuit held that the New York Mercantile Exchange's ("NYMEX") settlement prices were not copyrightable subject matter pursuant to the merger doctrine.

NYMEX and IntercontinentalExchange ("ICE") are competitors in the futures exchange business for oil and natural gas. At the end of every trading day, NYMEX determines settlement prices for futures contracts. ICE copies these prices and uses them in their trading operations.

NYMEX brought suit against ICE in 2002, alleging that ICE's use of the prices constituted copyright infringement. The United States District Court for the Southern District of New York granted ICE's motion for summary judgment, finding the prices non-copyrightable because they were facts, words or short phrases, and applied the merger doctrine since the only way to express the idea of a settlement price is a single number. The Second Circuit affirmed, relying on the merger doctrine, while declining to resolve whether the prices were indeed non-copyrightable facts.

Copyright protection extends only to expression, not to ideas. Under the merger doctrine, when there is only one or a few similar ways of expressing an idea, courts hold that the idea and its expression are so intermingled that they merge, such that the expression is not copyrightable.

The Second Circuit identified the "idea" as the fair market value for each NYMEX contract, which is expressed as a settlement price. In determining whether or not the merger doctrine applied, the court considered whether all possible expressions of settlement prices are so similar that granting the copyright would bar others from expressing the underlying idea. The doctrine applied because "all possible expression takes the same form, a number." Since NYMEX did not demonstrate a range of possible variations of what the settlement prices would be, the court declined to grant copyright protection to its settlement prices.

Instead of relying on the merger doctrine, the court could have resolved the copyright issue by determining whether NYMEX's settlement prices were non-copyrightable facts. While the court discussed, in dicta, the "strong argument" that NYMEX was not the author of the prices, which were insufficiently creative, the court declined to make such a determination on summary judgment, as there were factual questions unresolved. In a concurrence, Judge Hall criticized the court for this dicta, arguing that it contemplated heightening the minimal creativity requirement.

LIVE NATION MOTOR SPORTS, INC. V. DAVIS*81 U.S.P.Q.2d (BNA) 1826 (N.D. Tex. Jan. 9, 2007)*

The United States District Court for the Northern District of Texas found that defendant Davis's links to live streaming webcasts on the website of SFX Motor Sports ("SFX") infringed SFX's public performance, display, and digital transmission rights under 17 U.S.C. § 106(4), (5), and (6).

SFX produced motorcycle racing events and broadcast them live on the Internet. Davis provided links to SFX's live streaming media broadcasts on his website. SFX claimed that Davis's action constituted copyright infringement. Having granted SFX's motion for a preliminary injunction in an earlier proceeding, the court granted SFX's motion for summary judgment in its copyright action.

The court decided that Davis's links to SFX's live stream webcasts on his website qualified as a copied displays or performances of SFX's copyrightable material.

In ruling on the copyright protection of live internet webcasts, the court analogized to a case involving copyright protection for live television broadcasts. In the *National Football League v. PrimeTime 24 Joint Venture*, 211 F.3d 10 (2d Cir. 2000), the Second Circuit found that the defendant's unauthorized satellite transmissions of live football broadcasts were a public display or performance of the plaintiff's copyrighted material, and thus constituted copyright infringement.

Working from Second Circuits statement that "a public performance or display includes each step in the process by which a protected work wends its way to its audience," the court found that Davis's unauthorized link constituted a copied display or performance of copyrighted material. The fact that another entity distributed the link to the webcasts free of charge was not an affirmative defense. Moreover, the court found that Davis's link was not a fair use of the copyrightable material, citing a lack of evidence presented by Davis, a *pro se* litigant who failed to file a response to the motion for summary judgment. In its very brief fair use analysis, the court, treating a separate motion filed by Davis as his response, rejected Davis' characterization of his actions, in earlier proceedings, as "commentary" (which Davis made as part of a different motion). The court noted both that Davis appeared to have an admitted commercial purpose rather than a purpose of "criticism, comment or news reporting, and that Davis linked to the "whole" webcast rather than excerpts of it.

***UNITED STATES V. AMERICAN SOCIETY OF COMPOSERS, AU-
THORS & PUBLISHERS***

485 F. Supp. 2d 439 (S.D.N.Y. 2007)

The United States District Court for the Southern District of New York held that downloading of a digital music file does not constitute a public performance within the meaning of 17 U.S.C. § 101.

Applicants AOL, Yahoo!, and RealNetworks applied to the American Society of Composers, Authors and Publishers (“ASCAP”) for a license to publicly perform various musical works over the Internet. After the parties were unable to agree on a licensing fee, ASCAP applied to the court for a determination of a reasonable fee for the use of its media in Applicants’ online services. The court granted the Applicants’ partial summary judgment on the issue of whether downloading a digital music file in and of itself does constitute a “public performance” of that song within the meaning of 17 U.S.C. §101.

As the parties did not dispute the facts, the court faced the issue of the meaning of “performance” within the Copyright Act as a matter of statutory construction. The Copyright Act states that to perform a work “means to recite, render, play, dance, or act it, either directly or by means of any device or process” The court looked to dictionary definitions of the non-statutorily defined words “recite, render and play,” and found that all three required contemporaneous perceptibility. Although the court acknowledged that the term “perform” should be broadly construed, the court could not conceive of a construction of the term “perform” that would extend to the copying of a digital file from one computer to another in the absence of any perceptible rendition. Rather, it held, the act of downloading a music file is a method of reproducing—not performing—it, making it an exclusive reproduction right under § 106(1) rather than performance right under § 106(4).

The court then looked to case law, applicable legislative history, and administrative sources and found its construction of “perform” to be consistent with these sources. The court explained: “to the extent that [] a download can be considered a public performance,” *e.g.* if the user plays the music contemporaneously with downloading it, “the performance is merely a technical by-product of the transmission process that no value separate from the download.”

SCO GROUP, INC. v. NOVELL, INC.

2007 U.S. Dist. LEXIS 58854 (D. Utah Aug. 10, 2007)

The United States District Court for the District of Utah ruled that Novell owns the copyrights to UNIX, and that SCO Group must drop its claims against IBM and Sequent for breaching their UNIX licensing agreements.

UNIX is a computer operating system developed by AT&T in 1969. Since its introduction, several UNIX-like operating systems have been developed, including Linux, a free, open source operating system.

Ownership of UNIX changed several times in the mid 1990s. AT&T transferred all its UNIX rights to Novell in 1993. Novell later tried to sell its UNIX assets to Santa Cruz Operations, but Santa Cruz Operations could not afford UNIX. Thus, Novell structured a special purchase agreement that allowed Santa Cruz Operations to further develop and license UNIX, but required Santa Cruz Operations to remit most royalties to Novell. Santa Cruz Operations sold its UNIX assets to Caldera, which then changed its name to SCO.

In 2003, SCO launched an initiative to obtain license fees from Linux users for using its UNIX intellectual property. As part of this strategy, SCO sued IBM and its subsidiary, Sequent, alleging that IBM violated its UNIX license by disclosing UNIX-derivative source code in the form of Linux. While the open source community reacted with outrage to SCO's claim that the use of Linux required a UNIX license, Novell publicly stated that it still owned the UNIX copyrights which SCO was attempting to enforce. SCO responded by suing Novell for slander of title.

The initial purchase agreement between SCO's predecessor, Santa Cruz Operations, and Novell covered Novell's UNIX assets, including the trademarks, but excluded all patents and copyrights. The parties later amended the purchase contract to include the copyrights and trademarks "required for SCO to exercise its rights with respect to the acquisition of [UNIX technologies]". However, the amended purchase agreement specifically listed the trademarks as assets to be purchased, but never listed any copyrights as assets to be purchased. Thus, the court concluded that this amendment only conveyed a license to the copyrights and that Novell retained ownership of the copyrights to UNIX.

After holding that Novell owned the UNIX copyrights, the court ruled on several license disputes. First, the court held that all licenses related to UNIX products were subject to the amended purchase agreement. Thus, SCO was directed to waive its claims against IBM and Sequent because Novell exercised its waiver right under the purchase agreement. Second, the court ruled that SCO must give Novell the appropriate portion of revenues from its licensing agreements with Sun and Microsoft because UNIX technology was included in those agreements. The appropriate portion was to be determined at a later date because it involved questions of fact. However, this trial was postponed because SCO filed for bankruptcy.

***IN RE MECHANICAL & DIGITAL PHONORECORD
DELIVERY RATE ADJUSTMENT PROCEEDING***

71 Fed. Reg. 64303 (2006)

The Register of Copyrights issued a memorandum opinion stating (1) that ringtones qualify as digital phonorecord deliveries (“DPDs”) under 17 U.S.C. § 115, and (2) that, therefore, depending on whether they exhibit sufficient creativity to qualify as derivative works under the Copyright Act, ringtones may fall within the scope of § 115’s compulsory licensing scheme. In so doing, the Register agreed on every major issue with the Recording Industry Association of America (“RIAA”), which had requested guidance on and heavily briefed the issue to the Register. The National Music Publishers Association, Inc., the Songwriters Guild of America, and the Nashville Songwriters Association International (collectively, “Copyright Owners”) had opposed the RIAA’s referral motion and argued that ringtones should not qualify for compulsory licensing.

17 U.S.C. §115 provides a “compulsory license to make and distribute phonorecords” of any nondramatic musical work previously recorded once a phonorecord of that work has been “distributed to the public in the United States under authority of the copyright owner.” The compulsory license allows the licensee to distribute (or authorize the distribution of) a phonorecord of such a work via a digital transmission which constitutes a digital phonorecord delivery. The copyright statute defines a DPD as “each individual delivery of a phonorecord by digital transmission of a sound recording which results in a specifically identifiable reproduction by or for any transmission recipient of a phonorecord of that sound recording.”

The Register found that ringtones fall under the § 115 licensing scheme because they are sound recordings fixed in a phonorecord (“the phonorecord here is the actual sound recording file stored as a ‘download’ on either the cell phone’s hard drive or removable memory storage disk”) and because the delivery of such by wire or wireless technology meets the definition set forth in the Copyright Act.

Although the Register acknowledged that statutory licenses are to be construed narrowly, the Register found, on the basis of the Act’s language and legislative history, that certain ringtones appear to fit comfortably within the definition of DPDs. Relying on principles of statutory interpretation expounded in the RIAA’s briefs, the Register reasoned that § 115 applies to whole musical works as well as portions of musical works like ringtones.

Thus, the Register held, whether a particular ringtone falls under § 115’s statutory licensing scheme depends on whether it could be considered a mere “portion of a work” to which § 115 applies, or an original derivative work, to which it does not. Under that rule, ringtones that are merely excerpts of a preexisting sound recording—whether looped or not, and whether monophonic, polyphonic, or mastertones—fall squarely within the scope of the statutory license. Ringtones made up of excerpts with additional material, on the other hand, may exhibit sufficient originality to qualify as derivative works and therefore fall outside the §115 compulsory license. The Register determined that there is a broad spectrum of ringtones, and whether one could be considered a derivative work or not depends on the nature of the ringtone, an issue for courts to determine on a case-by-case basis.

GOWERS REPORT: U.K. KEEPS COPYRIGHT TERM AT 50 YEARS

Following an independent review of its intellectual property laws, the United Kingdom decided to maintain the term of copyright in sound recordings and performers' rights at the current 50 years. The decision was one of several recommendations made by Andrew Gowers, former Editor of the Financial Times. The governments' refusal to extend copyright protection outraged the U.K. music industry, which had campaigned for the extension.

In December 2005, the Chancellor of the Exchequer commissioned Mr. Gowers to review the UK's intellectual property framework. The Gowers Review of Intellectual Property ("the Review") was published on December 6, 2006. The project's purpose was to recommend policies that would ensure that the UK's IP rights are balanced, coherent, flexible, and suited for a digital and globalized age. The principal recommendations included: tackling IP crime and ensuring that rights are properly enforced, reducing the system's costs and complexity, and reforming copyright law to allow individuals and institutions to use content in ways consistent with the digital age.

The Review also sets out several concrete recommendations, including the controversial recommendation that the European Commission should retain the length of protection on sound recordings and performers' rights at 50 years. The Review consulted a wide range of industrial, academic, and public sector stakeholders. The Review concluded that extending the term would harm the UK's trade balance while providing little practical benefit to artists and causing great harm to creativity and consumers. The music industry argued that performers and producers were unfairly discriminated against, as their rights only extend for 50 years, whereas composers are entitled to the life of the author plus 70 years. Proponents of the government's decision argued that extending the term would only help a small number of already highly successful artists, while damaging future artists and the general public's access to their cultural heritage.

AUSTRALIAN COPYRIGHT AMENDMENT ACT OF 2006

Australia amended its copyright law to implement a number of key changes, as it had agreed to under the Australia-United States Free Trade Agreement. The Copyright Amendment Act of 2006 codifies (1) new fair dealing defenses, (2) new copyright infringement offenses, (3) new exceptions to copyright infringement, and (4) new anti-circumvention provisions regarding technological protection measures.

Prior to the Act, Australian copyright law had only limited recognition for fair dealing—a defense to copyright that serves similar purposes to the U.S. doctrine of fair use. The defense of fair dealing explicitly applied only to use of copyrighted material for purposes of criticism, review, or news reporting. The Act amended Australia's fair dealing regime by codifying fair dealing for parody and satire. Copying protected material for purposes of parody or satire is not infringement. Australian legislators specifically chose not to introduce the broad fair use defense regime present in the United States.

The Act introduces four new exceptions to copyright infringement: (1) time-shifting, (2) format-shifting, (3) space-shifting, and (4) research and study. First, the time-shifting defense allows individuals to record a broadcast, including any work within the broadcast such as a film, for watching at another time. Time-shifting copies must be for private use, and may be borrowed by family members or household members. Second, the format-shifting defense allows owners of copies of copyrighted works—including books, newspapers, periodicals, photographs and films—to make a copy in a different format. If temporary copies are produced during the course of format-shifting, the temporary copies must be promptly destroyed. Third, the space-shifting defense allows owners of copies of copyrighted sound recordings to make copies for personal use. Unlike the format-shifting exception, the copy may be in the same format as the original copy. Thus, this defense would not permit recordings of copyrighted works during internet broadcasts. Fourth, the Act that a “reasonable portion,” usable for research and study without infringement liability, means ten percent of a work, or one chapter for published material.

The Act introduces four new criminal liability infringement offenses: (1) making, selling, distributing, or offering to sell an infringing copy of a copyrighted work; (2) displaying a copyrighted work in public or causing a copyrighted sound recording or film to be heard in public; (3) possession of an infringing work with the intent to sell the infringing work; and (4) making or possessing technology for making an infringing copy of a copyrighted work. Large scale commercial infringers face up to five years imprisonment. Negligent commercial infringers face up to two years of imprisonment. Individual, non-commercial infringers face strict liability on the spot fines for each infringement.

The Act introduces anti-circumvention measures comparable to those under the U.S. Digital Millennium Copyright Act. The Act establishes infringement liability for making or possessing technology used for infringing conduct, and introduces a comprehensive civil and criminal liability scheme making it illegal to manufacture, distribute, or use any device designed to circumvent a “Technology Protection Measure”—any technological device designed to prevent unauthorized copying of protected material.

The Act was greeted with mixed reactions. Educators and academics, for example, are encouraged by the clarified research and study exception. On the other hand, some argue that the amendments introduce unnecessary complexities and will ultimately hurt users of information who are not fully aware of the Act's new requirements.

U.S.-SINO WTO DISPUTE OVER CHINESE INTELLECTUAL PROPERTY PROTECTION

In April 2007, the United States filed two requests for World Trade Organization (“WTO”) dispute settlement consultations with the People’s Republic of China. The first request pertained to China’s alleged inadequate protection and enforcement of copyrights and trademarks. The second request challenged China’s barriers to trade in books, music, videos and movies.

The first request contested Chinese law that provides a substantial “safe harbor” for wholesalers and retailers who distribute or sell pirated and counterfeit products in China. The United States contends that China’s quantitative thresholds for criminal prosecution of trademark counterfeiting or copyright piracy permitted large-scale piracy and counterfeiting. Further, the United States alleged that the Chinese practice of selling seized goods infringing IPRs after the removal of infringing features conflicted with WTO rules which dictate that such goods should be kept out of the marketplace altogether. Finally, the United States took issue with the Chinese copyright law’s apparent denial of copyright protection to foreign works of authorship, sound recordings, and performances while awaiting Chinese censorship approval, observing that copyright protection is available immediately to Chinese works. The United States’ request asserted that these Chinese practices conflicted with China’s obligations under the WTO Agreement on Trade-Related Aspects of Intellectual Property Rights.

The second request sought to eliminate China’s import and internal distribution barriers. Chinese law currently denies U.S. companies the right to import books, journals, movies, music, and videos directly; instead all imports must be channeled through authorized state-run or state-approved companies. The United States has alleged that Chinese rules impede the efficient distribution of publications and home entertainment video products within China. The United States contended that these barriers created opportunities for counterfeit and pirated goods by slowing the distribution of genuine products in China. The United States asserts that these laws are inconsistent with China’s obligations under its WTO Accession Protocol and under the WTO General Agreement on Trade in Services.

Consultations between the United States and China in June 2007 failed to resolve these issues. In August, the United States took the next step in the WTO dispute process by requesting that a WTO dispute-settlement panel examine several key issues stated in its consultation request, including the criminal threshold for acts of copyright piracy or trademark counterfeiting, the denial of copyright protection to creative works pending authorization for publication or distribution within China, and the sale of infringing goods by Chinese authorities.

ANTI-DILUTION LAW, NEW AND IMPROVED: THE TRADEMARK DILUTION REVISION ACT OF 2006

By Jennifer Files Beerline

I. INTRODUCTION

Federal law provides famous trademark owners with power over and above traditional trademark infringement protection.¹ Generally, businesses rely on infringement law to prevent other firms from using an identical or similar trademark. The crucial inquiry under an infringement action is whether the infringing use would be likely to confuse consumers into believing that the marks referred to the same company, goods, or services.² Businesses with especially famous marks, however, can rely upon an additional weapon: anti-dilution law.

Trademark dilution involves situations in which consumers associate an established, famous trademark with a newer trademark, even if it is clear that the marks represent different goods or manufacturers.³ Dilution occurs when such an association impairs the power of the famous mark. The remedy for a violation of anti-dilution law is generally an injunction prohibiting the diluting use,⁴ which has spurred criticism from free speech advocates, who fear that such powerful trademark protection gives powerful corporations excessive control over parody, criticism, and other forms of language under the guise of anti-dilution.⁵

© 2008 Jennifer Files Beerline.

1. Trademark Dilution Revision Act of 2006, Pub. L. No. 109-312, § 2, 120 Stat. 1730 (to be codified at 15 U.S.C. § 1125(c)(2)(A)).

2. 15 U.S.C. § 1114(1) (2000) (establishing protection from infringing uses, defined as “likely to cause confusion, or to cause mistake, or to deceive”).

3. Trademark Dilution Revision Act of 2006 § 2 (to be codified at 15 U.S.C. § 1125(c)).

4. 4 J. THOMAS MCCARTHY, MCCARTHY ON TRADEMARKS AND UNFAIR COMPETITION § 24:81 (4th ed. 2005).

5. *Trademark Dilution Revision Act of 2005: Hearing on H.R. 683 Before the Subcommittee on Courts, the Internet, and Intellectual Property of the House Committee on the Judiciary*, 109th Cong. 2 (2005) [hereinafter *Dilution Hearing*] (statement of Marvin J. Johnson, Legislative Counsel, American Civil Liberties Union) (stating that proposals to increase anti-dilution protection “places the trademark holder in the position of holding an indefinite monopoly in expressive subject matter, and obstructs the public’s ability to freely engage in a democratic dialogue”).

Congress passed the first federal anti-dilution law, the Federal Trademark Dilution Act (“FTDA”), in 1996,⁶ eight years after an earlier attempt failed.⁷ Ambiguities in the FTDA led to inconsistent judicial holdings regarding key questions such as the level of fame a trademark had to possess to be protected, the meaning of dilution, and the amount of harm a plaintiff had to prove.⁸ While courts had frequently granted relief under the FTDA when plaintiffs proved that dilution was *likely* to occur, in 2003 the Supreme Court held in *Moseley v. V Secret Catalogue, Inc.* that plaintiffs could only win relief under the FTDA by showing that their trademarks had suffered *actual* dilution.⁹ Trademark owners, unhappy with this decision, pushed for reform that resulted in the enactment of the Trademark Dilution Revision Act of 2006 (“TDRA”).¹⁰

The purpose of the TDRA, which superseded the FTDA, was to clarify questions left open by the earlier law,¹¹ and to provide more concrete guidance about which trademarks warrant protection,¹² when a plaintiff may receive injunctive relief,¹³ and what types of dilution are protected against under federal law.¹⁴ However, the TDRA does not resolve all of the FTDA’s ambiguities and introduces some new ones of its own. For instance, the TDRA specifically extends anti-dilution protection to marks of acquired distinctiveness,¹⁵ which receive protection only as consumers come to associate them with a particular company. Yet one of the TDRA’s optional factors for assessing dilution claims—whether the famous mark

6. Federal Trademark Dilution Act of 1995, Pub. L. 104-98, 109 Stat. 985 (codified at 15 U.S.C. §§ 1051, 1125, 1127 (2000) (amended 2006)). The Act was passed by Congress in December 1995 and signed by President Clinton on January 16, 1996.

7. See MCCARTHY, *supra* note 4, § 24:95.

8. H.R. REP. NO. 109-23 (2005), *reprinted in* 2006 U.S.C.C.A.N. 1091.

9. 537 U.S. 418, 433 (2003).

10. Trademark Dilution Revision Act of 2006, Pub. L. 109-312, § 120 Stat. 1730 (to be codified as 15 U.S.C. § 1125(c) and replacing the Federal Trademark Dilution Act, Pub. L. 104-98).

11. See Brian T. Yeh, *Protecting Famous, Distinctive Marks: The Trademark Dilution Revision Act of 2006*, CRS REPORT FOR CONGRESS, available at http://ipmall.info/hosted_resources/crs/RL33393-061016.pdf [hereinafter CRS REPORT] (describing the goals and legislative history of the TDRA).

12. Trademark Dilution Revision Act of 2006 § 2 (to be codified at 15 U.S.C. § 1125(c)(2)(A)).

13. *Id.*

14. Trademark Dilution Revision Act of 2006 § 2 (to be codified at 15 U.S.C. § 1125(c)(1), (c)(2)(C)).

15. Trademark Dilution Revision Act of 2006 § 2 (to be codified at 15 U.S.C. § 1125(c)(1)).

was in “substantially exclusive use” for one purpose¹⁶—appears to impose a high hurdle on marks of acquired distinctiveness, because they are less likely to be used exclusively than coined marks. Most importantly, the TDRA, like the FTDA, gives courts ample room to develop and apply their own standards for interpreting the law, which may lead to the same sort of unpredictability that characterized the FTDA.¹⁷

Part II of this Note examines the background, theory, and critiques of dilution law and the goals and shortfalls of the FTDA. Part III analyzes key components of the TDRA and predicts how changes in the law will alter courts’ interpretations of anti-dilution law. Part IV concludes that while imperfect, the TDRA is a vast improvement over the FTDA.

II. ANTI-DILUTION DOCTRINE BEFORE THE TDRA

Anti-dilution theory originates from a 1927 article by Frank I. Schechter, a New York lawyer.¹⁸ Schechter argued that traditional trademark infringement law was misguided and wrote that “the preservation of the uniqueness of a trademark should constitute the only rational basis for its protection.”¹⁹ Two decades after Schechter’s article, states began enacting anti-dilution laws.²⁰ By the time the FTDA was enacted in 2006, about two thirds of the states had passed laws protecting against either “likelihood of injury to business reputation or of dilution of the distinctive quality of a mark” or “dilution of the distinctive quality of the owner’s mark.”²¹ Still, over the course of seventy years, dilution theory was unclear. This Part lays out the theory and critiques of anti-dilution law as

16. Trademark Dilution Revision Act of 2006 § 2 (to be codified at 15 U.S.C. § 1125(c)(2)(B)(iii)).

17. Trademark Dilution Revision Act of 2006 § 2 (to be codified at 15 U.S.C. § 1125(c)(2)(A)-(B)) (noting that courts “may consider all relevant factors,” including those enumerated by the statute, in assessing whether a mark is famous and/or has been diluted).

18. Frank I. Schechter, *The Rational Basis of Trademark Protection*, 40 HARV. L. REV. 813 (1927). See also MCCARTHY, *supra* note 4, § 24:67.

19. Schechter, *supra* note 18, at 831.

20. See MCCARTHY, *supra* note 4, § 24:77. More than two-thirds of U.S. states currently have anti-dilution laws. They include, as of 2006: Alabama, Alaska, Arkansas, Arizona, California, Connecticut, Delaware, Florida, Georgia, Hawaii, Idaho, Illinois, Iowa, Kansas, Louisiana, Maine, Massachusetts, Minnesota, Mississippi, Missouri, Montana, Nebraska, New Hampshire, New Jersey, New Mexico, New York, Oregon, Pennsylvania, Rhode Island, South Carolina, Tennessee, Texas, Utah, Washington, West Virginia, and Wyoming. *Id.*

21. MCCARTHY, *supra* note 4, § 24:77.

codified in the FTDA, statutory history, and case law that led to the passage of the TDRA.

A. Dilution Theory and Critiques

Anti-dilution doctrine addresses two distinct harms. Blurring, the first type of dilution, occurs when consumers associate a famous trademark with a newer trademark in such a way that the famous mark becomes less distinct. “Kodak bicycles,” an example Schechter used in his article,²² is a classic example of blurring a more famous mark, Kodak cameras. Even though consumers would not necessarily jump to the conclusion that the famous camera company made the bicycles, they might make a mental association between the two brands. As a result, the Kodak trademark could lose some of its strong identification with cameras and related gear and thus become blurred.

The second type of dilution, tarnishment, protects famous marks from uses that harm the reputation of the trademark or the company behind the mark. An example of a tarnishing use might be a tee-shirt printed with “Buttweiser,” which casts the famous brand in a less-than-wholesome light.²³

Big businesses have significant financial interests in their trademarks and view them as valuable property. For example, a 2007 study valued the world’s 100 strongest brands at a combined \$2.3 trillion, based on their potential to generate earnings.²⁴ According to an attorney for Warner Brothers, “[T]he trademark owner, who has spent the time and investment needed to create and maintain the property, should be the sole determinant of how that property is to be used in a commercial manner.”²⁵

22. Schechter, *supra* note 18, at 825.

23. *Anheuser Busch v. Andy’s Sportswear*, 40 U.S.P.Q.2d 1542 (N.D. Cal. 1996) (grant of preliminary injunction); *see also Coca-Cola Co. v. Gemini Rising, Inc.*, 346 F. Supp. 1183 (E.D.N.Y. 1972) (preliminary injunction on use of “Enjoy Cocaine”); H.R. REP. NO. 109-23, *supra* note 8, at 4 (“[D]ilution occurs when the unauthorized use of a famous mark reduces the public’s perception that the mark signifies something unique, singular, or particular. In other words, dilution can result in the loss of the mark’s distinctiveness and, in worst-case scenarios, the owner’s rights in it.”).

24. David Kiley, *Best Global Brands*, BUSINESSWEEK, Aug. 6, 2007, at 56, *available at* http://www.businessweek.com/magazine/content/07_32/b4045401.htm. Inter-brand, a global branding consultancy, conducted the survey for the magazine. Coca-Cola, perennially the world’s No. 1 brand, was valued at \$65 billion; Budweiser, ranked 30th, at \$11.7 billion; Kodak, ranked 82nd, at \$3.9 billion. The author added the individual values for the top 100 brands together to obtain the aggregate figure of \$2.3 trillion. *Id.*

25. *Madrid Protocol Implementation Act and Federal Trademark Dilution Act of 1995: Hearing Before the Subcomm. on Courts and Intellectual Property of the H.*

Yet, trademark dilution is a particularly controversial branch of intellectual property law. Like traditional trademark infringement law, anti-dilution law does not promote creative expression or invention, as copyright and patent law do: on the contrary, it can restrict both, by limiting companies' ability to use certain marks.²⁶ This is exacerbated by the fact that anti-dilution protection, like other forms of trademark protection, never expires.²⁷ Unlike infringement protection, however, anti-dilution laws protect trademark holders rather than consumers.²⁸ In particular, anti-dilution laws serve the most powerful companies, because they are the ones with the financial wherewithal to build truly famous marks.²⁹

Some scholars see anti-dilution law as a remedy without a harm, arguing that uses by non-competing products actually tend to raise the profile of a famous mark.³⁰ Others have suggested that brand ubiquity, carried out by extensive licensing, has made anti-dilution laws irrelevant.³¹ For instance, Kodak-brand bicycles might have been inconceivable in 1927, when companies typically associated themselves with a single product or category; eighty years later, such a diverse portfolio of one company is entirely possible. If today's companies are diluting their own marks by

Comm. on the Judiciary, 104th Cong. 111 (1995) (statement of Nils Victor Montan, Vice President and Senior Intellectual Property Counsel, Warner Brothers).

26. See, e.g., Mark A. Lemley, *The Modern Lanham Act and the Death of Common Sense*, 108 YALE L.J. 1687, 1694-95 (1999).

27. See *id.*

28. See CRS REPORT, *supra* note 11, at 14 n.67 (stating that H.R. 683 "is a big company's dream . . . [T]he lawyers policing a trademark could sue businesses and individuals for using words, images, or even colors that look vaguely like a famous brand—without even having to prove that the company is being harmed . . . This bill would chill speech and hand ownership of common words to big companies") (citing ELECTRONIC FRONTIER FOUNDATION, STOP THE TRADEMARK ACT FROM DILUTING FREE SPEECH!).

29. See, CRS REPORT, *supra* note 11, at 14 (quoting 152 Cong. Rec. H6965 (daily ed. Sept. 25, 2006) (statement of Rep. David Wu) ("Since trademark laws have an effect not only on famous companies but also on the many small businesses with legitimate business interests, any antidilution legislation should be very carefully considered so as not to interfere with the rights of small businesses. The goal must be to protect trademarks from subsequent uses that blur, dilute or tarnish that trademark, but it must also be the protection of small business interests from its more powerful corporate counterparts.")).

30. Christine Haight Farley, Presentation, *Frank Schechter Was a Man Ahead of His Time, but Now He Is Dead (Trademark Dilution: Theoretical and Empirical Inquiries)*, Santa Clara Law School, Santa Clara, Cal., Oct. 2007.

31. Sara Stadler Nelson, *The Wages of Ubiquity in Trademark Law*, 88 IOWA L. REV. 731 (2003).

attaching their mark to an array of products, then why should they be able to sue when other companies follows suit?³²

A final criticism of anti-dilution doctrine relates to the line between dilution (especially tarnishment) and parody or other forms of speech that are protected under the First Amendment. When broadly applied, anti-dilution protection may “transform the trademark owner into a monitor of the spoken and written English language.”³³ Thus, one fundamental challenge in crafting an anti-dilution law lies in balancing protection for famous trademarks against the concerns of free speech and free enterprise. While Congress acknowledged the need for such a balance in drafting the FTDA,³⁴ the law arguably gave courts too little guidance on how to achieve it.

B. FTDA

The FTDA protected famous marks from a reduction in their capacity “to identify and distinguish goods or services, regardless of the presence or absence of (1) competition between the owner of the famous mark and other parties, or (2) likelihood of confusion, mistake, or deception.”³⁵

1. *Protectable Marks Under the FTDA*

The FTDA only protected trademarks that were famous prior to the date of the challenged mark’s first use in commerce.³⁶ The law offered little concrete guidance on the definition of “famous,” and courts applied widely different standards. Courts also imposed other—often conflicting—restrictions based on the types of trademarks involved.

a) FTDA Protection with Respect to Different Types of Marks

The FTDA did not specifically define which types of marks could be considered “famous.” This threshold question involved whether anti-dilution protection applied only to inherently distinct marks, like Yahoo!, or more broadly, to marks of acquired distinctiveness, like the New York

32. *Id.*

33. *Dilution Hearing*, *supra* note 5 (statement of Marvin J. Johnson, Legislative Counsel, American Civil Liberties Union).

34. CRS REPORT, *supra* note 12, at 9 (“Dilution law is designed to preserve the capacity of a famous mark to identify and distinguish the goods or services to which it is attached. To address First Amendment concerns . . . the FTDA provides three affirmative defenses to a claim of dilution.”).

35. 15 U.S.C. § 1127 (2000) (amended 2006).

36. Federal Trademark Dilution Act, 15 U.S.C. § 1125(c)(1) (2000) (amended 2006).

Stock Exchange.³⁷ For instance, the Second Circuit consistently held that only inherently distinctive marks could be famous under the FTDA.³⁸ In contrast, the Ninth Circuit held that the FTDA did not require inherent distinctiveness.³⁹

Similar conflicts arose regarding the applicability of the FTDA to product packaging and design, known as trade dress. The Second Circuit has awarded protection for trade dress without reservation. In *Nabisco, Inc. v. PF Brands, Inc.*, the court held that the shape of Pepperidge Farm's goldfish crackers was protected trade dress and prevented Nabisco from selling its own fish-shaped crackers.⁴⁰ In sharp contrast, in *I.P. Lund Trading ApS v. Kohler Co.*, the First Circuit reasoned that anti-dilution remedies for trade dress would award an enduring degree of protection that is specifically for design patents without forcing trademark owners to clear the hurdles required for patent protection.⁴¹ The court concluded that such protection might be unconstitutional and that Congress likely did not intend to provide it as part of the FTDA.⁴²

b) The FTDA's Fame Requirement

The FTDA provided no concrete definition of "famous" but included eight optional factors that courts could, within their discretion, use to assess whether a mark was sufficiently famous to merit protection.⁴³ The factors were (A) the degree of inherent or acquired distinctiveness of the mark; (B) the duration and extent of use of the mark in connection with the goods or services with which the mark is used; (C) the duration and

37. *Compare* N.Y. Stock Exchange, Inc. v. N.Y., N.Y. Hotel, LLC, 293 F.3d 550 (2d Cir. 2002) (holding that plaintiff's mark cannot be famous because it is descriptive and therefore not inherently distinctive) *with* Times Mirror Magazines, Inc. v. Las Vegas Sports News, L.L.C., 212 F.3d 157 (3d Cir. 2000) (holding that a mark of acquired distinctiveness can be famous).

38. *See, e.g.*, New York Stock Exchange, Inc. v. N.Y., N.Y. Hotel, LLC, 293 F.3d 550 (2d Cir. 2002); TCPIP Holding Co. v. Haar Comms., Inc., 244 F.3d 88 (2d Cir. 2001) (holding that The Children's Place is not inherently distinct and therefore does not qualify for anti-dilution protection).

39. *E.g.*, Thane Intern., Inc. v. Trek Bicycle Corp., 305 F.3d 894, 912 n.14 (9th Cir. 2002).

40. 191 F.3d 208, 229 (2d Cir. 1999); *see also* Binney & Smith v. Rose Art Industries, 60 U.S.P.Q.2d 2000, 2001 (E.D. Pa. 2001) (order for preliminary injunction on trade dress dilution for Crayola crayons).

41. 163 F.3d 27, 50 (1st Cir. 1998). The court speculated in dicta that such protection might be unconstitutional and that Congress likely did not intend to provide it as part of the FTDA. Nonetheless, the court stopped short of categorically denying such protection because the FTDA did not explicitly exclude trade dress. *Id.*

42. *Id.* at 33.

43. 15 U.S.C. § 1125(c)(1) (2000) (amended 2006).

extent of advertising and publicity of the mark; (D) the geographical extent of the trading area in which the mark is used; (E) the channels of trade for the goods or services with which the mark is used; (F) the degree of recognition of the mark in the trading areas and channels of trade used by the mark's owner and the person against whom the injunction is sought; (G) the nature and extent of use of the same or similar marks by third parties; and (H) whether the mark was registered under the Act of March 3, 1881, the Act of February 20, 1905, or on the principal register.⁴⁴ The FTDA was silent, however, regarding the requisite level of fame a mark necessary for protection.

In most circuits, courts held that the FTDA protected trademarks even when their fame was limited to a geographic region or an industry niche.⁴⁵ For instance, the trademark "Wawa," which was the name of a chain of 600 convenience stores located in Pennsylvania and surrounding states, was considered to be famous within its region.⁴⁶ Similarly, Nailtiques, a brand of manicure products, was held to be famous within its niche.⁴⁷ These courts reasoned that when a mark had achieved fame, even among a limited segment of consumers based on regional operations or a very limited category of products, it deserved protection from dilution.⁴⁸ The Second Circuit, on the other hand, has required a broader level of fame. The court wrote in *TCPIP Holding Co. v. Haar Communications, Inc.* that "[i]t seem[ed] most unlikely that Congress intended to confer on marks that have enjoyed only brief fame in a small part of the country, or among a small segment of the population, the power to enjoin all other users throughout the nation in all realms of commerce."⁴⁹

2. Dilution Under the FTDA

The FTDA defined dilution as "[t]he lessening of the capacity of a famous mark to identify and distinguish goods or services, regardless of the presence or absence of (1) competition between the owner of the famous

44. *Id.*

45. *See Dilution Hearing, supra* note 5 (statement of Anne Gundelfinger on behalf of the International Trademark Association) (stating that the niche market theory of fame had been accepted by courts in the Third, Fourth, Fifth, Sixth, Seventh and Ninth circuits but rejected in the Second, Eighth, and Eleventh circuits).

46. *Wawa Dairy Farms v. Haaf*, 40 U.S.P.Q.2d 1629 (E.D. Pa. 1996), *aff'd*, 939 F.3d 1032 (3d Cir. 1997).

47. *Nailtiques Cosmetic Corp. v. Salon Sciences Corp.*, 41 U.S.P.Q.2d 1995 (S.D. Fla. 1997).

48. *See Wawa*, 40 U.S.P.Q.2d 1629.

49. 244 F.3d 88, 99 (2d Cir. 2001).

mark and other parties, or (2) likelihood of confusion, mistake, or deception.”⁵⁰

Although the FTDA did not specifically use the word “blurring,” its definition of dilution encompassed the traditional claim of dilution by blurring; courts were split over whether the FTDA also included tarnishment.

a) Blurring Under the FTDA

Beyond its brief definition of dilution, the FTDA provided no further guidance to help courts identify blurring, leaving courts to choose their own factors. Courts first followed a test known as the “Sweet Factors,” which was named after the judge who posited them and developed under New York state anti-dilution law.⁵¹ This test was criticized because it tended to conflate dilution with infringement by incorporating factors such as “consumer confusion” and “the similarity of the markets for the products covered by the trademarks.”⁵² These factors are critical to trademark infringement analyses but irrelevant to a dilution claim because dilution is, by definition, independent of consumer confusion or brand competition.⁵³ In *Nabisco*, the court developed another list of ten optional factors that could be used to determine whether blurring occurred.⁵⁴ The *Nabisco* factors were widely viewed as an improvement but they were also criticized, in part because of their complexity. The fact that courts could pick and choose among the ten-factor list gave courts great flexibility in determining blurring cases but made outcomes impossible to predict.⁵⁵

50. 15 U.S.C. § 1125(c)(1) (2000) (amended 2006).

51. *Mead Data Cent., Inc. v. Toyota Motor Sales, U.S.A., Inc.*, 875 F.2d 1026, 1035 (2d Cir. 1989) (Sweet, J., concurring) (proposing the following six factors: “(i) similarity of the marks; (ii) similarity of the products covered by the marks; (iii) sophistication of consumers; (iv) predatory intent; (v) renown of the senior mark; and (vi) renown of the junior mark.”).

52. *See, e.g., I.P. Lund Trading ApS v. Kohler Co.*, 163 F.3d 27, 49-50 (1st Cir. 1998).

53. *See id.*

54. *Nabisco, Inc. v. PF Brands, Inc.*, 191 F.3d 208, 217-23 (2d Cir. 1999) (suggesting ten non-exclusive factors: (i) distinctiveness of the senior mark; (ii) similarity of the marks; (iii) proximity of the products and likelihood of bridging the gap; (iv) interrelationship among the distinctiveness of the senior mark, the similarity of the junior mark, and the proximity of the products; (v) shared consumers and geographic limitations; (vi) sophistication of consumers; (vii) actual confusion; (viii) adjectival or referential quality of the junior use; (ix) harm to the junior user and delay by the senior user; (x) effect of senior’s prior laxity in protecting the mark).

55. *See MCCARTHY, supra* note 4, § 24:114 (“[T]he relationship between the ten factors and the factual analysis involved is so extensive, complicated, and involved that

b) Tarnishment Under the FTDA

Courts recognized tarnishment as a cause of action under the FTDA and under state laws.⁵⁶ Courts most frequently found tarnishment from association of a famous mark with sexually oriented entertainment or products, drugs or “cheap or shoddy” goods.⁵⁷ For instance, the Eastern District of New York enjoined the sale of posters printed with “Enjoy Cocaine,” based on a likelihood of harm to the beverage company’s trademark and business reputation.⁵⁸ However, in dicta in its 2003 *Moseley* decision, the Supreme Court questioned the validity of dilution by tarnishment as a claim under the FTDA.⁵⁹ The Court noted that the FTDA’s legislative history clearly envisioned protection from tarnishment, but the statute itself notably omitted protection against “injury to business reputation,” language used in state anti-dilution laws in many states.⁶⁰

3. Exemptions Under the FTDA

The FTDA codified three types of exemptions from coverage of the act:

- (A) Fair use of a famous mark by another person in comparative commercial advertising or promotion to identify the competing goods or services of the owner of the famous mark.
- (B) Noncommercial use of a mark.
- (C) All forms of news reporting and news commentary.⁶¹

Among these exemptions, the “noncommercial use” exemption was a catch-all category that included uses ranging from negative commentary on a personal website, to use of trademarks in political campaigns, to parody and artistic expression.⁶² For example, the Ninth Circuit held in *Mattel, Inc. v. MCA Records, Inc.* that the song “Barbie Girl,” which targeted the popular doll’s frivolous image, was entitled to the non-commercial

the ability to accurately predict a result is low. When many variables are relevant and interrelated, none are determinative.”).

56. See Graeme B. Dinwoodie & Mark D. Janis, *Dilution’s (Still) Uncertain Future*, 105 MICH. L. REV. FIRST IMPRESSIONS 98, 99 (2006), <http://students.law.umich.edu/mlr/firstimpressions/vol105/dinwoodie.pdf> (“Courts simply assumed that Congress meant to recognize [both] blurring and tarnishment.”).

57. MCCARTHY, *supra* note 4, § 24:89.

58. *Coca-Cola Co. v. Gemini Rising, Inc.*, 346 F. Supp. 1183, 1188 (E.D.N.Y. 1972).

59. *Moseley v. V Secret Catalogue, Inc.*, 537 U.S. 418, 432-33 (2003).

60. *Id.*

61. 15 U.S.C. § 1125(c) (2000) (amended 2006).

62. See MCCARTHY, *supra* note 4, § 24:89.

speech exclusion even though the trademark name Barbie was part of the title and helped sell the song.⁶³ The court found that the song constituted creative expression and that because defendant did not use the mark as a brand for its own goods, the use was protected.⁶⁴

4. *Relief Under the FTDA*

Before *Moseley*, courts were divided concerning the standard of harm required for relief under the FTDA. Some, including the Second Circuit, used a “likelihood of dilution” standard; plaintiffs in those jurisdictions needed only prove that dilution was likely to occur.⁶⁵ By contrast, the Fourth Circuit operated under an “actual dilution” standard; plaintiffs could not get an injunction or recover monetary damages unless they could prove that their trademarks had been diluted.⁶⁶ The standard of harm was important for two reasons: first, particularly with dilution by blurring, proving actual dilution is far more difficult than establishing that it is likely. When required to show actual dilution, plaintiffs must often use survey evidence and expert testimony, but there is no clear test for quantifying a mark’s loss of distinctiveness. Second, the main remedy for dilution is an injunction against a defendant’s use of the trademark. This might help prevent dilution, but trademark owners argue that it is unlikely to be effective in curing dilution. The Supreme Court granted certiorari to *Moseley* to resolve this particular issue.⁶⁷

Amid so many ambiguities, the percentage of plaintiffs who won cases under the FTDA declined during the decade after the act was passed.⁶⁸ An empirical study by Professor Clarisa Long found that courts granted relief in fifty-four percent of dilution cases during 1996; that rate dropped to

63. *Mattel, Inc. v. MCA Records, Inc.*, 296 F.3d 894, 907 (9th Cir. 2002) (“To be sure, MCA used Barbie’s name to sell copies of the song. However, as we’ve already observed, . . . the song also lampoons the Barbie image and comments humorously on the cultural values [that the band that recorded the song] claims she represents. Use of the Barbie mark in the song Barbie Girl therefore falls within the noncommercial use exemption to the FTDA. For precisely the same reasons, use of the mark in the song’s title is also exempted.”).

64. *Id.*

65. *See Nabisco, Inc. v. PF Brands, Inc.*, 191 F.3d 208, 224 (2d Cir 1999).

66. *See Ringling Bros.-Barnum & Bailey Combined Shows, Inc. v. Utah Division of Travel Dev.*, 170 F.3d 449, 464 (4th Cir. 1999).

67. *Moseley v. V Secret Catalogue, Inc.*, 537 U.S. 418, 428 (2003); *see infra*, Section II.C.

68. *See Clarisa Long, Dilution*, 106 COLUM. L. REV. 1029 (2006). Long’s study analyzed 344 reported cases from Jan. 16, 1996 (the date President Clinton signed the FTDA) through July 16, 2005, in addition to a sample of unreported claims over the same period. The results for reported and unreported dilution claims were similar. *Id.* at 1041.

seventeen percent in 2004 and twelve percent during the first half of 2005.⁶⁹ Meanwhile, the percentages of plaintiffs who won relief in non-dilution trademark claims declined, but to a lesser extent, from fifty-four percent in 1996 to fifty-one percent in 2004 and twenty percent in the first half of 2005.⁷⁰ The decline in wins by plaintiffs for dilution claims was particularly notable because cases grew arguably stronger in later years, as they were generally brought to protect better-known trademarks.⁷¹ One explanation is that courts increasingly tended to interpret the FTDA narrowly, “even to the point of imposing limitations not in the statute,” such as denying dilution protection for a product’s shape.⁷² Professor Long concluded that courts “tailor[ed] an overbroad and ambiguous form of intellectual property protection to correct for congressional exuberance, influence by interest groups, or perhaps just haste.”⁷³

C. *Moseley*: The Final Blow to the FTDA

In 2002, the Supreme Court granted certiorari in *Moseley v. V Secret Catalogue, Inc.* to settle the circuit split about the standard of harm required for a trademark dilution claim.⁷⁴ The parent company of Victoria’s Secret stores had sued Victor and Cathy Moseley, a Kentucky couple, to bar them from using the name “Victor’s Little Secret” for their store, which sold lingerie and adult novelties and videos.⁷⁵ The lawsuit alleged federal trademark infringement and dilution under the FTDA, in addition to Kentucky state law claims. The district court ruled for Victoria’s Secret on all counts. In upholding an injunction against the Moseleys, the Sixth Circuit held that the FTDA required no proof of actual economic harm; the Moseleys appealed.⁷⁶

69. *Id.* at 1031.

70. *Id.* at 1042. The reason for the sharp drop in both categories of relief in early 2005 is unclear. Professor Long suggests that it could be partly due to the widespread consensus by 2005 that the FTDA needed revision. E-mail from Clarisa Long, Max Mendel Shaye Professor of Intellectual Property Law, Columbia Law School, to author (Dec. 19, 2007, at 9:19 p.m.) (on file with author).

71. *Id.* at 1053.

72. *Id.* at 1032-33 (citing as an example *I.P. Lund Trading ApS v. Kohler Co.*, 163 F.3d 27, 45-50 (1st Cir. 1998)).

73. Long, *supra* note 68 at 1075.

74. *Moseley v. V Secret Catalogue, Inc.*, 535 U.S. 985 (2002) (order granting certiorari).

75. The Moseleys initially had named their store Victor’s Secret, but later inserted the word “Little” after being contacted by Victoria’s Secret attorneys. *Moseley v. V Secret Catalogue, Inc.*, 537 U.S. 418, 418 (2003).

76. *Id.* at 425-26.

Writing for a unanimous Court, Justice Kennedy noted that the FTDA defined dilution as “the lessening” of a mark’s capacity to identify and distinguish; he compared that definition with language elsewhere in the act referring to the “likelihood of confusion.”⁷⁷ He concluded that “[t]he contrast between the initial reference to an actual ‘lessening of the capacity’ of the mark, and the later reference to a ‘likelihood of confusion, mistake, or deception’ in the second caveat confirms the conclusion that actual dilution must be established.”⁷⁸

Trademark lawyers widely viewed the holding as incongruous with the fact that the main remedy under the FTDA was injunctive relief, a forward-looking remedy.⁷⁹ Once a mark was diluted they argued that a company could not recover, and an injunction was essentially meaningless.⁸⁰

The outcry *Moseley* generated quickly drew Congress’s attention.⁸¹ Shortly after *Moseley*, the International Trademark Association, which represents trademark owners and attorneys, drafted the initial version of the TDRA.⁸² With the goals of overturning *Moseley* and resolving judicial conflicts about anti-dilution law,⁸³ Congress weighed further comments from other trademark and intellectual property proponents, as well as public interest advocates including the American Civil Liberties Union.⁸⁴ Trademark owners wanted a “likelihood of dilution” standard for a dilution claim, protection for traditional causes of action, and clearer guidance regarding the meaning of “famous mark.”⁸⁵ Other groups feared that ex-

77. *Id.* at 432-33.

78. *Id.* at 433.

79. *Id.* See *Dilution Hearings*, *supra* note 5 (statement of Anne Gundelfinger on behalf of the International Trademark Association).

80. William G. Barber, *The Trademark Dilution Revision Act of 2005: Breathing Life Back Into the Federal Dilution Statute*, 16 *FORDHAM INTELL. PROP. MEDIA & ENT. L.J.* 1113, 1123 (2006) (writing that the actual dilution standard “essentially emasculate[d] the FTDA”).

81. See H.R. REP. NO. 109-23, *supra* note 8 (“The purpose of H.R. 683, the ‘Trademark Dilution Revision Act of 2005,’ is to amend the Federal Trademark Dilution Act (FTDA) in the wake of a recent Supreme Court decision regarding the standard of harm under the statute and conflicting circuit case law on other relevant issues.”).

82. See *id.*

83. *Id.* (noting that the *Moseley*’s actual dilution standard “creates an undue burden for trademark holders who contest diluting uses and should be revised”).

84. Groups represented at hearings on the TDRA included the INTA, the Section of Intellectual Property Law of the American Bar Association, the American Intellectual Property Law Association, and the American Civil Liberties Union. Professor Lemley also testified as an expert in trademark law. See *Dilution Hearing*, *supra* note 5.

85. *Id.* (statement of Anne Gundelfinger on behalf of the International Trademark Association) (“[D]ilution law in the United States is moving in every direction except the one that it needs to-forward. . . . All the while, famous marks and their value both to con-

panded anti-dilution protection could squelch free speech.⁸⁶ Hammering out a compromise among those competing interests took Congress nearly two years.

III. THE TDRA

This Part describes the major changes that the TDRA introduced and predicts how they will affect relevant aspects of anti-dilution cases. First, the new law more clearly delineates the scope of protection with respect to types of trademarks. Second, the TDRA acknowledges two categories of dilution, blurring and tarnishment. Third, more kinds of speech are specifically exempted from protection under the TDRA, and the new “fair use” exclusion for parody is likely to be a particularly strong defense against tarnishment claims. Finally, the TDRA establishes that likelihood of dilution is the standard of harm. While remedies under the TDRA remain similar those in the FTDA, the new standard will affect how each type of remedy is applied.

A. Clearer Guidance on Protectable Trademarks

The TDRA sets a higher bar for a mark to be considered “famous” and specifically extends coverage for marks of acquired distinctiveness and, under certain conditions, trade dress. However, like the FTDA, the new law gives courts broad discretion regarding how closely to follow its guidance.

1. *Enlarged Scope of Marks that Can be Famous*

The TDRA ends the debate over whether marks of acquired distinctiveness and trade dress receive anti-dilution protection.⁸⁷ The new law specifically protects famous marks that “[are] distinctive, inherently or through acquired distinctiveness” and expressly protects trade dress.⁸⁸ In trade dress claims, the plaintiff must not only show that its trade dress is

sumers and their owners remain at risk from blurring and tarnishment, and third parties have little guidance regarding what marks they can safely adopt without risk of dilution liability. The lack of clarity in the law and the splits in the various circuits are resulting in forum shopping and unnecessarily costly lawsuits. For these reasons a revision of dilution law is needed.”)

86. *Id.* (statement of Marvin J. Johnson, Legislative Counsel, American Civil Liberties Union) (“As the FTDA expands, it alters the dynamic tension between trademark holders and free speech in favor of trademark holders. While enriching trademark holders, it dilutes free speech without any concomitant benefit to society.”).

87. Trademark Dilution Revision Act of 2006, Pub. L. No. 109-312, § 2, 120 Stat. 1730, 1730-31 (to be codified at 15 U.S.C. § 1125(c)(1),(4)).

88. *Id.*

famous, but also that the trade dress is not merely functional.⁸⁹ Furthermore, if the trade dress includes a registered trademark, the plaintiff must show that the trade dress is famous on its own, apart from the registered mark's fame.⁹⁰

2. *The Meaning of "Famous Mark"*

The TDRA sets a clearer preliminary requirement for fame than the FTDA. To be considered "famous" under the new law, a trademark must be "widely recognized by the general consuming public of the United States."⁹¹ Like the FTDA, the TDRA states that a plaintiff's trademark must have been famous before the defendant began using its mark.⁹²

The TDRA appears to require nationwide fame, not simply regional recognition. The requirement of recognition among "the general consuming public" is also a higher bar than fame in an industry niche. Conceivably, a company that is very well known within a particular industry but that is lesser known by consumers would not meet the TDRA's fame standard. Companies that sell to corporations rather than individuals, even if they are well known within their industries, will likely have a much higher time clearing this hurdle than retail brands.

a) Factors for Determining Fame

The TDRA also streamlined the FTDA's eight factors for determining fame. While the TDRA, in language similar to the FTDA, states that courts "may consider all relevant factors," it lists only four to guide judges:

The duration, extent, and geographic reach of advertising and publicity of the mark

The amount, volume, and geographic extent of sales of goods or services offered under the mark.

The extent of actual recognition of the mark.

89. Trademark Dilution Revision Act § 2 (to be codified at 15 U.S.C. § 1125(c)(4)(A)).

90. Trademark Dilution Revision Act § 2 (to be codified at 15 U.S.C. § 1125(c)(4)(B)).

91. Trademark Dilution Revision Act § 2 (to be codified at 15 U.S.C. § 1125(c)(2)(A)).

92. Trademark Dilution Revision Act § 2 (to be codified at 15 U.S.C. § 1125(c)(1)).

Whether the mark was registered under the Act of March 3, 1881, or the Act of February 20, 1905, or on the principal register.⁹³

This list omits the FTDA's factor regarding a mark's use "in trading areas,"⁹⁴ which had been used to establish niche or regional fame and thus is inapplicable to analysis under the TDRA. Other factors, however, which analyze a mark's inherent or acquired distinctiveness and the use of the same or similar marks by third parties, reappear in identical or analogous forms in the TDRA's blurring analysis.⁹⁵

b) Effect of the Fame Rules

The TDRA resolves the test for fame, making protection available to a narrower group of trademark holders. As trademark law scholar Thomas McCarthy has commented, "[o]nly strong marks need apply."⁹⁶ It seems very unlikely that either the Wawa or Naitiques trademarks would meet the TDRA's tougher test for fame, as regional or niche fame clearly does not qualify under the TDRA.⁹⁷ By contrast, courts have held that Nike⁹⁸ and Louis Vuitton⁹⁹ are famous trademarks by the TDRA's standard.

93. Trademark Dilution Revision Act § 2 (to be codified at 15 U.S.C. §§ 1125(c)(2)(A)(i)-(iv)).

94. 15 U.S.C. § 1125(c)(1) (2000) (amended 2006).

95. Trademark Dilution Revision Act § 2 (to be codified at 15 U.S.C. § 1125(c)(2)(B)). Some argue that the TDRA's shorter list of factors could be streamlined even further. See Barton Beebe, *A Defense of the New Federal Trademark Antidilution Law*, 16 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 1143, 1159 (2006) (criticizing the first two factors: "A court should not grant antidilution protection to reward—i.e., to promote—spending on advertising, just as it should not grant such protection in recognition of something like the plaintiff's good faith in trying as hard as it can to make its mark famous"; and finding the fourth "irrelevant."); accord MCCARTHY, *supra* note 4, § 24:106.

96. MCCARTHY, *supra* note 4, § 24:87.

97. This does not mean that owners of less widely famous marks will never bring their cases to court. See, e.g., Jacob Jacoby, *Merchants Council Professor of Consumer Behavior*, Stern School of Business, New York Univ., *Considering the Who, What, When, Where and How of Measuring Dilution*, Presentation at the Santa Clara Univ. School of Law Trademark Dilution Symposium (Oct. 5, 2007), available at <http://www.scu.edu/law/tmdilution/articles-and-presentations.cfm> (suggesting that the phrase "general consuming public" could mean consumers of the product or product category, leading to a narrower definition of fame). Given the clear legislative intent to restrict fame to nationally recognized brands, however, such a suggestion is likely to be met with resistance.

98. Nike, Inc. v. Nikepal Intern., Inc., 84 U.S.P.Q.2d 1820 (E.D. Cal. 2007).

99. Louis Vuitton Malletier v. Haute Diggity Dog, 507 F.3d 252 (4th Cir. 2007).

Among early cases under the TDRA, the one that may best illustrate the fame analysis involved the Tempur-Pedic¹⁰⁰ mattress brand. Dan-Foam, which owns the Tempur-Pedic brand, sued Brand Named Beds, Inc., which purchased Tempur-Pedic mattresses from authorized dealers and then sold them at discount prices.¹⁰¹ Among several claims, Dan-Foam alleged that its brand was likely to be diluted because the discounter did not meet its standards for quality control, shipping, and warranty.¹⁰² The district court held that Tempur-Pedic brand's claim to fame was strong enough to survive a motion for summary judgment.¹⁰³ In applying the TDRA's fame factors, the court noted that the Tempur-Pedic brand had been in use since 1994 and was the subject of considerable advertising and promotion through newspapers, magazines, direct mail, television commercials, and infomercials and on the Internet.¹⁰⁴ Sales of goods with the Tempur-Pedic trademark had exceeded \$2 billion over a three year period.¹⁰⁵ Finally, Tempur-Pedic was a registered trademark.¹⁰⁶ The court noted that Dan-Foam presented no survey evidence to meet the TDRA's third factor, actual recognition of the trademark, but added that a reasonable jury could find Tempur-Pedic to be widely recognized among general U.S. consumers.¹⁰⁷

B. Dilution Under the TDRA

The TDRA specifically recognizes both blurring and tarnishment, resolving the doubts *Moseley* cast on the latter claim.¹⁰⁸ The TDRA gives courts increased guidance regarding blurring, with six optional factors, which are better tailored to anti-dilution law than the court-developed tests used under the FTDA.¹⁰⁹ By comparison, however, the TDRA provides almost no guidance on tarnishment.¹¹⁰

100. *Dan-Foam v. Brand Named Beds*, 500 F. Supp. 2d 296 (S.D.N.Y. 2006).

101. *Id.* at 302.

102. *Id.* at 302-04.

103. *Id.* at 319.

104. *Id.* at 323.

105. *Id.*

106. *Id.*

107. *Id.* at 326.

108. Trademark Dilution Revision Act of 2006, Pub. L. No. 109-312, § 2, 120 Stat. 1730 (to be codified at 15 U.S.C. § 1125(c)).

109. Trademark Dilution Revision Act § 2 (to be codified at 15 U.S.C. § 1125(c)(2)(B)).

110. Trademark Dilution Revision Act § 2 (to be codified at 15 U.S.C. § 1125(c)(2)(C)).

1. *Dilution by Blurring*

Under the TDRA, blurring involves two elements. First, there must be an association between the blurring mark and the blurred mark.¹¹¹ Second, that association must “impair the distinctiveness” of the famous mark.¹¹² The TDRA offers courts six optional factors for assessing the likelihood of blurring:

The degree of similarity between the mark or trade name and the famous mark.

The degree of inherent or acquired distinctiveness of the famous mark.

The extent to which the owner of the famous mark is engaging in substantially exclusive use of the mark.

The degree of recognition of the famous mark.

Whether the user of the mark or trade name intended to create an association with the famous mark.

Any actual association between the mark or trade name and the famous mark.¹¹³

This list omits consumer confusion and competition, the two factors which had conflated dilution with infringement under the FTDA.¹¹⁴ Furthermore, compared to the complexity of the ten-factor *Nabisco* test, the TDRA offers courts a relatively straightforward roadmap.

However, the new factors also present ambiguities. For instance, the third factor, the “extent to which the owner of the famous mark is engaging in substantially exclusive use of the mark,” is likely to be particularly troublesome because it may limit the TDRA’s protection for marks with acquired distinctiveness.¹¹⁵ Descriptive or geographic trademarks, unlike inherently distinctive marks, are less likely to be exclusive. United Airlines, for instance, often uses “United” as a standalone mark. But many other brands also include the word “United,” including United Van Lines, which also sometimes refers to itself as simply “United,” United Way, and

111. Trademark Dilution Revision Act § 2 (to be codified at 15 U.S.C. § 1125(c)(2)(B)).

112. *Id.*

113. *Id.*

114. *Contra* Graeme B. Dinwoodie & Mark D. Janis, *Dilution’s (Still) Uncertain Future*, 105 MICH. L. REV. FIRST IMPRESSIONS 98, 100 (2006), <http://students.law.umich.edu/mlr/firstimpressions/vol105/dinwoodie.pdf> (remarking that the TDRA’s blurring analysis “looks like little more than confusion analysis with a different paint job”).

115. Trademark Dilution Revision Act § 2 (to be codified at 15 U.S.C. § 1125(c)(2)(B)(iii)).

United We Stand. Because United Airlines would not be able to establish substantially exclusive use of the “United” trademark, it would appear very unlikely to prevail on a blurring claim for the trademark “United.” What the TDRA gives marks of acquired distinctiveness, it at least partly takes away with the “substantially exclusive use” factor.

Moreover, the six factors taken together may not give courts sufficient guidance regarding whether an association between marks is likely to impair the famous mark’s distinctiveness, the second element of a blurring claim. Some commentators have suggested that courts should require evidence or expert testimony in order to establish the impairment element.¹¹⁶ “At the very least,” according to McCarthy, the “plaintiff should be required to articulate for the court the argument that this kind of famous mark in this market will be likely to attract multiple uses which take a free ride on the fame of the mark. The issue should be addressed, not ignored or assumed away.”¹¹⁷

2. *The TDRA Revives Dilution by Tarnishment*

Restoring the tarnishment claim was a major priority of trademark holders.¹¹⁸ On the other hand, free speech advocates argued that tarnishment, especially coupled with the TDRA’s eased standard of harm, gave trademark holders too much power to squelch parody, criticism, and other forms of protected speech.¹¹⁹

The TDRA’s definition of tarnishment begins like its definition of blurring: “an association arising from the similarity between a mark or

116. See MCCARTHY, *supra* note 4, § 24:120. The American Intellectual Property Law Association proposed a different set of five optional blurring factors; the fifth of the factors would have addressed impairment. AIPLA’s proposed factors included: (i) the degree of recognition of the famous mark; (ii) The extent to which the public associates the famous mark exclusively with a single source; (iii) the degree of similarity between the mark or trade name and the famous mark; (iv) whether the user of the mark or trade name intended to dilute or exploit the uniqueness of the famous mark; and (v) any actual impairment of the public’s association of the famous mark exclusively with a single source. American Intellectual Property Law Association Past Action Manual, Resolution No. 425-09, May 15, 2004 (on file with author).

117. MCCARTHY, *supra* note 4, § 24:120. Accord Paul Alan Levy, *The Trademark Dilution Revision Act—A Consumer Perspective*, 16 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 1189, 1196 (2006) (“Because dilution law bars truthful speech, the cause of action *should* be hard to prove.”).

118. See *Dilution Hearing*, *supra* note 5 (statement of Anne Gundelfinger on behalf of the International Trademark Association) (“[I]t is important to expressly state in a revised federal dilution statute that tarnishment is within the scope of the law.”).

119. See *Dilution Hearing*, *supra* note 5 (statement of Marvin J. Johnson, Legislative Counsel, American Civil Liberties Union) (“[S]peech critical of a company could be enjoined, even if true, because it is likely to result in tarnishment.”).

trade name and a famous mark.”¹²⁰ Such an association becomes tarnishing when it “harms the reputation of the famous mark.”¹²¹ Therefore, to prevail in a tarnishment claim under the TDRA, a plaintiff must prove both that an association is likely and that such an association would be likely to harm the famous mark’s reputation. Generally, tarnishment claims that succeeded under the FTDA and state laws would probably succeed under the TDRA, but, as discussed in the next section, the new law’s expanded exemptions could limit some claims.

C. Exclusions Complicate the Analysis

Proposals to codify the tarnishment claim and lower the standard of harm in the TDRA concerned free speech advocates, who feared that the revised law would give plaintiffs too much latitude to censor unflattering uses of their marks.¹²² Their concerns led to broader exclusions that counterbalance those plaintiff-friendly provisions. The exclusions involved multiple rounds of drafting, each with a longer list of exempted speech.¹²³

1. More Detailed Exemptions

The TDRA provides for the following exclusions:

- (A) Any fair use, including a nominative or descriptive fair use, or facilitation of such fair use, of a famous mark by another person other than as a designation of source for the person’s own goods or services, including use in connection with—
 - (i) advertising or promotion that permits consumers to compare goods or services; or
 - (ii) identifying and parodying, criticizing, or commenting upon the famous mark owner or the goods or services of the famous mark owner.
- (B) All forms of news reporting and news commentary.
- (C) Any noncommercial use of a mark.¹²⁴

These exclusions include all of the statutory exclusions from the FTDA and also classify as statutory fair use several forms of speech, including parody, which courts previously had held to be protected under the

120. Trademark Dilution Revision Act § 2 (to be codified at 15 U.S.C. § 1125(c)(2)(C)).

121. *Id.* According to the RESTATEMENT (THIRD) OF UNFAIR COMPETITION § 25 (1995), a tarnishing use is one that “is likely to undermine or damage the positive associations evoked by the mark.”

122. See CRS REPORT, *supra* note 12, at 14 n.67.

123. Exclusions in the initial draft were identical to those in the FTDA.

124. Trademark Dilution Revision Act § 2 (to be codified at 15 U.S.C. § 1125(c)(3)).

FTDA's "noncommercial use" exclusion. The amended exclusions are separated into categories but essentially provide overlapping protection.¹²⁵ The additional language "represents a sort of overabundance of caution" to satisfy free speech advocates.¹²⁶

Parody and tarnishment are closely linked,¹²⁷ and the TDRA's express codification of the parody exclusion has arguably strengthened the force of this defense. For instance, according to one prominent public interest attorney, if the case involving the "Enjoy Cocaine" posters were considered under the TDRA, a defendant might well assert that the posters parody Coca-Cola.¹²⁸ Under that theory, the posters arguably make a statement about the unfairness of promoting a product because of its caffeine-based "jolt" while cocaine is illegal, or about how Coca-Cola got its name from the coca leaf extract that was an active ingredient.¹²⁹

The expanded fair use exemptions include an important limitation. When a defendant uses the trademark "as a designation of source for the person's own goods or services," in other words, when a company uses the parody as a trademark on the very product that it is selling, the exclusions do not apply.¹³⁰

The Fourth Circuit's decision in *Louis Vuitton v. Haute Diggity Dog* delineates the limits of the parody defense under the TDRA.¹³¹ Louis Vuitton, the maker of luxury handbags and luggage, sued Haute Diggity, which sells purse-shaped "Chewy Vuiton" dog toys that mimicked the Louis Vuitton logo and handbag designs.¹³² The plaintiff alleged dilution by both blurring and tarnishment along with trademark infringement; the Fourth Circuit upheld the district court decision in the defendant's favor, but not on the basis of the parody defense.¹³³ While the appeals court agreed that the Chewy Vuiton toys were a parody, it noted that the defendant was not entitled to the complete fair use defense because it was using

125. MCCARTHY, *supra* note 4, § 24:126.

126. *Id.*

127. Sally Abel, *Congressional Balancing Act: The Trademark Dilution Revision Act of 2006*, 193 TRADEMARK WORLD 20 (2007) ("What is tarnishment in the eyes of an offended trademark holder may in fact be parody in the eyes of the challenged user.").

128. See Paul Alan Levy, *The Trademark Dilution Revision Act—A Consumer Perspective*, 16 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 1189, 1199 (2006).

129. *Id.*

130. Trademark Dilution Revision Act of 2006, Pub. L. No. 109-312, § 2, 120 Stat. 1730, 1731 (to be codified at 15 U.S.C. § 1125(c)(3)(A)).

131. 507 F.3d 252 (4th Cir. 2007).

132. *Id.*

133. *Id.* at 261.

the parody as a trademark to sell goods.¹³⁴ “Although the TDRA does provide that fair use is a complete defense and allows that a parody can be considered fair use . . . parodying a famous mark is protected . . . only if the parody is *not* a ‘designation of source for the person’s own goods or service,’” the court held.¹³⁵

The Fourth Circuit decided the blurring claim by considering the TDRA’s six factors, and held that the parody was relevant to that analysis even though it did not qualify as fair use.¹³⁶ The parody influenced the court’s finding that there was a likelihood of an association between the two trademarks, they were similar by design, and Haute Diggity Dog both intended to create and actually did create an association with the Louis Vuitton trademark.¹³⁷ However, the court held that the parody worked against the likelihood that the association would dilute Louis Vuitton’s mark: the court reasoned that, because “a successful parody might actually enhance the famous mark’s distinctiveness by making it an icon.”¹³⁸ The court noted in dicta that if Haute Diggity Dog had used Louis Vuitton’s exact trademark rather than “Chewy Vuiton,” then, regardless of the parody, the use might have been held to be blurring.¹³⁹ Regarding Louis Vuitton’s tarnishment claim, the court held with little discussion that there was no evidence that the Chewy Vuiton toys would harm the mark.¹⁴⁰

Based on the Fourth Circuit’s reasoning, it seems likely that other courts would similarly reject the parody defense in cases where a company used a parodied trademark to sell its own products. That might suggest a different result in the “Barbie Girl” case: if putting “Barbie Girl” into the song title constitutes a “designation of source,” the court might well have held differently under the TDRA.¹⁴¹

D. Remedies Under the TDRA

Perhaps most significant of all its changes to anti-dilution law, the TDRA overrides the Supreme Court’s holding in *Moseley*, setting a “likelihood of dilution” standard as a requirement for a remedy. The new standard lowers the bar for injunctive remedies but complicates the calculation of monetary damages. This is because under the TDRA monetary damages are available when a defendant “willfully intended to trade on the recogni-

134. *Id.* at 262.

135. *Id.* at 266-67.

136. *Id.* at 267.

137. *Id.*

138. *Id.*

139. *Id.* at 268

140. *Id.*

141. *See* *Mattel, Inc. v. MCA Records, Inc.*, 296 F.3d 894, 907 (9th Cir. 2002).

tion of the famous mark”¹⁴² in a case of dilution by blurring, or “willfully intended to harm the reputation of the famous mark” in a case of dilution by tarnishment.¹⁴³

The FTDA included a nearly identically worded provision.¹⁴⁴ However, it was only rarely invoked,¹⁴⁵ and it appears unlikely that monetary damages will suddenly gain popularity under the TDRA. Although the text of the law does not specify a different standard of harm for monetary damages, at least one expert suggests that a plaintiff should not recover monetary damages without proving actual dilution by either blurring or tarnishment.¹⁴⁶

E. Analyzing *Moseley* Through the TDRA’s Lens

Had the TDRA been in force in 2003, Victoria’s Secret would have had a much stronger chance of winning its dilution claims. The lingerie retailer would almost certainly meet the TDRA’s threshold “famous mark” condition. In *Moseley*, Victoria’s Secret presented evidence addressing all four of the TDRA’s factors to be “famous”: it spent more than \$55 million on advertising and distributed 400 million catalogs a year; it operated 750 retail stores; it was the ninth most famous brand in the apparel industry; and, “Victoria’s Secret” is a registered mark.¹⁴⁷

In the aggregate, the TDRA’s blurring factors also support Victoria’s Secret’s dilution claim. Regarding the first factor, similarity of the marks, “Victor’s Little Secret” is very similar to “Victoria’s Secret.” While some scholars suggest that only identical marks should be held to be diluting, courts traditionally have not set such a high standard.¹⁴⁸ With regard to the second factor, the Sixth Circuit held (and the Supreme Court did not contradict) that Victoria’s Secret was an arbitrary or fanciful, and therefore

142. Trademark Dilution Revision Act of 2006, Pub. L. No. 109-312, § 2, 120 Stat. 1730, 1731 (to be codified at 15 U.S.C. § 1125(c)(4)(B)(1)).

143. Trademark Dilution Revision Act § 2 (to be codified at 15 U.S.C. § 1125(c)(4)(B)(2)).

144. 15 U.S.C. § 1125(c)(2) (2000) (amended 2006).

145. See MCCARTHY, *supra* note 4, § 24:132.

146. See *id.* (“More than a mere likelihood of impairment or harm is needed to recover any damages or profits. Some proof of actual impairment or harm to the famous mark is required.”).

147. Neither the district nor the appellate opinion mentions revenue, but Victoria’s Secret had sales of \$3.7 billion in its most recent fiscal year, further supporting this factor. *Moseley v. V Secret Catalogue, Inc.*, 537 U.S. 418, 424 (2003).

148. *Id.* at 432 (explaining that a defendant’s mark need not be identical to the plaintiff’s for dilution to occur, because “[e]ven if the legislative history might lend some support to such a contention, it surely is not compelled by the statutory text”).

had a high degree of distinctiveness that warrants greater protection.¹⁴⁹ The evidence presented to bolster its claim of being famous, particularly the statistic that it is among the top retail brands (not to mention the near ubiquity of its catalogs and stores), would very likely satisfy the fourth factor of the TDRA, actual recognition of the mark. Furthermore, it appears likely that the name of Moseley's store was a purposeful play on the term Victoria's Secret—the original name was Victor's Secret, changed later to Victor's Little Secret—indicating an intent to create an association with the famous mark and satisfying the fifth factor. Finally, Victoria's Secret was able to demonstrate at least some actual association between the two marks: court records note that a military officer saw the ad for Victor's Secret's grand opening and wrote to Victoria's Secret because “he was offended by what he perceived to be an attempt to use a reputable company's trademark to promote the sale of ‘unwholesome, tawdry merchandise.’”¹⁵⁰

Based on the TDRA's factors, there seems to be little question that Victoria's Secret could establish a likelihood of association between its mark and the defendant's use of “Victoria's Little Secret.” If courts held that meeting the six statutory factors is sufficient to prove a likelihood that the association will lead to blurring, Victoria's Secret would almost certainly have won. This seems to be the most probable outcome under the TRDA. On the other hand, as discussed *supra* Section III.B.1, courts might decide that the TDRA's factors do not sufficiently show that the association is likely to blur the mark. Courts skeptical of anti-dilution law might require the lingerie retailer to offer evidence that the association would impair the mark's distinctiveness. To be sure, the TDRA's factors are non-exhaustive; courts could impose other requirements.

With respect to tarnishment, Victoria's Secret's claim might be a close call under the TDRA. A court would have to find that the likely association between the two marks would be likely to harm the reputation of the lingerie retailer. That is possible: Victor's Little Secret sold sex toys, among other goods, and courts have tended to favor tarnishment claims when adult products are involved.¹⁵¹

149. Trademark Dilution Revision Act of 2006, Pub. L. No. 109-312, § 2, 120 Stat. 1730, 1731 (to be codified at 15 U.S.C. § 1125(c)(2)(C)(ii)) (“The degree of inherent or acquired distinctiveness of the famous mark.”).

150. *Moseley*, 537 U.S. at 424.

151. *Id.* at 425 (“Victoria's Secret stores sell a complete line of lingerie, women's undergarments and nightwear, robes, caftans and kimonos, slippers, sachets, lingerie bags, hanging bags, candles, soaps, cosmetic brushes, atomizers, bath products and fragrances. . . . [Victor's Little Secret] sell[s] novelty action clocks, patches, temporary tat-

What *is* clear, however, is that the actual dilution standard would not stand in the way of the claim. In that respect, the TDRA served its purpose of overturning *Moseley*.

IV. CONCLUSION

The TDRA is a clearer and more balanced anti-dilution law because it establishes a higher standard for trademark fame, provides broader exclusions than were found in the FTDA, and sets a lower requirement for proof of harm.¹⁵²

Unfortunately, the law does not resolve all the FTDA's ambiguities, and it even introduces new questions. Nonetheless, the new law balances concerns between trademark holders and free speech advocates by juxtaposing the eased "likelihood of dilution" standard against a more restrictive nationwide-fame standard. It clarifies several significant questions from the FTDA, including the protectability of trade dress and marks of acquired distinctiveness, and it protects the tarnishment cause of action in the face of skepticism from the Supreme Court. Finally, it includes an expanded list of exemptions that balance provisions granting more power to trademark holders. Overall, the TDRA should lead to more consistent holdings by courts in anti-dilution cases.

toos, stuffed animals, coffee mugs, leather biker wallets, zippo lighters, diet formula, diet supplements, jigsaw puzzles, whyss, handcufs [*sic*], hosiery bubble machines, greeting cards, calendars, incense burners, car air fresheners, sunglasses, ball caps, jewelry, candles, lava lamps, blacklights, fiber optic lights, rock and roll prints, lingerie, pagers, candy, adult video tapes, adult novelties, t-shirts, etc.").

152. CRS REPORT, *supra* note 12, at 14.

ADDITIONAL DEVELOPMENTS— TRADEMARK

GOOGLE INC. v. AMERICAN BLIND & WALLPAPER FACTORY, INC.

2007 WL 1159950 (N.D. Cal. April 17, 2007)

BOSTON DUCK TOURS, LP v. SUPER DUCK TOURS, LLC

527 F.Supp.2d 205 (D. Mass. 2007)

The results in *American Blind*, from the Northern District of California, and *Boston Duck*, from the District of Massachusetts, suggest a potential circuit split over the issue of whether the sale of keywords by search engines for advertising purposes is a “use in commerce” within the meaning of the Lanham Act.

When a person uses a search engine, such as Google, advertisements triggered by the search keywords are displayed as “sponsored links” near the search results. Through its AdWords service, Google sells keywords to parties who wish to be shown as “sponsored links.” Google’s competitors, like Yahoo!, offer similar services.

Both *American Blind* and *Boston Duck* concerned whether the sale of trademarked keywords is a “use in commerce” under the Lanham Act. To prevail on a trademark infringement claim, a plaintiff must establish that defendant used the mark in commerce in connection with the sale or advertising of goods or services. Some courts have required that defendant’s “use” of plaintiff’s mark be in a trademark way—that is, identifying a product’s source.

In *American Blind*, Google sold the keywords “American Blind,” “Decoratetoday,” and other terms used as trademarks by American Blind & Wallpaper Factory (“ABWF”). After ABWF threatened litigation for trademark infringement, Google filed a complaint, asking for a declaratory judgment of non-infringement. ABWF then counterclaimed for trademark infringement. In a motion for summary judgment, Google asked the court to declare that its sale of trademarked keywords does not constitute “use in commerce.”

The *American Blind* court expressly disagreed with district court cases from the Second Circuit that held that the sale of trademarks as keywords for sponsored links is not “use” for the purpose of the Lanham Act. In *Merck & Co., Inc. v. Mediplan Health Consulting*, 431 F. Supp. 2d 425 (S.D.N.Y. 2006), the court held that defendants, who paid Google and Yahoo! to post links to their websites as sponsored links when consumers typed “Zocor,” is not a “use” of the plaintiff’s trademark “Zocor” for purposes of the Lanham Act. Similarly, in *Rescuecom Corp. v. Google, Inc.*, 456 F. Supp. 2d 393 (N.D.N.Y. 2006), another district court within the Second Circuit ruled that Google’s sale of the term “Rescuecom” to plaintiff’s competitors as a keyword was not a “use in commerce” within the meaning of the Lanham Act.

Like the court in *American Blind*, the court in *Boston Duck Tours, LP v. Super Duck Tours, LLC*, 527 F.Supp.2d 205 (D. Mass. 2007), concluded that the defendant’s purchase of sponsored links for the phrase “boston duck tours” was a “use in commerce,” reasoning that “[b]ecause sponsored linking necessarily entails the “use” of the plaintiff’s mark as part of a mechanism of advertising, it is ‘use’ for Lanham Act purposes.”

However, the court found that because the defendant had (as a result of an earlier injunction), changed its trademark to “Boston Duck Excursions,” the keyword purchases created an insufficient likelihood of consumer confusion to make the use infringing.

If the First, Second, and Ninth Circuits adopt the approaches taken by the district courts within their respective territories, this would create a circuit split with respect to the issue of whether sales of search keywords constitute a “use in commerce.”

IN RE REED ELSEVIER PROPERTIES, INC.*482 F.3d 1376 (Fed. Cir. 2007)*

The United States Court of Appeals for the Federal Circuit affirmed the decision of the U.S. Patent and Trademark Office rejecting Reed Elsevier's application for a trademark for its website "lawyers.com" on the basis that the mark was generic.

Reed operates "lawyers.com," a website providing locating tools for finding lawyers as well as legal news, basic legal information, and message boards. Reed filed a trademark application in 1998, seeking to register the mark for providing "an online interactive database featuring information exchange in the fields of law, lawyers, legal news, and legal services." The examining attorney rejected the mark on the grounds that "lawyers.com" was generic. Reed removed the word "lawyers" from its application and, following the examiner's final rejection, appealed to the Trademark Trial and Appeal Board (TTAB). The TTAB affirmed the examiner's rejection because it found that "information about lawyers and information from lawyers" constituted "a central and inextricably intertwined element" of the services on Reed's revised application—a website providing "information exchange concerning the law, legal news and legal services." The Federal Circuit affirmed the rejection of Reed's application because it was generic.

Under the Lanham Act, the PTO may not register marks that are generic—merely descriptive and incapable of designating a source. Whether a mark is generic is determined by a two-part inquiry: (1) the genus of goods or services at issue, and (2) whether the term sought to be registered is understood by the relevant public primarily to refer to that genus of goods or services.

Reed argued that the TTAB improperly expanded the genus of its services by considering its entire web site rather than focusing on the services Reed specifically identified in its revised trademark application, which Reed argued were discrete from the services concerning "lawyers" rejected during prosecution of its mark. Reed conceded that the relevant public could readily understand the "lawyers.com" to refer to a commercial site about lawyers.

Reviewing the TTAB's decision under a sufficient evidence standard, the Federal Circuit rejected Reed's narrow definition of the genus at issue, holding that the Board's definition of the genus of Reed's services was proper because "for better or worse, lawyers are necessarily an integral part of the information exchange for legal services." The court thus affirmed the TTAB's rejection of Reed's application for "lawyers.com" as generic, remarking that it was "abundantly clear that LAWYERS.COM is generic for the services identified in Reed's application."

*ITC, LTD. V. PUNCHGINI, INC.**482 F.3d 135 (2d Cir. 2007)*

The United States Court of Appeals for the Second Circuit affirmed the summary judgment decision that defendant Punchgini did not infringe on plaintiff ITC's "Bukhara" trademark because ITC had abandoned it three years prior. The court also affirmed in part the summary judgment that Punchgini had not practiced unfair competition under federal law, but withheld judgment on whether state unfair competition law was violated pending the state court's response. Lastly, the court affirmed the U.S. District Court for the Southern District of New York's decision that ITC lacked the standing necessary to pursue a false advertising claim.

ITC operated the Bukhara restaurant in Manhattan until 1991, and in Chicago until 1997. Punchgini, Inc. was formed in 1999 and opened a restaurant called "Bukhara Grill" in New York. In February 2003, ITC brought action against Punchgini under sections 32(1)(a), 44(h), and 43(a) of the Lanham Act for trademark infringement, unfair competition, and false advertising. Parallel actions were brought under New York state law. ITC argued that since it had continued to maintain restaurants outside the United States during the intermittent time, it maintained control of the Bukhara mark. The district court granted summary judgment on all three counts, holding that ITC had abandoned the Bukhara mark as applied to U.S. restaurants, and that even if the "famous marks" doctrine applied, ITC had not presented enough evidence for a jury to determine if "Bukhara" had enough recognition to trigger the doctrine.

The abandonment doctrine states that if a trademark is abandoned, it returns to the public domain. The Lanham Act states that a lack of use of a mark for three consecutive years is prima facie evidence of abandonment. To overcome the presumption of abandonment, the Second Circuit had previously held that the plaintiff needs to present evidence of an intent to resume use of the mark that would convince a jury that the mark had not been abandoned. The Second Circuit affirmed the district court's decision, rejecting evidence presented by ITC that the Bukhara restaurants in the United States were only closed because of Indian regulations. The court also rejected ITC's arguments that the Bukhara mark was going to be used to market packaged food products, that tentative plans existed to expand Bukhara restaurants to other U.S. cities, and that maintaining Bukhara restaurants outside the United States created an intent to reuse the mark within the United States.

A trademark has a separate legal existence under each country's laws. The famous marks doctrine prevents the registration and use of marks likely to cause confusion with highly recognized marks, and has been recognized in New York common law. The Ninth Circuit is the only federal appeals court to recognize the doctrine under federal law. The Second Circuit rejected the argument that the famous marks doctrine can be inferred from the language of the Lanham Act since it does not reference it, despite Congress's willingness to amend the Act. The Second Circuit certified the state unfair competition claim to a New York state court, asking the court to determine whether New York law recognizes the famous marks doctrine, and how famous a mark must be to come within the scope of the doctrine.

ITC argued that Punchgini falsely implied an affiliation between the Bukhara restaurants. Section 43(a)(1)(B) of the Lanham Act states that to establish standing for a false advertisement claim, one must demonstrate a reasonable interest to be protected from the claims and a reasonable basis to believe that this interest will be damaged by the false

advertising. The court held that ITC failed to produce evidence that Punchgini made statements of comparison between the Bakhara grill and ITC's packaged food products, which launched in 2003. The Court also held that ITC only presented speculation that the Bukhara grill would damage ITC's remaining restaurants, which did not meet the burden required by the Lanham Act. Finally, the court held that ITC failed to produce evidence of well-developed plans for re-entry into the U.S. market, for which protection from false advertising would be sought.

DEVELOPMENTS— TRADE SECRET

JENNINGS V. ELECTIONS CANVASSING COMM'N

No. 2006-CA-2973, 2006 WL 5508548 (Fla. Cir. Ct. Dec. 29, 2006), cert. denied, 958 So. 2d 1083 (Fla. Dist. Ct. App. 2007)

In *Jennings*, a Florida appeals court denied certiorari with respect to a trial court's non-final order denying a request to compel disclosure of trade secrets, including the source code and other proprietary technology associated with voting machines.

In the November 2006 congressional elections, Republican candidate Vern Buchanan won Florida's 13th congressional district over Democratic candidate Christine Jennings by less than 400 votes. High undervote rates cast doubts on the electronic voting technology utilized and the election result. About fifteen percent of the total ballots cast in the district did not include a vote in the race between Jennings and Buchanan. In contrast, neighboring districts that used regular paper ballots reported only a two percent undervote rate.

Jennings and eleven voters filed suit in state court, filing a motion to compel expedited discovery which asked Election Systems & Software, Inc., makers of the voting machines, to disclose trade secrets, such as the source code for the election software and other proprietary voting machine technology. The trial court denied the request for the source code, dismissing plaintiffs' expert testimony as conjectural and speculative, and finding no basis to rule that plaintiffs' access to the code was "reasonably necessary" where, the court stated, granting access "would result in destroying or at least gutting the protections afforded those who own the trade secrets."

The Court of Appeal for Florida, First District, denied Jennings' petition for a writ of certiorari. The appeals court noted that orders denying discovery are generally not reviewable because such errors can be rectified on plenary appeal. Jennings did not meet the burden of demonstrating that "the trial court departed from the essential requirements of law, resulting in irreparable, material injury for the remaining trial proceedings that cannot be rectified on direct appeal."

Proponents of electronic voting emphasize the accessibility and increased political participation facilitated by machines that can accommodate multiple languages and offer audio capabilities. Those concerned about electronic voting worry about the reliability of the hardware and software of electronic voting machines, the obstacles to a meaningful recount posed by unverifiable votes cast in exclusively digital format, and the danger of hackers manipulating the results. Lending weight to these concerns, a recent report by the University of California testing California's electronic voting systems found that "the security mechanisms provided for all systems analyzed were inadequate to ensure accuracy and integrity of the election results and of the systems that provide those results." However, a separate study suggested that the undervote in the 13th district may have resulted from poor ballot design on the voting interface, rather than voting machine malfunction or security problems. When, as in *Jennings*, competing theories are offered to explain an undervote, an examination of voting machine source code could provide evidence as to the actual cause. However, as *Jennings* illustrates, the presence of trade secrets—coupled with the difficulty of appealing discovery orders—may create a significant obstacle to the prompt resolution of voting disputes.

FOR BETTER OR WORSE: INTRODUCING THE GNU GENERAL PUBLIC LICENSE VERSION 3

By John Tsai

I. INTRODUCTION

“I designed the GNU General Public License for a very simple purpose: to defend the freedom of every user of a free program.”¹ Thus, Richard Stallman, creator of the free software movement and founder of the non-profit Free Software Foundation (“FSF”), defines the vision for the GNU General Public License (“GPL”).² Version 2 of the GPL (“GPLv2”) was released in 1991³ and is now one of the most popular free and open source software (“FOSS”) licenses in the world.⁴

On June 29, 2007, the FSF released version 3 of the GPL (“GPLv3”).⁵ GPLv3 attempted to address both the legal and technological changes that occurred after GPLv2’s release in 1991. During this period, lawyers and scholars raised legal uncertainties about GPLv2, questioning the license’s enforceability and scope. This Note analyzes the perceived shortcomings of GPLv2, discusses how GPLv3 addresses those issues, including patent

© 2008 John Tsai.

1. Richard Stallman, RMS Announces Release of GPLv3, http://gplv3.fsf.org/rms_gplv3_launch_transcript (last visited Apr. 4, 2008).

2. Free software is a software movement started by Stallman in the 1970’s. For a brief history, *see infra* Section II.A.

3. Robert W. Gomulkiewicz, *A First Look at General Public License 3.0*, COMPUTER & INTERNET LAWYER, Nov. 2007, at 15.

4. Ronald J. Mann, *Commercializing Open Source Software: Do Property Rights Still Matter?*, 20 HARV. J. LAW & TECH. 1, 11 (2006). While the words free software and open source are often interchangeably used (and the respective movements share many common goals), the terms differ in one significant way: free software refers to political movement, while open source refers to a software development methodology. *See infra*, Sections II.B, II.C; *see also* Richard Stallman, *Why Open Source Misses the Point of Free Software*, <http://www.gnu.org/philosophy/open-source-misses-the-point.html> (last visited Apr. 4, 2008). Therefore, when this Note refers to the aims and characteristics of both movements, it uses the term “FOSS,” an acronym for free and open source software. To signify the characteristics and aims of one group and not the other, this Note will use the individual terms where appropriate.

5. Stallman, *supra* note 1. The full text of GPLv3 is available at GNU General Public License, <http://www.gnu.org/licenses/gpl-3.0.html> (last visited Apr. 4, 2008) [hereinafter GPLv3]. The full text of GPLv2 is available at GNU General Public License v2.0, <http://www.gnu.org/licenses/old-licenses/gpl-2.0.html> (last visited Apr. 4, 2008) [hereinafter GPLv2].

licenses, and evaluates the changes' impact on both Stallman's "social" free software movement and the more "practical" open source movement.

This Note argues that while GPLv3 has made progress in clarifying GPLv2's legal uncertainties, the new version still contains ambiguities in the scope of the license grant. These ambiguities, along with GPLv3's hostility toward software patents, should make the technology industry and open source communities cautious about adopting GPLv3. Further, several ideologically motivated provisions in GPLv3 will exacerbate the differences between the free software and the open source movements. Businesses looking for GPLv3 to clearly delineate their legal obligations will find little comfort.

Part II of this Note examines the history of the GPL and the development of the free software movement. Part III discusses perceived problems of GPLv2—both ambiguities in the scope of the copyright license grant and the lack of express provisions governing patents. Part IV examines the implications of new language in GPLv3 with respect to copyrights and patents. Finally, Part V discusses initial reactions to GPLv3 within various software communities, identifies obstacles to relicensing under GPLv3, and points out unsettled issues regarding the new version of the license.

II. HISTORICAL BACKGROUND OF THE GPL

Before examining GPLv3 in detail, it is helpful to touch on the history of the GPL and accompanying software movements. Section II.A explains how Richard Stallman's personal project gave birth to the free software movement. Section II.B summarizes the creation of the GPL. Section II.C recounts the development of the more pragmatic open-source software movement. Finally, Section II.D traces adoption of the GPL, which is now used by thousands of open source software projects worldwide.⁶

6. See STEVEN WEBER, *THE SUCCESS OF OPEN SOURCE* 66 (2004) (citing statistics from SourceForge, Counter.li.org, and the Orbiten Free Software Survey); Sourceforge.Net: Software Map, http://sourceforge.net/softwaremap/trove_list.php?form_cat=18 (last visited Apr. 4, 2008) (showing over 120,000 registered software projects on one of the largest online repositories of open source software, SourceForge.Net, as of April 2008). FOSS software is typically developed within projects, in which a group of software developers is organized around a core source code base. See *id.* at 62-65 (explaining the model and noting variations with regard to formality, hierarchy, and stability).

A. Richard M. Stallman and the Birth of Free Software

The free software movement began in the 1970's when Richard M. Stallman worked as a programmer at MIT's Artificial Intelligence lab.⁷ Stallman decided to solve a problem with the lab's centralized printer: paper jams.⁸ With access to the printer's software source code,⁹ Stallman modified the printer software so that it would notify all lab members when the printer jammed.¹⁰ When the lab received a new Xerox printer, Stallman tried to improve it in the same manner.¹¹ However, Xerox would not release the printer's source code.¹² Stallman's encounter with this proprietary software model marked the beginning of his vision of the free software movement.¹³ He believed proprietary software was fundamentally incompatible with his conception of the "golden rule."¹⁴ For Stallman, sharing source code was, and is, a moral obligation.

In response, Stallman decided to create a computing environment where he could guarantee that the source code would always be available, or "free."¹⁵ When coining the phrase "free software," Stallman meant "free" as in freedom to study and modify source code, not "free" in price.¹⁶ FSF's catchphrase for this concept is "free speech, not free

7. SAM WILLIAMS, *FREE AS IN FREEDOM: RICHARD STALLMAN'S CRUSADE FOR FREE SOFTWARE* 1-12 (2002), available at <http://www.oreilly.com/openbook/freedom/>; Brian W. Carver, Note, *Share and Share Alike: Understanding and Enforcing Open Source and Free Software Licenses*, 20 BERKELEY TECH. L.J. 443, 444 (2005).

8. WILLIAMS, *supra* note 7, at 1-5.

9. When a program, such as Microsoft Word, runs on a computer, the program file is an executable file in machine-readable binary format, called object code. The file contains a set of instructions understandable to a computer, but not software programmers. By contrast, source code represents a human-readable version of a program. Software developers write source code, not object code. A program called a compiler is used to translate source code into object code. See JOHN L. HENNESSY & DAVID A. PATTERSON, *COMPUTER ORGANIZATION AND DESIGN: THE HARDWARE/SOFTWARE INTERFACE* 5-9 (2d ed. 1998).

10. WILLIAMS, *supra* note 7, at 1-5.

11. *Id.* at 4-9.

12. *Id.*

13. *Id.* at 10. Proprietary software refers to "software for which no access to the source code is provided." Carver, *supra* note 7, at 445 n.13 (citing Jonathan Zittrain, *Normative Principles for Evaluating Free and Proprietary Software*, 71 U. CHI. L. REV. 265, 271 (2004)).

14. See Carver, *supra* note 7, at 445 n.17 (citing Initial Announcement, <http://www.gnu.org/gnu/initial-announcement.html> (last visited Apr. 4, 2008)).

15. *Id.*

16. GPLv2, *supra* note 5, at pmb1.; GPLv3, *supra* note 5, at pmb1.

beer.”¹⁷ At that time, the standard computer operating system was UNIX, developed by AT&T Bell Laboratories.¹⁸ Stallman’s own project was to write an entire operating system environment compatible with UNIX, called “GNU,” a recursive acronym for “GNU’s Not UNIX.”¹⁹ In 1985, Stallman also founded the FSF, a “tax-exempt charity for free software development.”²⁰ The FSF’s goals are primarily social and political, not technical or economic, which is key to understanding the distinction between Stallman’s free software movement and the open source movement described below.²¹

B. Creation of the GNU GPL

Although Stallman was initially weary of copyright licenses, he eventually recognized that he could use licenses to preserve the freedoms of his software by ensuring that others who modified or distributed his source code would be bound by the licenses’ terms.²² Stallman began to experiment with different copyright licenses to ensure sharing of his source code.²³ These eventually evolved into the first version of the GPL, which

17. RICHARD M. STALLMAN, *The Free Software Definition*, in FREE SOFTWARE, FREE SOCIETY: SELECTED ESSAYS OF RICHARD M. STALLMAN 43 (Joshua Gay ed., 2002) (introducing the Free Software Definition, a list of four criteria for a “free software” license), available at <http://www.gnu.org/philosophy/fsfs/rms-essays.pdf>.

18. WILLIAMS, *supra* note 7, at 90-91.

19. *Id.* at 89-90.

20. *Id.* at 106; Douglas A. Hass, Note, *A Gentlemen’s Agreement: Assessing the GNU General Public License and Its Adaptation to Linux*, 6 CHI.-KENT J. INTELL. PROP. 213, 215 (2007) (discussing the creation and purpose of the FSF).

21. Eben Moglen & Richard Stallman, GPL Version 3: Background to Adoption, <http://www.fsf.org/news/gpl3.html> (last visited Apr. 4, 2008) (stating the FSF’s “goals are primarily social and political, not technical or economic”).

22. WILLIAMS, *supra* note 7, at 123-24. Copyright in code, combined with licensing of code, ensures the freedom of software. Software is protected by copyright law. The moment a programmer writes code, copyright law gives the programmer a bundle of exclusive rights, including the rights to copy, distribute, and create derivative works. The programmer can give away these exclusive rights via licensing. Free software and open source programmers can therefore use copyright to license their code with specific conditions, such as making the source code of any modifications available. Robert Gomulkiewicz, *General Public License 3.0: Hacking the Free Software Movement’s Constitution*, 42 HOUS. L. REV. 1015, 1022-23 (2005). For more information on open source copyright licensing, see generally LAWRENCE ROSEN, OPEN SOURCE LICENSING: SOFTWARE FREEDOM AND INTELLECTUAL PROPERTY LAW (2004), available at <http://www.rosenlaw.com/oslbook.htm>; ANDREW M. ST. LAURENT, UNDERSTANDING OPEN SOURCE AND FREE SOFTWARE LICENSING (2004), available at <http://www.oreilly.com/catalog/osfreesoft/book>.

23. WILLIAMS, *supra* note 7, at 124.

Stallman published in 1989.²⁴ Two years later, Stallman published GPLv2.²⁵ The GPL was (and is) a “copyleft,” or reciprocal license: any derivative work of a copyleft-licensed work must be licensed under the same license.²⁶ Downstream licensees, no matter how far removed from the original licensor, are thus bound by the key GPL terms.²⁷

C. The Open Source Movement

Although Stallman started a social movement based on his philosophy of free software, others focused on the practical benefits in providing source code to users.²⁸ The open source movement’s founders worried that businesses were not embracing free software because they confused the word “free” with no cost, despite Stallman’s efforts to associate “free” with freedom.²⁹ The movement coined the term “open source” to encourage companies to adopt an open development process, which movement leaders (such as Eric Raymond)³⁰ saw as having distinctly practical bene-

24. *Id.* at 126. Stallman’s vision of free software rested on four fundamental freedoms: (1) the freedom to run the program, for any purpose; (2) the freedom to modify the program to suit one’s needs (meaning access to the source code); (3) the freedom to redistribute copies, either gratis or for a fee; and (4) freedom to distribute modified versions of the program, so that the community can benefit from one’s improvements. These freedoms are codified in the Free Software Definition, *see supra* note 17.

25. GPLv2, *supra* note 5.

26. RICHARD M. STALLMAN, *What is Copyleft?*, in FREE SOFTWARE, FREE SOCIETY: SELECTED ESSAYS OF RICHARD M. STALLMAN, *supra* note 17, at 91-92; *see also* Carver, *supra* note 7, at 453, 455-56; Hass, *supra* note 20, at 217. Copyleft licenses have been described as being “viral” because any software which incorporates GPL code must itself be licensed under GPL under copyleft terms. *See, e.g.*, WILLIAMS, *supra* note 7, at 14-16; Craig Mundie, Chief Research and Strategy Officer of Microsoft, Address Before the New York University Stern School of Business, May 3, 2001, <http://www.microsoft.com/presspass/exec/craig/05-03sharedsource.mspx> (last visited Apr. 4, 2008) (stating that the “viral aspect of the GPL poses a threat to the intellectual property of any organization making use of it”).

27. Carver, *supra* note 7, at 455-56; *see also* Christian H. Nandan, *Open Source Licensing: Virus or Virtue?*, 10 TEX. INTELL. PROP. L.J. 349, 357-58 (2002) (explaining that the copyleft nature of the GPL ensures that downstream recipients of GPL-licensed code remain bound to the terms of the license).

28. For more information on the open source movement, *see* ERIC RAYMOND, THE CATHEDRAL AND THE BAZAAR: MUSINGS ON LINUX AND OPEN SOURCE BY AN ACCIDENTAL REVOLUTIONARY (2d ed. 2001).

29. Carver, *supra* note 7, at 449-50; Nandan, *supra* note 27, at 354-55.

30. *See generally* WILLIAMS, *supra* note 7, at 159-169 (tracing the origins and trajectory of the open source movement); RAYMOND, *supra* note 28, at 169-191 (discussing Raymond’s role as the “accidental revolutionary” of the open source movement and the open source philosophy generally).

fits, such as the ability to find and fix bugs more quickly.³¹ Rather than following the free software movement, which argued that software should never be proprietary, the open source movement sought to cooperate with the business world.³² The open source movement has resulted in the creation of numerous open source licenses, such as the Apache License (under which the ubiquitous Apache web server is licensed) and the Mozilla Public License (under which the Mozilla Firefox web browser is licensed).³³

D. Adoption of the GPL

The GPL has been widely adopted. As of April 2008, almost 30,000 of roughly 44,000 software projects on Freshmeat.net, and over 80,000 of about 117,000 open source software projects on Sourceforge.net, two of the most popular online repositories of open source software, are licensed under the GPL.³⁴ Since December 1991, Linux has been licensed under the GPL, and Linux distributions also incorporate many GNU tools.³⁵

The GPL has flourished as an open source license for three reasons. First, the philosophy that Stallman outlined appealed to many software developers and users just as the Internet emerged and allowed users to collaborate over large geographical distances because it “facilitate[d] innova-

31. Carver, *supra* note 7, at 449-50; Nadan, *supra* note 27, at 354-55. Note that the term “open source” and “free software,” while having many similarities, are not the same. See Carver, *supra* note 7, at 450-53 (noting the differences between the Free Software Definition and the Open Source Definition). Richard Stallman is opposed to using the term “open source” for ideological reasons. Stallman, *supra* note 4, para. 6-9.

32. Nadan, *supra* note 27, at 354 (“We realized it was time to dump the confrontational attitude that has been associated with ‘free software’ in the past and sell the idea strictly on . . . pragmatic, business-case grounds[.]” (quoting Open Source Initiative, History of the OSI, <http://www.opensource.org/history> (last visited Apr. 4, 2008)) (alterations in original).

33. Apache License, Version 2, <http://www.apache.org/licenses/LICENSE-2.0> (last visited Apr. 4, 2008); How the ASF Works, <http://www.apache.org/foundation/how-it-works.html> (last visited Apr. 4, 2008); Mozilla Public License Version 1.1, <http://www.mozilla.org/MPL/MPL-1.1.html> (last visited Apr. 4, 2008); About Mozilla, <http://www.mozilla.org/about/> (last visited Apr. 4, 2008).

34. See freshmeat.net: Statistics and Top 20, <http://freshmeat.net/stats> (last visited Apr. 4, 2008); SourceForge.net: Software Map, http://sourceforge.net/softwaremap/trove_list.php?form_cat=14 (last visited Apr. 4, 2008) (listing all OSI-approved licensed projects at SourceForge); SourceForge.net: Software Map, http://sourceforge.net/softwaremap/trove_list.php?form_cat=15 (last visited Apr. 4, 2008) (listing GPL projects only).

35. WILLIAMS, *supra* note 7, at 137-38 (outlining the development of GNU/Linux and the open source movement).

tion and improvements with and within the software.”³⁶ Second, software licensed under the GPL was usually provided at no cost or very low cost to cover the expense of a copy.³⁷ Lastly, the GPL’s reciprocal requirement that any distributed modifications must themselves be licensed under the GPL helped to perpetuate both the license and the licensed software.³⁸

III. LEGAL ISSUES WITH GPL VERSION 2

While GPLv2 has become a popular FOSS license, it is far from perfect. Academics, members of the free software and open source communities, and Stallman himself perceived many problems and shortcomings with GPLv2 in the sixteen years since its release in 1991.³⁹ One problem that puzzled lawyers was the ambiguous scope of GPLv2’s license grant.⁴⁰ Another concern was whether the GPLv2 granted an implied patent license.⁴¹ This section discusses the pressing legal risks that lawyers and businesses have faced when confronted with GPLv2.

36. Richard Stallman, *The GNU Operating System and the Free Software Movement*, in OPEN SOURCES: VOICES FROM THE OPEN SOURCE REVOLUTION 53, 56, 60 (Chris DiBona et al. eds., 1999).

37. Stallman used to charge \$150 for a copy of his EMACS software to support himself, but encouraged those who received copies to share them with others. Stallman, *supra* note 36, at 58.

38. *Id.* at 62, 66.

39. *See, e.g.*, ROSEN, *supra* note 22, at 109-140 (analyzing GPLv2 in detail and raising potential legal problems with ambiguities in the license terms); WEBER, *supra* note 6, at 213 (pointing out problems with GPLv2’s warranty provisions as well as the license’s binding effect on third parties); Lothar Determann, *Dangerous Liaisons—Software Combinations as Derivative Works?*, 21 BERKELEY TECH. L. J. 1421, 1480-96 (2006) (noting the problems with GPLv2 and recommending changes for GPLv3); Gomulkiewicz, *supra* note 22, at 1028-36 (raising several problems with GPLv2); Robert W. Gomulkiewicz, *De-bugging Open Source Software Licensing*, 64 U. PITT. L. REV. 75, 83-92 (2002) (discussing several flaws and recommending a process to fix them); Mitchell L. Stoltz, Note, *The Penguin Paradox: How the Scope of Derivative Works in Copyright Affects the Effectiveness of the GNU GPL*, 85 B.U. L. REV. 1439 (2005) (describing the problems in the scope of derivative works); Richard Stallman, *Why Upgrade to GPL Version 3*, <http://gplv3.fsf.org/rms-why.html> (last visited Apr. 4, 2008) (discussing the various “existing problems” that GPLv3 will fix).

40. The scope of the license grant hinged on the scope of derivative works in copyright for software. This problem is discussed below in detail, *see infra* Section III.A.

41. *See* Gomulkiewicz, *supra* note 22, at 1033-34 (querying whether GPLv2 contains an implied patent license); Stallman, *supra* note 39 (“With GPLv2, users rely on an implicit patent license. . .”).

A. Scope of GPLv2's License Grant and Copyleft Obligation

Copyright gives the author of a piece of software the exclusive right to copy, distribute, and prepare derivative works.⁴² GPLv2 grants users the right to copy, distribute, and modify GPLv2 programs conditioned upon two important obligations.⁴³ First, the user must distribute that work and any derived works under the terms of GPLv2, per section 2, paragraph b:

You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third parties under the terms of the License.⁴⁴

Second, the user must include the program's source code (or include a written offer to supply such source code) with any redistribution of the program in object code format under section 3 of GPLv2.⁴⁵ These provisions are the core of GPLv2's "copyleft" obligation: to license the original and modified versions of the program under the same license terms, while providing the source code to all downstream licensees.

The key ambiguity in GPLv2 is how far this copyleft obligation should reach. The issue originates from the use of the term "derivative work" in GPLv2. Section 0 of the license defines a "work based on the program," as "either the Program, or any derivative work under copyright law: *that is to say, a work containing the Program or a portion of it, either verbatim or with modifications and/or translated into another language.*"⁴⁶ This provision has several possible legal interpretations.

42. 17 U.S.C. § 106 (2000) (listing the exclusive rights granted under copyright). Software is regarded as a "literary work" protected under the U.S. Copyright Act. 17 U.S.C. § 101 (2000) (defining "literary works" broadly); *Apple Computer, Inc. v. Franklin Computer Corp.*, 714 F.2d 1240, 1249 (3d Cir. 1983) ("[A] computer program, whether in object code or source code, is a 'literary work' and is protected from unauthorized copying").

43. GPLv2, *supra* note 5, §§ 1-3.

44. *Id.* § 2(b).

45. *Id.* § 3.

46. *Id.* § 0 (emphasis added). GPLv2 section 0 defines key terms and outlines the scope of the license:

This License applies to any program or other work which contains a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License. The "Program," below, refers to any such program or work, and a "work based on the Program" means either the Program, or any derivative work under copyright law: that is to say, a work containing the Program or a portion of it, either verbatim or with modifications and/or translated into another language.

Id.

One interpretation is that the scope of derivative works subject to the copyleft obligation mirrors the scope of derivative works under U.S. copyright law. U.S. copyright law defines a derivative work as:

[A] work based upon one or more preexisting works, such as a translation, musical arrangement, dramatization, fictionalization, motion picture version, sound recording, art reproduction, abridgment, condensation, or any other form in which a work may be recast, transformed, or adapted. A work consisting of editorial revisions, annotations, elaborations, or other modifications which, as a whole, represent an original work of authorship, is a “derivative work.”⁴⁷

The definition above does not specifically address software, and some commentators have pointed out the unclear scope of a “derivative work” in software under statute and case law.⁴⁸

However, certain terms in GPLv2 indicate that the scope of works to which the copyleft obligation applies is broader than the scope of derivative works under U.S. copyright law. Section 0 of GPLv2 adds an interpretive gloss to the meaning of “derivative work” by including within the definition “a work containing the Program or a portion of it, either verbatim or with modifications and/or translated into another language.”⁴⁹ When one copyrighted work is contained in a portion of another, it is considered a collective work or compilation. The U.S. Copyright Act defines these terms as follows:

A “collective work” is a work, such as a periodical issue, anthology, or encyclopedia, in which a number of contributions, constituting separate and independent works in themselves, are assembled into a collective whole.

A “compilation” is a work formed by the collection and assembling of preexisting materials or of data that are selected, coordinated, or arranged in such a way that the resulting work as a whole constitutes an original work of authorship. The term “compilation” includes collective works.⁵⁰

47. 17 U.S.C. § 101 (2000).

48. See Determann, *supra* note 39, at 1427-28 (noting lack of court-developed rules for classifying software combinations as derivative works); Carver, *supra* note 7, at 458 (noting that neither statutes nor case law make clear what constitutes a derivative work for software); Stoltz, *supra* note 39 (discussing how the current state of software derivative works affects GPLv2).

49. See text accompanying note 46.

50. 17 U.S.C. § 101 (2000). One way to think about the distinction between collective works and compilations is that collective works are creative collections of copy-

Based on these definitions, the italicized proviso appears to broaden the scope of GPLv2 to include compilations and collective works under U.S. copyright law. For example, if someone “assembled” preexisting GPLv2-licensed source code into a larger program, the GPLv2 code might be considered “contained” in the larger program (which is itself a copyrighted work). In the explanatory notes under Section 2, GPLv2 also explicitly includes “collective works” as triggering the copyleft obligation.⁵¹ The license language appears to merge derivative works and collective works together, which is troublesome given that these terms have very distinct definitions under U.S. copyright law.⁵² The puzzling result is a potential headache for proprietary software companies.⁵³ The viral nature of GPLv2 comes from its requirement that software “contain[ing] . . . any part of” GPLv2-licensed code must also be distributed under the license.⁵⁴ Incorporating GPLv2-licensed source code into the source code of a proprietary software product could potentially “infect” the proprietary software, causing the proprietary source code to be automatically licensed under GPLv2.⁵⁵ Because the proprietary software now “contains” the

righted works: both the collection and the collected works must be creative in nature. Compilations include both creative collections of creative works (collective works) and creative compilations of non-creative materials (such as names and phone numbers). *See* Determann, *supra* note 39, at 1431 (citing *Feist v. Rural Tel. Serv. Co.*, 499 U.S. 340, 362-64 (1991)).

51. GPLv2, *supra* note 5, § 2, para. 5.

52. *See* Determann, *supra* note 39, at 1431. Determann succinctly distinguishes compilations, collective works, and derivative works under U.S. Copyright law by stating:

In the case of a compilation, the existing material remains intact and unchanged, and the “combination creativity” remains separate and clearly distinguishable from the existing material. In the case of a non-derivative new work, existing material may be remotely reflected in the new work, but its contribution is insubstantial. The derivative work category lies somewhere in the middle: existing creative material constitutes a substantial part of the new derivative work, and the new creative material appears in the form of inseparable changes to the existing material.

Id.

53. *See* Nadan, *supra* note 27, at 359-60 (outlining the potential consequences of a scenario where one of thousands of Microsoft developers incorporate a few lines of GPLv2 code into Microsoft Windows).

54. GPLv2, *supra* note 5, § 2(b).

55. Nadan, *supra* note 27, at 359 (“Thus, if you incorporate some GPL code in your proprietary software product, arguably your whole proprietary product becomes open source and must be licensed by you under the GPL.”); Greg R. Vetter, “*Infectious*” *Open Source Software: Spreading Incentives or Promoting Resistance?*, 36 RUTGERS L.J. 53,

GPLv2-licensed code, the entire program might potentially “be licensed as a whole at no charge to all third parties under the terms” of GPLv2.⁵⁶ To complicate matters, GPLv2 uses inconsistent terminology, sometimes referring to “modified” work or “modification” instead of “derivative work” or “work based on the Program.”⁵⁷

1. *Dynamic Linking in Software*

The technical nature of software makes the ambiguities in GPLv2 particularly problematic. One technical issue in GPLv2 involves the software principle of “linking.” Software programs are often modularized into smaller, more manageable subcomponents because programs tend to be large and complex.⁵⁸ Each smaller subcomponent can be more easily written and understood by individual programmers, and work on different subcomponents can be accomplished in parallel.⁵⁹ Modularization also allows programmers to easily reuse code,⁶⁰ a key part of FOSS development.⁶¹ Software “libraries” are subcomponents of general-purpose, reusable code that perform common functions, such as printing, reading data from a disk, or opening a file.⁶² These modularized subcomponents, which are often separate programs or files, can then be combined together, or “linked,” to create a larger program.⁶³

Linking can be accomplished two ways: statically or dynamically. Static linking involves embedding the object code of a subcomponent directly into the object code of the larger program, like copying chapters from one book into another.⁶⁴ In contrast, a dynamically linked subcomponent exists as an independent set of object code that is simply referenced by the code of the larger program, much like web page, or a cross reference from one book to another.⁶⁵ Dynamic linking also allows for

88-94 (2004) (discussing the problems confronted by programmers in attempting to interpret section 2(b)).

56. See GPLv2, *supra* note 5, § 2(b).

57. *Id.* §§ 2, 5.

58. See W. P. Stevens, G. J. Myers, & L. L. Constantine, *Structured Design*, 38 IBM SYSTEMS J. 231, 232 (1999), available at <http://www.research.ibm.com/journal/sj/382/stevens.pdf>.

59. See *id.* at 254-55.

60. See *id.*

61. WEBER, *supra* note 6, at 75-76 (describing how open source facilitates reuse of code to minimize “reinventing the wheel”).

62. HENNESSY & PATTERSON, *supra* note 9, at 8.

63. *Id.* at 158-59, A-17.

64. ABRAHAM SILBERSCHATZ ET AL., *OPERATING SYSTEM CONCEPTS* 278 (6th ed. 2002).

65. *Id.*

more efficient use of disk space and memory.⁶⁶ Because a dynamically linked subcomponent runs independently from the larger program, other programs can share the same dynamically-linked subcomponent simultaneously.⁶⁷

Static linking almost certainly falls within the scope of GPLv2's copyleft obligation. It embeds a subcomponent's object code into the larger program, creating a derivative work under GPLv2 and thereby "infecting" the larger program.⁶⁸ Because the process of dynamic linking is different, some have argued that a proprietary program could dynamically link to a GPLv2-licensed subcomponent without creating a derivative work subject to GPLv2's copyleft obligation.⁶⁹ However, the FSF insists that dynamic linking to a GPLv2-licensed library can create a single combined work licensed under GPLv2.⁷⁰ The FSF fashioned a new license, called the GNU Lesser General Public License ("LGPL") to allow for GPL subcomponents to be dynamically linked with proprietary pro-

66. *Id.*

67. IBM, AIX 6.1 PERFORMANCE MANAGEMENT 338 (2007), <http://publib.boulder.ibm.com/infocenter/systems/topic/com.ibm.aix.prftungd/doc/prftungd/prftungd.pdf> (last visited Apr. 4, 2008).

68. This is the "viral" effect of GPLv2. *See supra* Section III.A.

69. *See* Determann, *supra* note 39, at 1458-62, 1488 n.255 (stating "dynamic linking" of libraries "would not qualify as derivative works"); Stoltz, *supra* note 39, at 1456-59, 1463-64 (discussing the "linking exemption" to the derivative work right and how it applies to GPLv2).

70. *See, e.g.*, The LGPL and Java, <http://www.gnu.org/licenses/lgpl-java.html> (last visited Apr. 4, 2008); GNU GPLv2 Frequently Asked Questions, Mere Aggregation, <http://www.gnu.org/licenses/old-licenses/gpl-2.0-faq.html#MereAggregation> (last visited Apr. 4, 2008). The FSF, in describing what is considered a software combination under the terms of GPLv2, states:

What constitutes combining two parts into one program? This is a legal question, which ultimately judges will decide. We believe that a proper criterion depends both on the mechanism of communication (exec, pipes, rpc, function calls within a shared address space, etc.) and the semantics of the communication (what kinds of information are interchanged). If the modules are included in the same executable file, they are definitely combined in one program. If modules are designed to run linked together in a shared address space, that almost surely means combining them into one program. By contrast, pipes, sockets and command-line arguments are communication mechanisms normally used between two separate programs. So when they are used for communication, the modules normally are separate programs. But *if the semantics of the communication are intimate enough, exchanging complex internal data structures*, that too could be a basis to consider the two parts as combined into a larger program.

Id. (emphasis added).

grams.⁷¹ Complicating the analysis, GPLv2 provides a “special exception” to the copyleft obligation for certain system libraries that link to the major components of an operating system.⁷² While this was meant to exempt distribution of essential proprietary libraries used in compiling GPL-based applications, it is unclear how broadly the exception can be interpreted.⁷³

2. *Linux Kernel Modules*

Another technical issue in GPLv2 concerns Linux kernel modules.⁷⁴ The kernel is the basic program at the heart of an operating system.⁷⁵ Linux offers an easy process to add functionality to the kernel: modules.⁷⁶ Linux kernel modules are subcomponents that can be individually compiled and dynamically linked, or “loaded,” into the kernel through an interface,⁷⁷ avoiding the need to recompile the entire kernel and reboot the system when installing software such as printer drivers.⁷⁸

71. GNU Lesser General Public License, Version 2.1, <http://www.gnu.org/licenses/old-licenses/lgpl-2.1.html> (last visited Apr. 4, 2008). The newest version of the LGPL is version 3, which was released simultaneously with GPLv3. GNU Lesser General Public License, Version 3, <http://www.gnu.org/licenses/lgpl.html> (last visited Apr. 4, 2008). Ultimately, the FSF does not recommend the use of LGPL, as Stallman believes it breeds a dependence on proprietary software. *See* Richard Stallman, *Why You Shouldn't Use the Lesser GPL For Your Next Library*, <http://www.gnu.org/licenses/why-not-lgpl.html> (last visited Apr. 4, 2008).

72. *See* GPLv2, *supra* note 5, § 3, para. 2. GPLv2 section 5 explains the exception to the copyleft obligation:

For an executable work, complete source code means all the source code for all the modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a *special exception*, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless the component itself accompanies the executable.

Id. (emphasis added).

73. *See id.* A compiler is a program that translates source code into object code. *See supra* note 9 and accompanying text.

74. For more technical information on Linux kernel modules, *see* ALESSANDRO RUBINI ET AL., *LINUX DEVICE DRIVERS* (3d ed. 2005), *available at* <http://lwn.net/Kernel/LDD3>.

75. The kernel is the core program that manages all system resources and interacts directly with computer hardware. SILBERSCHATZ ET AL., *supra* note 64, at 6, 696.

76. RUBINI ET AL., *supra* note 74, at 5.

77. Programs are often made up of smaller subcomponents. *See supra* Section III.A.1.

78. RUBINI ET AL., *supra* note 74, at 5.

Since the Linux kernel is licensed under GPLv2, the critical concern is whether a dynamically linked kernel module constitutes a derivative work under the license. The FOSS community is deeply divided on this issue. Linus Torvalds, creator of the Linux kernel, has distinguished loadable kernel modules from dynamic linking, stating that while he does not like closed source kernel modules, he accepts them.⁷⁹ Conversely, Eben Moglen, former general counsel of the FSF and a Columbia Law School professor, has stated that “that non-GPL, non-free loadable kernel modules represent GPL violations.”⁸⁰ He believes closed source kernel modules are simply exceptions allowed by Torvalds and other Linux developers.⁸¹ Reconciling these positions is a difficult endeavor.

Some companies have exploited this kernel module uncertainty by releasing closed source, or proprietary drivers for their hardware. For example, two graphic card chipmakers, Nvidia and ATI Technologies, release their driver modules solely in closed source format.⁸² ATI does so for intellectual property reasons, as their drivers contain third-party intellectual property as well as trade secrets.⁸³ While intellectual property is a consideration for Nvidia, it says that a graphics driver is so complicated that open sourcing it “would not help.”⁸⁴ In any case, Linux distributors Red Hat and Novell are beginning to shun proprietary drivers.⁸⁵ If the Linux kernel community demands the end of closed source Linux drivers, companies may be discouraged from releasing proprietary Linux drivers for intellectual property or other reasons, which would ultimately hurt Linux’s popularity.

79. For a summary of Torvalds’ views on kernel modules, see Proprietary Kernel Modules, <http://linuxmafia.com/faq/Kernel/proprietary-kernel-modules.html> (last visited Apr. 4, 2008).

80. Joe Brockmeier, *Interview: Eben Moglen*, LINUX WEEKLY NEWS, Aug. 10, 2005, <http://lwn.net/Articles/147070> (last visited Apr. 4, 2008).

81. *Id.*

82. Steven Shankland, *New Linux Fuels Old Debate*, CNET NEWS.COM, April 17, 2006, http://www.news.com/New-Linux-look-fuels-old-debate/2100-7344_3-6061491.html (last visited Apr. 4, 2008). Nvidia packages their closed source driver with an open source interface to the kernel code. *Id.*

83. *Id.* Software source and object code can be protected as trade secrets. *Trandes Corp. v. Guy F. Atkinson Co.*, 996 F.2d 655, 663-64 (4th Cir. 1993).

84. Shankland, *supra* note 82.

85. *Id.*

B. Software Patents Under GPLv2

Software patents were very rare in 1991 when GPLv2 was released.⁸⁶ Now, more than fifteen years later, software patents have become common in the U.S. software industry.⁸⁷ FOSS software is not immune from patent infringement suits.⁸⁸ FOSS advocates have proposed a variety of methods to combat the potential threat of software patents on open source software.⁸⁹ Besides the fundamental ideological schism between the FOSS community's collaborative approach and software patent monopolies, the threat of patent infringement has been an ever-present concern for the community.⁹⁰

GPLv2's preamble voices Stallman's opposition to patents, stating that "any free program is threatened constantly by software patents."⁹¹ However, the GPLv2 lacked an express patent license. GPLv2's section 7 requires anyone distributing a GPLv2-licensed program to allow "royalty-free redistribution of the Program by all those who receive copies directly or indirectly through you."⁹² Thus, if a distributor obtained a patent license that prevented royalty-free distribution to all downstream recipients, then he must not distribute the code at all.⁹³ Likewise, a patent holder who distributes GPLv2 software must permit royalty-free redistribution to all

86. The U.S. Patent and Trademark Office (USPTO) did not start issuing standards for software patents until 1996. See ROBERT PATRICK MERGES & JOHN FITZGERALD DUFFY, *PATENT LAW AND POLICY: CASES AND MATERIALS* 154-55 (4th ed. 2006) (citing U.S. PTO, *Examination Guidelines for Computer-Related Inventions*, 61 Fed. Reg. 7478 (1996)). However, there remained uncertainty regarding the validity of software patents until the Federal Circuit's *State Street Bank* decision. See *State Street Bank v. Signature Financial Group, Inc.*, 149 F.3d 1368 (Fed. Cir. 1998) (allowing machine and process claims covering software).

87. Robert P. Merges, *Software and Patent Scope: A Report From the Middle Innings*, 85 TEX. L. REV. 1627, 1641 (2007). One recent paper found that more than 20,000 software patents are granted each year. James Bessen & Robert M. Hunt, *An Empirical Look at Software Patents*, 16 J. ECON. & MGMT. STRATEGY 157, 158 (2007).

88. In fact, the first patent infringement suit against open source software was filed in October 2007, by a patent holding company called IP Innovation and Technology against Red Hat and Novell. Paul McDougall, *Red Hat, Novell Sued Over Linux Patents*, INFOWEEK.COM, Oct. 12, 2007, <http://www.informationweek.com/news/showArticle.jhtml?articleID=202402004> (last visited Apr. 4, 2008). Microsoft claims that Linux infringes on forty-two of its patents. See *infra* note 164.

89. Steven Shankland, *Open-source Allies Go on Patent Offensive*, CNET NEWS.COM, Aug. 11, 2005, http://www.news.com/2100-7344_3-5827844.html (last visited Mar. 7, 2008).

90. *Id.*

91. GPLv2, *supra* note 5, at pmb1.

92. *Id.* § 7.

93. *Id.*

downstream recipients, including those that do not receive the software directly from the patent holder, or to simply refrain from distributing the patented software.⁹⁴ Stallman calls this concept “Liberty or Death.”⁹⁵ One interpretation of section 7 is that it creates an implied royalty-free patent license.⁹⁶ Based on this interpretation, Stallman and the FSF maintain that GPLv2 contains an implied patent license based on U.S. copyright law.⁹⁷ Even free software supporters, however, admit that the scope of such an implied license would be difficult to determine.⁹⁸

C. GPLv3 Goals and Drafting Process

Richard Stallman and Eben Moglen identified several issues to tackle for GPLv3.⁹⁹ First, they wanted to make GPLv3 more internationally compliant, as GPLv2 relied on key terms in U.S. copyright law, such as derivative works and collective works.¹⁰⁰ Second, the FSF wanted GPLv3 to continue to be a standard for open source licenses.¹⁰¹ Third, the FSF wanted to adapt the license to legal and technological developments since

94. *See id.* at pmbl. (“[W]e have made it clear that any patent must be licensed for everyone’s free use or not licensed at all.”); *Id.* § 7 (“If you cannot distribute as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Program at all.”).

95. Richard Stallman, Address at the 2nd International GPLv3 Conference (April 21, 2006), <http://fsfeurope.org/projects/gplv3/fisl-rms-transcript.en.html> (last visited Apr. 4, 2008).

96. ROSEN, *supra* note 22, at 126 (“[Under section 7], a licensor cannot distribute software . . . while simultaneously demanding royalties for his patents. His act of distributing the software implies a royalty-free license.”). Other commentators have also raised the possibility of implied licenses in GPLv2. *See* Adam Pugh & Laura A. Majerus, Potential Defenses of Implied Patent Licenses Under the GPL, http://www.fenwick.com/docstore/Publications/IP/potential_defenses.pdf (last visited Apr. 4, 2008) (discussing an implied license based on theories of legal estoppels, equitable estoppels, conduct, and acquiescence).

97. *See* Stallman, *supra* note 95. Stallman stated:

[I]n GPL version two we rely on an implicit patent licence. The issue is: what if the company who distributed the GPL covered program has a patent that applies to something in the program? . . . In the US, by distributing the program to you under the GPL they’re saying they have no objectins [sic] if you carry out your rights under the GPL, so if they then try to sue you for doing so, they will lose.

Id.

98. SOFTWARE FREEDOM LAW CENTER, A LEGAL ISSUES PRIMER FOR OPEN SOURCE AND FREE SOFTWARE PROJECTS 25 (2008), <http://www.softwarefreedom.org/resources/2008/foss-primer.pdf> (last visited Apr. 4, 2008).

99. Moglen, *supra* note 21.

100. *Id.* For more discussion, *see supra* Section III.A.

101. Moglen, *supra* note 21.

the release of GPLv2, including the emergence of software patents, the anti-circumvention provisions of the Digital Millennium Copyright Act (“DMCA”), and Digital Rights Management technology.¹⁰² In FSF’s view, these developments placed restrictions and burdens on users and developers of free software.¹⁰³

Nonetheless, the FSF recognized the commercial interests involved in open source, and invited those interests to participate in the drafting process.¹⁰⁴ After eighteen months of revision, including comment by several different discussion committees representing various open source interests on four different discussion drafts of the license, the final version of GPLv3 was released on June 29, 2007.¹⁰⁵

IV. ANALYSIS OF THE MAIN PROVISIONS OF GPL VERSION 3

This Part analyzes the major changes in GPLv3, which attempt to address the legal problems in GPLv2, and whether the updated license successfully resolves these concerns.¹⁰⁶ Section IV.A reviews new language in GPLv3 intended to clarify the license scope and licensors’ obligations.¹⁰⁷ Section IV.A.1 looks at GPLv3’s explicit references to dynamic linking,¹⁰⁸ while Section IV.A.2 examines the consequences of GPLv3 for kernel modules,¹⁰⁹ which are not specifically addressed by the new version. GPLv3 enacts an express patent license, which is examined in detail in Section IV.A.3. Finally, Section IV.B examines other GPLv3 provisions meant to modernize the license and deal with what the FSF viewed as increasing threats to software freedom. Given the license scope ambiguities as well as the difficulties classifying dynamic linking and Linux kernel modules under GPLv2, many hoped that GPLv3 would provide more clarity. While the new license unifies and clarifies the license language, it still contains ambiguities.

102. See FREE SOFTWARE FOUNDATION, GPLv3 FIRST DISCUSSION DRAFT RATIONALE 3 (2007), <http://gplv3.fsf.org/gpl-rationale-2006-01-16.pdf> (last visited Apr. 4, 2008).

103. See *id.*

104. FREE SOFTWARE FOUNDATION, GPLv3 PROCESS DEFINITION 9 (2006), <http://gplv3.fsf.org/gpl3-process.pdf> (last visited Apr. 4, 2008).

105. Gomulkiewicz, *supra* note 3, at 15.

106. This Note does not attempt to discuss exhaustively every one of GPLv3’s changes, but instead focuses on the most significant provisions.

107. For a discussion on GPLv2 license scope, see *supra* Section III.A.

108. For a discussion of the dynamic linking problem, see *supra* Section III.A.1.

109. For a discussion of problems related to Linux kernel modules, see *supra* Section III.A.2.

A. GPLv3's Clarifications of License Scope and Copyleft Obligations

GPLv3 modifies the language of the license scope and copyleft obligations while attempting to maintain the same copyleft spirit of its predecessor: a licensee is permitted to freely copy, redistribute, and improve software governed by the license, provided that the licensee makes the source code, either original or modified, available to downstream recipients: “You must license the entire work, as a whole, under this License to anyone who comes into possession of a copy. This License will therefore apply . . . to the whole of the work, and all its parts . . .”¹¹⁰

GPLv3 employs newly defined terms, such as “propagate” and “convey” in describing the potential distribution of source code.¹¹¹ The new definitions also make clear that to “modify” a work is to create a “modified version” of the earlier work or a work “based on” the earlier version, allowing for a consistent terminology in the license instead of GPLv2's inconsistent use of the terms “modified work” and “work based on the

110. GPLv3, *supra* note 5, § 5(c).

111. GPLv3, *supra* note 5, § 0. To “propagate” a work is to:
 . . . do anything with it that, without permission, would make you directly or secondarily liable for infringement under applicable copyright law, except executing it on a computer or modifying a private copy. Propagation includes copying, distribution (with or without modification), making available to the public, and in some countries other activities as well.

Id. To “convey” a work is to engage in “any kind of propagation that enables other parties to make or receive copies. Mere interaction with a user through a computer network, with no transfer of a copy, is not conveying.” *Id.* These changes arguably eliminate GPLv2's dependence on U.S. copyright terms, such as “derivative work” or “distribute.” At the same time, this means that lawyers can no longer rely on U.S. case law and statutes to provide the meanings of the license terms. Eben Moglen, at a talk describing GPLv3, stated:

I will say, therefore, the second discussion draft of GPL3 will not have any longer any dependency on the American copyright law idea of a “derivative work.” Accordingly we will be able to avoid another fifteen years of complaining from lawyers who quite justifiably thought the reliance on a US centric view of the derivative work was a major source of uncertainty and uneasiness. They may think that what we have done instead is not a perfect improvement, but I feel certain that there will at least be the recognition that it's a useful development.

Eben Moglen, Address at the 3rd International GPLv3 Conference (June 22, 2006), <http://www.fsfeurope.org/projects/gplv3/barcelona-moglen-transcript.en.html> (last visited Apr. 4, 2008).

Program.”¹¹² Abandoning GPLv2’s use of term “derivative work,” GPLv3 defines a “covered work” to mean either the “unmodified Program or a work based on the Program.”¹¹³ These definitional changes clean up the GPL and create more uniformity in the license.

The new license consolidates the scope of the copyleft obligation to provide source code in section 1.¹¹⁴ GPLv3 distributors must include all source code needed to generate, install, and modify the work.¹¹⁵ However, the scope of the obligation to provide source code exempts system libraries,¹¹⁶ which are program subcomponents included in either (1) the core components of a compiler or an operating system (such as a kernel)¹¹⁷ or (2) the implementation of a standard interface.¹¹⁸

These provisions attempt to clarify the “special exception” in GPLv2 for system libraries.¹¹⁹ The FSF claims the new GPLv3 provisions extend the system library exception to include software that might not come directly with the operating system (such as software libraries of popular programming languages like Java) and make clear that distributors can combine GPLv3 software with non-GPL system libraries.¹²⁰

112. GPLv3, *supra* note 5, § 0, para. 4. *See supra* notes 46 & 57 and accompanying text.

113. GPLv3, *supra* note 5, § 0, para. 5. GPLv2’s use of “derivative work” raised potential ambiguities in the license. For a full discussion, *see supra* Section III.A.

114. GPLv3, *supra* note 5, § 1 (defining “Corresponding Source” to mean “all the source code needed to generate, install, and (for an executable work) run the object code and to modify the work.”).

115. *Id.*

116. *Id.* § 1, para. 4. GPLv3 defines “System Libraries” as:

... anything, other than the work as a whole, that (a) is included in the normal form of packaging a Major Component, but which is not part of that Major Component, *and* (b) serves only to enable use of the work with that Major Component, or to implement a Standard Interface for which an implementation is available to the public in source code form.

Id. (emphasis added).

117. *Id.* § 1, para. 3 (defining “Major Component” as “a major essential component (kernel, window system, and so on) of the specific operating system (if any) on which the executable work runs, or a compiler used to produce the work, or an object code interpreter used to run it.”).

118. *Id.* § 1, para. 2 (defining “Standard Interface” as “an interface that either is an official standard defined by a recognized standards body, or, in the case of interfaces specified for a particular programming language, one that is widely used among developers working in that language.”)

119. GPLv2, *supra* note 5, § 3, para. 2. The “special exception” in GPLv2 is discussed in Section 0 of the license. *See supra* Section III.A.1.

120. BRETT SMITH, A QUICK GUIDE TO GPLv3 5 (2007), <http://www.gnu.org/licenses/quick-guide-gplv3.pdf> (last visited Apr. 4, 2008).

1. Clarification of Dynamic Linking

GPLv3 includes an express provision by the FSF to address the dynamic linking issue that plagued GPLv2.¹²¹ The scope of the copyleft obligation to provide source code for a GPLv3 work now extends to dynamically linked subprograms which share “intimate data communication or control flow” with the work.¹²² While attempting to clarify dynamic linking, this language actually muddles the license scope. The problem is that the FSF strikes a tenuous position, stating first that dynamically linked programs are within the scope of the source code provision, then pulling back with a cryptic condition that the dynamic links must involve “intimate data communication or control flow.” Exactly what is considered “intimate” enough for this provision is unclear. This change appears to do little more than codify the FSF’s “unofficial” position on GPLv2 dynamic linking into GPLv3.¹²³ At the very least, however, users, developers, and distributors can no longer advocate a categorical exclusion of dynamic linking from the scope of the copyleft obligation under GPLv3, as some did under the previous license.¹²⁴ But the new language leaves the status of any given dynamically linked program unclear, perhaps awaiting the development of case law interpreting “intimate.”

2. Linux Kernel Modules

GPLv3 does not expressly address the effect of combining non-GPL kernel modules with GPLv3 code. Thus, it is unclear whether the “intimate data communication” provision discussed above changes the existing

121. This GPLv3 provision is contained in section 6, see *infra* note 122 and accompanying notes. The dynamic linking issue in GPLv2 is discussed in Section III.A.1. See *supra* Section III.A.1.

122. Conveying a GPLv3 program in object code form requires the conveyer to supply the “Corresponding Source.” GPLv3, *supra* note 5, § 6. “Corresponding Source” is defined as “all source code needed to generate, install, and (for an executable work) run the object code and to modify the work.” *Id.* § 1, para. 4. Corresponding Source also includes “interface definition files associated with source files for the work, and the source code for shared libraries and dynamically linked subprograms that the work is specifically designed to require, such as by intimate data communication or control flow between these subprograms and other parts of the work.” *Id.* (emphasis added).

123. See *Mere Aggregation*, *supra* note 70 and accompanying notes. The FSF always maintained the position that certain types of dynamic linking create derivative works subject to the terms of the GPLv2. *Id.*

124. See Determann, *supra* note 39, at 1458-62, 1488 n.255 (stating “dynamic linking” of libraries “would not qualify as derivative works”); Stoltz, *supra* note 39, at 1458-59, 1463-64 (discussing the “linking exemption” to the derivative work right and how it applies to GPLv2).

treatment of Linux kernel modules.¹²⁵ One interpretation is that the FSF, by codifying its “unofficial” position on GPLv2 dynamic linking into GPLv3,¹²⁶ also codified its position that proprietary kernel modules that dynamically link to the Linux kernel are subject to the copyleft obligation of the GPL.¹²⁷

Another approach is to examine how Linux kernel modules interact with the Linux kernel, as well as the amount of “intimate data communication and control flow” involved in this process. The Linux kernel interacts with kernel modules using a specific software interface.¹²⁸ Depending on the kernel module’s function and design, a module might have a simple or complex interface to the Linux kernel.¹²⁹ The complexity of the interface is at least partly a function of the complexity of the underlying module: is it a module that simply prints to the screen, or is it a network card driver that passes huge amounts of Internet data to the user?¹³⁰ The more complex the interface, and the more data exchanged between the module and the kernel, the more likely there will be “intimate data communication and control flow” under the terms of GPLv3. The appropriate paradigm is a spectrum, where on one end there is minimal data sharing and a simple interface, and on the other there is “heavy” data sharing and a complex interface, with GPLv3’s undefined definition of “intimate” lying somewhere in between. Companies with proprietary kernel modules must therefore be careful about where their module falls on this spectrum.

3. *Impact Regarding Scope, Dynamic Linking and Kernel Modules*

Regarding (1) license scope, (2) dynamic linking, and (3) Linux kernel modules, GPLv3 introduces new terms that try to clarify the scope of the copyleft obligation by unifying language and explicitly stating that certain dynamically linked programs are covered under the license. Unfortunately, the inclusion of these new terms and conditions creates new uncertainties for companies seeking a clear delineation of their potential liability under GPLv3. While the GPLv2 had its own problems, there was a level of comfort in the computing and legal industry regarding plausible interpretations

125. The “intimate data sharing” provision was added in GPLv3 to address dynamic linking. *See supra* Section IV.A.1.

126. *See supra* note 123 and accompanying text. The FSF always maintained the position that certain types of dynamic linking create derivative works subject to the terms of the GPLv2. *Id.*

127. *See supra* note 80 & 81 and accompanying text.

128. RUBINI, ET AL., *supra* note 74, at 1, 5-6; Hass, *supra* note 20, at 251, 253.

129. *See* Hass, *supra* note 20, at 254.

130. *See id.* at 254.

of the license.¹³¹ GPLv3 introduces new language in an attempt to clarify a licensor's obligations, but new language inevitably introduces new ambiguities.

For proprietary software vendors, GPLv3 is a mixed bag. Clarifications in the scope of the copyleft obligation will allow vendors to better plan how to deal with GPLv3 software and ensure the closed-source integrity of their proprietary code. However, the addition of language covering dynamic linking could compromise a vendor's proprietary kernel modules. The new language could be read to extend GPLv3's copyleft obligation to certain proprietary kernel modules, which should be a concern for businesses dependent on kernel module functionality.

The FOSS community stands to gain from the additional clarification in the license. The clarifications in the license scope allow FOSS programmers to better grasp their obligations under the license. At the same time, the FOSS community is split over whether or not the GPL copyleft obligation extends to dynamically linked kernel modules. FSF and Stallman, the authors of GPLv3, added new language to cover certain types of dynamic linking.¹³² Linus Torvalds, who accepts the existence of proprietary kernel modules, will probably continue to maintain that the new language does not cover Linux kernel modules.¹³³

B. Software Patent Problems

GPLv3 continues GPLv2's aversion to software patents,¹³⁴ but does not stop at "Liberty or Death."¹³⁵ The new version adds four significant

131. See, e.g., Steven Shankland, *Sun Considers GPL for Solaris*, CNET NEWS.COM, Nov. 14, 2006, http://www.news.com/Sun-considers-GPL-for-Solaris/2100-7344_3-6135461.html (last visited Apr. 4, 2008) (Sun's Executive Vice President of Software, Rich Green, stating there is a "familiarity and comfort level with" GPLv2); Interview with Heather J. Meeker, Shareholder, Greenberg Traurig, in Palo Alto, Cal. (Oct. 9, 2007) (indicating a general level of comfort and familiarity with GPLv2 built up over its sixteen year existence).

132. See *supra*, note 122 and accompanying text.

133. See *supra*, note 79.

134. GPLv3's preamble reads: "States should not allow patents to restrict development and use of software . . ." GPLv3, *supra* note 5, at pmbl.

135. GPLv3 also contains a "Liberty or Death" provision in section 12, which states: If conditions are imposed on you (whether by court order, agreement, or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot convey a covered work so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not convey it at all.

changes to the way the GPL deals with patents: (1) a patent retaliation clause;¹³⁶ (2) an explicit patent license for contributors;¹³⁷ (3) a “knowing reliance” provision to shield downstream users;¹³⁸ and (4) two ad hoc clauses dealing with an ongoing collaboration deal between Microsoft and Novell.¹³⁹

1. Patent Retaliation Provision

Unlike GPLv2, GPLv3 contains a patent retaliation provision,¹⁴⁰ a concept borrowed from other open source licenses, such as the Apache License and Mozilla Public License. Under a typical open source patent retaliation clause, a licensee who sues a licensor for patent infringement on claims covering the licensed software would have its license terminated; in other words, a licensee cannot keep its license while simultaneously filing a patent infringement suit.¹⁴¹ GPLv3’s patent retaliation provision states that:

You [the licensee] may not impose any further restrictions on the exercise of the rights granted or affirmed under this License. For example, you may not impose a license fee, royalty, or other

Id. § 12. Note that this new provision is not limited just to obligations or conditions arising from patents, but to any condition which “would contradict the conditions of this License.” *Id.*

136. *Id.* § 10, para. 3.

137. *Id.* § 11, para. 2-4.

138. *Id.* § 11, para. 5.

139. *Id.* § 11, para. 6-7.

140. *Id.* § 10, para. 3.

141. *See, e.g.,* Apache License, *supra* note 33, § 3. The Apache License provides that:

If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.

Id. *See also* Mozilla Public License, *supra* note 33, § 8.2. The Mozilla Public License states that:

If You initiate litigation by asserting a patent infringement claim (excluding declaratory [sic] judgment actions) against Initial Developer or a Contributor (the Initial Developer or Contributor against whom You file such action is referred to as “Participant”) alleging that . . . such Participant's Contributor Version directly or indirectly infringes any patent, then any and all rights granted by such Participant to You under Sections 2.1 and/or 2.2 of this License shall, upon 60 days notice from Participant terminate

Id.

charge for exercise of rights granted under this License, and you may not initiate litigation (including a cross-claim or counter-claim in a lawsuit) alleging that any patent claim is infringed by making, using, selling, offering for sale, or importing the Program or any portion of it.¹⁴²

If a licensee proceeds to file patent infringement litigation against the licensor, section 8 will immediately terminate its license.¹⁴³ GPLv3's patent retaliation clause follows the typical approach: the licensee cannot assert any patent claim on the licensed program against the licensor without termination.¹⁴⁴

There are two potential problems with the patent retaliation provision. First, the scope of this provision is uncertain because GPLv3 defines "the Program" as "*any* copyrightable work licensed under this License," with "this License" defined as GPLv3.¹⁴⁵ The way that the "any" is placed in the definition of "the Program" above could be interpreted to mean that the patent retaliation provision would cover not just the specific program licensed under GPLv3, but all GPLv3-licensed programs. However, this is an extreme interpretation that appears to result from bad license drafting, so a court is unlikely to take a similar approach. The alternative, and more likely interpretation, is that "the Program" refers just to the specific program licensed under GPLv3. In fact, the FSF published a small note on its website discounting the extreme interpretation and endorsing the alternative interpretation.¹⁴⁶

Second, nothing in a patent retaliation clause prevents a licensee from immediately terminating distribution of the licensed work and proceeding to sue the licensor. Thus, this deterrent may not be effective against motivated licensees. However, it may not be feasible for many licensees to immediately terminate use or distribution of the licensed work, especially if it is embedded in the licensee's own product. Furthermore, if the licensee never used or distributed the licensed work, it probably did not need a license to begin with. Despite the first scenario, GPLv3's patent retaliation provision will be an effective deterrent in most typical instances.

142. GPLv3, *supra* note 5, § 10, para. 3.

143. *See id.* § 8 (stating that "You may not propagate or modify a covered work except as *expressly provided* under this License. Any attempt *otherwise* to propagate or modify it *is void*, and will *automatically terminate your rights* under this License") (emphasis added).

144. *See id.* § 10, para. 3.

145. *Id.* § 0 (emphasis added).

146. *See* Free Software Foundation, What Does "the Program" Mean in GPLv3?, <http://www.gnu.org/licenses/gplv3-the-program.html> (last visited Apr. 4, 2008).

2. *Express Patent License*

GPLv3 contains an express patent license.¹⁴⁷ If a licensee modifies GPLv3 code and distributes the modified version as a *contributor*, then the licensee grants an express, nonexclusive, worldwide, royalty-free patent license to all of the contributor's "essential patent claims" in the entire modified version *as a whole*.¹⁴⁸ This patent license raises three main issues.

First, the patent license applies only to contributors of modified GPLv3-licensed code, and not mere distributors of unmodified code.¹⁴⁹ Although earlier drafts had included patent licenses covering both distributors and contributors, the FSF removed the patent license for distributors from the final draft because of pressure from commercial distributors of open source software that had strategic patent portfolios.¹⁵⁰

Second, GPLv3's patent license is broader than most other open source licenses, which typically license patent claims reading solely on the contribution or a combination of that contribution with the remainder of the work, and not the entire work (with the embedded contribution) *as a whole*.¹⁵¹ Under GPLv3, contributors might grant patent licenses reading on code they never modified or wrote. The FSF decided to keep a broad patent license in GPLv3 despite concerns from some companies that wanted the more common open source approach, which only granted patent licenses on "changes" and "additions" a contributor made to the work.¹⁵²

Third, and most crucial, is delineating the scope of the patent license. GPLv3 defines "essential patent claims" as:

[A]ll patent claims owned or controlled by the contributor, whether *already acquired or hereafter acquired*, that would be infringed by some manner, permitted by this License, of making, using, or selling its contributor version, *but do not include claims*

147. The FSF always maintained the controversial position that GPLv2 contained an implied patent license. *See supra* Section III.B.

148. GPLv3, *supra* note 5, §§ 5(c), 11.

149. *See* GPLv3, *supra* note 5, § 11 (defining a "contributor" as a "copyright holder who authorizes use under [GPLv3] of the Program or a work on which the Program is based").

150. *See* FREE SOFTWARE FOUNDATION, GPLv3 THIRD DISCUSSION DRAFT RATIONALE 15 (2007), <http://gplv3.fsf.org/gpl3-dd3-rationale.pdf> (last visited Apr. 4, 2008).

151. *Compare* GPLv3, *supra* note 5, §§ 5(c), 11, with Apache License, *supra* note 33, § 3, with Mozilla Public License, *supra* note 33, § 2.2(b).

152. THIRD DISCUSSION DRAFT RATIONALE, *supra* note 150, at 18.

*that would be infringed only as a consequence of further modification of the contributor version.*¹⁵³

A contributor would certainly grant a license for patent claims reading on the contributions that it has made. Further downstream recipients of the contributed code also receive this patent license. The question, however, is whether the contributor's patent license can be enlarged based on further modifications of its contribution by downstream recipients. According to the FSF, the italicized limitation in the definition means that "the set of essential patent claims . . . is fixed by the particular *version* of the work that was contributed."¹⁵⁴ Thus, further modifications to the contribution by downstream recipients cannot enlarge the scope of the contributor's patent license.¹⁵⁵ The scope of such derivative works is potentially unbounded, and therefore would be of concern to any business with an important patent portfolio who contributed code. Despite the change, an ambiguity remains in the language. The FSF uses the word "version" to describe the point at which the patent license is fixed.¹⁵⁶ This word is ambiguous: is the "version" fixed at the time at which the contribution is made? As versions in software programs might only change every few months, can multiple contributions be made under the same "version"?

Additionally, the patent license is temporally unbounded, as "essential patent claims" includes all of the contributor's patent claims "already acquired or *hereafter acquired*."¹⁵⁷ However, this infinite capture period appears to conflict with FSF's claim that a contributor's patent license is fixed at the time of contribution. There are also potential ambiguities regarding how far this period can extend. First, does the infinite capture period cover patents that a contributor might later acquire by assignment or acquisition? For example, if company X contributes GPLv3-licensed code, and later decides to purchase target company Y with a significant patent portfolio, does the patent license granted when X contributed the code include claims from company Y's patents? Second, does the phrase "owned or controlled by the contributor" reach down to include patents owned by subsidiaries or affiliates? For example, if company X spins out company Z as a wholly owned subsidiary, assigning all its patents to Z with an exclusive grant-back license to those patents, and then contributes GPLv3-license code, does X grant a patent license under the GPLv3? The license language is silent on how it would handle these scenarios.

153. GPLv3, *supra* note 5, § 11, para. 2 (emphasis added).

154. THIRD DISCUSSION DRAFT RATIONALE, *supra* note 150, at 20 (emphasis added).

155. *See id.*

156. *Id.*

157. GPLv3, *supra* note 5, § 11, para. 2 (emphasis added).

Companies with important patent portfolios should be wary of GPLv3's patent license, especially if they employ open source project contributors. Contributor companies should employ a careful review policy to ensure contributions do not cause unwitting patent licenses.

3. “Knowing Reliance” and Downstream Users

GPLv3 attempts to shield downstream licensees of a program from third party patent claims.¹⁵⁸ This “knowing reliance” provision provides that if a licensor knows that the GPLv3 work he is conveying is covered by a third party patent, and licenses the patent from that third party in order to use the work, the licensor cannot convey the work to downstream users because the downstream users—although under the GPL they would receive copyright rights and licenses to patents owned by the licensor—would not be licensees of the third-party patent holder and would become infringers of the third-party's patents.¹⁵⁹ For example, suppose company A wishes to distribute a program it developed under GPLv3 to company B. Company A also knows that company Z's patent covers this program and has obtained a license from Z in order to make, use, and distribute the program. However, company Z's patent license does not extend to company B or any subsequent downstream recipients of company A's program. Therefore, company A knows that B's use of the distributed program would infringe on Z's patent. In this situation, company A (the licensor) would be unable to distribute the program because it would violate the “knowing reliance” provision in GPLv3. In sum, GPLv3 mandates that licensors cannot “knowingly rely” on patent licenses to protect themselves while exposing their downstream recipients to patent infringement.

However, GPLv3 gives a licensor three “escape” options to allow for distribution of the work in the situation above: (1) cause the source code of the work to be made available for anyone to copy, free of charge and under the terms of GPLv3, through a public network server; (2) deprive itself of the benefit of the patent license for this particular work; or (3) arrange to extend the patent license to downstream recipients via a sublicense.¹⁶⁰ Most companies will probably choose option (1), as option (2) is a harsh penalty that might have consequences for a licensor's business, and option (3) is usually not available as the vast majority of commercial patent cross-licenses do not allow for sublicensing. Note that option (1) requires that source code of the appropriate work be made available to *anyone* via the Internet, which is a broader obligation than the normal

158. *See id.* § 11, para. 5.

159. *Id.*

160. *Id.*

GPLv3 requirement that source code made available only to recipients of conveyed object code.¹⁶¹

The definition of “knowing reliance” also raises another issue. GPLv3 defines “knowing reliance” as “actual knowledge that, but for the [third party] patent license, your [the licensor] conveying the covered work . . . or your recipient’s use of the covered work in a country, would infringe one or more identifiable patents . . . you have reason to believe are valid.”¹⁶² This would indicate that if the licensor believed that the third party patents were not valid, he would not be in violation of the “knowing reliance” provision by conveying the “covered work.” This could have significance for companies who license third party patents they believe are invalid because it is cheaper to take a license to the patent instead of being embroiled in patent litigation.¹⁶³ The italicized proviso above appears to open the door for such companies to escape the knowing reliance provision.

4. Addressing the Microsoft/Novell Agreement

In November 2006, during the drafting of GPLv3, Microsoft arranged a controversial deal with Linux distributor Novell.¹⁶⁴ In that deal, Microsoft extended a limited covenant not to assert its patents against Novell Linux customers in exchange for money and other considerations from Novell.¹⁶⁵ Microsoft and Novell structured the deal with the creative solution of a covenant not to sue instead of a patent royalty, as GPLv2’s “Liberty or Death” clause prevents Novell from paying any royalty to Microsoft to distribute Linux.¹⁶⁶ Members of the free software movement, including Stallman, were outraged that Novell had entered into such a deal,

161. Compare GPLv3, *supra* note 5, § 11, para. 3, with GPLv3, *supra* note 5, § 6.

162. GPLv3, *supra* note 5, § 11, para. 5 (emphasis added).

163. Major technology companies often license what they believe to be meritless patents from so-called “patent trolls” because of the inherent uncertainty in patent litigation. Joe Beyers, *Perspective: Rise of the Patent Trolls*, CNETNEWS.COM, Oct. 2, 2005, http://www.news.com/Rise-of-the-patent-trolls/2010-1071_3-5892996.html (last visited Apr. 4, 2008) (discussing the rise of patent trolls that extract money from companies due to uncertainty in patent infringement suits). “Patent troll” is a pejorative term that is used to describe a company whose primary business is to obtain and enforce patents, and not release products. See Steve Seidenberg, *Troll Control*, 92 A.B.A. J. 50 (2006) (discussing the definition of patent trolls).

164. Roger Parloff, *Microsoft Takes on the Free World*, FORTUNE, May 28, 2007, at 76.

165. *Id.* Microsoft claims that free and open source software infringes on 235 of its patents. Specifically, it claims the Linux kernel infringes on forty-two of the 235 patents. *Id.*

166. *Id.* See also GPLv2, *supra* note 5, § 7, para. 1.

as they believed these arrangements could render free software effectively proprietary.¹⁶⁷ Stallman and Moglen immediately set out to include provisions in GPLv3 to prevent a similar deal in the future.¹⁶⁸

The FSF's answer to the Microsoft-Novell deal was two additional GPLv3 provisions. The first provision, aimed at Microsoft, states that where a patent holder distributes GPLv3 code but only grants a patent license to some subset of parties receiving the covered work, the license is automatically extended to all recipients of the covered work.¹⁶⁹ If Microsoft is bound under the provision, Microsoft's patent license to Novell Linux customers would extend to all Linux users. However, the enforceability of this provision on Microsoft is doubtful, as Microsoft is not a party to GPLv3 and does not distribute GPLv3 code.¹⁷⁰

The second provision, aimed at Novell, forbids distributors of GPLv3 code from entering into "discriminatory patent licenses" with third parties that are "in the business of distributing software."¹⁷¹ A "discriminatory patent license" is one which does not include within its scope all of the "rights that are specifically granted under [GPLv3]."¹⁷² This provision specifically grandfathers Novell's agreement with Microsoft, and all such "discriminatory patent license" agreements made before March 28, 2007.¹⁷³ The limitation of this provision to third parties "in the business of distributing software" appears allow distributors to enter into "discriminatory patent licenses" with businesses that do not distribute software, such

167. Parloff, *supra* note 164. The article notes:

FOSS developers, who do not have the resources to defend themselves against a Microsoft patent suit, felt safe as long as powerful corporate Linux users shared their cause. But now the big boys could just buy their Linux from a royalty-paying vendor like Novell, getting protection from lawsuits and leaving the little guys to fend for themselves. What the shortsighted corporate types didn't grasp was that without the little-guy developers there might not be any high-quality FOSS for them to use five years down the road.

Id. See also THIRD DISCUSSION DRAFT RATIONALE, *supra* note 150, at 25.

168. Parloff, *supra* note 164.

169. GPLv3, *supra* note 5, § 11, para. 6.

170. Microsoft released a statement after GPLv3 was published, taking pains to state that it was not a party to GPLv3, and that its deal with Novell would remain valid even if Novell started distributing GPLv3 code. See Microsoft's Statement on GPLv3, <http://www.microsoft.com/about/legal/intellectualproperty/GPLv3.msp> (last visited Apr. 28, 2008).

171. GPLv3, *supra* note 5, § 11, para. 7.

172. *Id.*

173. *Id.*

as patent trolls and other similar entities.¹⁷⁴ While these two provisions may prevent or deter a future agreement similar to Microsoft-Novell, they encumber an already complex license with two overly inclusive paragraphs.

C. A Survey of Other GPLv3 Provisions

Although patents and license scope were two of the biggest changes in GPLv3, the new license also contains important updates meant to deal with advancements in technology since the release of GPLv2 in 1991. The most important and controversial changes are analyzed below.

1. *Modification of Software for Consumer Products*

The FSF has been openly hostile to a practice dubbed “Tivoization.”¹⁷⁵ Tivoization is the practice of incorporating GPL software on a consumer device or appliance that the user cannot change, because the manufacturer uses hardware to disable the device if it detects modified software.¹⁷⁶ The FSF believes that these device manufacturers take advantage of the freedoms the GPL provides, but do not let users do likewise.¹⁷⁷ The term originates from the TiVo, a company that utilized GPLv2 licensed software on its digital video recorder products, but prevented users from loading modified versions of the TiVo software on its devices.¹⁷⁸ GPLv3 requires that distributors provide information necessary “to install and execute modified versions of a covered work” in their consumer products, thereby allowing users to run modified code on their consumer devices.¹⁷⁹

However, the license contains two important exceptions to this requirement. The first exception is for devices where the software can never be modified (e.g., if it is installed in read-only memory, or ROM).¹⁸⁰ This exception will likely be unpopular because restriction to a ROM is a serious technical limitation: post-distribution patches and upgrades cannot be

174. “Patent troll” is a pejorative term that is used to describe a company whose primary business is to obtain and enforce patents, and not release products. *See* Seidenberg, *supra* note 163, at 50.

175. *See* Stallman, *supra* note 39. GPLv3’s preamble states this hostility succinctly: “Some devices are designed to deny users access to install or run modified versions of the software inside them, although the manufacturer can do so. This is fundamentally incompatible with the aim of protecting users’ freedom to change the software.” GPLv3, *supra* note 5, at pmb1.

176. Gomulkiewicz, *supra* note 3, at 16.

177. Stallman, *supra* note 39.

178. Gomulkiewicz, *supra* note 3, at 16.

179. GPLv3, *supra* note 5, § 6, para. 4.

180. *Id.*

applied as the contents of a ROM are fixed.¹⁸¹ The second exception is that a user's device can be denied access to the network if the modified code "materially and adversely affects the operation of the network or violates the rules and protocols for communication across the network."¹⁸² This definition is potentially ambiguous, and companies might try to exploit this by taking a broad interpretation of what violates the "rules and protocols" for network communication to deny access. Note that this exception only allows such companies to deny users access to the network, and not to the device itself, although many modern consumer products are networked.

2. *Digital Rights Management ("DRM")*

The FSF opposes the use of DRM¹⁸³ and other similar digital controls on ideological grounds.¹⁸⁴ Although GPLv3 does not ban the use of DRM in GPLv3 code, the license allows developers to subsequently remove DRM from GPLv3 code without running afoul of so-called "anti-circumvention laws" that prohibit tampering with DRM technology, such as the U.S. Digital Millennium Copyright Act ("DMCA").¹⁸⁵ First, section 3 states that a work licensed under GPLv3 does not qualify as an "effective technological measure" under the DMCA.¹⁸⁶ Second, GPLv3 contains an explicit waiver by GPLv3 licensors of the protections against DRM circumvention in the DMCA.¹⁸⁷ Courts may be willing to enforce such a waiver against a software distributor who is a voluntary party to the GPLv3 license, but a third party content owner or distributor who is not a party to the license may still be able to invoke the DMCA against users of GPLv3 code engaging in circumvention.

181. See HENNESSEY & PATTERSON, *supra* note 9, at B-13 to 14.

182. See GPLv3, *supra* note 5, § 6, para. 6.

183. See Stallman, *Opposing Digital Rights Management*, <http://www.gnu.org/philosophy/opposing-drm.html> (last visited Apr. 4, 2008). DRM refers to the panoply of technologies designed to allow copyright holders to limit access and usage of digital media or devices. *Id.*

184. See, e.g., Stallman, *supra* note 39; FIRST DISCUSSION DRAFT RATIONALE, *supra* note 102, at 3.

185. See 17 U.S.C. § 1201 (2000). The DMCA states that "[n]o person shall *circumvent a technological measure* that effectively controls access to a work protected under [this Act]." 17 U.S.C. § 1201(a)(1)(A) (2000) (emphasis added).

186. GPLv3, *supra* note 5, § 3, para. 1.

187. *Id.* para. 2.

3. *Termination and Cure*

GPLv2 terminated automatically upon failure to comply with its terms, meaning that continued use of the program was copyright infringement.¹⁸⁸ GPLv2 did not address how to reinstate rights under the license. The FSF believed this policy was too harsh, as it punished even inadvertent violators.¹⁸⁹ GPLv3 addresses this problem by providing an express cure period for violators of the license.¹⁹⁰ Specifically, the license states:

If you [the licensee] cease all violation of this License, then your license from a particular copyright holder is reinstated (a) provisionally, unless and until the copyright holder explicitly and finally terminates your license, and (b) permanently, if the copyright holder fails to notify you of the violation by some reasonable means prior to 60 days after the cessation.¹⁹¹

These cure provisions allow inadvertent violators to retain a provision license immediately after they come back into compliance, and permanently if the violator is not notified by the copyright holder sixty days after achieving compliance.

V. THE PRESENT AND FUTURE OF GPL VERSION 3

This Part examines additional issues confronting GPLv3 as it moves into the future. Section V.A examines the FOSS contribution problem created by incompatible licenses and license versions. Section V.B looks at the adoption of GPLv3 to date, while Section V.C assesses the future of GPLv3.

A. The FOSS Contribution Problem

Although GPLv3 maintains the same copyleft spirit of its predecessor, GPLv3 is not compatible with GPLv2.¹⁹² This incompatibility means that GPLv2-licensed source code cannot be combined with source code li-

188. See FIRST DISCUSSION DRAFT RATIONALE, *supra* note 102, at 17.

189. *Id.*

190. GPLv3, *supra* note 5, § 8, para. 2.

191. *Id.*

192. See Stallman, *supra* note 39. Stallman has stated:

GPL version 2 will remain a valid license, and no disaster will happen if some programs remain under GPLv2 while others advance to GPLv3. These two licenses are incompatible, but that isn't a serious problem. When we say that GPLv2 and GPLv3 are incompatible, it means there is no legal way to combine code under GPLv2 with code under GPLv3 in a single program.

Id.

censed under GPLv3.¹⁹³ Code licensed under GPLv2, in many cases, must be relicensed under GPLv3 to be compatible, which can be a significant obstacle for large FOSS projects.

The person or entity wishing to re-license source code under an incompatible license must own the copyright to the work.¹⁹⁴ Having a single entity own all the copyrights in the source code of an FOSS project is inherently difficult because the code may originate from dozens, if not hundreds or thousands of developers.¹⁹⁵ Each of these developers owns the copyright in its individual contribution, which is licensed under the project's open source license.¹⁹⁶ The project will have difficulty relicensing its source code unless the developers assign their copyrights or give express permissions at the time of their contribution to a single entity.¹⁹⁷ Otherwise, the project likely must go back to obtain permission from each individual contributor.¹⁹⁸

The FSF has recognized this problem with GPLv2 and came up with two solutions. The first solution was to start using contributor agreements with FSF-owned GNU projects.¹⁹⁹ The second solution was to encourage projects to license under a specific version or "any later version," thus allowing existing projects licensed under GPLv2 or "any later version" to be re-licensed under GPLv3 without direct contributor approval.²⁰⁰

B. FOSS Adoption of GPLv3

As of April 2008, a prominent database tracking GPLv3 adoption indicated that over 2000 FOSS projects out of nearly 8500 in the database have converted to GPLv3.²⁰¹ Some important and visible projects that

193. Incompatibility frustrates source code sharing, one of the fundamental benefits of the FOSS development model.

194. See ROSEN, *supra* note 22, at 47 ("License compatibility is not an issue for projects that are copyright and patent owners, because the contributors no longer have any right to refuse the projects' licensing decisions for contributions the contributors no longer own.").

195. See Mann, *supra* note 4, 14-15, 15 n.59, 27-28 (describing the operation of open source software licenses).

196. See *id.* at 14-15.

197. See *id.*

198. See *id.* at 15 n.59.

199. Copyright Assignment, <http://www.gnu.org/licenses/old-licenses/gpl-2.0-faq.html#AssignCopyright> (last visited Apr. 4, 2008).

200. SMITH, *supra* note 120, at 4.

201. Palamida GPLv3 and LGPLv3 Information Site, <http://gpl3.palamida.com> (last visited Apr. 4, 2008). Note that this database is driven mainly by user submissions, so the total number of projects reported does not nearly match the number of total projects li-

have already converted to GPLv3 include Samba²⁰² and SugarCRM.²⁰³ Sun had indicated that it would seriously consider re-licensing OpenSolaris under GPLv3,²⁰⁴ but there has been no official announcement by the company indicating such a move after the release of GPLv3. However, Sun did release its first application licensed under GPLv3, characterizing it as a “first step” and suggesting that future products could be released under the license.²⁰⁵

C. Envisioning the Future of GPLv3

The GPLv3 has attempted to update a nearly sixteen-year-old GPLv2 and clarify its ambiguities. However, as outlined in Part IV, there are many legal issues that still remain unresolved with the new license, such as the treatment of dynamic linking and propriety kernel modules. Furthermore, the license contains many additions which are motivated by the philosophical views of Richard Stallman and the FSF, including provisions dealing with DRM, Tivoization, an express patent license, and the Microsoft/Novell agreement. Those additions will inevitably add complexities and legal uncertainties to GPLv3.

Given this backdrop, free software and open source projects and companies will likely adopt the license for both philosophical and practical reasons. Projects might adopt GPLv3 because they identify with the ideology of the FSF and want to encourage use and adoption of the new license. Adopting GPLv3 can also publicize a company’s open source efforts and incur political goodwill from the FOSS community. Adoption of GPLv3 will likely occur not because it is a better legal document than GPLv2, but because it is the newest version of the most well known FOSS license today. New open source projects and smaller projects might decide to move to new license, but Linux and other major projects, especially if they are backed by commercial interests, will not do so immediately be-

censed under GPLv3 as reported by SourceForge.net (many of which are probably inactive). For SourceForge statistics, see SourceForge, *supra* note 34 and accompanying text.

202. Samba, Samba Adopts GPLv3 for Future Releases, http://news.samba.org/announcements/samba_gplv3 (last visited Apr. 4, 2008). Samba is a program that allows Linux computers to interact via the network with Windows machines. *See* Samba, What is Samba?, http://us.samba.org/samba/what_is_samba.html (last visited Apr. 4, 2008).

203. SugarCRM, SugarCRM Announces Adoption of GPL v3, <http://www.sugarcrm.com/crm/about/press-releases/20070725-GPLv3-FOSS.html> (last visited Apr. 4, 2008). SugarCRM is a company that develops open-source based Customer Relationship Management (CRM) software. *See* SugarCRM, About Us, <http://www.sugarcrm.com/crm/about/about-sugarcrm.html> (last visited Apr. 4, 2008).

204. Shankland, *supra* note 131.

205. Tom Sanders, *Sun Tiptoes Into GPLv3*, VNUNET.COM, Nov. 15, 2007, <http://www.vnUNET.com/vnUNET/news/2203486/sun-tiptoes-gplv3> (last visited Apr. 4, 2008).

cause of the uncertain legal ramifications of adopting GPLv3, and for fear of losing important patent portfolios. However, the patent provisions both hurt and help potential licensors of GPLv3, by making an express patent license while at the same time granting protection from patent retaliation by the licensee. Therefore, companies will likely think strategically and comprehensively about the result of adopting GPLv3 and whether it fits with their business goals. Ultimately, until GPLv3 becomes industry custom, as GPLv2 has already become, there will be commercial opposition to GPLv3.

VI. CONCLUSION

The most popular FOSS license in existence today, GPLv2 was released nearly sixteen years ago. During that period, significant legal and technological changes have emerged, exposing a significant amount of uncertainty and risk in the license. While GPLv3 clarifies existing ambiguities in GPLv2, including the scope of the copyleft obligation and dynamic linking, it also introduces new ambiguities. Businesses involved in FOSS looking for a much clearer delineation of their legal responsibilities compared to GPLv2 will be disappointed with GPLv3. Further, the sweeping patent provisions in GPLv3 are extensive and complex. Whether they are distributors of open source or proprietary software, technology companies should carefully examine the ramifications of these provisions for their patent portfolios and potential patent infringement actions. Lastly, according to Richard Stallman, GPLv3 also addresses perceived threats to free software such as Tivoization and DRM, although compromises were made to satisfy corporate interests. GPLv3 is an improvement on GPLv2, but it faces a tough road ahead to unseat GPLv2 as the premier FOSS license.

THE OPTIMAL LIABILITY SYSTEM FOR ONLINE SERVICE PROVIDERS: HOW *ZERAN V. AMERICA ONLINE* GOT IT RIGHT AND WEB 2.0 PROVES IT

By Cecilia Ziniti

*Should businesses be liable for the grafitti [sic] on their walls?
No, it's the one who put it there who should be in trouble.*

—Comment to blog entry on the scope of CDA immunity.¹

It would be altogether unreasonable to demand so near an approach to omniscience [T]he bookseller's burden would become the public's burden, for by restricting him the public's access to reading matter would be restricted.

—The court in *Smith v. California*, an offline content distributor liability case.²

I. INTRODUCTION

Much has changed since 1997, when the Fourth Circuit in *Zeran v. America Online*³ became the first appellate court to interpret § 230 of the Communications Decency Act (“CDA”). Section 230 immunizes online service providers from liability for third-party content. Evaluating § 230 and the case law interpreting it reveals a remarkably good legal framework that has truly fostered the last ten years’ development of the web.

Part II of this Note reviews the statutory background of § 230, outlines the critical *Zeran* holdings on the CDA, and reviews post-*Zeran* developments in the online world. Against that background, Part III considers the liability of online providers for third-party content generally and discusses potential alternatives to § 230’s wide grant of immunity under *Zeran*. It also highlights problems with such alternatives. Part IV concludes with an explanation of how the post-*Zeran* cases have created a liability scheme constitutionally, practically, and socially preferable to its alternatives—especially as applied to the new landscape of online services.

© 2008 Cecilia Ziniti.

1. Posting of “Daniel” to TechDirt Blog, *There’s A Good Reason Why Online Sites Shouldn’t Be Liable For The Actions Of Its Users*, <http://www.techdirt.com/article.php?sid=20060908/163844#c19> (Sept. 8, 2006, 18:10 PST) (commenting on § 230 of the Communications Decency Act).

2. *Smith v. California*, 361 U.S. 147, 153 (1959) (internal quotations and citations omitted).

3. 129 F.3d 327 (4th Cir. 1997).

II. STATUTORY BACKGROUND

Passed as an amendment to the Telecommunications Act of 1996,⁴ § 230 of the Communications Decency Act⁵ (“CDA”) creates a safe harbor for online service providers—section 230(c)(1)—that shields them from liability for their users’ actions and related content.⁶ Section 230(c)(1) directs that “[n]o provider or user of an interactive computer service shall be treated as the publisher or speaker of any information provided by another information content provider.”⁷ With that provision, Congress explicitly departed from common law defamation jurisprudence. That jurisprudence had determined an actor’s liability for third-party content based on the level of control the actor exercised over it.⁸ At common law, that a party exerted or could exert more control over third-party content led to the application of stricter liability standards for it.⁹

Specifically, in passing § 230, Congress sought to overrule a New York case, *Stratton Oakmont, Inc. v. Prodigy Services Co.*,¹⁰ in which the court held that an online service provider, Prodigy, acted as a publisher when it screened some areas of its site to make the site more family-friendly.¹¹ Under common law defamation principles, the court held that, as a publisher, Prodigy was fully responsible for liability arising from third-party generated message board postings—despite Prodigy’s lack of contribution to, notice of, or knowledge of the postings’ unlawful nature.¹² Prodigy’s good-faith efforts to monitor its site thus resulted in increased liability under common law principles. Legislators recognized the unfair-

4. Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56 (codified as amended in scattered sections of 47 U.S.C.). The Supreme Court held that §§ 223(a) and 223(d) of the Communications Decency Act, aimed at restricting access to pornographic material on the Internet, violated the First Amendment. *Reno v. ACLU*, 521 U.S. 844 (1997).

5. 47 U.S.C. § 230 (2000).

6. *Carafano v. Metrosplash.com, Inc.*, 339 F.3d 1119, 1123 (9th Cir. 2003) (“[R]eviewing courts have treated § 230(c) immunity as quite robust.”).

7. 47 U.S.C. § 230(c)(1) (2000).

8. See Paul Ehrlich, Note, *Regulating Conduct on the Internet: Communications Decency Act § 230*, 17 BERKELEY TECH. L.J. 401, 402-03 (2002) (discussing “The Pre-CDA Landscape”).

9. *Id.*

10. No. 31063/94, 1995 N.Y. Misc. LEXIS 229 (N.Y. Sup. Ct. May 24, 1995).

11. *Id.* at *10-11. H.R. REP. NO. 104-458, at 194 (1996) (Conf. Rep.), reprinted in 1996 U.S.C.C.A.N. 10, 207-08 (“One of the specific purposes of [section 230] is to overrule *Stratton Oakmont v. Prodigy* and any other similar decisions which have treated such providers and users as publishers or speakers of content that is not their own because they have restricted access to objectionable material.”).

12. See *Stratton Oakmont*, 1995 N.Y. Misc. LEXIS 229, at *6-7.

ness of the *Stratton Oakmont* result—i.e., that the huge volume of web content distinguishes it from traditional media and makes application of traditional liability schemes unfair.¹³

A. Early Judicial Interpretation and the Zeran Regime

Almost uniformly, courts have interpreted § 230's safe harbor broadly.¹⁴ Under § 230(c)(1), online service providers, including website operators, have enjoyed immunity from primary and secondary liability for a wide variety of claims including defamation, employment torts, negligent misrepresentation, cyber-stalking, and breach of contract.¹⁵ The safe harbor provides immunity from being “treated as [a] publisher,”¹⁶ a phraseology courts have given expansive meaning. Courts' broad construction likely stems from the statute's stated aims: “to promote the continued development of the Internet” and “preserve the vibrant and competitive free market” online.¹⁷

B. The Zeran Case

The Fourth Circuit's *Zeran v. America Online*¹⁸ established the foundation for broad interpretation of § 230.¹⁹

13. See 141 CONG. REC. H8471 (daily ed. Aug. 4, 1995) (statement of Rep. Goodlatte) (“There is no way that any of those entities, like Prodigy, can take the responsibility to edit out information that is going to be coming in to them from all manner of sources onto their bulletin board . . . [T]o have that imposition imposed on them is wrong.”).

14. *Carafano*, 339 F.3d at 1122-23 (citing *Batzel v. Smith*, 333 F.3d 1018, 1026-27 (9th Cir. 2003)). See also *Chi. Lawyers' Comm. for Civ. Rights Under the Law v. Craigslist*, 461 F. Supp. 2d 681 (N.D. Ill. Nov. 14, 2006) (“Virtually all subsequent courts that have construed Section 230(c)(1) followed *Zeran*, and several have concluded that Section 230(c)(1) offers [interactive computer service]s a “broad,” “robust” immunity.”) (collecting cases). *But see* *Barrett v. Rosenthal*, 114 Cal. App. 4th 1379, 1402-08 (2004) (citing criticism of *Zeran*'s broad interpretation and holding immunity not to apply), *rev'd*, *Barrett v. Rosenthal*, 40 Cal. 4th 33 (2006).

15. There was for short while an open question as to whether, given the inclusion of terms traditionally found in defamation jurisprudence (i.e., words like ‘publisher’ and ‘speaker’), section 230 applied to any causes of action besides defamation. See *Schneider v. Amazon.com*, 108 Wash. App. 454, 464-465 & n.25 (2001). The issue has since been settled in the affirmative—so much so that a leading commentator concludes that for plaintiffs to even make the argument that 230 immunizes providers only with respect to defamation claims is “lame and futile.” See *Posting of Eric Goldman to Technology & Marketing Law Blog, Ninth Circuit Screws Up 47 USC 230—Fair Housing Council v. Roommates.com*, http://blog.ericgoldman.org/archives/2007/05/ninth_circuit_s.htm (May 15, 2007 11:59).

16. 47 U.S.C. § 230(c)(1) (2000).

17. 47 U.S.C. § 230(b)(1)-(2) (2000).

18. *Zeran v. Am. Online, Inc.*, 129 F.3d 327 (4th Cir. 1997).

1. *Zeran's Framework for Immunity*

The court in *Zeran* held defendant America Online (“AOL”) was immune under § 230.²⁰ The plaintiff claimed that after a third-party defamed him by posting messages on an AOL message board, AOL exacerbated his injuries by failing to timely remove the content upon notice.²¹ Though it did not characterize it exactly as such, the *Zeran* court laid out what in effect functions as a three-part test for § 230(c)(1) immunity.²² The defendant service provider must demonstrate: (1) that it was acting as a user or provider of an “interactive computer service,”²³ and (2) that holding it liable in the manner the plaintiff seeks would treat the defendant “as the publisher or speaker” of information furnished “by another information content provider”;²⁴ and (3) that the defendant itself was not the “information content provider” of the content at issue.²⁵ In *Zeran*, the plaintiff conceded the third part of the test.²⁶

2. *Zeran's Controversial Holdings*

Beyond the relatively straightforward framework culled from the statute, the *Zeran* court made additional judgments about the scope of service provider immunity²⁷ that have generated controversy among commentators and subsequent courts.²⁸

The court in *Zeran* held that § 230 precluded not just strict liability as a publisher, as in *Stratton Oakmont*.²⁹ Rather, said the court, it also pre-

19. According to a Lexis search on March 9, 2008, more than 60 federal cases across every circuit and 25 state court opinions across eleven states cite *Zeran*.

20. *Zeran*, 129 F.3d at 328, 335.

21. *See id.* at 330, 331.

22. *Id.* at 330.

23. *Id.* at 330 (citing 47 U.S.C. § 230(c)(1)). The CDA defines “interactive computer service” as “any information service, system, or access software provider that provides or enables computer access by multiple users.” 47 U.S.C. § 230(f)(2).

24. *Zeran*, 129 F.3d at 330 (citing 47 U.S.C. § 230(c)(1)). The CDA defines an “information content provider” as any person or entity “responsible, in whole or in part, for the creation or development” of the information at issue. 47 U.S.C. § 230(f)(3).

25. *Zeran*, 129 F.3d at 330.

26. *Id.* at 330 n.2 (noting that the parties agreed that AOL qualified as an “interactive computer service” because an unknown third party was the “information content provider” of the information at issue).

27. *Id.* at 330-34.

28. *See* Barrett v. Rosenthal, 114 Cal. App. 4th 1379, 1393-95 (2004) (calling *Zeran's* characterization of § 230 “misleading” and collecting scholarly and courts’ criticism of it).

29. *Compare Stratton Oakmont*, at *6 (contrasting publisher and distributor liability with respect to knowledge and fault requirements) *with Zeran*, 129 F.3d at 332 (“[D]istributors are considered to be publishers for purposes of defamation law.”).

cluded the application to website operators of intermediate liability for *distributors*,³⁰ a category of defendants that, before § 230, had faced liability upon knowledge of or negligence with respect to offending content they distributed.³¹ Instead, it held distributors were a subset of publishers and were thus immunized by § 230.³² Under this reading, providers maintain § 230 immunity even if they choose not to take action after learning of potentially illegal content on their sites.³³ Thus, the *Zeran* court implied that § 230 immunity applies not just to publication-related claims, such as defamation, but to *all* claims not explicitly excluded in the statute (criminal, IP and communication privacy claims).³⁴

Furthermore, the *Zeran* court reasoned that precluding distributor liability was the only holding consistent with Congress's intent.³⁵ It found that intent "not difficult to discern," especially in light of express Congressional findings in § 230 that it was "the policy of the United States . . . to preserve the vibrant and competitive free market that presently exists for the Internet and other interactive computer services, *unfettered by Federal or State regulation.*"³⁶ Thus, said the court, Congress necessarily sought to avoid "the specter of tort liability in an area of such prolific speech [the Internet]" and the "obvious chilling effect" that a holding otherwise—i.e., that § 230 only immunized traditional activities of publishers—would entail.³⁷

30. *Zeran*, 129 F.3d at 332-33.

31. *See, e.g.*, *Cubby, Inc. v. Compuserve, Inc.*, 776 F. Supp. 135, 139 (S.D.N.Y. 1991) ("With respect to entities such as news vendors, book stores, and libraries, however, 'New York courts have long held that vendors and distributors of defamatory publications are not liable if they neither know nor have reason to know of the defamation.'").

32. *Zeran*, 129 F.3d at 332.

33. *See Universal Comm'n Sys. v. Lycos, Inc.*, 478 F.3d 413, 420 (1st Cir. 2007) (explaining that under *Zeran*, "[i]t is, by now, well established that notice of the unlawful nature of the information provided is not enough to make it the service provider's own speech. . . . Section 230 immunity applies even after notice.")

34. *Zeran*, 129 F.3d at 330 ("By its plain language, § 230 creates a federal immunity to any cause of action that would make service providers liable for information originating with a third-party user of the service."). Subsequent courts have read *Zeran* this way. *See* Christopher Butler, *Plotting the Return of an Ancient Tort to Cyberspace: Towards a New Federal Standard of Responsibility for Defamation for Internet Service Providers*, 6 MICH. TELECOMM. TECH. L. REV. 247, 248, 254-56 (2000) (explaining how the § 230 regime that developed under *Zeran* became a "prohibition against virtually all liability" rather than classification of ISP liability as that of common law distributors), *available at* <http://www.mttl.org/volsix/Butler.html>.

35. *Zeran*, 129 F.3d at 330-33.

36. *Id.* at 330 (citing § 230(b)(1)) (emphasis in original).

37. *Zeran*, 129 F.3d at 331.

3. *Post-Zeran*

Soon after *Zeran*, the court in *Blumenthal v. Drudge*³⁸ applied *Zeran* to a case that highlighted—or perhaps obfuscated—the distinction under § 230 between a (non-immune) content provider and an (immune) interactive service provider.³⁹ The defendant in *Blumenthal*, AOL, had more control over the content in question than it had in *Zeran* because it paid for, promoted, and retained editorial control over the allegedly defamatory content.⁴⁰ Nevertheless, the court, citing *Zeran*, held AOL immune under § 230, regardless of whether AOL might under common law have qualified as a content distributor or even as a publisher.⁴¹ In so doing, the court echoed *Zeran*'s interpretation of § 230, i.e., that Congress did not intend § 230 to at all distinguish between publishers' and distributors' qualification for immunity.⁴² The court agreed with *Zeran*'s reasoning that Congress's policy choice in passing § 230 required immunity for AOL. Congress, said the court, had established a "tacit *quid pro quo*" of offering interactive service providers broad immunity in exchange for their efforts to police themselves.⁴³

Scholars have criticized the reasoning in *Zeran* and its progeny and their expansion of § 230's safe harbor.⁴⁴ Critics deny that Congress intended to extend immunity to distributors, and they take issue with *Zeran*'s contention that Congress's primary objective in passing § 230 was avoiding tort liability's chilling effects on free speech.⁴⁵ In contrast, inter-

38. 992 F. Supp. 44 (D.D.C. 1998).

39. See 47 U.S.C. §§ 230(c)(1), (f)(2)-(3) (2000).

40. *Blumenthal*, 992 F. Supp at 50-51.

41. *Id.* at 53.

42. *Id.* at 52-53.

43. *Id.* at 52.

44. See Barrett v. Rosenthal, 114 Cal. App. 4th 1379, 1395 (2004) ("The view of most scholars who have addressed the issue is that *Zeran*'s analysis of section 230 is flawed, in that the court ascribed to Congress an intent to create a far broader immunity than that body actually had in mind or is necessary to achieve its purposes.") (collecting sources).

45. See, e.g., Jennifer C. Chang, *In Search of Fair Housing in Cyberspace: The Implications of the Communications Decency Act for Fair Housing on the Internet*, 55 STAN. L. REV. 969, 995-96 & n.111 (2002) (criticizing *Zeran*'s "flawed logic"); Butler, *supra* note 34, at 253-54 (2000) (arguing that, by eliminating the common law's publisher/distributor distinction, the *Zeran* court incorrectly read § 230 more broadly than Congress intended); Ian C. Ballon, *Zeran v. AOL: Why the Fourth Circuit Is Wrong*, J. INTERNET L. (Mar. 1998), available at <http://library.findlaw.com/1999/Feb/2/127916.html> ("While the elimination of all third party liability for defamation would be generally consistent with the goal of promoting unfettered free speech online, it is incon-

net companies at the time and since, have lauded *Zeran*, with AOL's counsel predicting that the case "would stand the test of time" because it was "well written and well-reasoned."⁴⁶ Fairly assessing *Zeran* as applied today, though, requires a review of how the Internet today differs from when *Zeran* was decided.

C. Changes Since § 230's Passage and the *Zeran* Decision

1. Tremendous Growth

Since the passage of § 230 and the *Zeran* decision, the Internet has changed tremendously, as has American engagement with it. Over 70% of Americans are online, up from under 30%.⁴⁷ The term 'blog' emerged, and the number of them increased from essentially none to over 70 million.⁴⁸ Search engine Google went from a nifty Ph.D. project⁴⁹ to a multinational corporation with a market capitalization of over \$200 billion.⁵⁰ Online encyclopedia Wikipedia debuted and grew to include entries on over two million topics.⁵¹ Overall, the web grew to over 600 billion pages—over

sistent with the objective of encouraging . . . self-regulation [by online service providers].").

46. See In Brief, *U.S. Supreme Court Monday Let Stand Lower Court Decision*, COMMC'NS DAILY (Warren Publ'g), June 23, 1998 (quoting George Vradenburg, then general counsel for *Zeran* defendant AOL). See also Brief of Amici Curiae Amazon.com, Inc., et. al., *Barrett v. Rosenthal*, 40 Cal. 4th 33 (2006) (No. S122953), available at http://www.eff.org/files/filenode/Barrett_v_Rosenthal/ISP_amicus_brief.pdf (featuring internet companies like Amazon, eBay, and Google calling *Zeran* "seminal" and "well-reasoned" and calling for the court to follow it).

47. MARY MADDEN, PEW INTERNET & AMERICAN LIFE PROJECT, DATA MEMO: INTERNET PENETRATION AND IMPACT 3 (2006), available at http://www.pewinternet.org/pdfs/PIP_Internet_Impact.pdf.

48. Andy Carvin, *Timeline, The Life of the Blog*, NPR.ORG, Dec. 24, 2007, <http://www.npr.org/templates/story/story.php?storyId=17421022>; Posting of David Sifry, to Sifry's Alerts, *The State of the Live Web*, April 2007, <http://www.sifry.com/alerts/archives/000493.html> (Apr. 5, 2007 02:02:00) ("Technorati is now tracking over 70 million weblogs, and we're seeing about 120,000 new weblogs being created worldwide each day. That's about 1.4 blogs created every second of every day.").

49. Google Milestones, <http://www.google.com/intl/en/corporate/history.html> (last visited Oct. 7, 2007) (showing market capitalization of Google, Inc. was over \$200,000,000,000).

50. See Google, Inc. (GOOG), Yahoo! Finance, <http://finance.yahoo.com/q?s=GOOG> (last visited Oct. 27, 2007).

51. Wikipedia:About, <http://en.wikipedia.org/wiki/Wikipedia:About> (last visited Sept. 23, 2007).

100 pages per person on earth.⁵² Total search engine traffic grew by orders of magnitude since *Zeran*, to over 250 million searches per day today.⁵³

2. *The Rise of Web 2.0*

Moreover, the way people interact with the web has changed. At the time of *Zeran*, Web users observed, found, and exchanged content passively, e.g., by reading the *Washington Post* online, browsing the web using static directories like the original Yahoo!,⁵⁴ and privately, e.g., by emailing or engaging in person-to-person instant messages. Users now play a much more active role in creating and generating content for public or semi-public view.⁵⁵ They keep in touch not just using email, but by creating detailed, content-filled profile pages on sites like MySpace and Facebook.⁵⁶ They use systems to find, filter, and monitor the web's content via custom RSS news feeds, search-based alerts, and social networks. These developments, sometimes referred to as "Web 2.0" and social media, discussed in detail below, have developed and entered the mainstream

52. See Kevin Kelly, *We Are the Web*, WIRED, Aug. 20, 2005, at 96, available at <http://www.wired.com/wired/archive/13.08/tech.html>.

53. Press Release, Nielsen//NetRatings, Nielsen//NetRatings Announces August U.S. Search Share Rankings (Sept. 19, 2007), http://www.nielsen-netratings.com/pr/pr_070919.pdf (listing that total web searches per day in August 2007 was 250 million). See generally JOHN BATTELLE, *THE SEARCH: HOW GOOGLE AND ITS RIVALS REWROTE THE RULES OF BUSINESS AND TRANSFORMED OUR CULTURE*, 39-63, 123-43 (2006).

54. See Yahoo!, <http://web.archive.org/web/19971022190737/http://www11.yahoo.com/> (showing Yahoo! at the time of *Zeran*) (last visited Feb. 8, 2008); Yahoo! Directory, <http://dir.yahoo.com/> (showing the Yahoo! directory today) (last visited Feb. 8, 2008).

55. See Lev Grossman, *Time's Person of the Year: You*, TIME, Dec. 13, 2006—Jan. 1, 2007, at 38, 40-41; ELECTRONIC FRONTIER FOUNDATION, ET. AL., *FAIR USE PRINCIPLES FOR USER GENERATED VIDEO CONTENT 1* (2007), http://www.eff.org/files/UGC_Fair_Use_Best_Practices_0.pdf (2007) ("By providing a home for 'user-generated content' (UGC) on the Internet, these services enable creators to reach a global audience The result has been an explosion of creativity by ordinary people, who have enthusiastically embraced the opportunities created by these new technologies to express themselves in a remarkable variety of ways."); James Grimmelman, *Don't Censor Search*, 117 YALE L.J. POCKET PART 49, 51 (2007), <http://thepocketpart.org/2007/09/08/grimmelman.html> (arguing that advances in search technology "can help individuals move from being passive consumers of information to active seekers for it" and "catalyze[] a virtuous cycle of creativity.").

56. See Posting of Aidan Henry to Mapping the Web, Is Facebook Replacing Email?, <http://www.mappingtheweb.com/2007/07/11/facebook-email/> (Jul. 11, 2007) (pointing out that younger internet users tend to use Facebook's open message system rather than email); Alice Mathias, *The Fakebook Generation*, N.Y. TIMES, Oct. 6, 2007, at A19 (quoting one Facebook user explaining that she has "always thought of Facebook as online community theater. . . .").

since *Zeran* defined the scope of § 230 immunity. Loosely defined, Web 2.0 embodies interactive service providers that leverage users' collective intelligence and make the web, not the PC, "the platform that matters."⁵⁷

Scholars and courts alike have recognized the vast social utility the Internet and search engines provide under these new interaction models.⁵⁸ Mark Lemley points to the web's positive externalities.⁵⁹ He notes that internet services "do not and cannot reasonably expect to capture anything like the full social value of the uses that pass through their system."⁶⁰ The website and community Craigslist, for example, employs fewer than 30 people and offers most of its services for free.⁶¹ Yet its users are enormously loyal,⁶² and the site attracts over 8 billion page views and 35 million users per month, making it one of the top sites on the web.⁶³ By leaving a tremendous amount of revenue untapped, the site generates positive externalities for its users.⁶⁴ Moreover, social value theory applies with particular force online. Anyone with access to a public library can access the Internet and keep a blog. Low barriers to entry give the masses unprecedented power to access, create, and publish.⁶⁵

57. Tim O'Reilly, *Not 2.0?*, O'REILLY RADAR, Aug. 5, 2005, http://radar.oreilly.com/archives/2005/08/not_20.html ("The net has replaced the PC as the platform that matters, just as the PC replaced the mainframe and minicomputer.").

58. *See, e.g.*, *Am. Library Ass'n v. United States*, 201 F. Supp. 2d 401, 405 (E.D. Pa. May 31, 2002) ("the beneficial effect of the Internet in expanding the amount of information available to its users is self-evident . . ."), *rev'd*, 539 U.S. 194 (2003); BATTLE, *supra* note 53, at 7-9 (expressing wonder at the power of search engines to transform our daily lives); YOCHAI BENKLER, *THE WEALTH OF NETWORKS* 1-91 (2006) (extolling the power of the Internet and the "networked information economy" to enrich society), available at http://www.benkler.org/Benkler_Wealth_Of_Networks.pdf; Frank Pasquale, *Copyright in an Era of Information Overload: Toward the Privileging of Categorizers*, 60 VAND. L. REV. 135 (2007) (advocating special fair use treatment for search engines because of the social utility they provide in reducing search costs).

59. Mark A. Lemley, *Rationalizing Internet Safe Harbors* 15 (Stanford Public Law Working Paper, No. 979836, 2007), available at <http://ssrn.com/abstract=979836>.

60. *Id.*

61. *See* Craigslist Fact Sheet, <http://www.craigslist.org/about/factsheet.html> (last visited Oct. 28, 2007).

62. Anita Hamilton, *Find it on Craigslist*, TIME, Mar. 3, 2003, at 76.

63. *Id.*

64. Andrew Ross Sorkin, *Craigslist Meets the Capitalists*, N.Y. TIMES, Dec. 8, 2006 (Dealbook blog) <http://dealbook.blogs.nytimes.com/2006/12/08/craigslist-meets-the-capitalists/>.

65. *See* Frank A. Pasquale & Oren Bracha, *Federal Search Commission? Access, Fairness and Accountability in the Law of Search* 8-9 (Univ. of Texas Law Public Law Research Paper, No. 123, 2007), available at <http://ssrn.com/abstract=1002453>.

3. *Characteristics of Web 2.0 Service Providers*

Web 2.0 services share certain core principles.⁶⁶ In Web 2.0, for example, online services do not simply give users access to the web and a voice online—rather, they help find, manage, and explore the data within the web to make it useful.⁶⁷ Under this model, “the value of software [in Web 2.0] is proportional to the scale and dynamism of the data it helps to manage.”⁶⁸ Services like photo-sharing and community site Flickr, or Amazon.com’s community ratings system, take inputs from millions of users in the form of ratings, tags, and engagement (e.g., via analyzing what and how much users click, comment on, or forward to their friends) to make the online experience better.⁶⁹ User input not only improves but indeed makes possible technologies ranging from optimal spam filtering to social networking to movie ratings systems. Start-ups like Aggregate Knowledge and Clickability have entire business models based on helping websites harness the power of—and revenue from—user communities.⁷⁰ In short, “the heart of Web 2.0 is the user The tools power it, but the people do it.”⁷¹

Other features associated with Web 2.0 are open content and the offering of application program interfaces (“APIs”) and other technical means for users to manipulate content.⁷² Mashups, or programs that allow users to combine data from different sources into one tool,⁷³ are also new since *Zeran*. Likewise, services like Google’s AdSense, which enables anyone

66. Tim O’Reilly, *What Is Web 2.0: Design Patterns and Business Models for the Next Generation of Software*, O’REILLY NETWORK, Sept. 30, 2005, <http://www.oreillynet.com/pub/a/oreilly/tim/news/2005/09/30/what-is-web-20.html>.

67. *Id.*

68. *Id.*

69. *Id.*

70. See About Us, <http://www.clickability.com/company/About.html> (last visited Feb. 23, 2008); Overview, <http://www.aggregateknowledge.com/about.html> (last visited Feb. 23, 2008).

71. Posting of Susan Mernit to Susan Mernit’s Blog, Web 2.0—It’s Not Just RSS, <http://susanmernit.blogspot.com/2005/09/web-20-its-not-just-rss.html> (Sept. 27, 2005).

72. See Kwei-Jay Lin, *Building Web 2.0*, COMPUTER, IEEE Computer Society, May 2007, at 101-02 (“Any Web-based software that lets users create and update content is arguably a Web 2.0 technology Providing friendly tools for user participation in content creation, consumption, and distribution has been the key to success (and failure) for many startups in the Web 2.0 era.”).

73. Posting of Sherif Mansour to Smalls Blogger, Why Mashups = (REST + ‘Traditional SOA’) * Web 2.0, <http://blog.sherifmansour.com/?p=187> (Dec. 5, 2007) (“A Mashup is a new service, that combines functionality or content from existing sources. These existing sources can be Web Services (through the use of API’s), RSS feeds or even just other Websites (by screen-scraping.”)).

with a blog to make money by hosting Google ads on it, represent the web's new "distributed" model wherein much of the activity, profitable and otherwise, happens at edge rather than in a few concentrated centers.⁷⁴

In essence, Web 2.0 services embrace and encourage the "long tail"⁷⁵ such that the classic economic notion of the network effect⁷⁶—that the value of a network to a given customer depends on the numbers of users of it—proves even more powerful in Web 2.0 than on the Web before it.⁷⁷ That means restricting human input to Web 2.0, even marginally, necessarily destroys value. Furthermore, as a result of the network effect, restricting user input destroys value not just linearly—i.e., by a fixed amount per user excluded—but exponentially.

4. *The Legal Implications of Web 2.0*

The shift to Web 2.0 has important legal implications for publishing, distributing, and creating content in cyberspace. Under pre-Zeran jurisprudence, even technology as innocuous as a spam filter, because it entails some review by the provider of the email filtered, could make its provider the publisher of, and therefore liable for claims arising from, email content.⁷⁸ Namely, the *Stratton Oakmont* court's conclusion that Prodigy became a publisher "by actively utilizing technology and manpower to delete notes from its computer bulletin boards" would likely require that result.⁷⁹ The same analysis would also apply to many Web 2.0 services. For example, sites that, like photo site Flickr, sort and present user-generated con-

74. See O'Reilly, *supra* note 66, at 2 ("The Web 2.0 lesson: *leverage customer-self service and algorithmic data management to reach out to the entire web, to the edges and not just the center, to the long tail and not just the head.*") (emphasis in original).

75. For a general discussion of the "long tail" concept online and offline, see CHRIS ANDERSON, *THE LONG TAIL: WHY THE FUTURE OF BUSINESS IS SELLING LESS OF MORE* (2006).

76. One popular way to express this notion is the so-called Metcalfe's Law: that the value of a communications network like the Internet to its users is proportional to the square of the number of users of the system. See Posting of Bob Metcalfe to VCMike's Blog, *Metcalfe's Law Recurses Down the Long Tail of Social Networking*, <http://vcmike.wordpress.com/2006/08/18/metcalfe-social-networks/> (Aug. 18, 2006).

77. See O'Reilly, *supra* note 66, at 2 ("Network effects from user contributions are the key to market dominance in the Web 2.0 era."); see also Posting of Dion Hinchcliffe to Dion Hinchcliffe's Web 2.0 Blog, *Hacking the Web's Network Effect*, <http://web2.socialcomputingmagazine.com/hackingwebnetworkeffect.htm> (Oct. 17, 2005) ("Network effects are a primarily [sic] reason that the Web is such a vibrant and exciting place today.").

78. See *Stratton Oakmont*, 1995 N.Y. Misc. LEXIS 229 at *10.

79. See *id.* But see Douglas B. Luffman, *Defamation Liability For On-Line Services: The Sky Is Not Falling*, 65 GEO. WASH. L. REV. 1071 (1997) (arguing that *Stratton Oakmont* would not require such a result for most internet services).

tent according to user-defined tags also “actively utilize[e] technology” to manipulate content.⁸⁰ Staying with the Flickr example: the site features user-submitted photos on its homepage based on user-added “tags” such that, for instance, on Valentine’s Day, photos tagged with the word “love” automatically rotate out on the site’s primary landing page.⁸¹ A court could logically conclude, then, that Flickr therefore exercises “editorial control” over the photo’s content because it, or at least its technology, must decide which tags to feature and then “reviews” the photos to categorize and channel them.

Web 2.0 icon Wikipedia might be a publisher under *Stratton Oakmont* too, especially in light of the “impression of institutional reliability and veracity” it affords and the fact that it organizes content by subject and suggests areas for user input.⁸² Publisher liability as understood at common law would lead to input restrictions that would, because of the network effects that enable Wikipedia,⁸³ destroy significant value. Such a standard could, for example, limit entries on categories like Gattinara wine⁸⁴ or orthogonal frequency-division multiplexing⁸⁵—areas in which few people have expertise and which offline encyclopedias exclude. These kinds of entries make Wikipedia more useful, so removing them would prove costly.

III. DEFINING THE OPTIMAL LIABILITY SYSTEM FOR THIS NEW WORLD ONLINE

This Part argues that, especially as applied to Web 2.0, the *Zeran* regime—though not costless—proves superior to alternatives. Section III.A provides an overview of the spectrum of liability schemes. Section III.B begins an in-depth examination of alternatives, starting with a reversion to common law jurisprudence. Section III.C explores the possibility of im-

80. See *Stratton Oakmont*, 1995 N.Y. Misc. LEXIS 229 at *10.

81. For an example of a page comprised of images collected based on user-defined tags, see Flickr: Photos Tagged with Love, <http://www.flickr.com/photos/tags/love/clusters/> (last visited Feb. 24, 2008).

82. See Anita Ramasastry, *Is an Online Encyclopedia, Such as Wikipedia, Immune From Libel Suits? Under Current Law, the Answer Is Most Likely Yes, But that Law Should Change*, FINDLAW’S WRIT, Dec. 12, 2005, <http://writ.news.findlaw.com/ramasastry/20051212.html>.

83. See Wikipedia, Network Effect, http://en.wikipedia.org/wiki/Network_effect (last modified Feb. 14, 2008) (“Wikipedia itself depends on positive network effects.”).

84. Wikipedia, Gattinara Wine, [http://en.wikipedia.org/wiki/Gattinara_\(wine\)](http://en.wikipedia.org/wiki/Gattinara_(wine)) (last modified Oct. 8, 2007).

85. Wikipedia, Orthogonal Frequency-Division Multiplexing, http://en.wikipedia.org/wiki/Orthogonal_frequency-division_multiplexing (last modified Feb. 6, 2008).

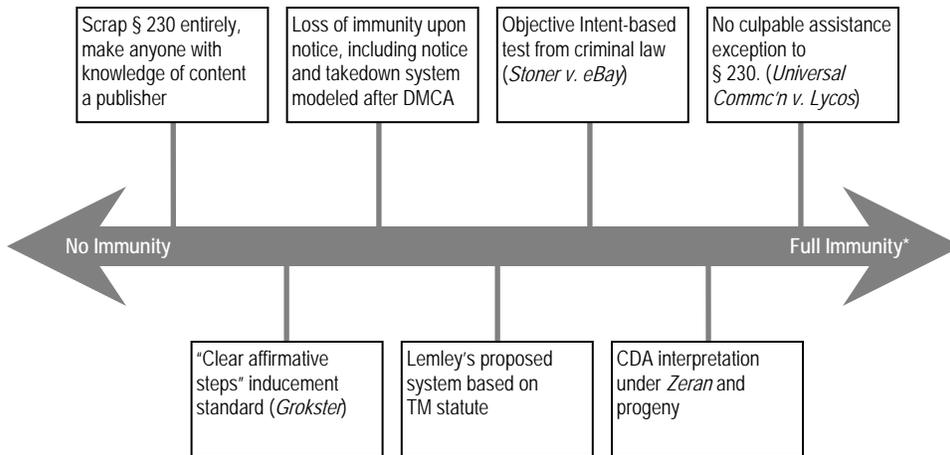
posing liability upon knowledge or notice. Section III.D considers intent-based standards, like the “affirmative steps” approach the Supreme Court took in *MGM v. Grokster*. Section III.E briefly considers other possibilities. Section III.F then looks at the cost and benefits of *Zeran* against the background of the alternatives.

This Part concludes that increased liability on interactive service providers would have negative externalities, be constitutionally problematic, and put the brakes on Web 2.0. Internet services currently immune under *Zeran* and its progeny would lose immunity under alternate schemes, thus facing draining legal battles to which they would react in predictable ways—diminishing the value and promise of Web 2.0. Alternatives to *Zeran* would inhibit providers’ ability to provide useful, entertaining, and socially beneficial online experiences based on user-generated content. Furthermore, depending on how they are implemented, more rigorous liability frameworks would likely impermissibly restrict free speech.

A. The Liability Spectrum

Decreases in value might prove warranted and necessary, but in crafting a legal liability system for the web, courts and policymakers should account for them. Thus the challenge of Web 2.0 for the law: How can the law assign liability for content, when Web 2.0 providers encourage the development of the content on the front end, redistribute it on the back end, manipulating the content all along the way? How much protection should the law afford Web 2.0 companies given their tremendous value to users, society, and shareholders? The spectrum of possible responses ranges from traditional common law defamation jurisprudence, which offers no immunity at all, at one extreme, to full immunity regardless of the service provider’s editing, encouragement, knowledge, or intent with respect to user-created content, at the other extreme.⁸⁶ Plotted on the spectrum of possible liability schemes, the current system, the wide view of § 230 under *Zeran*, falls somewhere on the right (high immunity, low liability).

86. See also Lemley, *supra* note 59, at 15 (“There are four basic possibilities [for an online liability rule]: no safe harbor at all, complete immunity, a notice-and-takedown regime modeled on the DMCA, or a no-damages, no-interference regime modeled on the trademark statute.”).



*If content at least originated with another

B. Reversion to Traditional Common Law Jurisprudence

One approach to liability for user-generated content assumes that the Internet is not fundamentally different than older media such that the best approach is simply to apply existing law—including defamation law and traditional First Amendment jurisprudence.⁸⁷ Advocates of the common law approach argue that § 230 cut short the natural adaptation of the law to the Internet, an adaptation that would incorporate trade-offs and value judgments that have refined over time.⁸⁸ Seemingly a member of this camp, Judge Easterbrook famously compared the concept of cyberlaw generally to “the law of the horse”—implying both are ridiculous as independent bodies of law.⁸⁹ He argued that “[m]ost behavior in cyberspace is easy to classify under current [legal] principles,” so, his argument goes, sound general legal principles provide the best framework for dealing with

87. See, e.g., Jae Hong Lee, Note, *Batzel v. Smith & Barrett v. Rosenthal: Defamation Liability for Third-party Content on the Internet*, 19 BERKELEY TECH. L.J. 469, 485-87 (2004) (declaring that the internet is not too exceptional for traditional doctrines); GEOFFREY C. HAZARD, JR., ET AL., PLEADING AND PROCEDURE, STATE AND FEDERAL CASES AND MATERIALS 237-38 n.4 (9th ed. 2005) (explaining that, on the issue of personal jurisdiction, some “cases suggest . . . that a special intellectual framework for internet cases is unnecessary.”).

88. See, e.g., Lee, *supra* note 87, at 487-88 (arguing that Section 230 and *Zeran* “derailed the process” of common law evolving to address to the new technology of the Internet).

89. Frank Easterbrook, *Cyberspace and the Law of the Horse*, 1996 U. CHI. LEGAL F. 207, 207 (1996).

liability, contract, and property issues online.⁹⁰ In other words, according to him, cyberspace requires no specialized statutory framework.

Even if it might prove “easy,”⁹¹ leaving the liability determination to the common law’s jurisprudence of categories would have awkward, unacceptable repercussions. This is especially true given the complexities—post-dating Easterbrook’s statement—that Web 2.0 adds regarding who creates content and what qualifies an actor as a publisher. A common law liability system would run counter to Congress’s expressed intent. Furthermore, it would lead interactive service providers to create boundaries around their activities based on the activities’ potential for legal categorization rather than their utility or other market-imposed measures. Finally, it would create legal uncertainty likely to chill speech.

1. *The Stratton Oakmont Problem*

Reverting to pre-Section 230 jurisprudence would force the absurd result in *Stratton Oakmont*, where a good faith effort to police message boards to protect children led to *more* liability for an internet service provider. Even the staunchest § 230 critics accept that in passing § 230, Congress sought to reverse this result and aimed to encourage interactive service providers to implement voluntary self-policing like that which *Stratton Oakmont* effectively penalized.⁹²

Supporters of applying the common law tort liability approach argue that it would “encourage internet service providers to do their part” to prevent and lessen the impact of bad acts online.⁹³ Maybe so, but the problem

90. *Id.*

91. Though I accept Judge Easterbrook’s premise for purposes of this Note, the notion that adapting common law jurisprudence to the Internet proves “easy” is not necessarily true, or at least not self-evident. Challenges abound, including of jurisdiction, of scale, of privacy and anonymity and the lack of authentication (e.g., of a child’s age), and of the problem of human versus automated action. See generally Lawrence Lessig, *The Law of the Horse: What Cyberlaw Might Teach*, 113 HARV. L. REV. 501 (1999) (responding to Easterbrook and pointing out the unique challenges to regulation that “cyberspace” presents versus “real” space presents).

92. See 141 Cong. Rec. H8468-72 (daily ed. Aug. 4, 1995).

93. Douglas Lichtman and Eric Posner argue that the CDA and robust immunity under it are “sharply inconsistent with conventional tort law principles” and therefore should be abandoned. They reason that ISPs are optimally positioned to reduce bad acts online and that imposing liability on them would match the offline jurisprudence, writing that “rules that hold one party liable for the wrongs committed by another are the standard legal response in situations where . . . liability will be predictably ineffective if directly applied to a class of bad actors, and yet there exists a class of related parties capable of either controlling those bad actors or mitigating the damage they cause.” Douglas Gary Lichtman & Eric A. Posner, *Holding Internet Service Providers Accountable 2-3* (U. Chi. L. & Econ. Olin Working Paper, No. 217, 2004), available at

with such an approach is that the abstract justification for strict liability applied to publishers of third-party content in traditional contexts would carry with it an unjustifiable burden on free speech in the online world. The efficiency rationale that justifies spreading the costs of injuries from a product or service to everyone who uses it, by holding its providers liable,⁹⁴ ignores the value of free speech and fails to appreciate the social utility of the Internet and its growth. Under strict liability, potential injurers (here, websites) completely internalize the marginal cost of precautionary measures, which gives them incentives to do so efficiently.⁹⁵ They reduce their risk to optimally reduce cost. That creates incentives that, as detailed below, have high costs for free speech and the value of the web, strengthening the argument for a robust immunity system on a societal level.

2. *Category-based Liability Leads to Over-precaution by Risk Averse Providers*

Online service providers might respond to the common law's category-based liability system by tailoring their services to avoid the semblance of editorial control, the consequence of which is more liability. For example, online providers might offer only the simplest tools and post content exactly as they receive it to avoid making editorial-type judgments about placement and display of it. This is true both of the distinction between publisher and distributor (i.e., the move from strict liability to liability on knowledge and negligence) and of the distinction between distributor and common carrier (moving from liability on knowledge/negligence to full immunity).

But the bigger problem is that, even if they wanted to, some online services simply could not make such adjustments. Search engines, for example, display results based on a scan of, and judgment concerning, the contents of the billions of web pages they index. The search-engine pro-

<http://ssrn.com/abstract=573502> (joining "a growing chorus of legal commentators in arguing" for "legal rule[s] that bring[] Internet service providers (ISPs) into the chain of responsibility.") (citing sources).

94. See, e.g., *Escola v. Coca-Cola Bottling Co.*, 24 Cal.2d 453, 462 (1944) (Traynor, J., concurring) ("Even if there is no negligence, however, public policy demands that responsibility be fixed wherever it will most effectively reduce the hazards to life and health inherent in defective products that reach the market.").

95. ROBERT COOTER & THOMAS ULEN, *LAW AND ECONOMICS* 307-346 (4th ed. 2004), available at <http://www.law.berkeley.edu/centers/bclbe/Courses/Law216/CooterUlen/216%20chpt8.pdf>.

vider must make decisions about display based on content.⁹⁶ No matter how much a search engine provider relies on, or claims to rely on, automation rather than human editing, relevance, critical to a useful search engine,⁹⁷ is inherently subjective. To present “relevant” results, the search engine designers have to decide: relevant to whom, by what metric, and in what context?⁹⁸ One classic example cited in the search industry is the term “apple”—a good search engine should capably disambiguate whether the user seeks the computer company or the fruit.⁹⁹ For Google and others to be able to make that kind of distinction, and, based on it, reveal the web’s content to millions of users requires a great deal of subjective judgment about not only the intent of the user but also about the meaning, message, and indeed the worth of the web’s content (the pages in the search engine’s index).¹⁰⁰ That kind of judgment is, under the common law jurisprudence, editorial control. Under the common law categories, then, editorial control means strict liability would thus apply to search engines. That fact alone troubles some scholars enough to call for special liability standards for search engines¹⁰¹ or at least judicial and legislative caution with respect to them.¹⁰²

Some argue that the *Stratton Oakmont* court got it wrong only in deciding that the *automated* filtering (e.g., for swear words) that Prodigy performed constituted editorial control.¹⁰³ But if courts were to address that

96. See Lemley, *supra* note 59, at 2 (“If we forced Google to try to find out which Web pages have problematic materials on them, there is no way it could return automated search results.”).

97. Matt Hines, *The Future of Search Rides on Relevance*, CNET NEWS.COM, Jan. 29, 2005, http://www.news.com/2100-1032_3-5555954.html (explaining that industry executives “roundly endorsed the idea that making search tools more relevant in customers’ lives will be the most important factor in driving their companies’ success.”).

98. Wilfred Ng, Lin Deng & Dik Lun Lee, *Mining User Preference Using Spy Voting for Search Engine Personalization*, 7 ACM TRANSACTIONS ON INTERNET TECHS. 1, 1 (Aug. 2007).

99. Steven Johnson, *Digging for Googleholes: Google May Be Our New God, But It’s Not Omnipotent*, SLATE (Jul. 16, 2003) (highlighting search engines’ “skewed synonyms” problem).

100. Even if Google and others try to minimize subjectivity by using tangible measures of relevance like the number of other websites linking to a particular site, the decision of which measures to weigh more heavily proves subjective, as do the search engine’s necessary efforts at stopping fraudulent sites like link farms.

101. See, e.g., Pasquale, *supra* note 58, at 136-42, 185-93 (advocating special treatment of search engines under the fair use doctrine).

102. See Grimmelmann, *supra* note 55, at 50 (“We need to analyze any serious proposal for a change in Internet law for its effects on the search ecosystem.”).

103. See, e.g., Butler, *supra* note 34, at 256-57 (“The source of the confusion over the liability of ISPs as publishers is the *Stratton Oakmont* decision that clumsily applied a

concern by, for example, requiring manual human editing before a provider transitioned to publisher from distributor status, that too would prove problematic. It would strongly favor providers that deployed fully-automated systems (and had the technical/financial resources to do so), rather than those that might use human editors to try an improve quality. Such a system would also lead to difficult issues around when human editing actually occurs, e.g., if a spam filter “learns” from human input, has the content that the filter assesses been human-edited? Astute commentators have also pointed out that human programmers write the algorithms that do the editing anyway, so such a distinction seems contrived anyway.¹⁰⁴

Even if courts sometimes classified service providers as mere distributors requiring a showing of knowledge or negligence before liability attached,¹⁰⁵ the uncertainty of qualifying for the preferable distributor status would still result in service provider over-precaution and its accompanying chilling effect on free speech.¹⁰⁶ In the abstract, uncertainty in a liability system allows actors to reduce the chance of punishment by “playing it safe,” so it leads actors to modifying their behavior more than the law requires.¹⁰⁷ As a result, even risk-neutral parties tend to “over-comply.”¹⁰⁸ Again, that will make providers less likely to manipulate content in interesting, innovative, and beneficial ways. If a given design tweak, for example, would make a service only somewhat more interesting and engaging but would require some kind of editorial input, a provider likely will not

fault standard best suited for newspapers and book publishers upon Prodigy, merely because Prodigy attempted to provide a small measure of order and control over the content of its electronic bulletin boards.”).

104. James Grimmelmann, *The Structure of Search Engine Law*, 93 IOWA L. REV. 1, 60 (2007).

105. This was the result in a pre-Section 230 case, *Cubby Inc. v. CompuServe Inc.*, 776 F. Supp. 135 (S.D.N.Y. 1991).

106. Before § 230, providers in fact worried of uncertainty under existing liability rules. See Luffman, *supra* note 79, at 1071-73 (collecting “apocalyptic reactions” to *Stratton Oakmont*); see also Steve Alexander, *The Content of Cyberspace; By editing, MRNet may have weakened its disclaimer that it is not responsible for Internet content that moves on its wires*, MINN. STAR TRIBUNE, Jan. 5, 1996, at 3B (quoting director of ISP trade association saying, “[t]he legal situation is foggy and gray and it’s likely to be for the next couple of years.”).

107. Richard Craswell & John E. Calfee, *Deterrence & Uncertain Legal Standards*, 2 J. LAW, ECON. & ORG. 279, 279-83 (1986)

108. *Id.* at 280.

implement it.¹⁰⁹ The marginal effect—that some providers will avoid creating new Web 2.0 services to avoid liability—potentially cuts off the “long tail” and eliminates much of the social value of the Web 2.0. One scholar sums it up nicely: “under such a regime, the Internet might be about where digital cable systems are, with lots of downstream content and very little opportunity for interactivity, much less individual publishing.”¹¹⁰

C. Attaching Liability Upon Knowledge or Notice

This Section argues that even if online service providers’ status as distributors were certain, if liability attached to providers upon knowledge or notice, problems would abound. Section III.C.1 considers the negative effects of a scheme attaching liability upon knowledge, while Section III.C.2 identifies problems with attaching liability upon actual notice.

1. Using Common Law/Pre-CDA Definitions of Knowledge

Courts could implement a knowledge-triggered liability system without congressional action by reverting to the common law distributor liability standard (i.e., by discarding the *Zeran* court’s controversial reading of § 230’s “treatment as a publisher” as precluding distributor liability).¹¹¹ Attaching liability upon knowledge or notice would create serious problems for Web 2.0 companies, however, because under the standards developed in pre-internet defamation cases, they would likely qualify as having “knowledge.” Under those standards, knowledge is defined as knowing or having reason to know of content’s illegal character.¹¹² Offline distributors like, for example, Borders Bookstore, simply do not have that problem; offline distributors do not and could not realistically scan the content of, for example, every magazine they sell. Courts have recognized

109. Notably, though, even relatively certain qualification for distributor liability status would pervert the web’s growth; I discuss the problems with knowledge or notice-based systems in more detail below. See *infra* Section III.C.2.

110. Jim Harper, *Against ISP Liability*, 28 REGULATION 30, 33 (Spring 2005), available at <http://ssrn.com/abstract=807545>.

111. See *Zeran*, 129 F.3d at 330 (“By its plain language, § 230 creates a federal immunity to any cause of action that would make service providers liable for information originating with a third-party user of the service.”); Chang, *infra* note 45, at 983-87 (explaining the alternative reading of § 230 under which distributor liability persists).

112. See *Lerman v. Chuckleberry Publ’g, Inc.*, 521 F. Supp. 228, 235 (S.D.N.Y. 1981) (“[C]ourts have long held that vendors and distributors of defamatory publications are not liable if they neither know nor have reason to know of the defamation.”).

as much.¹¹³ In fact, courts offer that as a key reason for the appropriateness of imposing liability on knowledge.¹¹⁴ Courts reason that imposing liability on any lesser showing than knowledge would lead to self-censorship.¹¹⁵

However, the same standard works differently online than offline. Under such a standard, a search engine's mere scanning of web pages, even without any decision (whether by editor or algorithm) as to whether to display the pages in search results, leads the search engine to "know or have reason to know" the web page's content and character. Going forward, advanced technology like semantic analysis, concept-mapping, and natural language search will increasingly make it impossible for sites to claim lack of knowledge of the content to which they provide access.¹¹⁶ A concrete example illustrates the point. Google's director of research talks about a day when the search engine will be able to handle the query: "show me the speech where so-and-so talks about this aspect of Middle East history."¹¹⁷ For Google to return a meaningful response to the query would be tremendously valuable to users. But to do so, Google would certainly have to know or have reason to know what the content means or implies.

Sites would thus seek to avoid "knowledge" of risky content. The search engine space proves particularly vulnerable under such a standard. Search engines might abandon indexing any unknown content. They might require people to submit their sites and agree to indemnify the search engine and only index those sites whose operators agree, effectively eviscerating internet-wide search, slowing the growth of the Web, and silencing many of the web's users in the process. Or, they might restrict searches for illegal or defamatory content, as they must do in China today.

113. *Smith v. Cal.*, 361 U.S. 147, 153 (1959) ("[I]f the bookseller is criminally liable without knowledge of the contents, and the ordinance fulfills its purpose, he will tend to restrict the books he sells to those he has inspected.").

114. *Id.*

115. *Id.* ("[D]ispensing with any requirement of knowledge of the contents of the book on the part of the seller . . . tends to impose a severe limitation on the public's access to constitutionally protected matter.")

116. For a comprehensive review of the state and future of search technology and related academic research, see conference materials and archived video presentations from The Future of Search, University of California, Berkeley CITRIS-NERSC Sponsored Research Event, <http://www-bisc.cs.berkeley.edu/FutureSearch/> (last visited Jan. 20, 2008).

117. Kate Greene, *The Future of Search: The head of Google Research talks about his group's projects*, MIT TECH. REV., Jul. 16, 2007, <http://www.technologyreview.com/Biztech/19050/>.

Beyond search, activities like setting up topical message boards or featuring content based on algorithmic calculations of popularity and other metrics would also be hindered because they require the entity providing them to know something about the content itself. Flickr's popular "Most Interesting" photos feature,¹¹⁸ for example, relies on a constantly-updated variety of ever-changing metrics, including the source of clicks and comments to a photo and whether and how users tag or mark it as a favorite.¹¹⁹ An enterprising plaintiffs' lawyer could, for example, find a link between these metrics and the illegality of the "interesting" photos the algorithm returned—e.g., that interesting photos are more likely to be tortious, and that Flickr designed its algorithm as such and thus encouraged users to engage in tortious behavior. In such a case, it would be difficult for Flickr to say it does not "know" that it encourages, or at least more actively promotes, tortious over non-tortious content.

2. *Using a Formal Notice-based Liability Scheme like the DMCA*

A formalized system akin to the notice-and-takedown safe harbor in the Digital Millennium Copyright Act¹²⁰ would address the problem of what constitutes "knowledge." It would also avoid the "electronic scanning equals knowledge" problem outlined above. Such an approach finds many proponents in academia¹²¹ and in at least one (since overruled) court.¹²² A formal notice-based system, proponents argue, would give injured parties a mechanism to request removal of offending content and service providers an incentive to take that content down—an incentive they argue that § 230 fails to provide. Nonetheless, even a formal notice-based system would have negative effects that outweigh its (debatable) potential benefits.¹²³

118. Explore, <http://www.flickr.com/explore/> (last visited Oct. 28, 2007).

119. About Interestingness, <http://www.flickr.com/explore/interesting> (last visited Jan. 20, 2007).

120. See 17 U.S.C. § 512 (2000).

121. See, e.g., Lee, *supra* note 87, at 491-92 (arguing for a "regime . . . analogous to the notice-based system established under the Digital Millennium Copyright Act."); Ryan W. King, *Online Defamation: Bringing the Communications Decency Act of 1996 in Line with Sound Public Policy*, 2003 DUKE L. & TECH. REV. 24 (2003); Butler, *supra* note 34, at 262-63 (proposing a notice-and-takedown process for defamation "similar to the one used for potential copyright violations in the Digital Millennium Copyright Act" and arguing that "[s]uch a procedure could work effectively" and "the process would be simple.").

122. See *Barrett v. Rosenthal*, 114 Cal. App. 4th 1379, 1403-06 (2004).

123. The premise that businesses have no incentive to police content under Section 230 seems flawed. Websites have a business incentive, if not a legal one, to keep subscribers happy and the content on their sites legal. Indeed Congress explicitly wanted to

a) The Marginal Cost of Postings Problem

First, such a system would have precisely the consequences the *Zeran* court predicted in justifying its broad interpretation of § 230.¹²⁴ If providers are “[f]aced with potential liability for each message republished by their services,” they will respond by restricting the amount of type content they are willing to republish.¹²⁵ Economics again requires this result.¹²⁶ When each additional message posted on a site brings no or very little additional liability (the result under § 230 today), then the marginal cost to a site of each new posting continues to fall and indeed approaches zero, or at least a predictable step-curve wherein a certain number of new messages requires the provider to obtain new servers. Each new user-created post, message, or tag, costs less than previous ones, so providers can allocate the fixed development costs of the entire system across each new posting. That truly enables Web 2.0’s “long tail”—the billions of pages on the web, the fact that search engines can handle billions of queries to return those billions of pages in results, and that operators like Craigslist can maintain message boards with over 75 million postings in over 100 categories.

In contrast, under a notice-based system, the marginal cost of each posting never goes to zero because each post represents some fixed percentage chance of legal liability, plus some cost of compliance (of responding to takedown notices). Especially for a site like Craigslist, which does not charge or collect revenue per post, the effect could be major: the site might simply stop accepting posts at the point that it cannot reasonably respond to the volume of notices in a way that complies with the DMCA-like notice-system. By keeping the marginal cost of each new post high, then, a notice-based system would destroy the promise of Web 2.0 (that the value of the network depends on its volume of users and their engagement). In other words, under a liability-on-notice system, providers will be less likely to expand the network, thus reducing its value to all participants.¹²⁷

encourage this sort of self-policing by passing Section 230. *See* 141 Cong. Rec. H8469 (daily ed. Aug. 4, 1995).

124. *See Zeran*, 129 F.3d at 331.

125. *Cf. id.*

126. *See* Seth F. Kreimer, *Censorship by Proxy: The First Amendment, Internet Intermediaries, and the Problem of the Weakest Link*, 155 U. PA. L. REV. 11, 29-30 (2006) (explaining that economics makes “intermediaries . . . particularly susceptible to chill” with respect to speech, and that they are often willing to cause some “collateral damage to protected expression” in exchange for avoiding liability).

127. *See* Metcalfe, *supra* note 76 (explaining that the value of a network, social and otherwise, grows as roughly the square of its number of users).

b) The Incentive to Chill Speech and the Related Constitutional Problem

In addition to the marginal cost problem, differences between the types of offenses the DMCA system targets and the third-party behavior for which § 230 provides immunity today render a notice-based system constitutionally and practically unworkable beyond the copyright realm.¹²⁸ A takedown notice under the DMCA is a clear and easy-to-prepare document,¹²⁹ and response to it requires relatively little judgment by its recipient, or at least, that is the premise DMCA supporters cite.¹³⁰ In contrast, notices in the CDA/Section 230 context could allege any of hundreds of torts under hundreds of state and federal laws with slight variations among them, so the notices would be harder to prepare and interpret.¹³¹ Even scholars who support such a system admit that this key practical difference makes such a system less appropriate beyond the copyright realm.¹³² Furthermore, even within the relatively clearer copyright context, empirical evidence indicates that more than a quarter of DMCA takedown notices are either on shaky legal grounds or address cases in which no copyrights are violated.¹³³ Anecdotal evidence concurs, with at least one major online provider publicly declaring that “[w]hat we have to do is take [DMCA notices] at face value . . . our responsibility is to abide by the notices”¹³⁴ Outside the copyright context, taking a legal claim at face value means

128. This argument holds regardless of one’s feelings about how well the DMCA notice-and-takedown system works in addressing the problem of online copyright infringement.

129. See 17 U.S.C. § 512(c)(3) (2000).

130. See Jennifer Urban & Laura Quilter, *Efficient Process or ‘Chilling Effects’? Takedown Notices Under Section 512 of the Digital Millennium Copyright Act*, 22 SANTA CLARA COMP. & HIGH TECH L.J. 621, 640-41 (2006) (“If notices are generally sent when copyright infringement is clear-cut—the assumption behind the positive story of the DMCA—Section 512 may represent an efficient way to clear infringing materials from the Internet.”).

131. See Bradley A. Areheart, *Regulating Cyberbullies Through Notice-Based Liability*, 117 YALE L.J. POCKET PART 42 (2007), <http://thepocketpart.org/2007/09/08/areheart.html> (noting the variety of claims related to third-party content for which the CDA gives service providers immunity).

132. See *id.* (after advocating for a notice-and-take down system, explaining that it should “only allow redress for torts that have relatively unambiguous elements” and calling for “principled demarcation” of a few specified torts.); Butler, *supra* note 34, at 264 (2000) (admitting that “[i]t is much easier for ISPs to judge whether a copyrighted work has been violated . . . than whether a factual assertion is defamatory.”).

133. Urban & Quilter, *supra* note 130, at 667-78.

134. Jim Avila, et al., *The Home Video Prince Doesn't Want You to See*, ABC NEWS INTERNET VENTURES, Oct. 26, 2007, <http://abcnews.go.com/print?id=3777651> (quoting Ricardo Reyes, a spokesman for Google-owned online video service YouTube).

taking down essentially any content in response to any complaint. Rather than expend resources investigating these claims, then, interactive service providers will likely just take down the content.¹³⁵ One could even envision an automated system allowing users to remove content themselves, e.g., via a hyperlink asking, “do you have a legal claim related to this post? Click here to remove it.”

Such a system would fly directly in the face of Supreme Court precedent on free speech. It would create an extreme version of the impermissible “heckler’s veto”¹³⁶—giving anyone with the desire the ability to silence another’s speech and engage in mass censorship.¹³⁷ Arguably, incorporating features like those of the DMCA notice-and-takedown system, requiring complainants to certify their legal claims on penalty of perjury¹³⁸ or setting up a formal counter-notice system,¹³⁹ could help avoid such a result.¹⁴⁰ Still, serious questions about the efficacy of the countermeasures in the DMCA system linger,¹⁴¹ and moreover, most of the damage to free speech occurs upon takedown because of the instantaneous nature of communication online. Also in the copyright setting, the Supreme Court has warned that, where decisions to remove or forbid challenged content implicate free speech, they require very careful “case by case analysis”¹⁴² and a “sensitive balancing of interests.”¹⁴³ Considering that courts struggle with them, leaving these delicate issues of constitutional judgment to non-lawyer ISP employees motivated by the company’s bottom line rather than substantive justice or even to just users themselves would have impermis-

135. *Barrett v. Rosenthal*, 40 Cal. 4th 33, 54-55 (2006) (citing “three deleterious effects that would flow from reading section 230 to permit liability upon notice,” including its creation of an incentive for ISPs to immediately takedown challenged content.)

136. *See Reno v. ACLU*, 521 U.S. 844, 880 (1997).

137. *See Donato v. Moldow*, 865 A.2d 711, 726 (N.J. Super. Ct. App. Div. 2005) (“If notice could defeat immunity, anyone in any way ‘displeased’ with posted materials could utilize notice as a ‘no-cost’ means to create the basis for future lawsuits.”). *But see* *Areheart*, *supra* note 131, at 45 (arguing that a notice-based system would “achieve[] the ‘[p]recision of regulation’ that the Supreme Court has required for rules implicating the First Amendment.”) (quoting *NAACP v. Button*, 371 U.S. 415, 438 (1963)).

138. 17 U.S.C.S. § 512(c)(3) (2008).

139. 17 U.S.C.S. § 512(g)(1) (2008).

140. *See Butler*, *supra* note 34, at 262-63.

141. *See Urban & Quilter*, *supra* note 130, at 666 (presenting results from an empirical study of § 512 takedown notices and concluding that at least one-third of notices were flawed and therefore “invite[d] serious concerns about the fairness of the process . . .”).

142. *Campbell v. Acuff-Rose Music*, 510 U.S. 569, 581 (1994).

143. *Id.* at 584; *Sony Corp. v. Universal City Studios, Inc.*, 464 U.S. 417, 455 n.40 (1984).

sible chilling effects.¹⁴⁴ Even if an ISP employed “an army of lawyers,” it would not be able to adequately tell what content should legally stay up and which it should remove.¹⁴⁵ As a result, to avoid liability, companies would err on silencing speech. Finally, as explained above, such a generalized online liability system would be practically harder to administer than the DMCA has been for copyright amplifies the Constitutional problem.

c) Defamation and Other Forms of Liability Differ from Copyright, So the DMCA Model Does Not Easily Extend

Beyond the practical differences, defamation and other torts from which § 230 protects online providers do not share the free speech “saving grace” that copyright law has been held to enjoy. Copyright law itself encourages, and was constitutionally created to encourage, free expression.¹⁴⁶ In contrast, as the Supreme Court has said, libel law has no such beneficial intent or effect on free speech—its role “has been relatively minor and essentially erratic.”¹⁴⁷ Other kinds of third-party content claims the CDA has been held to bar against online service providers, like securities law claims¹⁴⁸ or business practices regulations,¹⁴⁹ likely warrant even less constitutional indulgence than libel law. A DMCA-like liability system to replace § 230, then, would be unlikely to withstand Constitutional scrutiny because of its implications for free speech.¹⁵⁰ That problem, com-

144. The Supreme Court has affirmed the delicacy of these kind of judgments even at the procedural level. *See Bose Corp. v. Consumers Union*, 466 U.S. 485, 499 (1984) (“[I]n cases raising First Amendment issues we have repeatedly held that an appellate court has an obligation to make an independent examination of the whole record in order to make sure that the judgment does not constitute a forbidden intrusion on the field of free expression.”) (internal quotations and citations omitted). That the Supreme Court finds even federal district courts incapable of making these decisions cautiously enough is telling.

145. *See Lemley*, *supra* note 59, at 2.

146. *See, e.g., Harper & Row, Publ’rs. v. Nation Enters.*, 471 U.S. 539, 558 (1985) (“[T]he framers intended copyright itself to be the engine of free expression.”). *See also* Eugene Volokh, *Freedom of Speech and Appellate and Summary Judgment Review in Copyright Cases*, 107 YALE L.J. 2431, 2488 (1998) (“Copyright law’s speech-enhancing effect, coupled with its specific constitutional authorization, justifies holding copyright law to be a substantively valid speech restriction.”).

147. *See Gertz v. Robert Welch*, 418 U.S. 323, 400 n.41 (1974) (citing T. Emerson, *THE SYSTEM OF FREEDOM OF EXPRESSION* 519 (1970)).

148. *See Universal Commc’n Sys. v. Lycos, Inc.*, 478 F.3d 413 (1st Cir. 2007).

149. *See Stoner v. eBay*, 56 U.S.P.Q. 2d. 1852 (Cal. Super. Ct. 2000).

150. In considering a challenge to a new liability system affecting free speech, the Supreme Court would apply First Amendment tests for overbreadth and vagueness, under which regulations fail where their “burden on protected speech . . . could be avoided by a more carefully drafted statute.” *Cf. Reno v. ACLU*, 521 U.S. 844, 848 n.45, 868, 871-874

bined with the likely detrimental effects on Web 2.0 and the Internet generally, makes the regime of § 230 under *Zeran* preferable.

D. *Grokster*'s "Affirmative Steps" Standard and Other Intent-based Tests

Moving to the right on the liability-immunity spectrum from notice-based liability leads to systems that impose liability on online service providers for the content of others only when the providers have some higher level of scienter related to the content or its illegality. One judge suggested adopting criminal law's traditional test for liability, i.e., finding an actor responsible who has some intent to aid and abet the target behavior.¹⁵¹ A creative plaintiff¹⁵² called for extending the Supreme Court's *Grokster* standard for copyright infringement inducement, under which one who makes "clear expression or [takes] other affirmative steps . . . to foster infringement, is liable for the resulting acts of infringement by third parties,"¹⁵³ to all liability arising from third-party generated content online. Such tests have some appeal: They would impose liability on the worst online service providers—sites that, intuitively anyway, seem to deserve to face liability. The Ninth Circuit recently put forth such an example—the hypothetical "www.harassthem.com."¹⁵⁴ Under a broad reading of § 230, such a site might retain immunity from claims of injury resulting from harassing messages users posted on the site, even if the site encouraged users to create such illegal content.

Still, the potential for a *Grokster*-based system to chill speech still exists, and the same issues that make the DMCA-takedown model inappropriate beyond copyright apply with nearly equal force. Providers who set up online communities want the value of those communities to increase, they make more money when traffic increases, and the value of the network increases not only for users but also for providers as postings increase. The same could have been said for music exchange service *Grokster* and copyright infringement, but again, the key practical and Constitutional differences outlined above between online liability generally and copyright liability make the *Grokster* test a bad fit. If the dispositive question becomes not whether a provider created a piece of content but whether it intended for content to go up, the answer would almost invaria-

(1997) (applying the doctrines in the context of a content-based regulation, subject to strict scrutiny).

151. *Stoner*, 56 U.S.P.Q. 2d. 1852, *14-*15 (Cal. Super. Ct. 2000).

152. *See Universal*, 478 F.3d at 420-21.

153. *See Metro-Goldwyn-Mayer Studios, Inc. v. Grokster*, 545 U.S. 913, 919 (2005).

154. *Fair Hous. Council of San Fernando Valley v. Roommates.com, LLC*, 489 F.3d 921, 928 (9th Cir. 2007), *rev'd en banc*, 521 F.3d 1157 (9th Cir. 2008).

bly be yes—effectively eviscerating immunity overall, making liability strict, and leading to the necessarily accompanying chill on free speech.

E. Other Possible Systems

In the last several decades, scholars have had ample opportunity to consider how liability schemes should attach to new technologies and have proposed a variety of ideas. Some proposals involve systems that would force interactive service providers to disclose the identities of the creators of offending content.¹⁵⁵ That way, the logic goes, the law would enable potential plaintiffs to find and hold responsible those who actually cause the problem. However, requiring online providers to maintain records of every posting online would be a massive undertaking unreasonable to impose. Further, such a system would effectively prevent anonymous posting,¹⁵⁶ a constitutional right that courts have recognized as critical to free speech online and otherwise.¹⁵⁷ Professor Mark Lemley suggests a system based on the trademark statute,¹⁵⁸ but the complete lack of case law interpreting the applicable portion of the statute¹⁵⁹ makes such a system difficult to evaluate.

Another commentator sets forth a creative proposal for dealing with the problem of third-party content liability online—essentially an online ‘right of reply’ system for search engines.¹⁶⁰ The proposal would require Google and others to allow users to “asterisk” search results displaying content they felt harmed them and the ability to post a reply to it.¹⁶¹ The proposal has the advantages of providing injured parties with some redress when they seek to challenge third-party content and of addressing some people’s intuitive sense that “*some* accountability for search engine results

155. See, e.g., Ehrlich, *supra* note 8, at 402 (proposing “[c]ombining immunity with a remedy that allows plaintiffs to reach the actual publisher . . .”); Lemley, *supra* note 59, at 21-22 (outlining a system “requiring intermediaries to retain and disclose the identity of their customers in response to a subpoena.”).

156. See Lemley, *supra* note 59, at 15.

157. See, e.g., *Doe v. 2themart.com, Inc.*, 140 F. Supp. 2d 1088, 1092 (D. Wash. 2001) (“A component of the First Amendment is the right to speak with anonymity. This component of free speech is well established. . . . The right to speak anonymously extends to speech via the Internet.”); *ACLU v. Miller*, 977 F. Supp. 1228, 1230-32 (N.D. Ga. 1997) (recognizing right to speak anonymously on the Internet); see generally *McIntyre v. Ohio Elections Comm’n*, 514 U.S. 334 (1995) (decision to remain anonymous is protected by the First Amendment).

158. See Lemley, *supra* note 59, at 19.

159. 15 U.S.C. § 1114(2)(B)-(C) (2000).

160. Frank Pasquale, *Rankings, Reductionism, and Responsibility*, 54 CLEV. ST. L. REV 115, 135-36 (2006).

161. *Id.*

is increasingly necessary as they become the primary portal for net users.”¹⁶² To the extent that it is, as its proponent claims, “a minor, non-intrusive legal remedy,” it might not prove problematic provided that the § 230 immunity otherwise continues to apply as it does today. Still, the measure seems like a stop-gap, and it might not be practicable as applied to alternative forms search (e.g., voice search, map search, mobile search). Besides, there is no guarantee that searchers will actually click on the asterisks, so the defamed person likely will not feel this approach makes him whole.

F. *Zeran* and a Broad Interpretation of § 230 Have Allowed Web 2.0 Models to Flourish

The *Zeran* regime has not had negative consequences for free speech and innovation online likely under the systems discussed above. As this Section argues, *Zeran* has proven efficient¹⁶³ and adaptable and nurtured the growth of beneficial innovation online. It has effectuated Congressional intent to “promote the continued development of the Internet and other interactive computer services.”¹⁶⁴

1. Search Engines

The search space demonstrates the point well. As explained above, internet search is inherently editorial—even if algorithms do the editing—because it involves content-based decision-making as to relevance, display and usability. Systems that, unlike § 230 under *Zeran*, bias against editorial functions in determining liability thus risk hindering search. Section 230, on the other hand, explicitly precludes liability for “acting as a publisher,” i.e., exercising editorial control over content posted online, so search engines are free to do what they need to do to operate.

Search engine cases that follow *Zeran* bear out that conclusion. In *Murawski v. Pataki*, the court held that search engine Ask.com was immune under § 230 from defamation claims relating to content presented in search engine results.¹⁶⁵ Citing *Zeran*, the court found immunity, notwithstanding that the search engine removed line breaks in the results in such a way that it appeared plaintiff was associated with the Communist Party,

162. *Id.* (emphasis in original).

163. For an extended analysis of just the economic aspects of the available liability systems, see Matthew Schruers, *The History and Economics of ISP Liability for Third Party Content*, 88 VA. L. REV. 205, 206-08 (2002) (“[R]elative to the available alternatives, the current regime, in which ISPs are almost completely immune from suit, is the most efficient.”).

164. See 47 U.S.C. § 230(b)(1) (2000).

165. 514 F. Supp. 2d 577, 591 (S.D.N.Y. 2007).

even though it did not so appear on the destination sites from that created the content.¹⁶⁶ Likewise, the court in *Langdon v. Google, Inc.* held that § 230 immunized Google and Yahoo! from claims arising from any “decisions relating to the monitoring, screening, and deletion of content from their network[s],” including whether and how they displayed ads and results based on their content.¹⁶⁷ The court explained that under *Zeran* and its progeny, § 230 “bars lawsuits seeking to hold a service provider liable for . . . deciding whether to publish, withdraw, postpone, or alter content.”¹⁶⁸

2. Non-search Providers

Under *Zeran*, non-search providers also enjoy wide latitude in how they design their sites and display and manipulate user-generated content. The court in *Donato v. Moldow*, for example, discussed *Zeran*’s interpretation of § 230 at length and held that, under it, a local-issues website operator was immune from plaintiff’s claims of injury from messages posted on its site.¹⁶⁹ The court reached that conclusion, despite plaintiff’s contention that defendant controlled and shaped the tone and content of the message board by choosing to display, highlight, and comment on certain messages but not others.¹⁷⁰ According to the court, “selectively choosing which messages to delete and which to leave posted” on a message board was mere “exercise of a publisher’s traditional editorial functions, namely, whether to publish, withdraw, postpone or alter content provided by others.”¹⁷¹

In *Universal Communication Systems v. Lycos, Inc.*, the court cited *Zeran* for the proposition that mere notice does not change the analysis because § 230 precludes distributor liability.¹⁷² The court dismissed plaintiff’s claims otherwise.¹⁷³ What makes the case interesting is that instead of alleging that defendant Lycos was directly responsible for the content of message board postings—a claim that § 230 obviously proscribed—the plaintiffs alleged that Lycos’s *design* of its website harmed the plaintiff by enabling posters to the site to spread false information more credibly.¹⁷⁴

166. *Id.* at 589-91.

167. 474 F. Supp. 2d 622, 630-31 (D. Del. 2007).

168. *Id.* at 630.

169. 865 A.2d 711, 725-26 (N.J. Super. Ct. App. Div. 2005).

170. *Id.*

171. *Id.*

172. 478 F.3d 413, 420-21 (1st Cir. 2007).

173. *Id.*

174. *Id.* Cf. *Carafano v. Metrosplash.com, Inc.*, 339 F.3d 1119, 1121, 1124-25 (9th Cir. 2003) (holding website operator immune under § 230 when an anonymous poster

Specifically, the plaintiffs pointed to various things Lycos did to give the site, and the investment advice that users posted to it, an improved air of authority so as to “culpably assist” the creators of the offending content. The First Circuit called the strategy ‘artful pleading’ that failed to avoid the fact that the plaintiffs attempted to hold Lycos liable for content created by another.¹⁷⁵ Though the court ruled on the facts (that there was no active inducement by Lycos and therefore no reason to even consider not applying § 230 immunity), it opined in dicta that “[i]t is not at all clear that there is a culpable assistance exception to Section 230 immunity.”¹⁷⁶ *Zeran* was not binding, for *Universal* was the First Circuit’s first § 230 case.¹⁷⁷ Nevertheless, the court reviewed and agreed with *Zeran*’s more controversial holdings, and, importantly, did so in a way that protects online provider’s ability to tailor their sites in ways that might affect the content, or the impact of the content, that users provide. That protection of that discretion provides online providers the ability to create new and innovative online experiences, without worrying about losing § 230 immunity for the user-generated content that underlies them.

3. Content Distribution

Reading § 230 to preclude distributor liability also critically supports Web 2.0’s open content distribution model. Without that interpretation, a case like *Prickett v. infoUSA, Inc.*¹⁷⁸ would likely have come out differently. Defendant *infoUSA* operated an online directory listing service akin to the yellow pages.¹⁷⁹ A third party submitted a false listing to *infoUSA* for an escort service at the plaintiff’s address, and the plaintiff alleged that he and his family suffered harassment as a result.¹⁸⁰ The court held *infoUSA* did not become an information service provider thereby and lose § 230 immunity for the content of the listing despite its licensing, categorization, tagging, and distribution of it to third parties.¹⁸¹ That holding protects the mashup and data distribution services many laud as critical to the

created a false profile of the plaintiff on the defendant’s dating website despite fact that the prankster merely filled in defendant’s online forms to do so).

175. *Universal*, 478 F.3d at 420-21.

176. *Id.* at 421.

177. *Id.* at 418.

178. No. 4:05-CV-10, 2006 U.S. Dist. LEXIS 21867 (E.D. Tex. Mar. 30, 2006).

179. *Id.* at *7-8.

180. *Id.* at *8-10.

181. *Id.* Cf. *Carafano*, 339 F.3d at 1121, 1124-25 (9th Cir. 2003) (holding the provider of an online dating service immune under § 230 from harassment claims arising from third party’s submission of a bogus profile including plaintiff’s contact information, even though the site prompted and provided forms for the third party to create and submit the profile).

future of the Web.¹⁸² If courts went the other way and discarded *Zeran*'s critical (and criticized) holding that § 230 precludes distributor liability, it would mean that by creating APIs and redistributing the user-generated content they control, services like *infoUSA*, Google AdSense, YouTube, and Flickr would lose § 230 immunity. Such a result would be disastrous for Web 2.0. It would force a reversion to the "walled garden"-style internet services of the late 1990's in which portal sites like AOL strived to keep users within their world and keep others' content out.¹⁸³

4. Advertising

The *Zeran* framework also allows another behavior critical to the growth of online services that alternative systems likely hinder—websites' ability to make money generally and specifically from content-related advertising. For example, the court in *Doe v. Bates* held that defendant Yahoo! Inc. did not lose § 230 immunity despite generating significant advertising revenue from display ads placed near its popular Groups feature, even where users posted obviously illegal content to the groups.¹⁸⁴ In Web 2.0, internet services will increasingly provide targeted advertising based on the user-generated content of particular pages.¹⁸⁵ In fact, analysts consider offering services to users for "free" but making money by enabling advertisers to reach those users based on the content of the pages they view and the searches they perform as the web's most successful business model.¹⁸⁶ Thus, a system that threatened it would almost certainly harm the web's growth. Though no doubt self-serving, Google has cogently ar-

182. See Lin, *supra* note 72, at 101-102 (discussing the importance of mashups, search engines, and recommender systems).

183. See generally Michael Geist, *Pull Down the Walled Gardens*, BBC NEWS, Aug. 15, 2007, <http://news.bbc.co.uk/go/pr/fr/-/1/hi/technology/6944653.stm> (lamenting that today's social networks are somewhat of a reversion to the "walled gardens" of the late 90's but that today's sites' are willing to open up via platforms and APIs, a development he sees as a good thing).

184. *Doe v. Bates*, No. 5:05-CV-91-CF-CMC, 2006 U.S. Dist. LEXIS 93348, *9-12 (E.D. Tex. Dec. 27, 2006).

185. See Zachary Rogers, *Google Targets Search Ads on Prior Queries, à la Behavioral*, CLICKZ, Jul. 31, 2007, <http://clickz.com/showPage.html?page=3626593>. Arguably, such services improve the user experience because the ads shown are more relevant to them.

186. See *id.*; see also Dave Pollard, *Why Google's Business Model Is So Revolutionary*, SALON, Oct. 16, 2005 (How To Save The World Blog), <http://blogs.salon.com/0002007/2005/10/16.html>.

gued that its distributed advertising system itself promotes free speech by giving bloggers the ability to monetize their sites.¹⁸⁷

In sum, the relatively low level of liability for third-party content possible under *Zeran* does not seem to at all hinder internet growth (and in fact enables it) in at least four areas critical to Web 2.0: search, content display and manipulation, content distribution, and the ability to rely on advertising revenue. As outlined above, the same certainly does not hold true of other potentially liability frameworks. That would seem to heavily favor leaving courts to continue to interpret § 230 expansively, especially in light of the web's aforementioned value in fostering free speech and social value of Web 2.0.

G. The Potential Problems With the *Zeran* Regime Are Not Unique to the Internet

Despite these benefits, the *Zeran* framework does have costs. It can sometimes result in unfortunate victims, who, especially when the original provider of the information at issue evades identification, pay the price for the free speech and growth that the *Zeran* regime enables. The plaintiff in *Zeran* himself so suffered; he was harassed as a result of the false information about him posted on AOL, and he received no compensation because AOL was immune he was unable to identify the original content provider.¹⁸⁸ Such unfortunate victims of free speech exist offline too, where the First Amendment likewise requires limits on impositions of liability that would dampen free speech.¹⁸⁹ Evaluations of the rationales for free speech as a fundamental right exceed the scope of this Note, but suffice it

187. Alan Davidson, Google Senior Policy Counsel, Google Inc. Letter re: FTC Town Hall, http://blog.wired.com/27bstroke6/files/google_town_hall_lecture.pdf (“[O]nline advertising promotes freer, more robust, and more diverse speech . . . website owners can afford to dedicate themselves to their sites more fully . . . because a significant percentage of the revenue we earn ends up in their hands as publishers of blogs and other websites and our advertising partners.”).

188. *Zeran*, 129 F.3d at 329-330 & n.1.

189. See Frederick Schauer, *Uncoupling Free Speech*, 92 COLUM. L. REV. 1321 (1992) (arguing that First Amendment law need not presuppose a trade-off between tolerating individual harm and protecting societal free speech). “It ought to be troubling,” Schauer argues, “whenever the cost of a general societal benefit must be born exclusively or disproportionately by a small subset of the beneficiaries If free speech benefits us all, then ideally we all ought to pay for it.” *Id.* at 1322. Schauer cites two forceful illustrations of “unfortunate victims” of offline free speech: *Herceg v. Hustler Magazine, Inc.*, 814 F.2d 1017 (5th Cir.1987) (holding publishing article was not incitement where teen died practicing auto-erotic asphyxiation technique described in magazine), and *Olivia LV. v. Nat'l Broadcasting Co.*, 178 Cal. Rptr. 888 (Ct. App. 1981) (holding television show producers not liable for incitement with respect to rape that perpetrators carried out based on TV show). See *id.* at 1323-24, 1343-49 (discussing cases).

to say that the Supreme Court has explained that free speech is paramount to American democracy.¹⁹⁰ Indeed, First Amendment defamation jurisprudence, which requires a showing of actual malice before any recovery for defamation of public figures,¹⁹¹ and a heightened requirement of “clear and present danger” before even speech inciting illegality can be curtailed, shows that the law has considered and chosen to make difficult tradeoffs to protect free speech. That notion should extend to the web, especially in light of its Supreme Court-recognized power to promote free expression.¹⁹²

Some commentators take issue with the free-rider problem that the *Zeran* system and Web 2.0 potentially entail: Companies like Google make money from other people’s content but do not have to pay for it in the form of liability or otherwise.¹⁹³ That problem, again, is not unique to the Web. Booksellers and phone companies, both of which enjoy relaxed liability standards for third party content, make money from third party content too.¹⁹⁴ The fact that that internet companies at this point still do not capture the full social value of their sites¹⁹⁵ and the that the web is still in its relative infancy effectively counter this potential free-rider problem.¹⁹⁶

190. See generally ERWIN CHEMERINSKY, CONSTITUTIONAL LAW: PRINCIPLES AND POLICIES 924-31 (3d ed. 2006).

191. See *N.Y. Times v. Sullivan*, 376 U.S. 254, 279-80 (1964).

192. See *Reno v. ACLU*, 521 U.S. 844, 870 (1997) (stating that online, “any person with a phone line can become a town crier with a voice that resonates farther than it could from any soapbox”).

193. See Siva Vaidhyanathan, *Me, “Person of the Year”? No Thanks*, MSNBC, Dec. 28, 2006, <http://www.msnbc.msn.com/id/16371425/> (“Google, for instance, only makes money because it harvests, copies, aggregates, and ranks billions of Web contributions by millions of authors who unknowingly grant Google the right to capitalize, or ‘free ride,’ on their work.”).

194. See Eugene Volokh, *Freedom of Speech and Information Privacy: The Troubling Implications of a Right to Stop People from Speaking About You*, 52 STAN. L. REV. 1049, 1074 (2000) (arguing, with respect to the free rider problem, that the fact that companies make money selling information about people without compensating them, “cannot be the justification for restricting speech, unless we are willing to dramatically redefine free speech law.”).

195. See Lemley, *supra* note 59, at 15; Assaf Hamdani, *Who's Liable for Cyberwrongs?*, 87 CORNELL L. REV. 901, 916-18 (2002) (“ISPs do not capture the full value of the conduct they are entrusted with policing.”).

196. Some commentators in fact convincingly argue just the opposite—that Google is offering too many services for free and thereby potentially hindering other online entrants. See, e.g., Tom Foremski, *The Limits of Google’s Limitless Business Model*, SILICONVALLEYWATCHER, May 15, 2006, http://www.siliconvalleywatcher.com/mt/archives/2006/05/part_1_the_limi.php; Michael Schrage, *Why Giveaways Are Changing the Rules of Business*, FT.COM, Feb. 6, 2006, <http://www.ft.com/cms/s/2/01e4b1a4->

IV. CONCLUSION

Even if they might have applied to Web 1.0, offline analogies and their corresponding liability systems tend to fall short in Web 2.0. Service providers are not like shop-owners, who logically should not face liability for libelous graffiti others put on the walls of their stores. Instead, in Web 2.0, providers sort the graffiti, encourage it, arrange it by category, make money by putting relevant ads next to it, and repackage and redistribute it for display on other shop's walls—instantly. What role § 230 and courts' broad interpretation of it has to this point played in bringing about the staggering growth of the Web and these kinds of services it is not totally clear—certainly it is not simple causation. Nevertheless, both in theory and in practice, as both economic theory and the cases to date demonstrate, the minimal interference scheme set forth in *Zeran* poses no significant hurdles to Web 2.0, in contrast to its alternatives.

9741-11da-82b7-0000779e2340.html (citing Google's bundling of email and other 'free' services and explaining that "[o]ne company's clever cross-subsidy is another's anti-competitive predatory pricing.").

STRANGER DANGER AND THE ONLINE SOCIAL NETWORK

By Richard M. Guo

*The Internet has opened new channels of communication and self-expression. Countless individuals use message boards, date matching sites, interactive social networks, blog hosting services and video sharing websites to make themselves and their ideas visible to the world. While such intermediaries enable the user-driven digital age, they also create new legal problems.*¹

I. INTRODUCTION

As poster children of the recent Web 2.0 movement, social networking services such as MySpace and Facebook redefine and change the way people—in particular, teenagers and young adults—interact. For example, many university campus organizations now advertise by sending invitations on Facebook instead of distributing paper fliers.² Advertising in this manner is quicker and cheaper. Moreover, invitees on Facebook can easily check which of their friends are attending a particular event, and accept or decline the invitation accordingly. Facebook has also found its way onto the dating scene. One undergraduate at the University of Michigan peruses the website when she has recently met a “cute guy.”³ She searches for his profile and gleans personal information such as what fraternity he is in and whether he is in a relationship.⁴

While the majority of online social network users frequent sites for these and other fairly innocent purposes, a nefarious few are beginning to infiltrate the sites in order to prey sexually on vulnerable youths. Although the problem of sexual predators over the Internet is not new (many predecessor services based on user developed content and communications have had similar problems), the sheer popularity and visibility of the online so-

© 2008 Richard M. Guo.

1. Fair Housing Council v. Roommates.com, LLC, 489 F.3d 921, 924 (9th Cir. 2007) (citations omitted).

2. Cristian Lupsa, *Facebook: A Campus Fad Becomes a Campus Fact*, CHRISTIAN SCIENCE MONITOR, Dec. 13, 2006, at 13.

3. Matt Marshall & Anna Tong, *University Students Network's Biggest Fans*, SEATTLE TIMES, Sept. 19, 2005, at E1.

4. *Id.*

cial networks has caused widespread concern among the public, media, and lawmakers. In recent years, several news reports have illustrated instances where predators have propositioned youths over the online social networks.⁵

This Note explores the problem of sexual predators over online social networks. Part II describes the Web 2.0 phenomenon, provides a background on online social networks, and describes the structure and privacy protections of the two leading services, MySpace and Facebook. Part III examines the problem of online sexual predators infiltrating social networking communities, and the legal framework governing the services. Part IV argues that the online social networks confer several potential benefits that are worth preserving, and that the current, largely self-regulatory environment provides sufficient incentives for online social networks to protect children and also allows services to innovate and thrive. This Note concludes that lawmakers should avoid wholesale changes that might restrict the core attributes of online social networks such as limiting user-controlled content and communication. Instead, legislation at both federal and state levels should supplement the efforts of social networks through narrowly tailored procedural solutions.

II. THE RISE OF WEB 2.0 AND THE SOCIAL NETWORKING SERVICES

A. Web 2.0

Following the burst of the dot-com bubble in 2001, many concluded the web and its related services and products were “overhyped.”⁶ However, this conclusion was overly broad. While many dot-com based products and services premised on unviable business models failed in 2001, many others survived. Learning from the failures and survivors, a new group of web services began springing up as early as 2003 and have prevailed. Industry expert and analyst Tim O’Reilly described these new services as participants of a movement he coined “Web 2.0.” As explained by O’Reilly, Web 2.0 embodies a set of core principles and practices that tie

5. See generally Pete Williams, MySpace, Facebook Attract Online Predators: Experts Say be Careful What You Post Online-Somebody is Always Watching, NBC NEWS, Feb. 3, 2006, <http://www.msnbc.msn.com/id/11165576/>; see also Kevin Poulsen, MySpace Predator Caught by Code, WIRED.COM, Oct. 16, 2006, <http://www.wired.com/science/discoveries/news/2006/10/71948>.

6. Tim O’Reilly, *What is Web 2.0? Design Patterns and Business Models for the Next Generation of Software*, O’REILLY, Sept. 30, 2005, <http://www.oreillynet.com/pub/a/oreilly/tim/news/2005/09/30/what-is-web-20.html?page=1>.

“a veritable solar system of sites that demonstrate some or all” of the following principles:

- 1) Services, not packaged software, with cost-effective scalability
- 2) Control over unique, hard-to-recreate data sources that get richer as more people use them
- 3) Trusting users as co-developers
- 4) Harnessing collective intelligence
- 5) Leveraging the long tail through customer self-service
- 6) Software above the level of a single device
- 7) Lightweight user interfaces, development models, AND business models⁷

Social networking services are part of the Web 2.0 movement because they embrace the second, third, and fourth principles. Indeed, user content and activities almost entirely drive online social networks. A site becomes “richer” as more people add content and use its services. Online social networks also harness the collective intelligence of their members in developing their sites. A service does not create the majority of its communities. Instead, the service’s users, through creating friendships, develop the bulk of communities that ultimately form the foundation of the social network.

B. Social Networking Services

1. Traits of the Social Networking Service

While the various social networking services offer different features, they build around two basic elements: the profile and the community.

A profile is a webpage that allows a user to aggregate and present her personal information, photos, web journals, favorite hyperlinks, and the like into one location.⁸ Users input information through web-based questionnaires.⁹ These questionnaires typically ask users to disclose descriptors

7. *Id.*

8. See generally David V. Richards, Note, Posting Personal Information on the Internet: A Case for Changing the Legal Regime Created by § 230 of the Communications Decency Act, 85 TEX. L. REV. 1321, 1323-1325 (2007) (characterizing such profiles as “digital dossiers”).

9. See Danah M. Boyd & Nicole B. Ellison, *Social Network Sites: Definition, History, and Scholarship*, J. COMPUTER-MEDIATED COMM. (2007), available at

such as interests, age, name, and location.¹⁰ Once filled out, web servers take the user-supplied answers and generate the backend webpage code for the profile. As a result, users with little or no programming skills can create and maintain profiles without difficulty.¹¹ While this type of feature is not novel, it is one of the keys that have allowed social networks to proliferate.¹²

Following the creation of a profile, a user is then able to enjoy the second basic element of an online social network, the community. Unlike web-based communities organized by interest such as public discussion forums, the communities of online social networks are primarily structured around people.¹³ Users create communities by linking their profiles with one another. This linking creates a “friendship” between any two users,¹⁴ and generally allows each user to access the other’s profile. Beyond the basic “friendship,” some services such as Facebook automatically create communities by linking users if they are related in other ways.¹⁵ Within communities, online social networks permit users to communicate in various ways. Most services employ commenting systems that allow a user to post messages directly on another user’s profile in her community.¹⁶ In addition to these commenting systems, services also include private messaging services that mimic e-mail.¹⁷ Users can send personal messages to each other directly from links contained on profiles.

The two largest social networks currently are MySpace and Facebook. The slightly older MySpace service has an estimated active user base of 115 million.¹⁸ MySpace is currently the most visited website in the United

<http://jcmc.indiana.edu/vol13/issue1/boyd.ellison.html> (stating that individuals fill out forms containing questions).

10. *Id.*

11. See Sameer Hinduja & Justin W. Patchin, Personal Information of Adolescents on the Internet: A Quantitative Content Analysis of MySpace, 31 J. ADOLESCENCE 125, 130 (2008).

12. See *id.*

13. Boyd & Ellison, *supra* note 9.

14. Although referred to here as a friendship relationship, Boyd and Ellison note that other terms such as contact or fan are also used to refer to such relationships. *Id.*

15. Some communities are based on geographic or institutional relationships. Facebook.com, About Facebook, <http://www.facebook.com/about.php> (last visited Dec. 21, 2007).

16. Boyd & Ellison, *supra* note 9.

17. *Id.*

18. Jon Swartz & Theresa Howard, *Facebook Plans to Offer Targeted Ads*, USA TODAY, Aug. 27, 2007, at B3, available at http://www.usatoday/money/advertising/2007-08-26-facebook_N.htm.

States.¹⁹ Facebook, started a year after MySpace, has experienced incredible growth, and estimates a membership of sixty million.²⁰

2. *MySpace*

MySpace began its service on August 15, 2003, and expanded quickly thereafter.²¹ One reason for the service's rapid growth is its openness. MySpace is premised on a model that encourages users to make friends with and view content from other users worldwide.²² Anyone can use MySpace as long as that person has an e-mail address and claims to be over the age of fourteen.²³ The service also makes, by default, a vast amount of its users' profiles accessible to anyone, including non-members.²⁴

MySpace users create profiles by filling out questionnaire-like web forms.²⁵ Users are then able to connect their profiles to those of other users and thereby form communities. MySpace profiles contain several informational sections, known as "blurbs." These include two standard blurbs: "About Me" and "Who I'd Like to Meet."²⁶ Users may supplement those blurbs with additional sections about their interests, general additional details, and other personal information.²⁷ MySpace profiles also incorporate several multimedia features.²⁸ For instance, users may post photos, music, videos, and web logs to their pages.²⁹

With respect to privacy, the default setting for older users is to leave their profiles viewable to anyone.³⁰ Prior to 2008, users who were fourteen

19. *Doe v. MySpace, Inc.*, 474 F. Supp. 2d 843, 845 (W.D. Tex. 2007).

20. Scott Spanbauer, *The Right Social Network for You*, PC WORLD, April 2008, at 106.

21. Brad Greenspan, *MySpace History*, FreeMySpace, <http://freemyspace.com/?q=node/13>.

22. Posting of Donna Bogatin to Insider Chatter by Donna Bogatin, *MySpace to Facebook: Our Friends Rule*, <http://blog.insiderchatter.com/2007/06/15/myspace-to-facebookour-friends-rule/> (June 15, 2007).

23. MySpace, *Terms & Conditions*, <http://www.myspace.com/index.cfm?fuseaction=misc.terms> (last visited Mar. 10, 2008).

24. *See* Bogatin, *supra* note 22.

25. *See* Larry Magid, *Turn On MySpace Privacy Features*, CBS NEWS, April 25, 2006, <http://www.pcanswer.com/articles/myspaceprivacy.htm>.

26. MySpace, *Profile Edit*, <http://www.myspace.com> (follow "Home"; then follow "Edit Profile") (last visited Apr. 16, 2008).

27. *Id.*

28. MySpace, *Home*, <http://home.myspace.com> (last visited Apr. 16, 2008) (featuring links and buttons for viewing and adding photos, music, videos, and web logs).

29. *Id.*

30. Brian Stelter, *MySpace Agrees To Youth Protections*, N.Y. TIMES, Jan. 14, 2008, <http://www.nytimes.com/2008/01/04/technology/14end-myspace.html>.

or fifteen had their profiles automatically restricted to their friends.³¹ In 2008, MySpace raised the age to eighteen.³² In terms of privacy control, MySpace provides a few options to restrict exposure of a user's profile, such as limiting access to only a user's friends.

3. Facebook

Facebook, the second largest social networking service, was founded by Mark Zuckerberg³³ in 2004.³⁴ Facebook originally restricted its site to college students by requiring users to register with e-mail addresses associated with their college institutions.³⁵ While this requirement resulted in slower growth for Facebook as compared to MySpace, it also allowed Facebook to create a controlled environment and develop "marketing cachet."³⁶ In 2006, the service ranked as one of the top "in things on campus" along with iPods and text messaging.³⁷ In that same year, Facebook elected to open its services to anyone thirteen years or older³⁸ with an e-mail address.³⁹ The move helped Facebook increase new memberships by 200,000 per day and caused average page views to swell to fifty-four billion each month.⁴⁰

Facebook, in contrast to MySpace, follows a "confirmed friendship" model that emphasizes users' "interact[ion] with their real friends, based on real relationships and the real world around them."⁴¹ In fostering this

31. *Id.*

32. *Id.*; Anne Barnard, *MySpace Agrees to Lead Fight to Stop Sex Predators*, N.Y. TIMES, Jan. 15, 2008, at B3, available at <http://www.nytimes.com/2008/01/15/us/15myspace.html>.

33. Posting of Sid Yadav to Mashable, Facebook—The Complete Biography, <http://mashable.com/2006/08/25/facebook-profile/> (Aug. 25, 2006, 09:28 AM PDT).

34. Spanbauer, *supra* note 20.

35. Yadav, *supra* note 32.

36. *MySpace, Facebook, and Other Social Networking Sites: Hot Today, Gone Tomorrow?*, KNOWLEDGE@WHARTON, May 3, 2006, <http://knowledge.wharton.upenn.edu/article.cfm?articleid=1463>.

37. Mike Snider, *iPods Knock Over Beer Mugs; College Kids Rank What's Most Popular*, USA TODAY, June 8, 2006, at D9, available at http://www.usatoday.com/tech/news/2006-06-07-ipod-tops-beer_x.htm.

38. Facebook, Customer Support | Facebook, <http://www.facebook.com/help.php?safety> (last visited Mar. 10, 2008).

39. About Facebook, *supra* note 15.

40. Daniel Lyons, *Party Crashers*, FORBES, Oct. 29, 2007, at 68, 70, available at <http://www.forbes.com/forbes/2007/1029/068.html>.

41. Posting of Donna Bogatin to Digital Markets, Facebook Talks "The Real Deal" In Exclusive Interview, <http://blogs.zdnet.com/micro-markets/?p=533> (Oct. 12, 2006).

model, Facebook authenticates its users⁴² and actively facilitates user privacy.⁴³

Like MySpace, Facebook utilizes web-based questionnaires that permit users to create profiles containing photos and hosts of information including interests, work history, academic background, and user favorites.⁴⁴ The service also allows users to quickly add multimedia, articles, applets, and other things found around the site and the internet.⁴⁵ Communities or “networks” over Facebook are characterized by a user’s relationships and also by the user’s geographic location and affiliation to certain institutions such as a university or employer.⁴⁶

With respect to privacy over the service as a whole, Facebook restricts profile views to only those within a user’s communities.⁴⁷ Thus, the service’s “networks” are fairly self-contained with most users having access to less than one-percent of the site’s total number of profiles.⁴⁸ Minors must join the communities of their educational institutions.⁴⁹

In terms of privacy control, Facebook permits its users to determine the privacy settings of nearly every aspect of their profiles.⁵⁰ Granting such control lets users individually decide the amount of information they wish to expose to their friends and to their geographic and institutional networks. For instance, Facebook allows a user to tell those at her school about her interests and activities, but at the same time to restrict avenues of contacting that user to only the user’s friends. Contrast this with

42. With respect to authenticating users, Facebook generally requires its users to register an e-mail address distributed by their school or workplace institutions prior to joining that institution’s community. With respect to communities based on region (such as for those living in the Los Angeles area), anyone with an e-mail can join. However, a user can only be registered in one region at a time. Changes to a user’s region are limited to every few months. As a result, most users will accurately choose the region that is most relevant to them. *Id.*

43. Facebook suggests that user authentication and granular privacy controls enhance real world relationships. *Id.*

44. Facebook.com, Facebook | Site Tour, <http://www.facebook.com/sitetour/profile.php> (last visited Mar. 7, 2008).

45. *Id.*

46. Users enter these geographic or institutional communities by joining networks. See Facebook.com, About Facebook, <http://www.facebook.com/about.php> (last visited Dec. 21, 2007).

47. *Protect Your Privacy*, *supra* note 30.

48. Posting of Donna Bogatin to Digital Markets, Facebook Follows MySpace: Online Predator Risks, <http://blogs.zdnet.com/micro-markets/?p=967> (Feb. 11, 2007).

49. Kim Komando, *Set Up a Safe Facebook Profile*, Komando.com, Feb. 2, 2008, <http://www.komando.com/kids/tip.aspx?id=4455>.

50. *Protect Your Privacy*, *supra* note 30.

MySpace, where limited privacy settings force members to choose either to expose their entire profiles or not.⁵¹ As a result, a MySpace user cannot publicly share certain portions of her profile while limiting more personal portions to her friends.

4. *The Benefits of Social Networks*

While the social networking phenomenon is relatively new, interest in this area of growth has resulted in various studies attempting to understand the effects of online social networks on their users. With respect to minors, a recent study notes that far from acting solely as online places to hang out,⁵² social networks provide younger users with valuable opportunities to express themselves and interact with their peers. These opportunities, in turn, help minors facilitate development of their identities, and refine their abilities to understand and interact with one another in healthy ways.⁵³ Researcher Danah Boyd, who did not take part in the aforementioned study but who was cited by its authors, explains that the “process of learning to read social cues and react accordingly is core to being socialized into a society.”⁵⁴ Part of this learning experience is played out by attempting to communicate an impression of oneself through a performance, getting feedback on that performance from peers, and then adjusting one’s approach accordingly to better relay the desired impression next time.⁵⁵ This process, defined as impression management, is “honed” through experience.⁵⁶ Online social networks provide an additional avenue for youths to further hone their impression management skills.⁵⁷ This is accomplished by permitting users to craft “digital bodies” through profiles and to display these “digital bodies” to peers.⁵⁸

Apart from aiding social development, services also facilitate the sharing of web links, pictures, and stories.⁵⁹ Such facilitation often helps users

51. See *id.*

52. Hinduja & Patchin, *supra* note 11 at 131.

53. *Id.*

54. Danah Boyd, *Why Youth (Heart) Social Network Sites: The Role of Networked Publics in Teenage Social Life*, in *YOUTH, IDENTITY, AND DIGITAL MEDIA* 119, 129 (David Buckingham ed., John D. & Catherine T. MacArthur Found. Series on Digital Media & Learning, 2007), available at <http://www.mitpressjournals.org/doi/pdf/10.1162/dmal.9780262524834.119>.

55. *Id.* at 128.

56. *Id.*

57. See *id.*

58. See *id.*

59. Hinduja & Patchin, *supra* note 11 at 131.

to “remain intimately connected with friends regardless of spatial distance.”⁶⁰

III. SOCIAL NETWORKING AND ONLINE SEXUAL PREDATORS

A. The Online Sexual Predator Problem

Social networks are generally aimed at allowing users to develop communities of friends, and at facilitating communication within those communities. Indeed, the majority of teens use social networks to accomplish that very goal: to keep in touch with friends.⁶¹ At the same time, social networks are also becoming forums where complete strangers meet.⁶² In most instances, innocent friendships develop out of these online encounters. However, an unfortunate byproduct of the widespread usage of these social forums has been the increased presence of online sexual predators.

An online sexual predator is someone who uses the internet to sexually exploit vulnerable individuals, typically under-aged youths.⁶³ Predators approach and solicit sex from one out of five online youths.⁶⁴ These solicitations are typically done methodically. Most predators turn to the topic of sex early on, usually within three or four message exchanges.⁶⁵ While the majority of teens appear to ignore such advances,⁶⁶ for some unprepared minors, such situations can “get out of hand very quickly.”⁶⁷ Predators,

60. *Id.*

61. See AMANDA LENHART & MARY MADDEN, PEW INTERNET & AM. LIFE PROJECT, TEENS, PRIVACY & ONLINE SOCIAL NETWORKS 31 (2007), http://www.pewinternet.org/pdfs/PIP_Teens_Privacy_SNS_Report_Final.pdf (reporting that ninety-one percent of teenagers use social networking sites to stay in touch with friends they see frequently, while eighty-two percent use the sites to stay in touch with friends they rarely see in person).

62. See generally Janet Kornblum, Meet My 5,000 New Best Pals ; Does ‘Friending’ on a Social Site Make those Relationships Real?, USA TODAY, Sept. 20, 2006, at D1, available at http://www.usatoday.com/tech/news/2006-09-19-friending_x.htm.

63. See generally M. Megan McCune, Comment, Virtual Lollipops and Lost Puppies: How Far Can States Go to Protect Minors Through the Use of Internet Luring Laws, 14 COMM.LAW CONSP. 503, 505-07 (2006) (discussing online sexual predators).

64. *Id.* at 508.

65. M. Jane Brady, Symposium: Prosecution Responses to Internet Victimization: Keynote Address: Prosecution Responses to Internet Victimization, 76 MISS. L.J. 623, 633 (2007).

66. A Pew survey reports that nearly 65% of teens ignore or delete contact from strangers. LENHART & MADDEN, *supra* note 61 at 34.

67. Brady, *supra* note 65.

once detecting vulnerability, often start grooming a minor into trusting them and thinking that they are friends.⁶⁸ The prime targets of predators are frequently “kids struggling with low self-esteem, or [those] that haven’t found a place to belong and spend enormous amounts of time in isolation sitting at a computer.”⁶⁹

During the years prior to the explosive expansion of social networks, most online sexual predators attempted to contact youths through chat rooms and message boards.⁷⁰ In recent years, however, predators are increasingly targeting minors over social networking services. Two factors have contributed to this shift.

Arguably the primary factor is the escalating popularity of online social networks among teenagers. More than fifty-five percent of all American teenagers use and post profiles on these services.⁷¹ The high number and high concentration of minors on both MySpace and Facebook, as one researcher describes, creates “target-rich environment[s]” for online sexual predators.⁷² While a recent survey reveals that the majority of teens restrict their profiles to only their friends, a sizable forty percent allows anyone to view their information.⁷³ As a result, many teens remain contactable by strangers. Sexual predators have taken notice of this circumstance and have begun attempting to infiltrate social networking communities.⁷⁴

The second factor involves the content that minors post on social networking profiles. Many members of social networks post seemingly trivial, yet significant, information such as their city of residence, age, and personal preferences.⁷⁵ Sexual predators often exploit this precise information to establish rapport with and acquire the trust of their victims.⁷⁶

68. Chris Cobbs, *Dangers of Online Networking; Protecting Kids From Predators; More and More Children Hang Out on Social-Network Sites—So Do Predators*, ORLANDO SENTINEL, April 6, 2006, at A1.

69. *Id.*

70. In a report on online victimization by the Crimes Against Children Research Center in 2000, it was found that 65% of sexual solicitations of youths occurred in chat rooms. See DAVID FINKELHOR ET AL., *CRIMES AGAINST CHILDREN RES. CTR., ONLINE VICTIMIZATION: A REPORT ON THE NATION’S YOUTH 4* (2000), http://www.missingkids.com/en_US/publications/NC62.pdf; see also McCune, *supra* note 63.

71. See LENHART & MADDEN, *supra* note 61 at 11.

72. See Cobbs, *supra* note 68 (quoting Secret Service special agent James Glending as stating that predators, “go to these [social-networking] sites because they are a target-rich environment.”) (alteration in original).

73. LENHART & MADDEN, *supra* note 61 at 26.

74. See Cobbs, *supra* note 68.

75. LENHART & MADDEN, *supra* note 61 at 18.

76. Stephen T. Watson, *Online Site for Teens to Improve Security*, BUFFALO NEWS, March 5, 2006, at B1.

While both MySpace and Facebook have taken measures to enhance site safety and prevent sexual predators from browsing their sites, the improved sophistication of today's sexual predators⁷⁷ has meant that some have been able to get onto the sites and solicit minors. In some of these instances, victims and their parents have initiated civil actions against the social networking services. However, for the most part, social networking services are shielded from liability by the provisions of the Communications Decency Act.

B. The Regulatory Framework

1. *Social Networking and the Communications Decency Act*

a) The Communications Decency Act

The Communications Decency Act ("CDA"), Title V of the larger Telecommunications Act of 1996⁷⁸, attempted to regulate offensive material such as pornography over the internet.⁷⁹ In enacting the CDA, Congress chose to grant immunity to Internet Service Providers (ISPs) with regard to third-party usage in two key respects. Section 230(c)(1)⁸⁰ grants immunity to any "provider or user of an interactive computer service" from liability stemming from information "provided by another information content provider."⁸¹ Section 230(c)(2) limits liability for a provider that removes or edits offensive content.⁸² Together, these provisions remove liability concerns that might create a disincentive for a service provider to monitor its website.⁸³

77. In the past, predators roamed largely open message boards and chat rooms. As a consequence, much of an online sexual predator's conversations with a minor unfolded in public. This allowed law enforcement to much more effectively monitor and hunt predators. However, today, most sexual predators conduct communications outside of public view. Although predators might make their own social networking profiles public, they generally avoid detection by sticking to private messages and hiding any comments posted by their potential victims from public view. *See* Poulsen, *supra* note 5.

78. Pub. L. No. 104-104, 110 Stat. 56 (codified throughout 47 U.S.C. (1996)).

79. Ken S. Myers, *Wikimmunity: Fitting the Communications Decency Act to Wikipedia*, 20 HARV. J. LAW & TECH. 163, 172 (2006).

80. Section 230(c) is also known as the Good Samaritan provision. 47 U.S.C. § 230(c) (2000).

81. 47 U.S.C. § 230 (2000).

⁸² 47 U.S.C. § 230(c)(2) (2000).

83. 47 U.S.C. § 230(c)(2) (2000); *see* Jae Hong Lee, Note, *Batzel v. Smith & Barrett v. Rosenthal: Defamation Liability for Third-party Content on the Internet*, 19 BERKELEY TECH. L.J. 469, 472-73 (2004); *see* Myers, *supra* note 79 at 172.

Section 230 was enacted to directly address the problematic and odd situation created by *Stratton Oakmont, Inc. v. Prodigy Services, Co.*,⁸⁴ a New York state court decision. In that case, an investment banking firm, Stratton Oakmont, sued Prodigy over statements made by an unidentified poster over Prodigy's "Money Talk" message board.⁸⁵ The plaintiffs alleged that Prodigy was liable as the "publisher" of the statements.⁸⁶ The plaintiffs supported their view by pointing to statements made by Prodigy "likening itself to a newspaper."⁸⁷ The court ultimately sided with the plaintiffs. In its opinion, the court concluded that Prodigy's use of "technology and manpower" to delete offensive material demonstrated that the service "controlled decisions as to content" in a manner that warranted publisher liability.⁸⁸ The court noted that the benefits gained by Prodigy through asserting editorial control also subjected Prodigy to greater liability.⁸⁹

For ISPs, *Stratton* produced a strong disincentive to monitor and remove offensive material from their sites.⁹⁰ Should a website decide to monitor third party content and unknowingly allow the posting of unlawful material, that website would be held strictly liable as a publisher.⁹¹ However, if the same website elected not to monitor at all, a court would categorize the site as a distributor and determine liability based on a negligence standard.⁹² As a consequence, electing to monitor one's site after *Stratton* actually increased the prospect of liability for ISPs.⁹³

b) Subsequent Treatment of Section 230

In the years since the passage of the CDA, courts adjudicating Section 230 defenses have often looked to Congress's policy goals⁹⁴ for enacting the provision:

84. *Stratton Oakmont, Inc. v. Prodigy Servs. Co.*, 1995 N.Y. Misc. LEXIS 229 (N.Y. Sup. Ct. May 25, 1995).

85. *Id.* at *3.

86. *Id.* at *3.

87. *Id.* at *3-4.

88. *Id.* at *10.

89. *Id.* at *13.

90. Lee, *supra* note 83, at 472-73; Myers, *supra* note 79 at 172.

91. See Lee, *supra* note 83 at 472.

92. *Id.* at 470.

93. Cecilia Ziniti, Comment, *The Optimal Liability System for Online Service Providers: How Zeran v. America Online Got it Right and Web 2.0 Proves It*, 23 BERKELEY TECH. L.J. 583.

94. See Carafano v. Metrosplash.com, Inc., 339 F.3d 1119, 1123 (9th Cir. 2003); see *Zeran v. Am. Online, Inc.*, 129 F.3d 327, 331 (4th Cir. 1997); see *Doe v. Bates*, 2006 U.S. Dist. LEXIS 93348, at *8-9 (E.D. Tex. Dec. 27, 2006).

- 1) to promote the continued development of the Internet and other interactive computer services and other interactive media;
- 2) to preserve the vibrant and competitive free market that presently exists for the Internet and other interactive computer services, unfettered by Federal or State regulation;
- 3) to encourage the development of technologies which maximize user control over what information is received by individuals, families, and schools who use the Internet and other interactive computer services;
- 4) to remove disincentives for the development and utilization of blocking and filtering technologies that empower parents to restrict their children's access to objectionable or inappropriate online material; and
- 5) to ensure vigorous enforcement of Federal criminal laws to deter and punish trafficking in obscenity, stalking, and harassment by means of computer.⁹⁵

In light of these goals, courts have generally construed immunity under § 230 broadly. In terms of the range of internet services qualifying for immunity, courts have found § 230 “quite robust” with a “relatively expansive definition of ‘interactive computer service’ and a relatively restrictive definition of ‘information content provider.’”⁹⁶ Accordingly, most internet services meet the requirements for an interactive computer service. In terms of scope of protection from tort liability, most courts follow the Fourth Circuit’s holding in *Zeran v. America Online, Inc.*, a decision that found that the CDA removes the “specter of tort liability” for internet intermediaries in relation to third party content.⁹⁷ In that case, the Fourth Circuit reasoned broad immunity was required because the imposition of tort liability on service providers would create a form of government regulation on speech that Congress expressly wanted to minimize.⁹⁸

c) *Doe v. MySpace*

Congress designed Section 230 of the CDA during an era when the internet was burgeoning, and civil actions seriously threatened to curb online service providers. Section 230 allowed websites to develop without

96. *Carafano v. Metrosplash.com, Inc.*, 339 F.3d 1119, 1123 (9th Cir. 2003).

97. *Zeran v. Am. Online, Inc.*, 129 F.3d 327, 331 (4th Cir. 1997).

98. *Id.*

fear of civil liability by granting immunity to the websites in legal actions stemming from content posted by service users.

Social networking services gained mainstream popularity more than half a decade after the CDA's passage. In 2007, the Western District of Texas squarely considered whether and to what extent online social networks qualified for protection under the CDA.⁹⁹

In *Doe v. MySpace, Inc.*, the anonymous plaintiff, "Julie Doe," created a MySpace profile despite being only thirteen years old.¹⁰⁰ When she joined the website, Doe lied about her age and reported that she was in fact eighteen.¹⁰¹ Peter Solis, a nineteen year-old man, later contacted Doe over the website and eventually, Doe provided Solis with her telephone number.¹⁰² The two communicated over the telephone for several weeks before arranging to meet.¹⁰³ During the meeting, Solis allegedly sexually assaulted Doe.¹⁰⁴ Doe, along with her mother,¹⁰⁵ sued MySpace, claiming that the social network negligently failed "to take reasonable safety measures to keep young children off of its site."¹⁰⁶ MySpace moved to dismiss the lawsuit, asserting immunity under the Communications Decency Act.¹⁰⁷ The court ultimately found for MySpace and dismissed the case.¹⁰⁸

The court considered MySpace's Section 230(c)(1) defense by first noting that neither party contested MySpace's role as an "interactive computer service," requisite for immunity under the CDA.¹⁰⁹ After making this observation, the court examined to what extent Julie Doe and the online sexual predator qualified as "information content providers" for the purposes of Section 230(c)(1). With little discussion, the court held that both parties clearly qualified as information content providers with respect to their MySpace communications.¹¹⁰ Having settled these two requirements for Section 230(c)(1) applicability, the court subsequently spent the bulk of its analysis focused on the proper scope for CDA immunity, and whether the cause of action was rooted in MySpace's role as a publisher

99. *Doe v. MySpace, Inc.*, 474 F. Supp. 2d 843, 845 (W.D. Tex. 2007).

100. *Id.* at 846.

101. *Id.*

102. *Id.*

103. *Id.*

104. *Id.*

105. Citizen Media Law Project, *Doe v. MySpace*, <http://www.citmedialaw.org/doe-v-myspace> (last visited Oct. 26, 2007).

106. *Doe v. MySpace, Inc.*, 474 F. Supp. 2d 843, 849 (W.D. Tex. 2007).

107. *Id.* at 846.

108. *Id.* at 852.

109. *Id.* at 846.

110. *Id.* at 846-47.

(the third requirement for a Section 230(c)(1) defense) with respect to Doe and Solis's communications. Specifically, the court examined the plaintiffs' arguments: (1) that CDA immunity did not apply in the case because it was applicable only to defamation or related actions, and (2) that the cause of action was "not based on MySpace's posting of third-party content [anyway], but rather on MySpace's failure to institute safety measures to protect minors."¹¹¹

In reviewing the plaintiffs' first argument limiting CDA immunity to defamation or related actions, the court examined the policy underlying Section 230 and case law subsequent to the Section's enactment.¹¹² The court found that the CDA was intended to promote "the continued development of the Internet and other interactive computer services,"¹¹³ and that courts dealing with Section 230 questions developed an expansive interpretation of its immunity provisions. Citing *Zeran*, the court rejected the plaintiffs' argument for a narrow interpretation of Section 230 and held that the CDA "creates a federal immunity to any cause of action that would make service providers liable for information originating with a third-party user of the service."¹¹⁴ The court further noted that courts in the past had granted Section 230 immunity against claims involving negligence, "negligence per se, intentional infliction of emotion distress, invasion of privacy, civil conspiracy," distribution of child pornography, and the Maryland Commercial Electronic Mail Act.¹¹⁵

Turning to the plaintiffs' assertion that their cause of action was based on MySpace's failure to institute safety measures and not in the site's capacity as a publisher, the court rejected the plaintiffs' stance and found that the claims were, despite artful pleading on the plaintiffs' part, directed toward MySpace in the service's "publishing, editorial, and/or screening capacities."¹¹⁶ The court explained:

It is quite obvious the underlying basis of Plaintiffs' claims is that, through postings on MySpace, Pete Solis and Julie Doe met and exchanged personal information which eventually led to an in-person meeting and the sexual assault of Julie Doe. If MySpace had not published communications between Julie Doe and Solis, including personal contact information, Plaintiffs as-

111. *Id.* at 849.

112. *Id.* at 846-49.

113. *Id.* at 847.

114. *Id.* at 848.

115. *Id.* at 849.

116. *Id.* at 849.

sert they never would have met and the sexual assault never would have occurred.¹¹⁷

Having found that MySpace met the requirements to qualify for immunity under Section 230(c)(1), the court absolved the service of liability.

In addition to applicability of Section 230(c)(1), the court also concluded that MySpace was exempted from liability under the CDA's provisions immunizing sites that make "efforts to self-regulate material."¹¹⁸ Referencing Section 230(c)(2)(A), the court wrote:

This section reflects Congress's recognition that the potential for liability attendant to implementing safety features and policies created a disincentive for interactive computer services to implement any safety features or policies at all. To the extent Plaintiffs seek to hold MySpace liable for ineffective security measures and/or policies relating to age verification, the Court alternately finds such claims are barred under § 230(c)(2)(A).¹¹⁹

After finding that MySpace was not liable under federal law, the court further found that the social networking service was not liable under Texas law either. The court began its analysis by observing that claims of negligence and gross negligence require the existence of an affirmative duty.¹²⁰ Since, as a general matter, "a person has no legal duty to protect another from the criminal acts of a third person or control the conduct of another," the court examined whether a special relationship between MySpace and the fourteen year-old plaintiff existed.¹²¹ In the end, the court found no special relationship.¹²² The court placed considerable weight on the fact that the plaintiff had lied about her age, communicated with an adult, and published her personal information.¹²³ The court explained that:

To impose a duty under these circumstances for MySpace to confirm or determine the age of each applicant, with liability resulting from negligence in performing or not performing that duty, would of course stop MySpace's business in its tracks and close this avenue of communication, which Congress in its wisdom has decided to protect.¹²⁴

117. *Id.*

118. *Doe v. MySpace, Inc.*, 474 F. Supp. 2d 843, 850 (W.D. Tex. 2007).

119. *Id.*

120. *Id.*

121. *Id.*

122. *Id.*

123. *Id.*

124. *Id.* at 851.

Further, while the court acknowledged that premises owners had a duty to protect persons injured on their premises in certain situations, it declined to extend such a duty to ISPs and, in particular, to a defendant that “provide[d] its service to users for free.”¹²⁵

As a result of the court’s holdings, MySpace was absolved from liability under the CDA and also under Texas law. The *MySpace* decision is significant because it directly considers Section 230’s applicability with respect to social networking services. While not mandatory authority for future courts, it is likely to be influential. Although some critics argue that the decision’s broad application of Section 230 makes online social networks unaccountable for bad behavior,¹²⁶ services are likely to act responsibly due to other external pressures.¹²⁷

2. *Other Federal and State Laws and Current Proposals on Online Social Network Regulation*

While the *MySpace* court wrestled with the applicability and scope of section 230 immunity with respect to sexual predator cases involving online social networks, Congress and state legislatures proposed several measures specifically aimed at protecting minors over social networking sites. Several recent proposals address this issue by: (1) restricting child access to online social networks at institutions receiving government funding, (2) requiring sex offenders to register online identities and addresses, and (3) requiring minors to receive parental consent before accessing social networking services.

a) *Restricted Access to Social Networks in Government Funded Institutions*

The Deleting Online Predators Act of 2007 (DOPA II) seeks to restrict child access to online social networks at institutions receiving government funding.¹²⁸ In July 2006, the House of Representatives passed the bill’s forerunner, the Deleting Online Predator Act of 2006 (DOPA I); but the bill did not become law because it stagnated in the Senate.¹²⁹ DOPA II

125. *Id.*

126. See Texas District Court Extends § 230 Immunity to Social Networking Sites—*Doe v. MySpace, Inc.*, 474 F. Supp. 2d 843 (W.D. Tex. 2007), 121 HARV. L. REV. 930 (2008).

127. See *infra* Part IV.

128. H.R. 1120, 110th Cong. (1st Sess. 2007); see also Eric Goldman, *Social Networking Sites and the Law*, TECHNOLOGY & MARKETING LAW BLOG, May 2007, <http://www.ericgoldman.org/Resources/socialnetworkingsitesandthelaw.pdf>.

129. Jacqui Cheng, *Deleting Online Predators Act Reappears for 2007*, ARS TECHNICA, Feb. 16, 2007, <http://arstechnica.com/news.ars/post/20070216-8869.html>.

would require schools receiving e-rate federal funding to prohibit access to commercial social networking websites and chat rooms unless those institutions use the services for an educational purpose under adult supervision.¹³⁰ The bill would also require libraries receiving e-rate federal funding to prevent minors without parental authorization from accessing the aforementioned services.¹³¹ The definition of what constitutes a “social networking website” under the provisions of the bill is still unsettled.¹³² The bill requires the creation of a definition within 120 days of enactment.¹³³ In developing the definition, the bill requires consideration of the extent to which a website:

- (i) is offered by a commercial entity;
- (ii) permits registered users to create an on-line profile that includes detailed personal information;
- (iii) permits registered users to create an on-line journal and share such a journal with other users;
- (iv) elicits highly-personalized information from users; and
- (v) enables communication among users¹³⁴

Supporters of DOPA II feel that the bill is necessary because “with the explosive growth of trendy chat rooms and social networking websites, it is becoming more and more difficult to monitor and protect minors from those with devious intentions, particularly when children are away from parental supervision.”¹³⁵ Moreover, supporters note that the DOPA II does not create an outright ban of social networks and would allow children to use social networks under certain circumstances.¹³⁶

Critics of DOPA II, however, fear that the bill might create an overly broad definition of a social network, and prevent access to “truly helpful and educational sites.”¹³⁷ For example, critics fear that DOPA II may re-

130. H.R. 1120, 110th Cong. (1st Sess. 2007); *see also* Posting of Andy Carvin to Learning.now, Lifting the Hood on DOPA Jr., http://www.pbs.org/teachers/learning.now/2007/01/lifting_the_hood_on_dopa_jr.html (Jan. 26, 2007).

131. H.R. 1120, 110th Cong. (1st Sess. 2007).

132. *Id.*

133. *Id.*

134. *Id.*

135. *Id.*

136. *See* Carvin, *supra* note 130.

137. Cheng, *supra* note 129.

strict websites such as Wikipedia and Amazon.¹³⁸ Consequently, critics are concerned that some children who lack access to the internet at home might miss out on “an extended sphere of contacts.”¹³⁹ Moreover, while DOPA II permits schools and libraries to allow access to social networks, some critics argue that most schools and libraries would simply “lock down their computers” and “walk away.”¹⁴⁰ In addition, adult supervisors such as teachers who wish to use social networks for educational purposes might be dissuaded by increased scrutiny and pressure.¹⁴¹

b) Registration of Sex Offender Online Identities

With respect to the second category of proposals, which requires sex offenders to disclose online identities, Virginia became the first state to enact such a proposal when it recently passed a bill requiring sex offenders to register e-mail addresses and screen names.¹⁴² Legislators envision that the state will use the collected information to build a database accessible to website operators for the purpose of locating registered sex offenders on their sites.¹⁴³

At the federal level, the Keeping the Internet Devoid of Sexual Predators Act (KIDS),¹⁴⁴ introduced by U.S. Senators Charles E. Schumer and John McCain, parallels the Virginia statute by requiring “registered sex offenders to submit e-mail addresses, instant message addresses or other identifying internet information to law enforcement to be placed on the National Sex Offender Registry.”¹⁴⁵ Commercial social networking sites would then have access to this information to prevent registered sex offenders from using their services.¹⁴⁶

138. *Id.*

139. Interview by Sarah Wright with Henry Jenkins, Director of the Comparative Media Studies Program at M.I.T., and Danah Boyd, Ph.D. Student at U.C. Berkeley School of Information, conducted via e-mail (May 26, 2006), <http://www.danah.org/papers/MySpaceDOPA.html>. While Jenkins and Boyd discuss DOPA I, their concerns are also applicable to DOPA II.

140. *Id.*

141. *Id.*

142. H.B. 2749, 2007 Sess. (Va. 2007); VA. CODE ANN. § 9.1-903 (2007).

143. Kevin Fayle, *Understanding the Legal Issues for Social Networking Sites and Their Users*, FINDLAW, 2007, <http://technology.findlaw.com/articles/00006/010966.html>.

144. S. 431, 110th Cong. (1st Sess. 2007).

145. Press Release, Press Office of U.S. Senator John McCain, Senators McCain and Schumer Introduce KIDS Act of 2007 (Jan 30, 2007), http://mccain.senate.gov/public/index.cfm?FuseAction=PressOffice.PressReleases&ContentRecord_id=B81BC365-6A58-4425-B170-99E85F0E85D4.

146. Jennifer Parker, *Congress, MySpace Team Up to Fight Sexual Predators*, ABC NEWS, January 30, 2007, <http://abcnews.go.com/Politics/story?id=2835135&page=1>.

Supporters of such measures argue that sexual predators “have no business joining social networking communities,” and need to be kept out of the “online neighborhoods” that children frequent.¹⁴⁷ Critics, however, argue the proposal would do little to directly prevent a sexual predator from soliciting minors.¹⁴⁸ The anonymity of the internet and the ease in which it allows people to create multiple e-mail addresses, they contend, make it easy for a sexual predator to avoid detection and infiltrate online social networks with unregistered identities.¹⁴⁹

c) Age Verification

Finally, the third category of proposals would require minors to obtain parental consent and have their age verified prior to using social networking services. The North Carolina State Senate incorporated such a requirement in a bill introduced in 2007.¹⁵⁰ The requirement, which was ultimately removed while the bill was being considered in the North Carolina State House of Representatives,¹⁵¹ required online social networks to verify parental identity and age¹⁵² before allowing minors site access. While the requirement did not specify how sites would verify parental consent and age, one proposed method included using public records to check a parent’s identity, and then later placing a follow up phone call or postcard to confirm parental approval and the minor’s age.¹⁵³

Advocates for such verification proposals argue that requiring parental consent and age verification at least will give parents the chance to see what their children post.¹⁵⁴ Critics, however, counter that requiring parental approval creates an “ineffective and unworkable” solution in the long run, pointing out that parental approval and an age-verification system

147. *Senators Introduce KIDS Act of 2007*, GOVERNMENT TECHNOLOGY, Feb. 1, 2007, <http://www.govtech.com/gt/articles/103705>.

148. *See Editorial: KIDS Act of 2007*, CALIFORNIA AGGIE, Feb. 8, 2007, <http://media.www.californiaaggie.com/media/storage/paper981/news/2007/02/08/Opinion/Editorial.Kids.Act.Of.2007-2706532.shtml>; *see also* Catherine Rampell, *Registry May Soon Add Sex Offenders’ Web IDs*, WASH. POST, Dec. 15, 2007, at D02, *available at* <http://www.washingtonpost.com/wp-dyn/content/article/2007/12/14/AR2007121401734.html> (quoting Law Professor David Filler).

149. *See* Rampell, *supra* note 148.

150. S. Res. 132, Sess. 2007 (N.C. 2007) (edition 3); *see also* Fayle, *supra* note 143.

151. *See* S. Res. 132, Sess. 2007 (N.C. 2007) (edition 4).

152. S. Res. 132, Sess. 2007 (N.C. 2007) (edition 3).

153. *See* Press Release, North Carolina Department Of Justice, Protecting Children from Sexual Predators: SB 132 (July 24, 2007), <http://www.ncdoj.com/DocumentStreamerClient?directory=WhatsNew/&file=S132%20Summary%20final.pdf>.

154. *Id.*

would be difficult to implement technically.¹⁵⁵ In addition, a parental verification requirement, critics assert, would make the internet less safe by creating a false sense of security.¹⁵⁶

3. *Self-Regulation Through Initiatives and Technical Safety Mechanisms*

The CDA, in theory, creates an environment where social networks can routinely ignore concerns regarding offensive content. Such a theory seems plausible because the CDA removes tort liability, and thus eliminates a strong incentive to patrol one's site. While such a scenario might conceivably occur in environments where governments are the sole regulators, in the case of safety over social networks, the existence of other external forces creates a strong incentive for services to monitor their sites and enhance safeguards.

Specifically, media attention and public pressure continuously remind the social networks that they must be extra mindful of the sexual predator problem. Over the past two years, the media has detailed several incidents where sexual predators targeted minors over the online social networks. For example, in 2006, journalist Kevin Poulsen conducted an investigative report that helped law enforcement apprehend a thirty-nine year old convicted sex offender who had been using MySpace to contact and proposition a fourteen-year-old teen.¹⁵⁷ Reports like Poulsen's have created public concern¹⁵⁸ that in turn has caused many online social networks to carefully examine their services and act towards creating safer environments for their members.

155. Posting of Braden Cox to Netchoice, *The Achilles Heel of Social Networking Age Verification in the Tar Heel State*, http://blog.netchoice.org/2007/05/the_achilles_he.html (May 15, 2007).

156. *Id.*

157. *See* Poulsen, *supra* note 5.

158. Such concern had prompted some state attorney generals to initially use the threat of litigation to push social networks to enhance site safety. Currently, however, a situation has developed where state attorney generals and the social networks are operating in a cooperative manner to combat the danger of online sexual predators. *See* Brad Stone, *States Fault MySpace on Predator Issues*, N.Y. TIMES, May 15, 2007, at C2, available at <http://www.nytimes.com/2007/05/15/technology/15myspace.html>; *see also* Catherine Louisa Glenn, Note, *Protecting Health Information Privacy: The Case for Self-Regulation of Electronically Held Medical Records*, 53 VAND. L. REV. 1605, 1631-32 (2000) (discussing how the threat of liability makes self-regulation more effective); Juan Carlos Perez, *Facebook, MySpace Join NY AG in Pushing E-safety Bill*, INFOWORLD, Jan. 29, 2008, http://www.infoworld.com/article/08/01/29/NY-AG-pushes-e-safety-bill-Facebook-MySpace-back-it_1.html.

Generally, safety initiatives are directed at improving public awareness, enhancing complaint intake and monitoring, and improving safety through technical means.

a) Non-Technical Initiatives

With respect to improving awareness, both MySpace and Facebook have taken steps to improve public consciousness of the online predator issue. MySpace, for instance, recently started displaying public-service announcements on its website promoting safe online practices.¹⁵⁹ Facebook, in an agreement with the New York State Attorney General, began disclosing information about the site's safety measures, and also issued sterner warnings about the dangers of online sexual predators.¹⁶⁰ Facebook's chief security officer Chris Kelly recently described educational initiatives as the best way to protect minors in online communities.¹⁶¹

Both MySpace and Facebook have also made directed efforts at improving their procedures for locating and handling problematic profiles. Facebook, also in its agreement with the New York Attorney General, has implemented monitoring guidelines that include making it easier for users to complain about problematic profiles and addressing user complaints within twenty-four hours.¹⁶² MySpace, for its part, allocates a third of its customer service force to monitoring for and removing problematic profiles.¹⁶³ The service has also taken steps to strengthen coordination with law enforcement including establishing a twenty-four hour hotline.¹⁶⁴

b) Technical Safety Mechanisms

In addition to the aforementioned initiatives, MySpace and Facebook have implemented technical safety mechanisms. These mechanisms come in the form of additional, independent safety measures as well as in the form of safeguards developed through site design.

159. Maria Newman, *Internet Site Hires Official To Oversee Users' Safety*, N.Y. TIMES, April 12, 2006, at 3, available at <http://www.nytimes.com/2006/04/11/technology/11cnd-myspace.html>.

160. *Facebook Agrees to Police For Predators, Content*, NORTH COUNTRY GAZETTE, Oct. 16, 2007, http://www.northcountrygazette.org/news/2007/10/16/facebook_agrees/.

161. Erica Ogg, *RSA Panel Addresses Net Threats to Children*, NEWS.COM, Feb. 7, 2007, http://www.news.com/2100-7348_3-6157399.html.

162. Facebook Agrees to Police for Predators, Content, *supra* note 160.

163. Jenn Shreve, *MySpace Faces a Perp Problem*, WIRED.COM, April 18, 2006, <http://www.wired.com/news/culture/0,70675-0.html>.

164. January W. Payne, *Invitation to Harm; Some Minors Find MySpace.com a Hospitable Home for Traffic in Illegal Pills and Promotion of Self-Destructive Behaviors*, WASHINGTON POST, July 4, 2006, at F01, available at <http://www.washingtonpost.com/wp-dyn/content/article/2006/07/03/AR2006070300788.html>.

MySpace has added several technical safety mechanisms independent of their social networking system. In late 2006, the website announced the development of an automated system that would compare user profiles to a database containing the names and physical descriptions of convicted sex offenders.¹⁶⁵ The system is currently in operation. A recent report shows the system has helped MySpace find and remove more than 29,000 sex offender profiles.¹⁶⁶ Aside from this major initiative, MySpace is planning to make monitoring software available to users' parents. The software, currently in testing,¹⁶⁷ operates from a user's personal computer and provides her parent with the user's profile name, reported age, and location. Such information, MySpace's chief security officer Hemanshu Nigam notes, helps parents validate their children's self-reported information and determine whether too much personal information is being revealed.¹⁶⁸ Nigam further explains that the age validation feature is of particular importance because many of MySpace's technical safety features are built around age.¹⁶⁹

MySpace also incorporates safety measures into the design of their system. For example, as mentioned previously, MySpace limits access to profiles of users under eighteen.¹⁷⁰ Moreover, users that are eighteen and over are blocked from contacting a fourteen or fifteen year old user unless they can verify that user's last name and e-mail address.¹⁷¹

Facebook incorporates many of its protections through the design of its service. As previously mentioned, member profiles, unlike those in MySpace, are viewable only to a user's friends and those within a user's institutional or geographic networks. Such a design decision reduces the number of strangers granted access to any given profile from the outset of

165. The database maintains information on the United States' 550,000 registered sex offenders, and is maintained by ID verification firm Sentinel. Robert Lemos, *MySpace Teams to Create Sex-Offender Database*, SECURITYFOCUS, Dec. 5, 2006, <http://www.securityfocus.com/news/11428>.

166. Audrey Barrick, *29,000 MySpace Sex Offenders Removed*, CHRISTIAN POST, July 25, 2007, http://www.christianpost.com/article/20070725/28604_29,000_MySpace_Sex_Offenders_Removed.htm.

167. MySpace.com, ParentCare Beta, <http://myspace.com/parentcare> (last visited Dec. 18, 2007).

168. Caroline McCarthy, *MySpace Developing Parental-Notification Software*, NEWS.COM, Jan. 17, 2007, http://www.news.com/MySpace-developing-parental-notification-software/2100-1032_3-6150824.html?tag=item.

169. *Id.*

170. Stelter, *supra* note 32.

171. Jessica S. Gropp, Comment, *A Child's Playground or a Predator's Hunting Ground?-How To Protect Children on Internet Social Networking Sites*, 16 COMMLAW CONSPECTUS 215, 238-39 (2007).

that profile's creation. While such a distinction might seem trivial because MySpace already limits access to the profiles of minors, consider situations such as that of the plaintiff in *MySpace* who had lied about her age. For those minors, Facebook's design at least provides a bit more protection.

In addition to greater structural privacy protections, Facebook also gives its users enormous control in tweaking their privacy settings. Facebook's design choices, in this respect, permit users to very precisely select an appropriate level of information disclosure for each group of possible profile viewers. As a result, Facebook users are not faced with an all or nothing proposition in terms of profile information dissemination. Such privacy control comes in handy when a minor wants to reveal her interests and favorites to her friends, but not to the stranger living across town.

Along with aiding in curbing the unwanted proliferation of information, Facebook also makes it much more difficult to access minor-populated communities. High school aged students can only sign up by either using a school-issued e-mail or through invitation.¹⁷² After registration, Facebook associates the profiles of these students with their high school networks, and makes their profiles private to non-network members. For minors this is generally not a great issue because most minors use online social networks to interact with people that they personally know offline anyway.¹⁷³ Users without an invitation¹⁷⁴ or school issued e-mail address are not allowed access to the high school networks. As a result, Facebook creates a virtual boundary that helps prevent online sexual predators from locating and contacting minors.

Lastly, Facebook actively uses "algorithms [to] detect possibly problematic situations."¹⁷⁵ Algorithms, for example, flag users that make "too many friend requests to members younger than [eighteen], [who have] denials of friend requests and [who have] reports of inappropriate photos."¹⁷⁶

172. Ogg, *supra* note 161.

173. See Amanda Lenhart & Mary Madden, Pew Internet & Am. Life Project, Social Networking Websites and Teens: An Overview 2 (2007), http://www.pewinternet.org/pdfs/PIP_SNS_Data_Memo_Jan_2007.pdf.

174. In order to join a high school network through invitation, people within the network will need to accept a friend request from the user wanting to join the network and check that the requestor attends the high school in question. Facebook notes that sometimes more than one friend is required to confirm network status. Facebook.com, Networks and Network Pages, <http://www.facebook.com/help.php?page=2> (last visited Dec. 18, 2007).

175. Ogg, *supra* note 161.

176. *Id.*

IV. DISCUSSION

The rich experiences available to minors over social networks are worth preserving despite potential dangers. In order to maintain such experiences and at the same time offer safer environments, lawmakers should retain the current legal regime and permit the services to spearhead safety efforts through self-regulatory means.

A. Advantages of the CDA/*Zeran* Framework

With respect to social networking services, the current legal regime is necessary for a robust market. The regime allows web-based services—particularly those that heavily rely on third party posted content like online social networks—to thrive.¹⁷⁷ The CDA permits online social networks to accomplish its most fundamental functions. Under this current regime, and the broad scope of immunity ushered in by *Zeran*, social networks are able to organize profiles into communities, provide search engines to categorize and publish profiles, and ask questions during the input process to facilitate the creation and development of profiles without the fear of lurking liability.¹⁷⁸ Arguably, without such broad immunity, online social networks might have limited their design choices and service offerings. For example, Professor Mark Lemley recently argued that the absence of any safe harbor immunity would cause internet intermediaries¹⁷⁹ to respond by “inefficiently restricting the uses that third parties can make of the Internet.”¹⁸⁰ Lemley foresees absence of immunity leading to a scenario where the only internet intermediaries that exist are those that transmit “pre-approved content” similar to cable networks.¹⁸¹

If such a scenario is to unravel, social networks might disappear and take with them the “largely uncontrolled, unregulated, [and] unconstrained public space[s]”¹⁸² that, at present, support numerous vibrant and diverse

177. See generally Ziniti, *supra* note 93 (describing ways the CDA has helped Web 2.0 services thrive).

178. *Landry-Bell v. Various, Inc.*, 2005 U.S. Dist. LEXIS 38471, at *6 (W.D. La. Dec. 27, 2005).

179. Mark A. Lemley, *Rationalizing Internet Safe Harbors*, 6 J. ON TELECOMM. & HIGH TECH. L. 101 (2007). While Lemley’s paper directs its analysis to “service providers, Web hosting companies, Internet backbone providers, online marketplaces, and search engines,” online social networks are applicable to Lemley’s analysis because the sites share the same attribute that Lemley initially uses to tie his set of intermediaries—that is all use automated processes to handle volumes of data transfers, and to “host or link” large amounts of third part content.

180. *Id.* at 112.

181. *Id.*

182. Hinduja & Patchin, *supra* note 11 at 131.

communities. For minors, these communities create important experiences that make valuable contributions to identity formation and development.¹⁸³

B. Why Self-Regulation Works for Child Safety Over Online Social Networks

Turning to the goal of child safety, online social networks are likely to develop the best solutions through self-regulation. They have the incentive and means to aggressively protect users as well as to minimize disruptions in content development and user interactions.

As a general matter, self-regulation has the potential of being ineffective where active consumer and citizen participation is absent.¹⁸⁴ However in this particular area, self-regulation works because sites have strong incentives from the public and media to improve safety. Steps taken by social networks already show that they are willing to improve safety because they are pushed by an interested public that expects safe internet experiences for children.¹⁸⁵ As in other areas of the internet, pleasing the marketplace has proven to be one of the strongest incentives for service providers to self-regulate.¹⁸⁶ Ultimately, among all stakeholders, online social networks are the most likely to cautiously weigh the benefits and risks when imposing limitations on its users. Sites are also likely more inclined to find means of effectively improving safety that completely avoid restricting service functionality. Indeed, when it comes to regulating user content and communications, laws in the past have created “overinclusive” effects that precluded non-injurious content, and impinged on the Constitution.¹⁸⁷ The Supreme Court invalidated portions of the CDA for such a reason in *Reno v. ACLU*.¹⁸⁸

Online social networks are also inclined to produce the best solutions for at least two other reasons. First, sites benefit from the fact that they

183. *Id.*; see also *supra* Section II.B.4.

184. See Monroe E. Price & Stefaan G. Verhulst, *Self-Regulation and the Internet* 10 (2005).

185. See Lemos, *supra* note 165.

186. See Malcolm Maclachlan, *Self-Regulation Needed to Ensure Privacy*, TECHWEB NETWORK, March 13, 1998, <http://www.techweb.com/wire/story/TWB19980313S0018>; see also Glenn, *supra* note 158 at 1630-31.

187. See Monroe E. Price & Stefaan G. Verhulst, *The Concept of Self-Regulation and the Internet*, in PROTECTING OUR CHILDREN ON THE INTERNET 164 (Jens Waltermann & Marcel Machill eds., 2000).

188. *Reno v. ACLU*, 521 U.S. 844, 880 (1997) (striking down provisions as overly suppressive of communications when less restrictive alternatives existed); see also ANDREW D. MURRAY, *THE REGULATION OF CYBERSPACE: CONTROL IN THE ONLINE ENVIRONMENT* 221 (2007) (commenting on the Supreme Court’s assessment of the CDA’s constitutionality).

have extensive experience with both their own services and users.¹⁸⁹ Accordingly, services are in the strongest position to realize and attack areas of potential weakness on their sites. Second, as a general matter, online social networks are able to develop and implement measures more quickly than lawmakers are able to enact statutes through the political process.¹⁹⁰ This consideration is particularly important in a constantly evolving internet sphere where speedy reaction is essential.¹⁹¹ For example, while the KIDS Act was still not law as of March 2008,¹⁹² MySpace's sex offender identification system (announced only a few months prior to the introduction of KIDS) had already matched thousands of offenders to their online personas.¹⁹³

C. Appropriate Areas for Legislative Action

Lawmakers, for their part, should work with online social networks to implement measures that affect procedures for obtaining service access. Such measures, that leave site functionality to the discretion of the online social networks, will tend to promote service innovation.

An appropriate role for legislatures is evident in KIDS. KIDS and its enacted and proposed state counterparts impose hefty penalties on sex offenders who use unregistered online identities on social networks.¹⁹⁴ By doing so, these statutes and proposals aid social networks by helping sites reduce the number of online predators accessing their services. KIDS and its brethren accomplish this in two ways. First, they create strong disincentives for at least some risk adverse sex offenders from venturing onto social networks. Second, they collect the information necessary for online social networks to actively monitor and prevent access to their sites by sex offenders. In this instance, the proposals enhance site safety while leaving intact the features that add to the richness of social networks.

189. See PRICE & VERHULST, *supra* note 184 at 9 (referencing former FTC chairman Robert Pitofsky's assertion that self-regulation is sometimes more "prompt, flexible, and effective than government regulation," and that "the judgment and experience of an industry" is of great benefit).

190. See *generally id.*; TAMBINI ET AL., CODIFYING CYBERSPACE: COMMUNICATIONS SELF-REGULATION IN THE AGE OF INTERNET CONVERGENCE 31 (2008) (noting, with respect to Europe, technology is changing fast and that regulation is too subject to procedural constraints to keep pace).

191. See Monroe E. Price & Stefaan G. Verhulst, *In Search of the Self: Charting the Course of Self-Regulation on the Internet in a Global Environment*, in REGULATING THE GLOBAL INFORMATION SOCIETY 75 (Christopher T. Marsden, ed., 2000).

192. OpenCongress.com, H.R.719 KIDS Act of 2007, <http://www.opencongress.org/bill/110-h719/show> (last visited Mar. 31, 2008).

193. Barrick, *supra* note 166.

194. Senators McCain and Schumer Introduce KIDS Act of 2007, *supra* note 145.

V. CONCLUSION

Online social networks create an avant-garde participatory culture that, among other great goals, supports the developmental growth of youth.¹⁹⁵ The user-driven interactive experiences fostered by social networks are worth preserving. While the danger of online sexual predators does exist, media attention and public pressure will continue to encourage social networks to make their sites safer for minors. As such, Section 230 of the Communications Decency Act works as Congress had intended. The CDA has permitted services to thrive while at the same time allowing sites to protect minors through self-regulation. Therefore, the current regime does not require wholesale modification. At most, lawmakers should create narrowly tailored statutes that support the safety measures already implemented by the online social networks.

195. See Hinduja & Patchin, *supra* note 11 at 131-32.

ADDITIONAL DEVELOPMENTS— CYBERLAW

DOUGLAS V. U.S. DISTRICT COURT EX REL TALK AMERICA, INC.

495 F. 3d 1062 (9th Cir. 2007)

The United States Court of Appeals for the Ninth Circuit held that a customer was not bound by the revised terms of a contract which were posted on a website.

Joe Douglas contracted for long-distance telephone service with America Online. Douglas's account was subsequently acquired by Talk America. Talk America thereafter unilaterally added provisions to the service contract, including an arbitration clause and a choice-of-law provision. Talk America posted the revised contract on its website, but did not otherwise notify customers of the revisions. Douglas used Talk America's service for four years without knowledge of the revised terms.

Douglas filed a class action suit against Talk America for, among other things, breach of contract. He petitioned for a writ of mandamus in the Ninth Circuit after the U.S. District Court for the Central District of California granted Talk America's motion to compel arbitration pursuant to the revised contract.

The Ninth Circuit granted the writ of mandamus, holding that the order to compel arbitration was clearly erroneous as a matter of law. Talk America's unilaterally revised contract did not bind Douglas because Talk America had not notified him of and he was not otherwise aware of the new terms. The Ninth Circuit held that one party to a contract has no obligation to periodically check the contract terms to learn whether they have been changed by the other party. Further, one party to a contract cannot unilaterally change the contract. "[A] revised contract is merely an offer and does not bind the parties until accepted." Moreover, since Talk America failed to give Douglas proper notice of the proposed changes, Douglas's continued use of Talk America's service after it had changed the contract terms did not give rise to an inference of acceptance. The court found that the posting of the revised contract on a website was not proper notice of the proposed changes. A party to a contract would not know when to check the website for changes to the contract without receiving a notification that the contract had been changed.

The court found that mandamus relief was warranted, concluding that Douglas lacked other adequate means of challenging the district court's arbitration order, and a forced arbitration would prejudice Douglas in a manner not correctable on appeal.

The Ninth Circuit noted that this was the first time that any federal appellate court had addressed the enforcement of a modified contract where the alleged notice given to the customer consisted of posting the contract on the provider's website. The outcome of the case could affect numerous service providers and millions of customers.

HOWARD V. MISSOURI BONE & JOINT CENTER, INC.*869 N.E. 2d 207 (Ct. App. Ill. 2007)****CAPITOL FEDERAL SAVINGS BANK V.
EASTERN BANK CORP.****493 F. Supp. 2d 1150 (D. Kan. 2007)*

In both *Howard v. Missouri Bone & Joint Center* and *Capitol Federal v. Eastern Bank* courts declined to find personal jurisdiction over an out-of-state corporate defendant on the basis of the defendant having a website accessible from within the state.

The Due Process Clause of the Fourteenth Amendment limits when a state may assert jurisdiction over a non-resident defendant, including a corporation, protecting a defendant's "liberty interest in not being subject to the binding judgments of a forum in which [the defendant] has established no meaningful ties, contacts or relations." To establish personal jurisdiction, a plaintiff must demonstrate that the defendant had the necessary minimum contacts with the forum state. This minimum contacts standard can be met in two ways: First, a court can exercise specific jurisdiction where a defendant has "purposefully directed" his activities at members of the forum and the litigation results from alleged injuries that "arise out of or relate to" those activities. Second, a court can exercise general jurisdiction only where the non-resident has "continuous and systematic general business contacts" with the forum.

In *Howard v. Missouri Bone & Joint Center* the Appellate Court of Illinois, Fifth District, affirmed an order of the circuit court vacating a judgment against the defendant on the grounds that the court lacked personal jurisdiction over the defendant. The defendant was a Missouri Corporation with its principal place of business and corporate headquarters in Missouri. The defendant ran a fitness center that only does business in Missouri.

The plaintiff claimed jurisdiction based on general jurisdiction, rather than injuries arising or relating to defendant's contacts with Illinois, relying on the fact that the defendant ran a website accessible to people in Illinois, and the fact that the defendant sent advertising flyers to schools and coaches in Illinois. The plaintiff had based his arguments on the "sliding scale" used by a Pennsylvania court in *Zippo Manufacturing v. Zippo Dot Com, Inc.*, 952 F. Supp. 1119 (W.D. Pa. 1997). At one end of the scale is a business which regularly enters into contracts with a foreign jurisdiction where the contract involves sending computer files over the Internet. At the other end of the spectrum is a website that involves no customer interaction.

The court declined to apply the *Zippo* sliding scale, saying the interactivity of the website is irrelevant. The court found that a passive website is like an advertisement and held that an advertisement is not enough to sustain personal jurisdiction in Illinois. The court found that the defendant's distribution of flyers to coaches and schools in Illinois is a similar advertisement, and likewise is not enough for personal jurisdiction. Illinois law limits general jurisdiction over non-residents to where the non-resident is "present and doing business, requiring in-state business activity "with a fair measure of permanence and continuity," such the defendant has subjected itself to the laws and jurisdiction of the state. That standard, the court held, was not met.

In *Capitol Federal v. Eastern Bank*, the U.S. District court for the District of Kansas held that it lacked personal jurisdiction over out-of-state defendant Eastern Bank. Eastern

Bank is a mutually owned bank with headquarters in Boston doing business throughout New England. Capitol Federal is a federally chartered mutual savings association with its principal place of business in Kansas. It is the owner of the “TRUE BLUE” service mark. Capitol Federal claimed that Kansas courts had personal jurisdiction over Eastern Bank due to Eastern’s use of the “TRUE BLUE” mark to direct customers to its own commercial website.

Eastern had seventy accounts held by Kansas residents, although 96.3% of account-holders were from Massachusetts. Eastern was not licensed to do business in Kansas. It did not have any employees, agents, offices or property in Kansas, though it did have a commercial website accessible from within the state. But a person could only apply for a personal or business account online through Eastern’s website if they lived in New England. People living anywhere in the United States could apply for a credit card through Eastern’s website, but Eastern did not provide the credit cards themselves. Eastern displayed the words “TRUE BLUE” on its website. Eastern solicited and transacted business through its website, offering the same services as Capitol Federal.

Capitol Federal alleged that there was both general and specific personal jurisdiction over Eastern. The court applied the “interactivity” sliding scale test from *Zippo* and concluded that the website did not support a finding of specific personal jurisdiction. Notably, the court separately applied the test to different components of the website. The court found that to non-customers the website was passive, which did not qualify the site for personal jurisdiction. The court found that the online credit card application did qualify as being interactive, but that it wasn’t clear that Kansas residents were being targeted. The only Kansas resident who had applied for a credit card using the site had done so in preparation for the litigation. The court found that the online banking portion of the website was interactive, but that one had to sign up for a special service and Capitol Federal had failed to prove that any Kansas customers had done so.

The court concluded that Eastern’s advertising campaign was not “purposefully directed” at Kansas residents, and therefore did not support a finding of personal jurisdiction. Looking more narrowly at Eastern’s Kansas customers, the court found that while Eastern did “purposefully direct” its efforts to these customers, that there was no showing that the trademark claims “arose out of” Eastern’s relationships with these Kansas customers.

The court similarly found that there was no general personal jurisdiction over Eastern. While Eastern’s relationship with its Kansan customers was continuous, it accounted for only 0.008% of its customers. This was not substantial enough for the court to exercise jurisdiction over Eastern Bank.

DEVELOPMENTS— TELECOMMUNICATIONS

BIDDING FOR BANDWIDTH: THE 700 MHZ SPECTRUM AUCTION

As part the federally mandated switch to digital television, the Federal Communications Commission (“FCC”) has auctioned off part of the 700 MHz radio and television broadcast band. This spectrum of frequencies, which has carried ultra high frequency (“UHF”) television signals for decades, represents one of the last prime strips of broadcast “real estate.” Wireless broadband providers wanted a piece of the spectrum because its signals can travel long distances and penetrate thick walls, which are ideal qualities for a widespread, wireless network. Telecommunications titans AT&T and Verizon emerged as the big winners in this electromagnetic land rush. Verizon grabbed the coveted C-block of the spectrum, though on the condition (proposed by Google) that they must open part of those airwaves to a host of new devices that they will not control.

The anonymous bidding, which began January 24, 2008 and ended March 18, raised a record \$19.6 billion. Unlike most spectrum auctions, the FCC did not release the identity of the bidders until the auction had ended and the winners were determined. Currently used for analog television, the 700 MHz spectrum will become available in February 2009, which is the deadline set by Congress for all television to go digital.

The FCC entertained record-breaking bids for the spectrum despite a lack of interest in the D-block, which comes with the restriction that the buyer must provide services for public-safety agencies and emergency responders. As the only bid was below the FCC’s reserve price, the FCC severed the D-block from the rest of the auction, to be auctioned off at a late date.

Bidding for the 700 MHz band offered smaller competitors a chance to create an alternative “open” broadband network that could compete with the major wireless carriers. The FCC grants auction winners a time-limited license to use a spectrum, but as these licenses are almost invariably renewed, they create continuing advantages for the winning bidders. Google and others had hoped to reduce the cost of broadband delivery by using the 700 MHz band, enabling cheaper Internet access to poor communities: one tower broadcasting on the 700 MHz spectrum could cover an area ten times wider than the municipal Wi-Fi and WiMax networks now being built by Google. By dominating the auction, the nation’s two biggest mobile carriers have deflated the hope of creating a new wireless provider. However, the \$711 million slice of the 700 MHz spectrum won by Frontier Wireless, an open-access advocate and a partner of satellite television provider DISH Network, raises the possibility of a nationwide video network.

Open access advocates envision a wireless network to which any device—be it a cell phone, desktop computer, television, or toaster—would be able to connect. Currently, the big carriers restrict the models of cell phones that can be used on their networks and limit the software that can be downloaded over them.

Google promised to surpass the minimum bid of \$4.6 billion if the FCC would adopt a set of license conditions. As bidding began, the FCC had met only part of Google’s demands, requiring the C-block buyer to make a slice of the spectrum accessible to all mobile devices, using any software to connect. After bidding as high as \$4.71 billion for

the C-block, Google abandoned the auction once bids had safely surpassed the FCC-set minimum to activate the “open access” provision. It thus achieved its primary goal of introducing greater competition in the wireless market without making a winning bid. Verizon must now open at least part of its wireless network to all sorts of new devices and applications. However, some have criticized Google for abandoning its bidding efforts. Critics argue that the lackluster competition, combined with some arcane FCC bidding rules, suppressed demand allowing Verizon to pick up the C-block at a bargain price.

LEEGIN V. PSKS: NEW STANDARD, NEW CHALLENGES

By Ashley Doty

I. INTRODUCTION

In *Leegin Creative Leather Products, Inc v. PSKS, Inc.*,¹ the Supreme Court, taking heed of years of economic research identifying procompetitive benefits of vertical resale price maintenance (RPM), declared that the practice shall be evaluated under the rule of reason analysis. In a 5-4 split, the Court explicitly overruled *Dr. Miles Medical Co. v. John D. Park & Sons Co.*,² in which ninety-six years ago, the Court pronounced RPM to be *per se* illegal. The *Leegin* majority reasoned that in light of the voluminous economic research detailing procompetitive benefits, a *per se* rule of illegality is inappropriate for RPM; the minority dissented almost exclusively on grounds of *stare decisis*.³

This Note argues that the *Leegin* majority's decision to reverse the *per se* standard of liability in RPM cases was economically prudent. Unfortunately, because RPM has been *per se* illegal for ninety-six years, lower courts have little or no experience weighing procompetitive effects against anticompetitive effects under a rule of reason analysis in vertical RPM cases. Therefore, instead of dismissing *stare decisis* as virtually insignificant in the antitrust realm,⁴ the majority should have more thoroughly addressed the concerns the dissent raised about the consequences of breaking with *stare decisis*.⁵ Toward that end, the Court could have provided the lower courts with more detailed guidance as to what to look for when evaluating the anticompetitive effects of RPM under the rule of reason in

© 2008 Ashley Doty.

1. 127 S. Ct. 2705 (2007).

2. 220 U.S. 373 (1911).

3. See generally *Leegin*, 127 S. Ct. 2705. *Stare decisis* is “[t]he doctrine of precedent, under which it is necessary for a court to follow earlier judicial decisions when the same points arise again in litigation.” BLACK’S LAW DICTIONARY 1173 (Abridged 8th ed. 2005).

4. *Leegin*, 127 S. Ct. at 2720 (“*Stare decisis* is not as significant in this case, however, because the issue before us is the scope of the Sherman Act. From the beginning the Court has treated the Sherman Act as a common-law statute.”) (internal citations omitted).

5. *Id.* at 2731 (Breyer, J., dissenting) (“We write, not on a blank slate, but on a slate that begins with *Dr. Miles* and goes on to list a century’s worth of similar cases, massive amounts of advice that lawyers have provided their clients, and untold numbers of business decisions those clients have taken in reliance upon that advice.”).

hopes of producing a more uniform application in the modern nationalized economy. Additionally, the majority's language restricting the applicability of the common law doctrine against restraints on alienation to the real property context may indicate the Court's willingness to fundamentally change the first sale doctrine in patent law in the October 2007 term. A more patentee-friendly first sale doctrine, combined with a more relaxed standard for RPM, could lead to unintended and unfortunate consequences.

This Note reviews and synthesizes the economic literature dealing with vertical RPM in order to supplement the limited advice the majority gave the lower courts in *Leegin*, and examines how the *Leegin* decision would interact with the Federal Circuit's version of the first sale doctrine in patent law. Part II provides background on the practice of vertical RPM, its procompetitive and anticompetitive effects, the different standards of antitrust analysis, and the legal status of vertical RPMs before *Leegin*. Part III summarizes *Leegin*. Finally, Part IV analyzes the possible detrimental effects of the majority's failure to address the dissent's *stare decisis* concerns, provides more structured guidance to lower courts in light of economic literature regarding vertical RPM, and explores the likely effects of an interaction between the new *Leegin* standard and the more permissive first sale doctrine adopted by the Federal Circuit.

II. BACKGROUND

Vertical RPM is a restraint of trade regulated by Sherman Act § 1,⁶ which makes illegal "every contract . . . or conspiracy, in restraint of trade or commerce."⁷ Because every commercial contract imposes some degree of "restraint of trade," if read literally, the Sherman Act could proscribe "the entire body of private contract law."⁸ Therefore, Congress must have adopted the broad prohibition in the Sherman Act with the expectation that the courts would delineate the boundaries of the statute by drawing upon common law tradition.⁹

6. See, e.g., *Leegin*, 127 S. Ct. at 2712-13.

7. 15 U.S.C. § 1 (2006).

8. *Nat'l Soc'y of Prof'l Eng'rs v. United States*, 435 U.S. 679, 687-88 (1978).

9. *Nw. Airlines v. Transp. Workers Union*, 451 U.S. 77, 99 n.42 (1981); *Nat'l Soc'y of Prof'l Eng'rs*, 435 U.S. at 688; see also 21 Cong. Rec. 2456 (1890) (comments of Sen. Sherman) ("[The Sherman Act] does not announce a new principle of law, but applies old and well recognized principles of the common law to the complicated jurisdiction of our State and Federal Government.").

A. Vertical Resale Price Maintenance

This Section explains the practice of vertical RPM and presents its possible procompetitive and anticompetitive effects.

1. *What is Vertical Resale Price Maintenance?*

Vertical RPM is a business practice whereby a manufacturer sets a minimum price that retailers must observe as a condition of selling that manufacturer's product.¹⁰ Vertical RPM, by creating a price floor, limits price competition among retailers of the same product¹¹ because, in an RPM scheme, market competition can only drive prices to the stipulated minimum, thus significantly reducing intrabrand price competition.¹²

2. *Procompetitive Effects of Resale Price Maintenance*

RPM can serve as a solution to the free-rider problem and facilitate market entry by new, small competitors.

a) A Solution to the Free-Rider Problem

The free-rider problem in the RPM context occurs when one retailer who furnishes desired point-of-sale services for a particular product is undersold by discounting "price cutters": retailers who provide no services, and who sell at lower prices than their competitors because they "free-ride" from point-of-sale information, such as product demonstrations, that other retailers provide to the consumer.¹³

Free-riding discounters discourage other retailers from providing valuable point-of-sale services and information to consumers.¹⁴ Customers typically seek point-of-sale services such as product demonstrations, which are often provided by knowledgeable sales staff when shopping for complex, infrequently purchased goods.¹⁵ In the absence of any preventative policy, customers can enjoy the services provided by some retailers and then purchase the same product from a free-riding discount seller who

10. J.F. PICKERING, *RESALE PRICE MAINTENANCE IN PRACTICE* 13 (1966).

11. B.S. Yamey, *Introduction: The Main Economic Issues*, in *RESALE PRICE MAINTENANCE* 13, 13 (1966).

12. *See id.*; PICKERING, *supra* note 10, at 13.

13. William S. Comanor, Comment, *Vertical Price-Fixing, Vertical Market Restrictions, and the New Antitrust Policy*, 98 HARV. L. REV. 983, 987 (1985); Lester G. Telser, *Why Should Manufacturers Want Fair Trade?*, 3 J. L. & ECON. 86, 91-92 (1960). William Comanor is now a Professor of Economics at the University of California, Santa Barbara.

14. Telser, *supra* note 13, at 91.

15. Roger D. Blair, Jill Boylston Herndon & John E. Lopatka, *Resale Price Maintenance and the Private Antitrust Plaintiff*, 83 WASH. U. L. Q. 657, 698 (2005).

did not invest to provide those services.¹⁶ Thus, many of the increased sales generated by point-of-sale services do not go to the retailer that provided the services.¹⁷

As a practical example, during the “format war,” a customer looking to get a next-generation DVD player would likely go to an in-store retailer with knowledgeable sales staff who would inform the customer of what he needs to use the new player (an HD TV, HD disks) and discuss the pros and cons of choosing either blu-ray (better technology) or HD DVD (lower price). After getting this valuable advice, the customer is under no obligation to purchase his next generation DVD player from that retailer. In fact, it is in the customer’s best interest to leave the store empty-handed and buy the player from whichever retailer sells it cheapest. Since maintaining a knowledgeable sales staff is a significant overhead expense, the service-providing retailer is likely not the cheapest on the market, and thus the customer would not buy the DVD player from the service-providing retailer. Because a retailer will only invest in services insofar as it benefits its own sales, this phenomenon, if unchecked, forces service-providing retailers to decrease beneficial services to compete based on price.¹⁸ Although this does lower prices in the marketplace, overall consumer utility does not necessarily increase, as valuable information becomes more and more difficult to find, especially for customers who are not internet-savvy or otherwise do not know where to look to find detailed product reviews.

Vertical RPM can alleviate the free-rider problem by guaranteeing service-providing retailers a sufficient profit margin to induce them to provide services. In this situation, the hypothetical DVD player customer has little to no incentive to spend time and effort finding a cheaper retailer, since all of the retailers in the market will be selling at around the same price, and the retailer is rewarded for the resources spent on training sales staff. When the manufacturers guarantee a minimum price, which allows a sufficient profit margin throughout the marketplace, retailers push to sell more units based on the quality of the manufacturer’s product as compared to substitutes instead of by price cutting.¹⁹ Thus, RPM promotes inter-brand competition by reducing intra-brand competition.

16. Telser, *supra* note 13 at 91; Howard P. Marvel & Stephen McCafferty, *Resale Price Maintenance and Quality Certification*, 15 RAND J. ECON 346, 348 (1984).

17. Telser, *supra* note 13 at 91.

18. *Id.*

19. *Id.*

b) Facilitate Market Entry

Vertical RPM can facilitate market entry for new manufacturers, which subsequently increases product selection available to consumers from an increased number of market participants. First, by establishing a vertical RPM policy, new manufacturers can guarantee retailers that they will not have to compete with free-riders, which would allow a service-providing retailer to safely invest capital to introduce consumers to the new product.²⁰ Second, vertical RPM can help stabilize demand uncertainty for a product, which is common when a retailer must order goods before consumer demand is known.²¹ In the absence of vertical RPM, if retailers overestimate consumer demand, the good's price will plummet, causing substantial losses to retailers, as retailers have to liquidate their supply.²² By insulating retailers from the risks of unexpectedly low demands, vertical RPM minimizes the risk of investing in innovative but riskier products and of introducing those unknown products to consumers.²³

3. *Anticompetitive Effects of Vertical Resale Price Maintenance.*

Some have argued that vertical RPM should remain *per se* illegal because of several possible anticompetitive effects that may result from RPM arrangements, which this Section will explain.

a) Higher Prices

Many have argued that vertical RPM harms consumers because it inevitably raises prices to supra-competitive levels.²⁴ Several studies have chronicled empirical evidence that vertical RPM leads to price increases.²⁵ Prior to Congress's passage of the Consumer Goods Pricing Act²⁶ in 1975, the Miller-Tydings Fair Trade Act²⁷ and the McGuire Act²⁸ gave states the authority, under state laws, to permit manufacturers to engage in vertical RPM—despite the *Dr. Miles* holding—when the goods subject to the RPM policy were branded with the manufacturer's name. A National As-

20. *Cont'l T.V., Inc. v. GTE Sylvania, Inc.*, 433 U.S. 36, 55 (1977)

21. Brief of Amici Curiae Economists in Support of Petitioner, *Leegin Creative Prods., Inc. v. PSKS*, 127 S. Ct. 2705 (2007) (No. 06-480).

22. *Id.*

23. *See id.*

24. *See, e.g., Leegin*, 127 S. Ct. at 2727-28 (Breyer, J., dissenting).

25. *See, e.g., THOMAS R. OVERSTREET, RESALE PRICE MAINTENANCE: ECONOMIC THEORIES AND EMPIRICAL EVIDENCE: BUREAU OF ECONOMICS STAFF REPORT TO THE FEDERAL TRADE COMMISSION* 106-16 (1983).

26. Pub. L. No. 94-145, 89 Stat. 801 (1975).

27. 75 Pub. L. No. 314, 50 Stat. 673 (1937).

28. 66 Stat. 632.

sociation of Chain Drug Stores' survey of drug prices during this "fair trade" period found that drug prices rose 3.1%.²⁹ Another study found that prices in states which allowed vertical RPM were between nineteen and twenty-seven percent higher than prices in states which did not.³⁰

If prices do increase because of vertical RPM, the alleged harm to consumers will be borne by what Professor William Comanor dubs "inframarginal" consumers.³¹ While some "marginal" customers will not purchase a product if its price rises, "infra-marginal" customers, who value the product higher than the current price, will continue to buy the product at the increased price. The price increases associated with vertical RPM harm these customers insofar as they may bear the cost of supplemental services they never desired.³²

b) Cartel Facilitation

Vertical RPM may also facilitate horizontal cartels.³³ The concern is that stipulating a minimum price, particularly if that price is supra-competitive, allows manufacturers to police and stabilize horizontal price fixing at either the retailer or manufacturer level.³⁴

Vertical RPM can facilitate cartels by providing a mechanism through which the cartel could prevent a firm from cheating.³⁵ Suppose, for example, that five firms manufacture DVD players in a particular market. Ideally, these five firms would compete with each other for business in retail stores. In an unrestrained market, the lower the price the manufacturing firm can offer the retailer, the more DVD players the firm will sell because more retailers will buy their DVD players. Furthermore, a lower wholesale

29. OVERSTREET, *supra* note 25 at 109.

30. *Leegin Creative Leather Prods., Inc. v. PSKS, Inc.*, 127 S. Ct. 2705, 2728 (2007) (Breyer, J., dissenting) (citing Hearings on H. R. 2384 before the Subcommittee on Monopolies and Commercial Law of the House Committee on the Judiciary, 94th Cong., 1st Sess., 122 (1975)). Thomas Overstreet criticized these studies for methodological flaws, such as the inability to separate price increases due to vertical RPM from general inflation. Overstreet further notes that price increases are not an indicator of anticompetitive effects, as the procompetitive effects of vertical RPM would also lead to higher prices. THOMAS R. OVERSTREET, JR., *RESALE PRICE MAINTENANCE: ECONOMIC THEORIES AND EMPIRICAL EVIDENCE: BUREAU OF ECONOMICS STAFF REPORT TO THE FEDERAL TRADE COMMISSION 106-16* (1983).

31. Comanor, *supra* note 13, at 991-92.

32. *Id.*

33. *See, e.g.*, Robert Pitofsky, *Commentary: In Defense of Discounters: The No-Frills Case for a Per Se Rule Against Vertical Price Fixing*, 71 *GEO. L. J.* 1487, 1490 (1983).

34. *Id.*

35. Telser, *supra* note 13 at 97.

price allows retailers to offer a lower retail price, which in turn induces more consumers to buy that manufacturer's DVD Players.³⁶ Suppose further that all of the DVD player manufacturers collectively agreed to fix wholesale prices of DVD players at \$10 when the competitive price would be \$5.³⁷ In a competitive market, this arrangement would be highly unstable and susceptible to cheating. Although the collective cartel has an interest in maintaining the \$10 price, any single member has a powerful incentive to cheat on the cartel and undercut the fixed price to increase its own sales. A manufacturer in this example may offer DVD players to retailers at \$8. The cheating manufacturer will probably raise his profit margin because, absent exclusive dealings arrangements, retailers will likely buy their DVD players primarily from him.³⁸ Furthermore, the cheating manufacturer continues to benefit from the cartel arrangement because it can still maintain a supra-competitive profit of \$3 while the rest of the members sell at \$10.³⁹ Because all five independent cartel members have this same incentive structure, even absent antitrust enforcement⁴⁰ the cartel members would continuously undercut the group, and the arrangement would fall apart.⁴¹

A vertical RPM policy may serve as an effective policing mechanism to prevent cartel members from cheating. If the hypothetical cartel described above implements an RPM policy that fixes the wholesale price at \$10 and dictates a resale price of \$15, any cheating manufacturer will increase the retailer's profit margin, but will not increase the number of DVD players sold to consumers because the retail price remains \$15.⁴² Thus the RPM policy destroys most of the incentive to undercut the fixed wholesale price.⁴³ While a cheating manufacturer in this situation could not affect aggregate retail consumption, the cheating manufacturer could still increase its market share by inducing retailers to purchase more from it than from other cartel members, unless an exclusive dealing arrange-

36. *See id.*

37. For purposes of this analysis, this Note ignores the availability of substitute goods and elasticity of demand and assumes that the cartel can maintain the fixed \$10 price.

38. *Id.*

39. *See id.*

40. Horizontal price fixing is *per se* illegal. *United States v. Socony-Vacuum Oil Co.*, 310 U.S. 150, 223 (1940).

41. *See* Telser, *supra* note 13, at 96.

42. Blair et al., *supra* note 15, at 690.

43. *Id.*

ment is in place.⁴⁴ This is why the combination of an RPM scheme and an exclusive dealing arrangement is so powerfully anticompetitive.⁴⁵

In addition, firms can also use vertical RPM to strengthen retailer cartels because, left without a minimum vertical RPM, those cartels are also vulnerable to the same cheating concerns discussed above.⁴⁶ Retailers may solicit manufacturers to impose vertical RPM as a means to eliminate cartel-cheating at the retailer level.⁴⁷ Here, unlike in the manufacturer example where manufacturers could undercut the cartel to increase its market share to retailers (absent an exclusive dealing arrangement), a vertical RPM policy enforcing the retailer cartel price would eliminate all price competition because manufacturers would refuse to supply retailers who undercut the cartel under the RPM policy.⁴⁸

c) Powerful Retailer and Manufacturer Abuse

A powerful retailer may be able to force a vertical RPM scheme upon a manufacturer so that the retailer may forestall or avoid altogether an expensive and risky research and development investment that could lead to beneficial and efficiency-increasing innovations in distribution methods.⁴⁹ The manufacturer may feel it has no choice but to comply if the manufacturer feels it “needs access to the retailer’s distribution network.”⁵⁰ The subsequent inevitable reduction in retailer innovations, which could lower the retailer’s overhead costs, hurts the consumer, who never realizes the savings the retailer could pass on to him.

Similarly, a powerful manufacturer may use vertical RPM as a means to induce retailers not to carry the products of smaller rivals or new entrants.⁵¹ Well-known and powerful manufacturers can impose supra-competitive prices through a vertical RPM policy, and thus guarantee a supra-competitive profit margin to retailers.⁵² Conversely, manufacturers of newer or lesser-known brands, which do not benefit from the consumer loyalty that their more powerful competitors enjoy, have more elastic de-

44. Blair et al., *supra* note 15, at 690 n.192.

45. *See infra* Section IV.C.2.

46. Blair et al., *supra* note 15, at 695.

47. *Id.*

48. OVERSTREET, *supra* note 25, at 13-14.

49. *Leegin Creative Leather Prods., Inc. v. PSKS, Inc.*, 127 S. Ct. 2705, 2717 (2007); OVERSTREET, *supra* note 25, at 30-31.

50. *Leegin*, 127 S. Ct. at 2717.

51. Howard P. Marvel & Stephen McCafferty, *The Welfare Effects of Resale Price Maintenance*, 28 J. L. & ECON. 363, 366-68 (1985) (finding that the motivation for using RPM in the sugar trust was to deny distribution to rivals).

52. *See id.*

mand, and cannot afford to promise retailers a supra-competitive price. Therefore, with the presence of RPM, retailers have less incentive to invest in the products of an unknown competitor and more incentive to carry only brands upon which they enjoy a supra-competitive profit margin.⁵³ The subsequent decrease in availability of substitute goods hurts consumers because fewer competitors leads to less price competition and less innovation to create a superior product.

In sum, vertical RPM has the potential to produce both procompetitive and anticompetitive effects. As will be discussed below, the relative likelihoods of each of those possibilities drives the standards of liability the Court imposes on the practice. Section II.B. will present the rule of reason and *per se* standards of liability in Antitrust law, after which Section II.C. will discuss how the Court has historically categorized vertical RPM within that framework.

B. Antitrust Analysis: Rule of Reason and *Per Se* Standards

When analyzing a restraint of trade under antitrust laws, courts apply either a *per se* or rule of reason standard.⁵⁴ Courts evaluate most restraints of trade under the rule of reason approach.⁵⁵

The rule of reason standard requires the court to examine all of the particular circumstances surrounding the restraint to decide whether the practice constitutes an unreasonable restraint on competition.⁵⁶ Under the rule of reason, “the true test of legality is whether the restraint is such as merely regulates and perhaps thereby promotes competition or whether it is such as may suppress or even destroy competition.”⁵⁷ Factors to consider when making this determination include “the facts peculiar to the business to which the restraint is applied; its condition before and after the restraint was imposed; the nature of the restraint and its effect, actual or probable.”⁵⁸

In contrast, categories of restraints of trade which fall under the *per se* analysis are necessarily unlawful, and courts do not consider any of the offender’s defenses or conduct any inquiry as to procompetitive effects of

53. *See id.*

54. In certain limited circumstances, courts will apply a “quick look” analysis, which is not at issue here. *See Cal. Dental Ass’n v. Fed. Trade Comm’n*, 525 U.S. 756, 779 (1999) (discussing the categories of analysis in antitrust cases).

55. *See, e.g., Texaco v. Dagher*, 547 U.S. 1, 5 (2006); *Arizona v. Maricopa County Med. Soc’y*, 457 U.S. 332, 343 (1982).

56. *Id.*

57. *Chicago Bd. of Trade v. United States*, 246 U.S. 231, 238 (1918).

58. *Id.*

the restraint.⁵⁹ The justification for the harshness of the *per se* inquiry is that “certain kinds of agreements will so often prove so harmful to competition and so rarely prove justified that the antitrust laws do not require proof that an agreement of that kind is, in fact, anticompetitive in the particular circumstances.”⁶⁰ These restraints have a demonstrated a “pernicious effect on competition” and lack “any redeeming virtue.”⁶¹ The Court recognizes that this judgment can be imperfect, but “[f]or the sake of business certainty and litigation efficiency [it] tolerate[s] the invalidation of some agreements that a full-blown [rule of reason] inquiry might have proved to be reasonable.”⁶²

Because a *per se* categorization reflects a judicial judgment that a particular restraint is almost always harmful, courts disfavor declaring *per se* illegal a restraint with which it has limited experience.⁶³ The Court generally does not declare a particular restraint *per se* illegal until its experience with that “particular kind of restraint enables the Court to predict with confidence that the rule of reason will condemn it.”⁶⁴ The Court has reserved the *per se* analysis for a limited category of restraints such as horizontal conspiracies to fix prices,⁶⁵ concerted horizontal market division,⁶⁶ and until *Leegin*, vertical RPM.⁶⁷

C. Legal Developments of Vertical Resale Price Maintenance

1. *Dr. Miles and Per Se Illegality of RPM*

In *Dr. Miles*, the Supreme Court held that vertical RPM is *per se* illegal under the Sherman Act.⁶⁸ The Court based its decision, in part, on the common law property rule against general restraints on alienation.⁶⁹ The Court found that while a manufacturer may choose whether or not to sell its product to a particular purchaser, the manufacturer is not free to impose a restraint on alienation (here, a minimum retail price) as a condition of sale because such restraints were ordinarily invalid under the common

59. *Business Elecs. Corp. v. Sharp Elecs. Corp.*, 485 U.S. 717, 723 (1988).

60. *NYNEX Corp. v. Discon, Inc.*, 525 U.S. 128, 133 (1998).

61. *N. Pac. Ry. v. United States*, 356 U.S. 1, 5 (1958).

62. *Maricopa*, 457 U.S. at 344.

63. *See id*; *see also* *Broad. Music, Inc. v. Columbia Broad. Sys.*, 441 U.S. 1, 9 (1979).

64. *Maricopa*, 457 U.S. at 344.

65. *United States v. Socony-Vacuum Oil Co.*, 310 U.S. 150, 223 (1940).

66. *Palmer v. BRG of Georgia*, 498 U.S. 46, 49-50 (1990).

67. *Dr. Miles*, 220 U.S. 373, 404, 408 (1911).

68. *Id.*

69. *Id.* at 404.

law.⁷⁰ The Court opined that a contract between a manufacturer and a retailer to fix a minimum retail price was “injurious to the public interest and void” because the benefit to the parties involved in the vertical RPM policy did not outweigh the injury to the public.⁷¹ The Court concluded that because the retailer in *Dr. Miles* “sold its product at prices satisfactory to itself, the public [w]as entitled to whatever advantage may be derived from competition in the subsequent traffic.”⁷² Therefore, the Court ruled that vertical RPM policies were *per se* illegal under the Sherman Act.⁷³

2. *Circumventing the Dr. Miles Prohibition*

Since *Dr. Miles*, the Court has complicated the legal status of vertical RPM by authorizing practices allowing manufacturers to effectively set minimum prices without technically running afoul of *Dr. Miles*. For example, in *United States v. General Electric*, the Court held that it was *per se* legal for a manufacturer to engage in vertical RPM when it sold those products directly to the public through its own agents or under a consignment contract.⁷⁴ The Court declared that that the owner of an item did not violate antitrust laws or common law by “seeking to dispose of his article directly to the consumer and fixing the price by which his agents transfer the title from him directly to such consumer.”⁷⁵

While *General Electric* created a method to circumvent the *Dr. Miles* rule, *United States v. Colgate* led to true confusion over the (il)legality of vertical RPM. Under *United States v. Colgate*, manufacturers could effectively institute a vertical RPM scheme by announcing a minimum resale price and then unilaterally refusing to sell its product to price cutters.⁷⁶ The Court found that absent a purpose to create or maintain a monopoly, a manufacturer has a “long recognized right” to “exercise his own independent discretion as to parties with whom he will deal” and that a manu-

70. *Id.*

71. *Id.* at 408.

72. *Id.* at 409.

73. *See id.* at 408 (holding that vertical RPM agreements are against the public interest and void, and that they are not vindicated by any advantages to the parties involved).

74. 272 U.S. 476, 488 (1926).

75. *Id.* Manufacturers must ensure they have a true agency or consignment contract with their retailers to exercise this right. *See Simpson v. Union Oil Co.*, 377 U.S. 13, 24 (1964) *rev'd on other grounds*, 396 U.S. 13 (1969) (distinguishing *General Electric* to find a vertical price fix illegal because the manufacturer passed the risk of loss to the retailer, and thus it did not have a true consignment agreement).

76. 250 U.S. 300, 306-308 (1919).

facturer is free to “announce in advance the circumstances under which he [would] refuse to sell.”⁷⁷

In sum, while a vertical RPM “policy” was *per se* illegal under *Dr. Miles*, a manufacturer could still dictate minimum retail prices either by altering its distribution scheme such that its products reached the market through consignment contracts, or by “announcing” a mandatory minimum price with no disciplinary mechanism other than the manufacturer’s right of unilateral refusal to deal. Needless to say, it was never entirely clear which behaviors fell under *Dr. Miles* and which did not.

3. *Practices Analytically Equivalent to Vertical RPM not Per Se Illegal*

Adding to the confusion surrounding the legal status of vertical RPM was the Court’s decision to not declare practices analogous to vertical RPM *per se* illegal.

The Court did not apply the *per se* standard to non-price vertical restraints, although the economic effects of such practices are analogous to those of vertical RPM.⁷⁸ For example, under *Continental TV v. GTE Sylvania*, the Court held that vertical non-price restraints, such as market division—a practice by which manufacturers authorize resellers to sell the manufacturer’s goods only within a particular territory—fall under the rule of reason.⁷⁹ The Court overruled its previous *per se* ban⁸⁰ on vertical market division, finding that vertical restriction promoted interbrand competition and that this “redeeming virtue” rendered a *per se* ban inappropriate.⁸¹ The Court ruled that the decision to impose a *per se* standard “must be based upon demonstrable economic effect rather than . . . formalistic line drawing.”⁸²

77. *Id.* at 307. A manufacturer must be acting *unilaterally* to exercise this right. See *Monsanto Co. v. Spray-Rite Serv. Co.*, 465 U.S. 752, 764 (1984) (holding that where a retailer termination followed another retailer’s complaint, and retailer showed evidence beyond mere termination that the action was concerted, manufacturer incurred antitrust liability).

78. See ROBERT H. BORK, *THE ANTITRUST PARADOX: A POLICY AT WAR WITH ITSELF* 280 (1993) (arguing that vertical price fixing and vertical market division have the same economic impact and the same relation to consumer welfare, though the law does not treat vertical maximum price fixing and vertical market division with as much severity as it does vertical minimum price fixing).

79. *Cont’l T.V., Inc. v. GTE Sylvania, Inc.*, 433 U.S. 36, 59 (1977).

80. *United States v. Arnold, Schwinn & Co.*, 388 U.S. 365, 379-80 (1967).

81. *GTE Sylvania*, 433 U.S. at 54.

82. *Id.* at 58-59. In contrast, the *Dr. Miles* Court based its decision primarily on the common law policy disfavoring restraints on alienation, and not on any demonstrable market harm of vertical RPM. See *Dr. Miles*, 220 U.S. 373, 404, 408.

Under *State Oil Co. v. Khan*, the Court established that *maximum* vertical price fixing is subject to the rule of reason standard.⁸³ The Court reasoned that because “low prices . . . benefit consumers regardless of how those prices are set” the rule of reason analysis was the appropriate way to evaluate maximum price fixing.⁸⁴ Further, while the Court in *Dr. Miles* relied heavily on the common law doctrine disfavoring restraints on alienation to declare vertical RPM illegal *per se*, in subsequent cases the Court relied on economic theory and failed to mention the presumption against restraints on alienation when it ruled that equally restrictive practices should be evaluated under the rule of reason.⁸⁵ The *Leegin* majority used this fact to support its assertion that the common law rule against restraints on alienation does not control in the modern antitrust context.⁸⁶

Therefore, even though vertical RPM was *per se* illegal, courts evaluated vertical non-price restraints and maximum price fixing, which have similar economic effects to vertical RPM under a rule of reason standard.⁸⁷ Part III will discuss how the Supreme Court addressed this inconsistency in *Leegin*.⁸⁸

III. *LEEGIN v. PSKS*

A. Facts and Procedural History

Petitioner Leegin manufactured leather goods and accessories for women under the brand name Brighton.⁸⁹ Leegin sold its goods primarily to independent boutiques and specialty stores, believing that they treated customers better and provided more services than large retailers.⁹⁰

Respondent PSKS operated Kay’s Kloset, which began selling Brighton goods in 1995.⁹¹ In 1997, Leegin instituted the “Brighton Retail Pricing and Promotion Policy” under which it refused to sell to retailers who

83. 522 U.S. 3, 22 (1997).

84. *Id.* at 15, 22 (internal quotation marks omitted).

85. *See, e.g., State Oil Co. v. Khan*, 522 U.S. 3 (1997) (vertical maximum price fixing); *GTE Sylvania*, 433 U.S. at 58-59 (vertical non-price restraints).

86. *Leegin Creative Leather Prods., Inc. v. PSKS, Inc.*, 127 S. Ct. 2705, 2714 (2007).

87. BORK, *supra* note 78 at 280.

88. For a more in-depth discussion of the antitrust case law regarding vertical RPM that was unnecessarily complicated before *Leegin*, *see* BORK, *supra* note 78, at 280-98.

89. *Leegin*, 127 S. Ct. at 2710.

90. *Id.* at 2710-11.

91. *PSKS, Inc. v. Leegin Creative Leather Prods.*, 171 Fed. Appx. 464, 465 (5th Cir. 2006).

sold certain Brighton goods below suggested prices.⁹² Leegin contended that it adopted the policy to give retailers sufficient margins to provide customers with quality services without worrying about competing on price.⁹³

In 2002, Leegin discovered that Kay's Kloset had been discounting Brighton's entire line by twenty percent.⁹⁴ When Kay's Kloset refused to cease its discounting practice, Leegin stopped supplying the store with Brighton products.⁹⁵

PSKS sued Leegin in the U.S. District Court for the Eastern District of Texas, alleging that Leegin had violated antitrust laws by entering into agreements with retailers to charge prices fixed by Leegin.⁹⁶ The District Court excluded Leegin's economic expert's testimony as to the procompetitive effects of the Brighton Retail Pricing and Promotion Policy because vertical RPM was *per se* illegal under *Dr. Miles*.⁹⁷ Leegin then asserted that its action was unilateral and therefore lawful under *Colgate*.⁹⁸ However, the jury did not agree with that assertion, and it awarded \$1.2 million in damages.⁹⁹ The court trebled damages and awarded PSKS attorney's fees and costs.¹⁰⁰

Leegin appealed the ruling to the Fifth Circuit.¹⁰¹ On appeal, Leegin argued that the rule of reason should have been applied to its RPM practice.¹⁰² The Fifth Circuit rejected this argument and affirmed the lower court ruling, awarding attorney's fees and costs of the appeal to PSKS.¹⁰³ Leegin then appealed to the Supreme Court, who granted certiorari in December of 2006.¹⁰⁴

B. The Majority Opinion

The Supreme Court voted 5-4 to overrule *Dr. Miles* and reverse the lower court's finding that Leegin's practice was illegal, and remanded the case to the district court to evaluate Leegin's conduct under the rule of

92. *Id.*

93. *Leegin*, 127 S. Ct. at 2711.

94. *Id.* at 2711.

95. *Id.*

96. *Leegin*, 171 Fed. Appx. at 465-66.

97. *PSKS, Inc. v. Leegin Creative Leather Prods.*, 2004 U.S. Dist. LEXIS 30414 *7 (E.D. Tex. March 26, 2004) (order limiting economic expert testimony).

98. *Id.* at *13.

99. *Leegin*, 171 Fed. Appx. at 466.

100. *Id.*

101. *Id.*

102. *Id.* at 467.

103. *Id.* at 470.

104. *Leegin Creative Leather Prods., Inc. v. PSKS*, 127 S. Ct. 763 (2006).

reason standard.¹⁰⁵ The Court reasoned that the procompetitive effects of vertical RPM were too substantial to make the practice appropriate for *per se* analysis.¹⁰⁶ The Court first discussed why a rule of reason analysis was more appropriate for vertical RPM.¹⁰⁷ It then addressed the issue of *stare decisis*.¹⁰⁸

The Court held that *Dr. Miles* was incorrectly decided, noting that given that the arguments of economic analyses, a *per se* inquiry was inappropriate for vertical RPM.¹⁰⁹ The Court opined that the *Dr. Miles* Court placed undue emphasis on the common law rule against restraints on alienation when it decided that vertical RPM was *per se* illegal.¹¹⁰ In so doing, the Supreme Court explained, the *Dr. Miles* Court based its decision on “formalistic” doctrine instead of a demonstrable anticompetitive effect of vertical RPM.¹¹¹ The Court further noted that reliance on the common law was inappropriate because the traditional rule against restraints on alienation was aimed at preventing the removal of real property from the stream of commerce, and that the former state of the common law is irrelevant to modern antitrust law.¹¹²

The Court next weighed the possible procompetitive and anticompetitive effects of vertical RPM and concluded that a *per se* analysis was no longer appropriate.¹¹³ Citing various *amici curiae* briefs, the Court ruled that it was “essentially undisputed” that vertical RPM can have a variety of procompetitive effects and that it is unlikely to have anticompetitive effects.¹¹⁴ The procompetitive effects included: promoting interbrand competition,¹¹⁵ enhancing efficiency,¹¹⁶ facilitating market entry for new

105. 127 S. Ct. at 2725.

106. *Id.* at 2718.

107. *Id.* at 2712-20.

108. *Id.* at 2720-25.

109. *Id.* at 2714.

110. *Id.*

111. *Leegin Creative Leather Prods., Inc. v. PSKS, Inc.*, 127 U.S. 2705, 2714 (2007) (quoting *Cont'l T.V., Inc. v. GTE Sylvania, Inc.*, 433 U.S. 36, 58-59 (1977)).

112. *Leegin*, 127 S. Ct. at 2714.

113. *Id.* at 2715-18.

114. *Id.* at 2715 (citing Brief of Amici Curiae Economists in Support of Petitioner, *Leegin Creative Leather Prods., Inc. v. PSKS, Inc.* 127 U.S. 2705 (2007)(No. 06-480), 2006 U.S. Briefs 480.).

115. *Id.* (citing Brief for the United States as Amici Curiae, *Leegin Creative Leather Prods., Inc. v. PSKS, Inc.* 127 U.S. 2705 (2007)(No. 06-937), available at <http://www.usdoj.gov/atr/cases/f225500/225544.htm>).

116. *Id.* (citing ABA SECTION OF ANTITRUST LAW, ANTITRUST LAW AND ECONOMICS OF PRODUCT DISTRIBUTION 76 (2006)).

brands,¹¹⁷ and the ability to effectively combat “free riders.”¹¹⁸ The Court weighed these procompetitive effects against the possible anticompetitive effects,¹¹⁹ reiterating the concerns it previously expressed in *Business Electronics v. Sharp*¹²⁰ that vertical RPM could facilitate manufacturer and/or retailer cartels by discouraging retailers from cutting prices, or assisting the cartel in disciplining price-cutting manufacturers.¹²¹ Vertical RPM could also facilitate retail cartels because powerful retailers could fix prices and then compel a manufacturer to aid them through resale price maintenance.¹²² The Court noted that empirical studies confirmed that this scenario is a legitimate concern.¹²³

After acknowledging the anticompetitive concerns, the Court held that courts could effectively deal with these concerns under a rule of reason approach.¹²⁴ The Court then gave a cursory overview of some possible indications of anticompetitive behavior.¹²⁵ For example, it opined that courts should scrutinize vertical RPM more carefully if many competing firms adopt the practice, or if there is evidence that retailers were the impetus for the restraint.¹²⁶

The majority then gave brief consideration to the dissent’s *stare decisis* objection. The majority contended that *stare decisis* was not an insurmountable obstacle because the Court treats the Sherman Act as a common law statute, and thus the presumption that legislative changes should be left to Congress carries less weight.¹²⁷

C. The Dissent

Justice Breyer, writing for the dissent, argued that the *Leegin* Court had insufficient grounds to overturn ninety-six years of precedent.¹²⁸

117. *Leegin*, 127 S. Ct. at 2716 (citing *Cont’l T.V., Inc. v. GTE Sylvania, Inc.*, 433 U.S. 36, 55 (1977); *Marvel & McCafferty*, *supra* note 16, at 349).

118. *Id.* (citing *GTE Sylvania*, 433 U.S. at 55).

119. *Id.* at 2716-18.

120. 487 U.S. 717.

121. *Leegin*, 127 S. Ct. at 2716-18.

122. *Id.* at 2717.

123. *Id.* (citing *Marvel & McCafferty*, *supra* note 51, at 373).

124. *Id.* at 1218.

125. *See id.* at 2719.

126. *Id.* at 2719.

127. *Leegin*, 127 S. Ct. at 2720 (citing *State Oil Co. v. Khan* 522 U.S. 3, 20 (1997); *Nat’l Soc’y of Prof. Eng’rs v. United States*, 435 U.S. 679, 688 (1978); *Nw. Airlines v. Transp. Workers Union*, 451 U.S. 77, 98 n.42 (1981)).

128. *See id.* at 2731 (Breyer, J., dissenting) (“I am not aware of any case in which this Court has overturned so well-established a statutory precedent. Regardless, I do not see

While he implied that if *stare decisis* were not an issue he might have voted with the majority,¹²⁹ Justice Breyer nonetheless concluded that reversing *Dr. Miles* was inappropriate because clients and lower courts have relied on advice based on *Dr. Miles* for ninety-six years, and the circumstances had not changed since *Dr. Miles*.¹³⁰ Additionally, Justice Breyer argued that Congress considered the same economic literature upon which the majority relied and deemed it insufficient to overturn the *per se* ban against vertical RPM.¹³¹ Justice Breyer concluded that it is the purview of the legislature to change the Sherman Act, and, since it has deliberately chosen not to do so, the Court should not have changed it.¹³²

IV. DISCUSSION

This Part will argue that the majority decision was correct but problematic in two principal respects. Section IV.A argues that the majority decision was correct; Section IV.B argues that the majority, however, insufficiently addressed the *stare decisis* concerns; and Section IV.C suggests a more detailed starting point from which to address vertical RPM cases under the rule of reason. Section IV.D argues that the *Leegin* majority's language confining the scope of the common law rule disfavoring restraints on alienation was overbroad and unnecessary, and may indicate a willingness to weaken the first sale doctrine in the patent context this term. Section IV.D then examines the unwanted effects that would arise where antitrust and patent law intersect if the Supreme Court were to adopt the Federal Circuit's weaker first sale doctrine.

A. The Majority Decision was Correct

The majority correctly held that vertical RPM is inappropriate for *per se* treatment¹³³ because vertical RPM is not "manifestly anticompetitive"¹³⁴ and does not "lack of any redeeming virtue."¹³⁵ Vertical RPM

how the Court can claim that ordinary criteria for over-ruling an earlier case have been met.").

129. *Id.* at 2726 ("Were the Court writing on a blank slate, I would find these questions difficult. But, of course, the Court is not writing on a blank slate, and that fact makes a considerable legal difference.").

130. *Id.* at 2731.

131. *Id.* at 2726 (referring to Hearings on H.R. 10527 et al. before the Subcommittee on Commerce and Finance of the House Committee on Interstate and Foreign Commerce, 85th Cong., 2d Sess., 74-76, 89, 99, 101-102, 192-195, 261-262 (1958)).

132. *Id.* (stating that Congress's repeal of the McGuire and Miller-Tidings Acts constitutes a conscious extension of the *Dr. Miles per se* rule).

133. *See Leegin*, 127 S. Ct. at 2720.

134. *Cont'l T.V., Inc. v. GTE Sylvania, Inc.*, 433 U.S. 36, 50 (1977).

serves a variety of procompetitive ends recognized by economists. As discussed above, RPM policies can induce retailers to provide point of sale information about complicated products, to take risks on products whose commercial viability is uncertain, and to combat the free-rider problem.¹³⁶

Furthermore, widespread anticompetitive uses of vertical RPM are unlikely. In particular, market forces will, in most circumstances, prevent manufacturers or retailers from effectively using vertical RPM to strengthen a cartel.¹³⁷ The retailer cartel is particularly fragile. First, manufacturers have no economic incentive to reinforce a retailer cartel—the manufacturer will sell less and the retailers would absorb the monopoly profits.¹³⁸ Second, a retailer cartel is only viable when there are “(1) few [retailers]; (2) few manufacturers; (3) homogeneous products; and (4) easy policing.”¹³⁹ The cartel cannot survive if not all retailers and manufacturers in the relevant market cooperate; otherwise “outsiders” to the cartel will undercut the cartel price, stealing their customers and destroying their profitability.¹⁴⁰ Furthermore, even assuming an effective disciplinary mechanism and full industry participation, a retailer cartel will still crumble if market substitutes or differentiated goods are readily available.¹⁴¹ Given the rarity of market conditions suitable for cartels, and the presence of procompetitive benefits, the dealer cartel concern does not justify a *per se* standard for vertical RPM. Furthermore, the rule of reason is well suited to addressing the problem of a powerful retailer who imposes vertical RPM upon manufacturers because these manufacturers would likely complain to enforcement agencies.¹⁴² Under the rule of reason standard, as set forth by the *Leegin* majority, a retailer impetus for a restraint would weigh substantially toward a finding of anticompetitive behavior.¹⁴³

Similarly, courts can adequately deal with the possibility of manufacturer cartels using vertical RPM under the rule of reason. First, policing a cartel remains difficult even with vertical RPM policies in place. While price cuts are easy to detect and easily punished under a vertical RPM policy, cartel members can still undercut the cartel by offering buyers subtle

135. *N. Pac. Ry. Co. v. United States*, 356 U.S. 1, 5 (1958).

136. *See supra* Section II.A.2.

137. Frank H. Easterbrook, *Antitrust Law Enforcement in the Vertical Restraints Area: Vertical Arrangements and the Rule of Reason*, 53 ANTITRUST L. J. 135, 141-42 (1984).

138. *Id.* at 142.

139. *Id.*

140. *Id.*

141. *Id.*

142. *See BORK, supra* note 78, at 292-93.

143. *See Leegin*, 127 S. Ct. at 2719.

sales promotions such as more favorable credit policies, or putting slightly more product volume in a unit sold, which are far more difficult to detect than a simple price cut.¹⁴⁴ A manufacturer cartel could avoid this problem by implementing exclusive dealing arrangements in conjunction with vertical RPM.¹⁴⁵ However, because both vertical RPM and exclusive dealing arrangements are explicit, it will be easy for enforcement agencies and courts to identify this particular anticompetitive combination and proscribe it under the rule of reason.¹⁴⁶

While the majority's holding was correct, its reasoning was overbroad. The majority's dismissal of the importance of the *stare decisis* concern creates unnecessary uncertainty. Further, the majority's narrowing of the common law rule against restraints on alienation was unnecessary to reach its conclusion and could have unintended (or, perhaps, shrewdly calculated) ramifications outside the bounds of antitrust law. Section IV.B below discusses the possible ramifications of ignoring *stare decisis* concerns. Section IV.C then synthesizes economic research to recommend more substantial guidance to lower courts. Finally, Section IV.D explores the possible effects of the majority's narrowing of the common law rule against restraints on alienation where patent and antitrust law intersects.

B. The Problem of Ignoring *Stare Decisis*

The *Leegin* majority inaccurately characterized its decision as if *stare decisis* had never been a serious factor in antitrust analysis because the Sherman Act is effectively common law.¹⁴⁷ For example, in *Flood v. Kuhn*¹⁴⁸ although the Court found that a previous decision to exempt baseball (but not other professional sports)¹⁴⁹ from the federal antitrust laws was "illogical" and an "aberration,"¹⁵⁰ the Court nevertheless held that the case still controlled because of *stare decisis*, and that any remedy for the consequent inconsistency was the responsibility of Congress.¹⁵¹ Furthermore, in *Illinois Brick v. Illinois*¹⁵² the Court reasoned that even if it was convinced that its prior decision in *Hanover Shoe, Inc. v. United Shoe Ma-*

144. See BORK, *supra* note 78 at 294.

145. Robert L. Steiner, *Exclusive Dealing + Resale Price Maintenance: A Powerful Anticompetitive Combination*, 33 SW. U. L. REV. 447, 456 (2004).

146. See *id.* at 447 (explaining that both exclusive dealing arrangements and RPM involve an explicit agreement between manufacturer and reseller).

147. See *Leegin*, 127 S. Ct. at 2720 ("From the beginning the Court has treated the Sherman Act as a common-law statute").

148. 407 U.S. 258 (1972).

149. *Federal Baseball Club v. National League*, 259 U.S. 200 (1922).

150. *Flood*, 407 U.S. at 281.

151. *Id.* at 285.

152. 431 U.S. 720 (1977).

*chinery Corp.*¹⁵³ was inconsistent with antitrust policy, it would have upheld the decision because “the considerations of *stare decisis* weigh heavily in the area of statutory construction, where Congress is free to change this Court’s interpretation of its legislation.”¹⁵⁴ Therefore, while the *Leegin* majority might be correct to say that *stare decisis* is less significant in Sherman Act cases,¹⁵⁵ it is misleading to assert that “from the beginning the Court has treated the Sherman Act as a common law statute”¹⁵⁶ in order to excuse its dismissal of legitimate *stare decisis* concerns.

The majority should have further addressed the reliance interest of lower courts, firms, and enforcement agencies on *Dr. Miles*. The Court dismissed this interest, noting that only, “the reliance interest here . . . cannot justify an inefficient rule.”¹⁵⁷ This sentence was insufficient to deal with a “century’s worth of similar cases, massive amounts of advice that lawyers have provided their clients, and untold numbers of business decisions those clients have taken in reliance upon [*Dr. Miles*].”¹⁵⁸

Justice Breyer predicted that the majority’s decision will “create considerable legal turbulence as lower courts seek to develop workable principles.”¹⁵⁹ Ironically, although the majority’s decision purports to benefit the market by removing an unnecessary judicial and regulatory restraint, the “legal turbulence” it may create is actually harmful to a capitalist market.¹⁶⁰ One obvious consequence is increased cost for legal advice because the pool of legal professionals with the requisite expertise for advising clients as to whether a particular vertical RPM scheme will pass the rule of reason test will shrink, as compared to what it was before *Leegin*.¹⁶¹ Similarly, uncertainty as to the state of the law increases both transaction and dispute resolution costs.¹⁶²

153. 392 U.S. 481 (1968).

154. 431 U.S. at 736.

155. *See State Oil Co. v. Khan*, 522 U.S. 3, 20 (1997) (“In the area of antitrust law, there is a competing interest, well-represented in this Court’s decisions, in recognizing and adapting to changed circumstances and the lessons of accumulated experience. Thus, the general presumption that legislative changes should be left to Congress has less force with respect to the Sherman Act.”).

156. *Leegin Creative Leather Prods., Inc. v. PSKS, Inc.*, 127 S. Ct. 2705, 2720 (2007).

157. *Id.* at 2724.

158. *Id.* at 2731 (Breyer, J., dissenting).

159. *Id.* at 2737.

160. *See* Michael P. Van Alstine, *The Costs of Legal Change*, 49 UCLA L. REV. 789, 813 (2002) (“Some degree of legal certainty in fact is essential to the very functioning of a capitalist system.”).

161. *See id.* at 829.

162. *Id.* at 830-31.

For actors in the private sector, many businesses may choose to forego using vertical RPM, even if it benefits them, because of the uncertainty as to what will pass the rule of reason in each of the jurisdictions in which the business operates.¹⁶³ The majority could have largely foreclosed this scenario simply by giving lower courts more specific guidance for future cases in light of *Leegin*. While the rule of reason, by definition, leaves lower courts broad discretion to decide the legality of a particular restraint,¹⁶⁴ by giving a more detailed account of the factors which bear on the procompetitive or anticompetitive nature of vertical RPM, the *Leegin* Court could have left the lower courts with a more uniform starting point from which to develop their own standards. This could have substantially reduced Justice Breyer's "legal turbulence" concern.¹⁶⁵

C. Factors for the Rule of Reason for Future Vertical RPM Cases

The majority briefly instructed lower courts that (1) the number of manufacturers engaging in the vertical RPM within a given industry (whether or not retailers were the impetus for vertical RPM) and (2) whether or not manufacturers engaging in vertical RPM have market power are relevant considerations for determining whether a particular vertical RPM policy is anticompetitive.¹⁶⁶ This Part proposes a more detailed starting point for lower courts to follow when evaluating vertical RPM cases under the rule of reason. A more detailed set of standards will lead to a more uniform application of the rule of reason, which is particularly important in the modern marketplace, where few businesses operate in only one jurisdiction. The less variance of RPM standards a business is subject to, the better.

1. Market Power

The *Leegin* majority suggested a firm's market power as one of many factors under the rule of reason.¹⁶⁷ "Market power is the ability to raise price significantly without losing so many sales that the increase is unprofitable."¹⁶⁸ A finding that a firm does not have market power should create

163. *See id.* at 835 (explaining that uncertainty as to a practice's legality works to deter economic actors from adopting it, even when it benefits them).

164. *See Chicago Bd. of Trade v. United States*, 246 U.S. 231, 238 (1918) (articulating the rule of reason standard).

165. *See Leegin Creative Leather Prods., Inc. v. PSKS, Inc.*, 127 S. Ct. 2705, 2737 (2007) (Breyer, J., dissenting).

166. *Leegin*, 127 S. Ct. at 2719 (2007).

167. *Leegin*, 127 S. Ct. at 2712.

168. *Id.*

a strong presumption in favor of legality.¹⁶⁹ When a firm lacks market power, it cannot sustain anticompetitive practices, such as cartels, because rivals will lure away the firm's customers with better deals.¹⁷⁰ Therefore, competitive rivals regulate a bad actor that does not have market power more efficiently than the courts.¹⁷¹ Conversely, the presence of market power should weigh heavily toward a finding of anticompetitive behavior, since the natural market safeguards against anticompetitive behavior described above will not sufficiently affect a firm with market power to deter anticompetitive behavior. Because the absence or presence of market power so strongly affects a firm's ability to sustain anticompetitive effects, courts should begin a rule of reason evaluation of a vertical RPM policy with a market-power evaluation.

Courts have substantial experience determining whether a firm has market power in other antitrust areas such as monopolization,¹⁷² tying,¹⁷³ and merger enforcement.¹⁷⁴ Thus, courts should apply the same expertise when evaluating an RPM arrangement.

2. *Presence of Restricted Dealing Arrangements*

A finding that a firm does not have market power should not end the inquiry. When a firm combines vertical RPM with an exclusive dealing arrangement, it can exercise anticompetitive effects despite its lack of market power¹⁷⁵ because exclusive dealing arrangements can prevent manufacturers from cheating on cartels.¹⁷⁶ When a vertical RPM policy is in place, exclusive dealing arrangements—which dictate the cartel members who may sell to certain retailers—eliminate a cartel member's ability to increase its market share within the cartel by enticing retailers with

169. See Easterbrook, *supra* note 138, at 159 (“Vertical arrangements should be deemed lawful, without further inquiry if . . . the firm employing the arrangement lacks market power.”).

170. *Id.*

171. *Id.*

172. See, e.g., *Nat'l Collegiate Athletic Ass'n v. Bd. of Regents*, 468 U.S. 85, 111 (1984) (“As a factual matter, it is evident that petitioner does possess market power.”).

173. See, e.g., *Ill. Tool Works, Inc. v. Indep. Ink, Inc.*, 547 U.S. 28, 46 (2006) (“[I]n all cases involving a tying arrangement, a plaintiff must prove that the defendant has market power in the tying product.”).

174. *FTC v. H.J. Heinz Co.*, 246 F.3d 708, 713 (D.C. Cir. 2001) (“Merger enforcement, like other areas of antitrust, is directed at market power.”) (internal quotations omitted).

175. See generally Steiner, *supra* note 145, at 456 (discussing the anticompetitive effects of combined RPM and exclusive dealings arrangements).

176. For a more detailed explanation on the mechanics of cartels, see *supra* Section II.A.3.b.

more favorable terms of sale.¹⁷⁷ However, it is important to note that for this arrangement to work nearly all of the manufacturers in a particular industry must use exclusive dealing, otherwise retailers would buy from “holdout” manufacturers offering lower prices and better terms of sale.¹⁷⁸ Therefore, courts should inquire as to whether a substantial proportion of retailers in a relevant market are bound by exclusive dealings arrangements. If a manufacturer institutes a vertical RPM policy in conjunction with an exclusive dealing arrangement, this should weigh against a finding of legality. If most of the manufacturers in the relevant market combine vertical RPM and exclusive dealing arrangements, this should create a strong presumption toward illegality.

3. *Uniformity of Practices in the Market*

Courts should look for the prevalence of uniform practices in the relevant product market because highly uniform practices within a given market can indicate the presence of a cartel.¹⁷⁹ The viability of a cartel requires that all members agree on a uniform price schedule and have the same mark-up for retailers.¹⁸⁰ Furthermore, when market demand changes, all cartel members must adjust their prices simultaneously.¹⁸¹ In the event of a manufacturer cartel, one would expect to find coordinated price changes over time.¹⁸² Therefore, uniformity of practices, such as distribution arrangements or coordinated price changes, should weigh against a finding of legality.

Conversely, if those uniform practices endured for a considerable length of time, this should weigh neither for nor against legality. Empirical research has shown that only rarely do cartels last more than five years.¹⁸³ Therefore, long-lasting uniformity of practices throughout an industry more likely indicates that those practices are the most efficient of the known possibilities, not that the market is cartelized.¹⁸⁴

177. Telser, *supra* note 13, at 97.

178. Easterbrook, *supra* note 138, at 142.

179. *See* Toys “R” Us, Inc. v. Fed. Trade Comm’n, 221 F.3d 928 (7th Cir. 2000) (upholding FTC’s inference of a horizontal agreement from multiple vertical arrangements).

180. Telser, *supra* note 13, at 98.

181. *Id.* at 99.

182. OVERSTREET, *supra* note 25, at 23.

183. Easterbrook, *supra* note 138, at 165 (proposing five years as an arbitrary cutoff period).

184. *See id.*

4. *Other Factors to Consider*

After examining market power, the presence of restricted dealing arrangements, and the uniformity of certain practices, examining a few more minor factors could prove helpful to the rule of reason analysis. First, the *Leegin* majority suggests that courts should examine a vertical RPM arrangement more closely when a policy appears to have been initiated by retailers because horizontal retailer cartels are more likely in this situation.¹⁸⁵ Courts should easily be able to determine when this is the case, because manufacturers hurt by this practice will likely complain to enforcement agencies.¹⁸⁶ Second, courts should look to the restraint's effect on output. If the vertical RPM arrangement is anticompetitive, then, by definition, output must fall.¹⁸⁷ Therefore, if after holding demand and other variables constant, output remains stable or increases, this finding should weigh strongly in favor of legality under the rule of reason.¹⁸⁸

5. *Summary of Procedure*

When evaluating a vertical RPM arrangement, courts should first conduct a market analysis. Market power, or the combination of vertical RPM with an exclusive dealing arrangement, should create a rebuttable presumption of anticompetitive behavior. This presumption could be rebutted by a showing that output has not decreased since the implementation of the restraint, or by a satisfactory showing of pro-competitive effects in general. Following this inquiry, courts should proceed with the standard rule of reason analysis, inquiring whether retailers initiated the restraint and whether there are other indicators of cartel behavior, such as uniform practices in the industry.

D. **Possible Implications for Patent Law**

The Court's limitation on the applicability of the common law against restraints on alienation in *Leegin*, coupled with the decision to grant cert in *Quanta Computer, Inc. v. LG Electronics*,¹⁸⁹ may indicate the Court's willingness to accept the Federal Circuit's first sale doctrine next term. The Court's evisceration of the common law doctrine against restraints on alienation was not necessary to justify its opinion. As discussed above, economic research has made clear that vertical RPM can have a myriad of

185. *Leegin Creative Leather Prods., Inc. v. PSKS, Inc.*, 127 S. Ct. 2705, 2719 (2007).

186. BORK, *supra* note 78, at 292.

187. Easterbrook, *supra* note 138, at 163.

188. *Id.* at 163-64 (noting that data availability is a necessary prerequisite for statistical tools to be useful).

189. *Quanta Computer, Inc. v. LG Elecs., Inc.*, 128 S.Ct. 28 (2007) (granting cert.).

procompetitive effects,¹⁹⁰ which makes *per se* treatment inappropriate.¹⁹¹ The Court could, and should, have rested its decision on this argument. If the dicta about restraints on alienation has any purpose, it can only be to influence future, perhaps tangentially, related cases.

Section IV.D.1 will reexamine the *Leegin* Court's treatment of the common law rule against restraints on alienation. Section IV.D.2 will discuss the first sale doctrine in patent law and its relationship to the common law rule against restraints on alienation. Section IV.D.3 will compare the Supreme Court's first sale precedent with that of the Federal Circuit and introduce *Quanta, Inc. v. LG Electronics*. Finally, Section IV.D.4 will discuss how *Leegin* would interact if the Court adopts the Federal Circuit first sale doctrine.

1. *Leegin's Limiting of Common Law Doctrine Against Restraints on Alienation*

The *Leegin* majority criticized the *Dr. Miles* Court's reliance on the common law rule against restraint on alienation as an improper reliance on "formalistic legal doctrine rather than demonstrable economic effect."¹⁹² The *Leegin* majority reasoned that the policy reasons for invalidating restraints on alienation (preventing the removal of land, though not necessarily chattels, from the stream of commerce) were "extraneous" to the antitrust concerns which control when evaluating RPM.¹⁹³ The Court then pronounced that "the state of the common law 400 or even 100 years ago is irrelevant to the issue before us: the effect of antitrust laws upon vertical distribution restraints in the American economy today."¹⁹⁴ More generally, the majority admonished that "the Court should be cautious about putting dispositive weight on doctrines from antiquity [such as the common law doctrine against restraint on alienation] but of slight relevance."¹⁹⁵

2. *The First Sale Doctrine: An IP Equivalent of the Common Law Rule Against Restraints on Alienation*

The first sale doctrine is, in many ways, an analog to the common law rules against restraints on alienation in patent law. Under the first sale doctrine, an authorized sale of a patented product exhausts the intellectual

190. *See supra* Section II.A.2.

191. *See supra* Section IV.A.

192. *Leegin Creative Leather Prods., Inc. v. PSKS, Inc.*, 127 S. Ct. 2705, 2714 (2007) (internal quotations omitted) (quoting *Cont'l T.V., Inc. v. GTE Sylvania, Inc.* 433 U.S. 36, 58-59 (1977)).

193. *Id.*

194. *Id.* (internal quotations omitted) (quoting *GTE Sylvania*, 433 U.S. at 53, n.21).

195. *Id.*

property protection for that product.¹⁹⁶ Once the product passes into the purchaser's possession, it is wholly outside the authority of the patent laws, precluding the patentee from suing the user for infringement.¹⁹⁷ Therefore, disputes over post-sale restrictions on use must arise under contract, not patent laws.¹⁹⁸ The idea behind the first sale doctrine is that the patent owner is entitled to only one return on its government-conferred monopoly, and once the patent owner enjoys this first return, all subsequent returns have been exhausted.¹⁹⁹

The first sale doctrine is closely related to the common law rule against restraints on alienation.²⁰⁰ The idea that once the patentee sells the product, its control over the product ends, mirrors the rationale behind the traditional common law rule against restraints on alienation—that once a unit is sold, it wholly belongs to the buyer.²⁰¹ Because the *Leegin* Court implied that the common law rule against restraints on alienation is only relevant in the context of real property²⁰² the viability of the current conception of the first sale doctrine (which is applicable to intellectual property) is uncertain.²⁰³

3. *Legal Treatment of the First Sale Doctrine*

The Federal Circuit's first sale doctrine significantly deviates from the Supreme Court's last articulation of the first sale doctrine²⁰⁴ in *United*

196. 5-16 CHISUM ON PATENTS § 16.03(2)(a).

197. *Bloomer v. McQuewan*, 55 U.S. 539, 549-50 (1853). For a list of cases following *Bloomer*, see Brief for the United States as Amici Curiae: *Quanta Computer, Inc. v. LG Elecs., Inc.*, No. 06-937 (2007).

198. *Keeler v. Standard Folding Bed Co.*, 157 U.S. 659, 666 (1895).

199. Glen O. Robinson, *Personal Property Servitudes*, 71 U. CHI. L. REV. 1449, 1507 (2004).

200. Michael A. Carrier, *Cabining Intellectual Property Through a Property Paradigm*, 54 DUKE L. J. 1, 115 (2004).

201. See Julie E. Cohen & Mark Lemley, *Patent Scope and Innovation in the Software Industry*, 89 CALIF. L. REV. 1, 31 (2001).

202. See *Leegin Creative Leather Prods., Inc. v. PSKS, Inc.*, 127 S. Ct. 2705, 2714 (2007) ("Usually associated with land, not chattels, the rule [against restraints on alienation] arose from restrictions removing real property from the stream of commerce for generations. The Court should be cautious about putting dispositive weight on doctrines from antiquity but of slight relevance.").

203. See Brief for the United States as Amici Curiae: *Quanta Computer, Inc. v. LG Elecs. Inc.*, No. 06-937 n.3 (2007) (arguing that the first sale doctrine survives the demise of the per se ban on retail price maintenance).

204. *Id.*; see also Brief of Consumers Union, Electronic Frontier Foundation, and Public Knowledge in Support of the Petitioner: *Quanta Computer, Inc. v. LG Elecs., Inc.*, No. 06-937 (2007).

*States v. Univis Lens Co.*²⁰⁵ In *Univis*, the Court held that a lens-blank manufacturer could not exercise control over resale prices of its products through its patent monopoly or under the Sherman Act.²⁰⁶ The Court found that the manufacturer could not use its patent to exercise control over resale prices because it had sold the lens blanks to the reseller, who used the blanks consistently with the patent, and thus the manufacturer's patent rights were exhausted.²⁰⁷ The Court broadly noted that "the purpose of the patent law is fulfilled with respect to any particular article when the patentee has received his reward for the use of his invention by the sale of the article, and that once that purpose is realized the patent law affords no basis for restraining the use and enjoyment of the thing sold."²⁰⁸

Counter to the Supreme Court, the Federal Circuit held in *Mallinckrodt, Inc. v. Medipart, Inc.*²⁰⁹ that the owner of a patent on a medical device could sue a customer under the patent law for violating the patentee's request that the product be for single use only.²¹⁰ Plaintiff Mallinckrodt sold its patented medical device to hospitals with an accompanying "single use only" notice.²¹¹ Notwithstanding this notice, hospitals sent the devices to defendant Medipart to be refurbished.²¹² Relying on *Univis*, the district court ruled that Mallinckrodt could not remedy violation of the single use only provision through a patent infringement suit.²¹³ The Federal Circuit reversed, holding that the single-use restriction did not violate antitrust law or the patent misuse doctrine, and that a patent holder may remedy violation a post-sale use restriction of a patented article with a patent infringement suit.²¹⁴ For the Federal Circuit, the validity of the restriction under patent law depended not upon whether the patented article had been sold, but upon whether the conditions imposed on the buyer violated some other law (e.g., antitrust regulations), and whether the restriction was properly within the scope of the patent.²¹⁵

Against this legal backdrop, in *LG v. Quanta*, LG Electronics sued several electronics companies for patent infringement, alleging that the companies purchased microprocessors from Intel, LG's licensee, and in-

205. 316 U.S. 241 (1942).

206. *Id.* at 250.

207. *Id.* at 249-50.

208. *Id.* at 251.

209. 976 F.2d 700 (Fed. Cir. 1992).

210. *Id.*

211. *Id.* at 701.

212. *Id.*

213. *Id.*

214. *Id.*

215. *Mallinckrodt, Inc. v. Medipart, Inc.*, 976 F.2d 700, 708 (Fed. Cir. 1992).

corporated them into their own chip sets.²¹⁶ LG argued that Intel's sales of unpatented component parts to defendants did not exhaust LG's patent.²¹⁷ However, the District Court, relying on *Univis Lens*, held that licensee Intel's sale of unpatented microprocessors and chipsets did exhaust LG's patent because the components were "destined . . . to be finished by the purchaser in conformity with the patent."²¹⁸ LG appealed to the Federal Circuit, which upheld *Mallinckrodt* and reversed the District Court.²¹⁹ The Federal Circuit reasoned that LG's patents were not exhausted because the LG-Intel license expressly disallowed computer system manufacturers from combining licensed components with non-Intel components, and Intel notified licensees of this provision, making the sale *conditional* and non-exhaustive.²²⁰

On September 25, 2007, the Supreme Court granted certiorari to hear *Quanta Computer v. LG Electronics* on appeal from the Federal Circuit.²²¹ The Court requested additional briefing from the Solicitor General as to the Executive Branch's position.²²² The Solicitor General argued that the Federal Circuit's patent exhaustion precedent had significantly diverged from that of the Supreme Court.²²³ The Solicitor General argued that the Federal Circuit's version of the first sale doctrine creates economic inefficiencies by allowing multiple rounds of infringement suits against various actors at multiple levels downstream in commerce.²²⁴ Additionally, the Solicitor General warned that the Federal Circuit's rule would insulate patentees' resale and use restrictions from antitrust scrutiny because restrictions such as vertical RPM would be enforceable as a matter of patent law and subject to the Federal Circuit's exclusive jurisdiction.²²⁵ Accordingly, the Solicitor General argued that the *Univis* Court's ruling that RPM policies for patented goods were not authorized under the Patent Act survives *Leegin*.²²⁶

216. *LG Elecs., Inc. v. Asustek Computer, Inc.*, 248 F. Supp. 2d 912, 914 (N.D. Cal. 2003).

217. *Id.*

218. *Id.* at 915.

219. *LG Elecs. v. Biztek Elecs*, 453 F.3d 1364, 1369 (Fed. Cir. 2006).

220. *Id.* at 1370.

221. *Quanta Computer, Inc. v. LG Elecs.*, 453 F.3d 1364 (Fed. Cir. 2006), *cert. granted*, 128 S. Ct. 27 (U.S. Sept. 25, 2007) (No. 06-937).

222. *Quanta*, 127 S. Ct. 2087 (2007).

223. Brief for the United States as Amici Curiae: *Quanta Computer, Inc. v. LG Elecs., Inc.*, No. 06-937 (2007), available at <http://www.usdoj.gov/atr/cases/f225500/225544.htm>.

224. *Id.*

225. *Id.*

226. *Id.*

4. *A Mallinckrodt First Sale Framework Would Subject Price Cutters to Punitive Damages for Violation of the RPM Arrangement*

Before *Mallinckrodt*, a patent holder's resale and use restrictions, if enforceable, were a matter of contract law.²²⁷ Under the *Mallinckrodt* framework, if the patent license is a valid contract under state law and gives appropriate notice of limited rights to downstream purchasers, then the patent holder can enforce its use restrictions as a matter of patent infringement.²²⁸

Calling a breach of contract over violation of an RPM policy or reuse provision patent infringement renders all appeals subject to the exclusive jurisdiction of the Federal Circuit, erasing the influence of traditional contracts precedent in the dispute's circuit of origin.²²⁹ In the context of an RPM agreement, economic harm is the purview of antitrust law, not patent law, and should be dealt with under an antitrust legal framework rather than a patent law framework. The *Mallinckrodt* framework also intensifies the prices cutter's consequences for breach of contract, as patentees under *Mallinckrodt* could benefit from patent law's liberal damage rules, such as enhanced damages for willful infringement, which would not be available to punish violators of an RPM agreement in traditional contract actions.²³⁰ Given that the impetus of the rule of reason inquiry is the uncertainty of a particular agreement's practical effect on the market, the Court should not tolerate a potentially overlapping legal scheme which creates an additional hurdle for bringing a meritorious antitrust claim.

Fundamentally, a licensee's violation of a vertical RPM provision is a breach of contract, not an infringement upon the licensor's *patent* right. A reseller's refusal to comply with a vertical RPM restriction does not entail a wrongful appropriation of the technology embodied in the patent. While "patent owners should not be in a worse position, by virtue of the patent right to exclude, than owners of other property used in trade,"²³¹ patent owners should not be in a better position than owners of other property to

227. James B. Kobak, Jr., *Contracting Around Exhaustion: Some Thoughts About the CAFC's Mallinckrodt Decision*, 75 J. PAT. & TRADEMARK OFF. SOC'Y 550, 559 (1993).

228. *Id.* Litigating a licensee's deviation from an RPM arrangement under the Patent Act instead of under Contract law would have significant adverse consequences. *Compare* 35 U.S.C. § 284 (2000) (allowing up to treble damages for willful infringement) with 11-59 CORBIN ON CONTRACTS § 59.2 (explaining that punitive damages are not available in contract law).

229. Kobak, *supra* note 227 at 560.

230. *Id.* at 559.

231. *Mallinckrodt, Inc. v. Medipart, Inc.*, 976 F.2d 700, 708 (Fed. Cir. 1992).

enforce potentially anticompetitive vertical RPM arrangements by virtue of a weak patent exhaustion doctrine.²³² Therefore, the Court should not permit a patent holder to call a simple breach of contract an act of patent infringement and then demand punitive damages—unavailable to manufacturers not holding patents²³³—from the user or retailer who legitimately questioned the RPM scheme's legality under the rule of reason. Violation of a vertical RPM agreement should not become subject to punitive damages remedies simply because a patented product is involved. In the particular case of vertical RPM agreements for patented goods, *Leegin*, not *Mallinckrodt* should govern. Therefore, the Solicitor General correctly articulated that the *Univis* ruling survives, and should survive, *Leegin*.²³⁴

V. CONCLUSION

The Court correctly decided that vertical RPM should be subject to the rule of reason instead of a *per se* analysis under the Sherman Act. The fact that vertical RPM can have a myriad of procompetitive effects coupled with the fact that vertical RPMs anticompetitive effects are only possible in a very narrow set of economic circumstances renders the practice inappropriate for *per se* treatment.

However, in failing to adequately address the *stare decisis* concerns associated with overruling *Dr. Miles*, the Court created an uncertain environment, which in the short run may introduce more inefficiency into the market than the former *per se* rule did. Furthermore, the Court's treatment of the common law rule against restraints on alienation could facilitate a fundamental change to the first sale doctrine in patent law in such a way as to give unprecedented remedies for what would otherwise be mere breaches of contract. While the Court moved the analysis in the correct direction, the confusion over vertical RPM arrangements is far from over.

232. Brief of Amicus Curiae Electronic Frontier Foundation at 11-12, *Ariz. Cartridge Re-mfrs. Ass'n, Inc. v. Lexmark Int'l, Inc.*, 421 F.3d 981 (9th Cir. 2005) (No. 03-16987), available at http://w2.eff.org/legal/cases/ACRA_v_Lexmark/20040211_amicus.php.

233. See 11-59 CORBIN ON CONTRACTS § 59.2 (explaining that punitive damages are not available in contract law).

234. Brief for the United States as Amici Curiae: *Quanta Computer, Inc. v. LG Elecs., Inc.*, No. 06-937 (2007), available at <http://www.usdoj.gov/atr/cases/f225500/225544.htm>.

ADDITIONAL DEVELOPMENTS— ANTITRUST

BELL ATLANTIC CORP. V. TWOMBLY

127 S. Ct. 1955 (2007)

In *Bell Atlantic Corp. v. Twombly*, the Supreme Court held that a complaint under Sherman Act § 1 could not survive a motion to dismiss that alleged that major telecommunications providers engaged in parallel conduct unfavorable to competition. The Court required some factual context suggesting an agreement, as opposed to identical, independent action. In so doing, the Court rejected a previous, oft-quoted passage from *Conley v. Gibson*, 355 U.S. 41 (1957), in which the Court had held that “a complaint should not be dismissed for failure to state a claim unless it appears beyond doubt that the plaintiff can prove no set of facts in support of his claim which would entitle him to relief.”

The 1984 divestiture of AT&T’s local telephone business created a system of regional monopolies known as Incumbent Local Exchange Carriers (ILECs). The Telecommunications Act of 1996 ended the ILEC’s regional monopolies and ordered the ILECs to share its network with competitors, known as Competitive Local Exchange Carriers (CLECs). The plaintiffs in this action represent “a putative class action of subscribers of local telephone and/or high speed internet services.” The complaint first alleged that the ILECs “engaged in parallel conduct” in their respective service areas to inhibit the growth of the CLECs.” Second, the complaint charged that the ILECs agreed to refrain from competing with each other.

The U.S. District Court for the Southern District of New York dismissed the complaint for failure to state a claim upon which relief can be granted. The district court held that consciously parallel behavior was insufficient to infer a conspiracy, and that plaintiffs must plead additional facts that “tend to exclude independent self-interested conduct as an explanation for defendants’ parallel behavior.” The United States Court of Appeals for the Second Circuit reversed, holding that under *Conley v. Gibson*, the complaint was only properly dismissed if there was “no set of facts that would permit the plaintiff to demonstrate that the particular parallelism asserted was the product of collusion rather than coincidence.”

The Supreme Court held that while Federal Rule of Civil Procedure 8(a)(2) requires only “a short and plain statement of the claim showing that the pleader is entitled to relief,” this requires “enough factual matter . . . to suggest that an agreement was made.” When parallel conduct is alleged in a § 1 claim, the conduct must be placed in a context that suggests a preceding agreement. The Court rejected the *Conley v. Gibson* “no set of facts” passage and said that the appropriate rule of law is “once a claim has been stated adequately, it may be supported by showing any set of facts consistent with the allegations in the complaint.”

Justice Stevens, joined by Justice Ginsburg, dissented and would have held that the complaint adequately stated a ground upon which relief could be granted. Justice Stevens would have retained the “no set of facts” language from *Conley v. Gibson* and held that this language was consistent with the goals of modern notice pleading.

GOOGLE/DOUBLECLICK MERGER

In April 2007, Google announced its acquisition of DoubleClick, a large online advertising company that delivers display ads from advertisers to websites. Google's business rivals, notably Microsoft, publicly opposed the merger on the basis that it would give Google a monopoly in online advertising. Additionally, consumer advocacy groups were concerned that the personal data collection practices of Google and DoubleClick harmed consumer privacy. Consequently, the advocacy groups filed a complaint with the Federal Trade Commission (FTC), asking the agency to review the merger.

By a 4-1 vote, the FTC approved the Google/DoubleClick merger in December 2007.

The FTC did not examine the merger on the basis of privacy concerns because it lacked authority to block the merger on non-antitrust grounds. The FTC decided that Google's acquisition of DoubleClick was "unlikely to substantially lessen competition" after examining the possibilities of direct and substantial harm to competition after a merger, the elimination of potential competition in any relevant market, and any non-horizontal monopolistic harm.

The FTC noted the importance of privacy concerns in its report and concurrently released a voluntary set of principles to serve as "self-regulatory standards governing online behavioral advertising." The FTC defined online behavioral advertising as advertising tailored to individual consumers' interests through tracking of consumer's activities online. The FTC principles suggest that all websites in the behavioral advertising world should disclose that data is being collected for the purpose of targeting ads to the consumer. Underlying the principles was a message that advertisers should provide consumers with choice about whether they consent to being tracked.

In a ruling that also shied away from privacy concerns—focusing instead on issues of competition—the European Union announced in March 2008 that it would allow the acquisition to go forward, thus removing the last obstacle in Google's path.

IN RE RAMBUS INC.

2007 WL 431524 (FTC Feb. 5, 2007), vacated, 522 F.3d 456 (D.C. Cir. 2008)

RAMBUS INC. V. FTC

522 F.3d 456 (D.C. Cir. 2008)

In February 2007, the Federal Trade Commission (FTC) capped the royalties that memory-chip maker Rambus can charge licensees of its dynamic random access memory (DRAM) products. However, in April 2008, the United States Court of Appeals for the District of Columbia Circuit vacated the FTC's holding that Rambus monopolized the relevant technology markets, finding that the FTC's factual findings were insufficient to sustain the charge.

Back in the 1990s, the Joint Electron Device Engineering Council (JEDEC) set standards for synchronous DRAM (SDRAM) technology. The JEDEC required its members to disclose any patents and patent applications relating to the standards being set. Rambus worked with the JEDEC to set standards for SDRAM without revealing that they had patent applications pending on the same technology. Rambus pushed for standards over which they held patents, and used information from the JEDEC meetings to amend its patent applications so that their patents would cover the standards once adopted. After JEDEC adopted the standards and industry competitors implemented those standards in their products, Rambus sought royalties through patent infringement suits brought against JEDEC members who practiced the standards.

The FTC charged Rambus with antitrust violations in 2002. After a dismissal by an administrative law judge, the case proceeded to a full commission review on appeal. On July 31, 2006, the FTC ruled that Rambus engaged in acts constituting exclusionary conduct under Section 2 of the Sherman Act by contributing to the standard-setting process while hiding its ability to impose royalty obligations and using JEDEC to assemble a patent portfolio to cover the SDRAM and DDR SDRAM standards. In addition, the FTC found that Rambus unlawfully monopolized the markets for four related technologies incorporated into the JEDEC standards in violation of Section 5 of the Federal Trade Commission Act.

On the issue of remedy, the FTC rejected Rambus's contention that the FTC's remedial authority is limited to enjoining Rambus from deceiving a standard-setting organization ("SSO") in the future. Rather, the FTC held that its authority allows it to restore, to the extent possible, the competitive conditions that would have been present "but for" Rambus's unlawful conduct. Additionally, FTC held that it has the authority to issue compulsory licensing on terms it prescribes; the FTC can also order royalty-free licensing where the circumstances justify it, as long as the order bears a reasonable relationship to the unlawful practices.

The FTC's order set a maximum royalty rate that Rambus can collect for any of its JEDEC-compliant DRAM or non-DRAM products. The FTC determined that, but for Rambus's deceptive practices, JEDEC would have either chosen alternative technologies or would have incorporated Rambus's technologies on the condition that Rambus agree to license the technology on reasonable and non-discriminatory ("RAND") terms. However, the government failed to show that restoring competition to what would have otherwise existed required Rambus to license its technology for free. In setting the cap on royalty, the FTC chose 0.5% for DDR SDRAM over three years and 0.25% for SDRAM

over three years, numbers which reflected the bottom of what the Commission determined to be the range of reasonableness.

In April 2008, the D.C. Circuit overturned the 2006 FTC ruling that found Rambus in violation of the Sherman Act. The court reasoned that the FTC had merely identified the consequences of Rambus's conduct in the alternative. Rambus's conduct *either* prevented JEDEC from (1) adopting a non-proprietary standard, which the D.C. Circuit assumed without deciding amounted to an antitrust violation, *or* (2) requiring Rambus to license its patents on RAND terms, which the D.C. Circuit held did not entail anticompetitive effect. The FTC had not found that it was more likely JEDEC would have adopted a different standard, rather than simply extracting lower license terms. Rather, the FTC had simply found two equally probable consequences of Rambus's deceptive conduct, only one of which the D.C. Circuit considered anticompetitive. Accordingly, the D.C. Circuit found that the FTC's findings were insufficient to support an antitrust violation in the eyes of the D.C. Circuit.

The D.C. Circuit's decision turns on its holding that the second consequence—failure to extract a commitment from Rambus to license its technology on RAND terms—is not anticompetitive, despite Rambus's deception. Citing *NYNEX Corp. v. Disccon, Inc.*, 525 U.S. 128 (1998), the court stated that “[d]eceptive conduct—like any other kind—must have an anticompetitive effect in order to form the basis of a monopolization claim.” The court went further, stating that “an otherwise lawful monopolist’s use of deception simply to obtain higher prices normally has no particular tendency to exclude rivals and thus to diminish competition.”

The court's vacatur of the FTC decision relied on the aforementioned reasoning, while accepting the FTC's factual findings concerning Rambus's deceptive conduct. However, the court went on to express serious reservations about the sufficiency of the evidence for those findings. The court characterized the FTC findings as “murky,” and expressed concern that testimony regarding JEDEC's disclosure requirements “significantly stretch[ed]” the language of the policies to require disclosure of potential amendments to pending patent applications. While criticizing one finding of deception as relying on “weak evidence,” the court did not formally hold that the FTC's factual conclusions fell below the applicable sufficient evidence standard.

Further developments in the case remain possible on remand to the FTC.

The FTC has not been the only one pursuing antitrust charges against Rambus. Since 2000, Rambus had been involved in antitrust and patent infringement litigation with other major memory chip-makers such as Hynix and Micron Technology. Most recently, on March 26, 2008, a federal jury found Rambus not guilty of breaking antitrust laws and in favor of Rambus on its patent infringement claim.

PAY NO ATTENTION TO THE MAN BEHIND THE CURTAIN: THE GOVERNMENT'S INCREASED USE OF THE STATE SECRETS PRIVILEGE TO CONCEAL WRONGDOING

By Margaret Ziegler

I. INTRODUCTION

In the last forty years, the courts and legislature have taken steps to rein in the government's ability to wiretap U.S. citizens, mostly in response to revelations of widespread government abuse of the practice. Most statutes and case law pertaining to wiretapping originated in the late 1960s and the 1970s.¹ Around this time, American mistrust of the government had increased greatly in the face of publicity surrounding the Watergate investigation, which uncovered massive unchecked government wiretapping of U.S. citizens.² Congress responded by codifying warrant obligations for electronic surveillance.³ During and following the Vietnam War, litigation tested the government's right to eschew these requirements when faced with national security concerns. The Supreme Court addressed the issue in 1972, holding the warrant requirement for eavesdropping on U.S. citizens is mandated by both statute and the Fourth Amendment.⁴

Following the attacks of September 11, 2001, the United States became involved in another literal war as well as a figurative war on terrorism. The government once again began eavesdropping on its citizens and using national security as its justification.⁵ With many eavesdropping practices outlawed in the 1970s, the government has now taken steps to conceal its surveillance activities. When questionable activities are uncov-

© 2008 Margaret Ziegler.

1. See Title III of the Omnibus Crime Control and Safe Streets Act of 1968, Pub. L. No. 90-351, 82 Stat. 197 (codified as amended at 18 U.S.C. § 2510-21 (2000) [hereinafter "The Wiretap Act"]; Foreign Intelligence Surveillance Act, Pub. L. No. 95- 511, 92 Stat. 1783 (codified as amended at 50 U.S.C. §§ 1801-1811) (2000) (these sections pertain to electronic surveillance) [hereinafter "FISA"].

2. See generally Barbara B. Altera & Richard S. Pakola, *Master Environmental Edition II: All the Information the Security of the Nation Permits*, 58 A.F. L. REV. 1, 7 (2006) (describing "a post-Watergate general increase in distrust of government").

3. See The Wiretap Act and FISA, *supra* note 1.

4. See *United States v. United States Dist. Court*, 407 U.S. 297 (1972) [hereinafter "*Keith*"].

5. See *Hepting v. AT&T Corp.*, 439 F. Supp. 2d 974 (N.D. Cal. 2006); *ACLU v. NSA*, 493 F.3d 644 (6th Cir. 2007).

ered and lawsuits are filed, the government has a unique shield to hide behind. A little-known common law evidentiary privilege, the state secrets doctrine, allows the government to withhold allegedly secret evidence from courts and to block unwanted lawsuits.⁶

When secret government activities might be uncovered by a lawsuit, the state secrets privilege allows the government to block the release of any information or documents that might harm national security.⁷ In theory, this is an important tool to ensure that the broad discovery allowed in most lawsuits does not allow government secrets to fall into the wrong hands. “Say, for instance, that a janitor in Los Alamos, N.M., tripped over a box of uranium lying in the hallway in 1943. It would hardly do to have the evidence used in the subsequent slip-and-fall case scuttle the entire Manhattan Project.”⁸

Today, however, even more so than in the 1970s, there is a real danger that the government is using the privilege not to protect national security, but to cover up its own wrongdoing.⁹ During the Bush administration, not only has use of the state secrets privilege increased greatly, but the privilege has also expanded from a narrow evidentiary privilege to a full-blown litigation killer.¹⁰

This Note focuses on the government’s use of the state secrets privilege to avoid judicial review of its wiretapping activities, and examines the expansion of the privilege—especially its developing use as a screen between government wrongdoing and judicial scrutiny.

Part II discusses the holding in *Hepting v. AT&T*, a recent lawsuit challenging widespread government wiretapping of American citizens and the district court’s refusal to dismiss the case on state secrets grounds. Part III traces wiretapping’s technological developments and the progression of laws intended to regulate the government’s use of this technology against American citizens. Part III also examines the origin of the state secrets doctrine, which predated all of these developments. Part IV turns to government attempts to use the state secrets privilege to avoid the courts’ and legislature’s attempts at regulating wiretapping and argues that wiretapping exemplifies the state secrets privilege’s misapplication to cover up government wrongdoing. Part V advocates for a reversal of the privilege’s

6. See *United States v. Reynolds*, 345 U.S. 1 (1953).

7. *Id.*

8. Henry Lanman, *Guarding Secrets*, SLATE, May 22, 2006, <http://www.slate.com/id/2142155/> (last visited Apr. 5, 2008).

9. See Part V *infra*.

10. See Part IV *infra*.

evolution from a narrow evidentiary rule to a tool of government immunity.

II. *HEPTING V. AT&T*: CLAIMS AND PROCEEDINGS SO FAR

In 2005, after twenty-two years at AT&T, retired technician Mark Klein paid a visit to the Electronic Frontier Foundation (EFF), an advocacy group, and handed over documents that he claimed blew the whistle on secret National Security Agency (NSA) wiretapping activities.¹¹ He contends that AT&T had assisted the government in large-scale spying on American communications.¹² If Klein's allegations are correct, AT&T has granted the government unfettered access to all of its customers' communications, permitting the NSA to spy on virtually any U.S. citizen without a warrant.¹³

In response to the documents produced by Klein, the EFF filed a class action lawsuit on behalf of AT&T's customers.¹⁴ In the resulting suit, *Hepting v. AT&T*, plaintiffs allege that AT&T's wiretapping activities occur under color of law and violate both Constitutional and statutory requirements, including the Foreign Intelligence Surveillance Act (FISA).¹⁵ The plaintiffs also allege that, under FISA, telecommunication companies have an independent duty to their customers to protect the contents of their communications unless the government obtains a warrant.¹⁶

The government responded to the *Hepting* lawsuit by intervening as a co-defendant and asserting, among other defenses, the state secrets privilege.¹⁷ The Northern District of California rejected the government's motion to dismiss under the state secrets privilege, saying, "[t]he government has opened the door for judicial inquiry by publicly confirming and denying material information about its monitoring of communications content."¹⁸ The case was immediately appealed to the Ninth Circuit and

11. For Mark Klein's account, see *Wiretap Whistleblower's Account*, WIRED, April 7, 2006, <http://www.wired.com/science/discoveries/news/2006/04/70621>.

12. *Id.*

13. *Id.*

14. See *Hepting v. AT&T Corp.*, 439 F. Supp. 2d 974 (N.D. Cal. 2006).

15. See *id.* at 978.

16. E-mail interview with Cindy Cohn, EFF Counsel in *Hepting* (Nov. 29, 2007 and Jan. 1, 2008) [hereinafter "Cohn Interview"].

17. See *Hepting*, 439 F. Supp. 2d at 979.

18. *Id.* at 996.

though the parties presented arguments on August 15, 2007, an opinion has not yet been issued at the time this Note went to press.¹⁹

The central allegation in *Hepting* is that AT&T and the government, in violation of FISA and the Wiretap Act, have set up a surveillance system which essentially acts as a “dragnet” that collects the content of *all* customers’ Internet and phone communications that travel through AT&T’s fiber optic wires.²⁰ Klein claims that AT&T has not only consented to the government breaching its fiber optic wires, but has allowed a secret room to be built at its Folsom Street location in San Francisco, where a portion of the light from the wires is diverted to high-tech surveillance equipment which analyzes the data and transmits part or all of it to the government.²¹ While the most direct evidence provided by Klein focuses on Internet communications (e-mail, web traffic, data, etc.), the *Hepting* plaintiffs allege that AT&T has allowed the NSA access to telephone communications traveling through its networks as well.²²

The government, as an intervening defendant, moved to dismiss or, alternatively, for summary judgment based mainly on the state secrets privilege.²³ Judge Walker of the Northern District of California refused to dismiss the case or grant summary judgment for plaintiffs’ claims against AT&T or the government for allegedly collaborating to form a massive warrantless wiretapping operation.²⁴ The court noted that, following September 11, President Bush admitted to authorizing the NSA to perform surveillance of telephone communications where one party is located outside the United States and the government has a reasonable basis to conclude that one party has connections with or supports the al Qaeda terrorist group.²⁵ The court also took note of Klein’s allegations that, while working at an AT&T office in San Francisco, he saw a room being built which contained “technology . . . known to be used particularly by government intelligence agencies”²⁶ and learned of documents describing how equip-

19. Unofficial Transcript of Oral Argument, *Hepting v. AT&T*, No. 06-17132 (9th Cir. Aug. 15, 2007), http://www.eff.org/files/filenode/att/hepting_9th_circuit_hearing_transcript_08152007.pdf (last visited Apr. 5, 2008).

20. *See Hepting*, 439 F. Supp. 2d at 1001.

21. *Id.* at 989.

22. *See* Cohn Interview, *supra* note 16.

23. *See Hepting*, 439 F. Supp. at 979. AT&T also moved to dismiss, contending that plaintiffs lacked standing and did not affirmatively plead that AT&T’s actions were not certified by the government. They also asserted statutory theories, common law immunity, and qualified immunity. *Id.* at 999. The court denied all of these. *Id.* at 1001-1010.

24. *Id.* at 1011.

25. *Id.* at 986-987.

26. *Id.* at 989.

ment tapped into AT&T's circuits and diverted "some of the light signal to the secret room."²⁷

The district court opinion identified from precedent the three ways the state secret privilege can require dismissal of a case.²⁸ First, if the "very subject matter of the action" is a state secret, the court must dismiss the action.²⁹ Second, the government can privilege specific evidence, leaving the plaintiff unable to prove the prima facie elements of his or her case.³⁰ Finally, if information classified as privileged prevents a defendant from raising an otherwise valid defense, summary judgment must be granted for the defendant.³¹

The government maintains that these three forms of the state secrets privilege are legitimate, and argues that all three apply in *Hepting*.³² Regarding the first, the government claims that the very subject matter of the case is a state secret. Regarding the second approach, the government says the plaintiffs will not be able to establish the prima facie elements of their case because the state secrets privilege protects "any information tending to confirm or deny (a) the alleged intelligence activities, (b) whether AT&T was involved with any such activity and (c) whether a particular individual's communications were intercepted. . . ." ³³ The government claims invoking the privilege precludes a "fact-intensive inquiry" without which *Hepting* cannot prove the searches unreasonable.³⁴ Finally, the government asserts the third version by arguing that state secrecy deprives AT&T of a potential defense—authorization by the government.³⁵

With respect to the "very subject matter" argument, the district court concluded that the public knew enough (and the government had disclosed enough) about the surveillance programs to foreclose the possibility that the "very subject matter" of the action was a state secret.³⁶ Quoting President Bush's public addresses, newspaper articles, and AT&T's statements, the court found that this was "not the kind of 'secret' that . . . the state se-

27. *Id.*

28. *Id.* at 984.

29. *Id.*

30. *Id.*

31. *Id.*

32. *Id.* at 985.

33. *Id.*

34. *See id.* at 985.

35. *Id.* at 986.

36. *See id.* at 994.

crets privilege [was] intended to protect or that a potential terrorist would fail to anticipate.”³⁷ The court continued:

AT&T and the government have for all practical purposes already disclosed that AT&T assists the government in monitoring communication content . . . the government has publicly admitted the existence of a ‘terrorist surveillance program’ . . . [which] operates without warrants . . . [and c]onsidering the ubiquity of AT&T telecommunications services, it is unclear whether this program could even exist without AT&T’s acquiescence and cooperation.³⁸

Having completed an in camera review of the classified documents,³⁹ which traveled by armed guard from Washington, D.C., Judge Walker found them insufficiently secret to dismiss the case.⁴⁰

With respect to the second and third approaches to state secrets identified in the opinion, Judge Walker said it would be premature to conclude that state secrets privilege would bar evidence that would keep Hepting from establishing his prima facie case or preclude AT&T’s defense.⁴¹ The court said its decision to allow the case to proceed followed precedent in other state secret cases where the courts allowed them to “proceed to discovery sufficiently to assess the state secrets privilege in light of the facts.”⁴²

III. WIRETAPPING TECHNOLOGY, PRIVACY LAW, AND STATE SECRETS

Section III.A explains why government ability to wiretap increasingly requires the cooperation of telecommunications carriers. Section III.B traces the key court decisions and statutes that limit government wiretapping of American citizens. Section III.C traces the development of the state secrets doctrine, the invocation of which, if successfully invoked in *Hepting*, could thwart efforts to ascertain compliance with statutory and Constitutional limits on contemporary wiretapping.

37. *Id.* at 993.

38. *Id.* at 991-992.

39. *Id.* at 980.

40. See Nat Hentoff, An Expansive View of ‘State Secrets’; Federal Judge Shows Courage in Challenging Bush; WASH. TIMES, Aug. 14, 2006, at A15.

41. See *Hepting*, 439 F. Supp. 2d at 994.

42. *Id.* at 994.

A. Technical Background on Wiretapping

FISA and the Wiretap Act, the two primary statutes Hepting accuses AT&T of violating, were passed to prevent telecommunication companies and the government from colluding to spy on Americans.⁴³ When Congress passed the Wiretap Act, it recognized the need to impose on telecommunication companies an independent duty to protect their customers' private communications.⁴⁴ FISA's passage followed discoveries by the Senate that, during the 1950s, Western Union and other communication companies had turned over to the NSA millions of telegrams sent or received by U.S. citizens.⁴⁵ However, because of the nature of satellite communications, for most of the time since Congress enacted FISA and the Wiretap Act, the government has not needed telecommunication companies to facilitate spying on Americans.

Until recently, the government could capture much worldwide communication data without the help of any third party.⁴⁶ Starting in the 1960s, telecommunications increasingly relied on satellites.⁴⁷ Telephone signals traveled along wires from handsets to antennas, then bounced off satellites in space back down to receptor stations on the ground. It was easy for the NSA to place its own receptor stations alongside those of telecommunication companies and obtain its own copy of the data when the signals bounced from the satellites back to earth. With a few strategically-placed ground stations, the government could listen in on almost any conversation on the planet.⁴⁸

43. See The Wiretap Act, 18 U.S.C. § 2516 (2000) (establishing warrant requirements for electronic surveillance); see also, Nathan Alexander Sales, *Secrecy and National Security Investigations*, 58 ALA. L. REV. 811, 814 (2007) (“[FISA] was born in the late 1970s out of widespread revulsion at abuses by the Executive Branch of its information gathering authorities—in particular, warrantless wiretapping of dissident groups and the political rivals of incumbent statesmen.”).

44. See *Hodge v. Mountain States Tel. & Tel. Co.*, 555 F.2d 254, 259 (9th Cir. 1977) (“[The Wiretap Act] recognizes that the integrity of the communications system demands that the public be assured that employees who thus come to know the content of messages will in no way breach the trust which such knowledge imposes on them.”).

45. See Susan Landau, *National Security on the Line*, 4 J. ON TELECOMM. & HIGH TECH. L. 409, 447 n.104 (2006) (describing how “tapes of all international telegrams from RCA Global, ITT World Communications, and Western Union International were shipped daily to the NSA”).

46. See PATRICK RADDEN KEEFE, *CHATTER 51-52* (2005) (offering a detailed explanation of government capabilities for satellite interceptions).

47. See *id.* at 52.

48. See *id.*

Fiber optic cables have recently supplanted satellites, making telecommunications more challenging to infiltrate.⁴⁹ Fiber optic cables carry pulses of light, rather than electricity, and the content of the communications does not bounce indiscriminately into the government's receivers.⁵⁰ In order to monitor the content traveling along a fiber optic wire, one must physically breach the cable and divert the light pulsing through the strands of glass within the cable.⁵¹ The need for a physical breach in the fiber optic cables, such as those used in AT&T's Folsom Street location, requires access to the cables—making the cooperation of a telecommunications carrier desirable, perhaps even necessary.⁵² Once the cable is breached and the light is successfully diverted, an exact copy of each customer's communication data can be created.⁵³

B. Regulation of Government Wiretapping in the Face of National Security Concerns

The Supreme Court initially determined that the Fourth Amendment did not apply to wiretaps.⁵⁴ In *Olmstead v. United States*, a Prohibition-era bootlegger objected to evidence used against him in a criminal proceeding that was obtained through a warrantless wiretap.⁵⁵ The court found that "one who installs in his house a telephone instrument with connecting wires intends to project his voice to those quite outside, and that the wires beyond his house and messages while passing over them are not within the protection of the Fourth Amendment."⁵⁶ Because the wiretap collected intangible material, nothing was seized and because there was no "physical invasion" of his home, there was no search.⁵⁷ Therefore, no Fourth Amendment violation occurred through the use of a warrantless wiretap and the evidence was admissible.⁵⁸

Justice Brandeis presciently wrote in his *Olmstead* dissent:

[T]he progress of science in furnishing the government with means of espionage is not likely to stop with wiretapping. Ways

49. See *id.* at 73-74 (detailing the difficulty of monitoring fiber optic cables compared to earlier technologies).

50. *Id.*

51. See *id.*

52. See Cohn Interview, *supra* note 16.

53. *Id.*

54. *Olmstead v. United States*, 277 U.S. 438 (1928), *overruled by* *Katz v. United States*, 398 U.S. 347 (1967) and *Berger v. New York*, 388 U.S. 41 (1967).

55. *Id.* at 456.

56. *Id.* at 466.

57. *Id.*

58. See *id.* at 469.

may some day be developed by which the government, without removing papers from secret drawers, can reproduce them in court, and by which it will be enabled to expose to a jury the most intimate occurrences of the home. . . . Can it be that the Constitution affords no protection against such invasions of individual security?⁵⁹

The court in *Hepting* today is dealing with just such a case. Technology has created a way for the government to remove our papers from our drawers as copies of our e-mails can be pulled from AT&T's fiber optic cables and duplicated. Brandeis concluded that "every unjustifiable intrusion by the Government upon the privacy of the individual, whatever the means employed, must be deemed a violation of the Fourth Amendment."⁶⁰

The issue of national security did not arise in *Olmstead*, a bootlegging case. However, the government raised national security concerns in *Katz v. United States*, the case that overturned *Olmstead* forty years later.⁶¹ There, the government procured evidence of plaintiff's illegal gambling by wiretapping a phone booth.⁶² The Supreme Court held that warrantless electronic surveillance in a criminal investigation was per se unreasonable under the Fourth Amendment.⁶³ The Court reasoned:

[T]he Fourth Amendment protects people, not places. What a person knowingly exposes to the public, even in his own home or office, is not a subject of Fourth Amendment protection. But what he seeks to preserve as private, even in an area accessible to the public, may be constitutionally protected.⁶⁴

Justice Harlan's concurrence created the standard of protecting those situations where a person has a "reasonable expectation of privacy."⁶⁵ The government asserted in its briefs the concern that national security might require warrantless wiretaps, but the *Katz* Court explicitly declined to decide whether a national security exception to Fourth Amendment warrant requirements might apply, stating that the facts of *Katz* did not require such analysis.⁶⁶

59. *Id.* at 474.

60. *Id.* at 478-79.

61. *Katz v. United States*, 389 U.S. 347 (1967).

62. *Id.* at 348.

63. *Id.* at 357.

64. *Id.* at 351.

65. *Id.* at 360.

66. *Id.* at 359 n.23 ("Whether safeguards other than prior authorization by a magistrate would satisfy the Fourth Amendment in a situation involving the national security is

The following year, in response to *Katz*, the standard of requiring warrants for electronic surveillance was codified in the Wiretap Act of the Omnibus Crime Control and Safe Streets Act.⁶⁷ The Wiretap Act authorizes electronic surveillance, subject to court order.⁶⁸ The statute also addresses national security concerns, specifically noting:

Nothing contained in this chapter . . . shall limit the constitutional power of the President to take such measures as he deems necessary to protect the nation against actual or potential attack . . . [or] to obtain foreign intelligence information deemed essential to the security of the United States . . .⁶⁹

This proviso was carefully inserted by the government to allow intelligence gathering to continue despite the legislature's intention to curtail invasions of privacy. Roy Banner, a lawyer at the NSA, secretly assisted with the drafting of that provision and considered it a loophole for NSA's operations.⁷⁰ He sent a memo to the director of the NSA on July 24, 1968, saying that the exception was not only to "remove any doubt as to the legality of SIGINT"⁷¹ . . . operations of the Executive Branch of the Government" but also that the language "precludes an interpretation that the prohibitions against wiretapping or electronic surveillance techniques in other laws applies to SIGINT . . . activities of the Federal Government."⁷²

Five years later, in *United States v. United States District Court* (known as *Keith*), the Supreme Court had the opportunity to revisit the issue that they had passed on in *Katz* and discuss whether a national security exception to warrant requirements existed.⁷³ In *Keith*, a defendant was charged with a dynamite explosion at a CIA office and two others were charged with conspiring to destroy government property.⁷⁴ The defendants requested documentation of electronic surveillance that was obtained without a warrant prior to their arrest to determine if it "tainted" their indictment.⁷⁵ Beyond bootlegging in *Olmstead* and illegal gambling

a question not presented by this case."); see also Michael A. DiSabatino, *Construction and application of "national security" exception to Fourth Amendment search warrant requirement*, 39 A.L.R. FED. 646 (1978).

67. See 18 U.S.C. §§ 2510-2521 (2000).

68. *Id.*

69. *Id.* § 2511(2)(f).

70. See James Bamford, *The Puzzle Palace* 326 (1982).

71. SIGINT is short for "signals intelligence" or intelligence gathering by intercepting signals. See Church Report, *infra* note 84.

72. BAMFORD, *supra* note 70, at 326.

73. See *Keith*, 407 U.S. 297 (1972).

74. *Id.* at 299.

75. *Id.* at 300.

in *Katz*, this case had *actual* national security issues at stake. Nevertheless, the Court unanimously held that the government's surveillance actions were unlawful and that the national security implications did not justify departing from the warrant requirements in the Wiretap Act.⁷⁶ The *Keith* Court, however, urged Congress to create legislation to specifically deal with "the precise standards for domestic security warrants."⁷⁷ While *Keith* did not address the need for a warrant to perform the electronic surveillance on foreign powers or agents, it left no doubt that purely domestic surveillance without a warrant was forbidden by the Wiretap Act.⁷⁸

Following the Supreme Court's holding in *Keith*, the legality of the NSA's MINARET program (which contained a watch list of both foreign and domestic persons whose communications were monitored and disseminated to law enforcement agencies) was called into question—especially because some people being monitored had no foreign ties.⁷⁹ Then Attorney General, Elliot Richardson, wrote a memo to the head of the NSA and, citing *Keith*, directed the NSA to "'curtail the further dissemination' of watch list information to the FBI and Secret Service, although 'relevant information acquired by you in the routine pursuit of the collection of foreign intelligence information may continue to be furnished.'"⁸⁰ Compared to the millions of customers allegedly being monitored in *Hepting*, Richardson was concerned with eavesdropping on just over 600 individuals on the MINARET watch list, only *some* of whom were Americans.⁸¹ Following *Keith*, Attorney General Richardson felt it was too obviously illegal to allow such warrantless domestic surveillance to continue.⁸²

Soon after *Keith*, the Senate-created Church Committee uncovered more questionable information-gathering practices,⁸³ including Operation

76. *See id.* at 324.

77. *Id.* at 323.

78. *Id.* at 323-324 ("We do hold, however, that prior judicial approval is required for the type of domestic security surveillance involved in this case and that such approval may be made in accordance with such reasonable standards as the Congress may prescribe.").

79. BAMFORD, *supra* note 70, at 372.

80. *Id.*

81. *Id.* at 371.

82. *See id.*

83. The *Keith* case overlapped with the Watergate scandal. As the government's investigation into Watergate and the Nixon administration progressed, massive-scale wiretapping of the American people was among the improprieties discovered that led to the Church Committee's appointment. *See* Susan Freiwald, *Online Surveillance*, 56 ALA. L. REV. 9, 12 (2004) (describing the revelations of illegal wiretapping during the Watergate investigations).

MINARET,⁸⁴ Operation SHAMROCK,⁸⁵ and a mission that the CIA's own General Counsel had determined violated the Wiretap Act.⁸⁶ Following embarrassing revelations—including the monitoring of Dr. Martin Luther King, Jr. and organizations participating in the women's liberation movement in the name of national security⁸⁷—Congress answered the Church Committee recommendations⁸⁸ and the Supreme Court's call for guidance on foreign intelligence gathering by enacting FISA in 1978.⁸⁹

FISA regulates the government use of warrantless surveillance on international parties when American citizens are also being wiretapped. The statute requires the executive branch's representatives to apply to the Foreign Intelligence Surveillance Court (FISC) for a warrant to conduct foreign intelligence surveillance anytime a "United States person" is likely to be one party to the communication being monitored.⁹⁰ The court must find probable cause that the other party being targeted is a foreign power or an agent of a foreign power and that the information sought is foreign intelligence information.⁹¹ FISA also contains ambiguously worded "minimization requirements" to protect the U.S. citizen.⁹² If FISA requirements are

84. S. Select Comm. to Study Governmental Operations With Respect To Intelligence Activities, Supplementary Detailed Staff Reports on Intelligence Activities And The Rights Of Americans, Book III, Final Report § 1(B) ¶ 1 (1976), available at <http://www.icdc.com/~paulwolf/cointelpro/churchfinalreportIIIj.htm> (hereinafter "Church Report"): MINARET was described by the Church Report as a government-sponsored watch list including people whose communications were specifically monitored and disseminated to intelligence organizations. The list included "American groups and individuals whose activities 'may result in civil disturbances or otherwise subvert the national security of the U.S.'" *Id.* For Minaret charter reproduced in part see Bamford, *supra* note 70, at 323-24.

85. *Id.* § 1(B) ¶ 2 ("From August 1945 until May 1975, NSA received copies of millions of international telegrams sent to, from, or transiting the United States. Code-named Operation SHAMROCK, this was the largest governmental interception program affecting Americans.").

86. *Id.*

87. Richard Henry Seamon & William Dylan Gardner, *The Patriot Act and the Wall Between Foreign Intelligence and Law Enforcement*, 28 HARV. J.L. & PUB. POL'Y 319, 334 (2005).

88. See Freiwald, *supra* note 83; see also, Sales, *supra* note 43.

89. See FISA, 50 U.S.C. § 1805 (2000).

90. See FISA, 50 U.S.C. § 1804(b) (2000).

91. See FISA, 50 U.S.C. §§ 1804-05 (2000).

92. See FISA, 50 U.S.C. § 1801(h) (2000) (requiring the Attorney General to establish specific procedures "to minimize the acquisition and retention, and prohibit the dissemination, of nonpublicly available information concerning unconsenting United States persons").

met, a judge must issue a warrant without discretion.⁹³ Additionally, in emergency situations where a warrant cannot be obtained immediately, the Attorney General can authorize up to seventy-two hours of surveillance and the order can be approved retroactively.⁹⁴

The FISC has historically been shrouded in secrecy and very compliant with the government's warrant requests. From its windowless, sound-proof, cipher-locked room on the top floor of the Justice Department, the court deals out FISA warrants liberally.⁹⁵ Since the court's inception, almost every single warrant requested has been granted.⁹⁶ The operation of FISC is unlike any other court in the United States. There are no adversarial proceedings; no witnesses are cross-examined; and only the government is permitted to present its side of the story.⁹⁷ The eleven rotating judges are selected by the Chief Justice of the Supreme Court in secret.⁹⁸ Almost no opinions are issued and all rulings are permanently sealed.⁹⁹ Since September 11, 2001, the court has approved about one thousand applications per year—more than three each day—and has only refused a handful.¹⁰⁰

C. The Origin of the State Secrets Doctrine and its Expansion Towards Blanket Immunity

The state secrets doctrine received its first official treatment by the Supreme Court in *United States v. Reynolds*. When *Reynolds* was decided, wiretapping was not yet restricted under the Fourth Amendment or any

93. See FISA, 50 U.S.C. § 1805(c) (2000) (“[T]he judge shall enter an ex parte order as requested or as modified approving the electronic surveillance if he finds . . . [requirements are met].”).

94. See FISA, 50 U.S.C. § 1805(f) (2000).

95. James Bamford, *Washington Bends the Rules*, N.Y. TIMES, Aug 27, 2002, at A2, available at <http://query.nytimes.com/gst/fullpage.html?res=9B04EEDA113CF934A1575BC0A9649C8B63>.

96. See KEEFFE, *supra* note 46, at 159.

97. See *id.* at 158.

98. *Id.*

99. *Id.*

100. The Attorney General must report to Congress under FOIA the number of orders requested, granted and denied in a given year. This information is publicly available. In 2005, 2,072 applications were approved and none were denied in whole or in part. In 2004, FISC approved 1,754 applications and denied none. In 2003, the court approved 1,724 applications and denied four—two of which were reconsidered and approved in whole or in part shortly afterward. All 1,228 applications made in 2002 were approved. All 934 requests of 2001 were approved. Reports from 1996-2005 are available online. See DEPARTMENT OF JUSTICE, ANNUAL FOREIGN INTELLIGENCE SURVEILLANCE ACT REPORTS (2001-2005), available at http://www.usdoj.gov/ag/readingroom/ag_foia1.htm (last visited Apr. 5, 2008).

other law.¹⁰¹ Because warrantless wiretapping was not yet recognized as unlawful and because technology was not nearly as advanced as it is today, it is difficult to imagine the *Reynolds* Court could have foreseen its application in covering up the massive government spying on American citizens that is now at issue in *Hepting*. The case was about military secrets in the context of a military mission. In 1953, an Air Force flight crashed in Georgia, killing, among others, three civilian engineers.¹⁰² The decedents' widows sued, claiming negligence and, during discovery, sought production of the official accident report.¹⁰³ The government filed a formal "Claim of Privilege" which said that producing the information would have negative effects on national security.¹⁰⁴

The Supreme Court harkened back to English law and U.S. cases as early as 1807 to find precedent to support a claim of state secrets.¹⁰⁵ Then, without examining the purported secret document, the Court accepted the government's assertion and established procedural requirements for asserting the privilege.¹⁰⁶ To employ the state secrets privilege the government's claim must be 1) formal, 2) "lodged by the head of the department which has control over the matter, and [3)] made after actual personal consideration by that officer."¹⁰⁷ A court deciding whether to apply the privilege is not required to examine the secret evidence, and, depending on the circumstances, may not be permitted to do so. Essentially, the *Reynolds* standard takes the government at its word that the evidence requested, if revealed, would be detrimental to national security.¹⁰⁸

Fifty years after *Reynolds*, the daughter of one of the men killed, Judy Loether, accidentally learned on the Internet that the accident report had been declassified.¹⁰⁹ She purchased a copy from a private company for \$63. "To her utter amazement, the accident report revealed that no state secrets whatsoever had been involved; rather, the only secret was the gross negligence by the military."¹¹⁰ The report revealed negligent operation and

101. *See generally* United States v. Reynolds, 345 U.S. 1 (1953).

102. *Id.* at 3.

103. *Id.*

104. *Id.* at 4.

105. *Id.* at 7-8.

106. *Id.* at 11.

107. *Id.* at 7-8.

108. *Id.*

109. John W. Dean, ACLU v. National Security Agency: Why the "State Secrets Privilege" Shouldn't Stop the Lawsuit Challenging Warrantless Telephone Surveillance of Americans, FindLaw, June 16, 2006, <http://writ.news.findlaw.com/dean/20060616.html> (last visited Apr. 5, 2008).

110. *Id.*

pilot error as among the causes of the crash, and only mentioned the secret mission of the plane in passing.¹¹¹ Ms. Loether believes that the government actually invoked the state secret privilege to avoid embarrassment.¹¹² This would not be the only time the government would do so.¹¹³ Thus, besides creating the state secrets privilege, *Reynolds* exemplifies the pressing need for judicial oversight of such executive claims of secrecy.

Questioning the government's assertion of the privilege is the exception and not the rule. Historically, when the state secrets doctrine has been invoked, courts have been reluctant to investigate the executive's claim of secrecy. In fact, courts have only rebuffed the government's use of the privilege on four occasions.¹¹⁴ In *Halpern v. United States*, a patent suit involving an invention with military applications, the Second Circuit allowed the district court to hold the entire trial in camera if necessary to protect national security.¹¹⁵ The Second Circuit held that "the privilege relating to state secrets is inapplicable when disclosure to court personnel in an in camera proceeding will not make the information public or endanger the national security."¹¹⁶ In *Republic Steel*, the court found that two cables from the Department of Commerce to the American Embassy in Bucharest were not privileged following in camera review.¹¹⁷ Rejecting an "entirely conclusory" allegation that the documents at issue posed a threat to national security the court found they were not shown to be "in the same class as those for which the state secrets privilege has been recognized."¹¹⁸ Less than two years later, the same court rejected the Commerce

111. Matt Katz, *Air Force Report Undermines Secrecy Rationale*, COURIER POST ONLINE, June 24, 2005, <http://www.courierpostonline.com/specialreports/statesecrets/m062403b.htm> (last visited Apr. 5, 2008).

112. See Dean, *supra* note 109.

113. See *United States v. New York Times*, 403 U.S. 713 (1971). In this case, the federal government cited "grave and irreparable" danger to national security in an attempt to prevent national newspapers from publishing the Pentagon Papers. The Supreme Court allowed the release of the documents and "most observers agree that the publication of the papers did not do injury to the national security of the United States." See *The Pentagon Papers Case*, 2 E.JOURNAL USA, February 1997, <http://usinfo.state.gov/journals/itdhr/0297/ijde/goodsb1.htm> (last visited Apr. 5, 2008). In fact, the Solicitor General responsible for the government's brief later admitted in an editorial, that "governmental embarrassment" and not national security was the principal concern. Erwin N. Griswold, *Secrets Not Worth Keeping*, WASH. POST, Feb. 15, 1989, at A25.

114. William G. Weaver & Robert M. Pallitto, *State Secrets and Executive Power*, 120 POL. SCI. Q. 85, 100 (2005).

115. *Halpern v. United States*, 258 F.2d 36, 44 (2d Cir. 1958).

116. *Id.*

117. *Republic Steel Corp. v. United States*, 3 C.I.T. 117, 118 (1982).

118. *Id.*

Department's assertion of the privilege when in camera review showed the documents merely "consist[ed] of material regarding the financial condition of two Brazilian steel companies."¹¹⁹ Finally, in *Yang v. Reno*, the court found that the formal threshold *Reynolds* requirements had not been met, but said the government would be "given the opportunity to re-assert the privilege[]." ¹²⁰ Of these exceptions, only in *Halpern* did the court truly confront the need to try a case despite recognized national security worries; in *Republic Steel* and *United States Steel*, the information was obviously not a secret of the state; in *Yang*, use of the privilege was merely delayed by failure to meet *Reynolds* formalities. In the only two cases where the government's invocation was rejected because the information was not secret, the court realized this by examining the documents in camera.

A notable district court case, *Spock v. United States*, did not reject use of the privilege, but asserted limits, stating that "the states secrets privilege is only an evidentiary privilege, which should be construed narrowly, to permit the broadest possible discovery consistent with the purposes of the privilege."¹²¹ *Spock* had sued the NSA as a target of warrantless surveillance, making claims for invasion of privacy under the Federal Tort Claims Act and New York law. The court refused to dismiss the case at the pleadings stage, saying the government's request for dismissal "goes beyond the traditional remedies fashioned by the courts in order to protect state secrets or other classified information."¹²² The judge instead called for a "conference for the purpose of considering procedures to safeguard state secrets during this litigation."¹²³

In the great majority of cases, courts have hesitated to even question the government. As Tom Blanton, Director of the National Security Archive observed, "[U]ntil a year or two ago, the judges rarely even questioned it when the government raised the 'state secrets' claim. It was a neutron bomb - no plaintiffs left standing."¹²⁴ As discussed in Part IV, as the government expands its invocation of the privilege (in terms of both the number of uses and the extent of the privilege's coverage) courts may wish to take a closer look at what secrets they are protecting.

119. *United States Steel Corp. v. United States*, 6 C.I.T. 182, 185 (1983).

120. *Yang v. Reno*, 157 F.R.D. 625, 635 (M.D. Penn. 1993) (holding that the executive secretary of the National Security Council was not considered competent to assert the privilege because he was not the head of a department, as required by *Reynolds*).

121. *Spock v. United States*, 464 F. Supp. 510, 519 (S.D.N.Y. 1978).

122. *Id.*

123. *Id.* at 520.

124. Eric Lichtblau, *U.S. Cites 'Secrets' Privilege as It Tries to Stop Suit on Banking Records*, N.Y. TIMES, Aug 31, 2007, at A17, available at <http://www.nytimes.com/2007/08/31/us/nationalspecial3/31swift.html>.

IV. INVOKING STATE SECRETS TO ACHIEVE GOVERNMENT IMMUNITY FOR A WIRETAP DRAGNET?

There are striking parallels between the government's disregard for laws regulating wiretapping during the Vietnam War and the government's disrespect for such laws today. The public's reaction, however, differs. The evolution of the statutes and case law discussed above came about in the face of both evolving technology and strong public opinion regarding illicit government spying. Perhaps the current "war on terrorism" differs from the Vietnam War in some respects. Maybe public opinion on the importance of privacy has diminished in an information age where online social sites, blogs, and web profiles keep very little personal information out of the public sphere. Whatever the reason, the public outrage responsible for pushing Congress to regulate wiretapping in the 1970s is not present to the same extent today.¹²⁵

Perhaps in part because of the lack of public outcry over the government's most recent invasions into citizens' private communications, the state secrets privilege has been successfully expanding to become a tool for governmental immunity. With lessened public pressure on the legislature to step in and a judicial system that is willing to accept national security as a justification without closely examining the claimed secrets, the government may be able to use state secrets to escape necessary scrutiny of its wiretapping activities.

A. The Legality of the Alleged Wiretapping Activities in *Hepting*

Following *Keith*, the Church Report and the enactment of FISA in 1978, both Congress and the courts seemed to be sending a clear message that warrants were required to listen in on U.S. citizens' communications. Even before FISA, the Supreme Court's holding in *Keith* led Attorney General Richardson to curtail an NSA program targeting fewer than 600 Americans in order to avoid illegality.¹²⁶ If Richardson's understanding of *Keith* was correct, his reaction raises serious doubts about the legality of the much wider dragnet of spying alleged in *Hepting*. If the type of sur-

125. A Washington Post survey in May 2006 of about 500 American adults found that just 31% of Americans think respect for privacy is more important than investigating terrorist threats. The survey does imply an inverse relationship between privacy and security that has not necessarily been proven. The survey also found that 51% of Americans approve of the way Bush is protecting Americans' privacy rights and only 34% would be upset by if the government had kept track of all the phone calls they had made. *Washington Post-ABC News Poll*, WASH. POST, May 12, 2006, http://www.washingtonpost.com/wp-srv/politics/polls/postpoll_nsa_051206.htm.

126. See *infra* Section III.B for a further discussion.

veillance alleged in *Hepting* occurred without a warrant, it seems to clearly violate FISA, the Wiretap Act, and under *Keith*, the Fourth Amendment.

Indeed, Judge Walker's opinion took the view that *Keith*'s precedent, forbade the dragnet of surveillance alleged in *Hepting* in the absence of a warrant. Judge Walker expressly stated that "AT&T's alleged actions here violate[d] the constitutional rights clearly established in *Keith*,"¹²⁷ and that in *Keith*, "the Supreme Court held that the Fourth Amendment does not permit warrantless wiretaps to track domestic threats to national security."¹²⁸ Judge Walker also noted that the alleged dragnet passes through one of AT&T's "key domestic telecommunications facilities" and "it cannot reasonably be said that the program as alleged is limited to tracking foreign powers."¹²⁹ If such a dragnet is proven to exist at AT&T's domestic facility, all national security justifications presented by the government must fail under the *Keith* precedent.

Furthermore, given the FISC's liberality in doling out FISA warrants, there is little reason to believe that the court would have withheld certification from AT&T if the U.S. government's surveillance activities were, as the executive contends in public statements, limited to conversations of citizens who were communicating with people reasonably believed to be affiliated with al Qaeda. One might infer that the government's failure to obtain an FISC warrant for its surveillance activities on Folsom Street means that it was not *only* intercepting such communications. However, whether or not AT&T did or did not obtain a FISC warrant remains an unanswered question. Judge Pregerson asked at the Ninth Circuit *Hepting* oral arguments, "Was a warrant obtained in this case? You go through the FISA court on this case?"¹³⁰ The government's attorney replied, "Again, your honor, that gets into matters that are protected by the state secrets . . . whether it was or whether it was not. . . ." and later concluded, "I cannot say."¹³¹

127. *Hepting v. AT&T Corp.*, 439 F. Supp. 2d 974, 1010 (N.D. Cal. 2006).

128. *Id.*

129. *Id.*

130. Video: Oral Arguments in *Hepting v. AT&T* (C-SPAN television broadcast Aug. 15, 2007), *Hepting v. AT&T*, No. 06-17132 (9th Cir. Aug. 15, 2007), <http://www.archive.org/details/gov.courts.ca9.2007.08.16> (last visited Apr. 5, 2008) [hereinafter "Oral Arguments"].

131. *Id.*

B. *Hepting* Exemplifies More Expansive Use of the State Secrets Privilege

The government, in facing these allegations of warrantless wiretapping, is not defending its actions based on compliance with FISA or the scope of Fourth Amendment protections. Instead, the government insists that the case must be dismissed under the state secrets privilege because it claims that judicial review of such claims would jeopardize national security. The state secrets privilege has been invoked in a number of wiretapping cases, both in the aftermath of the Vietnam War and recently.¹³² The government, however, has recently enhanced its requests under the privilege; instead of using state secrets to hold back certain scientific evidence, it is asking that entire cases be dismissed.

One scholar has referred to the state secrets privilege as “the most powerful privilege available to the President” because it prevents disclosure of information to the courts and prevents a judicial check on the executive.¹³³ Also, given how superficial judicial review of state secrets claims has become, abuse of the privilege is far more likely. “The plain fact is that if department heads or the president know that assertion of the privilege is tantamount to conclusive on the judiciary, and that federal judges rarely order documents for inspection, then there is great incentive on the part of the executive branch to misuse the privilege.”¹³⁴

The courts do appear to be noticing the government’s increasingly casual and abundant use of the privilege. The government attorney’s refusal to answer Judge Pregerson’s question about whether AT&T had government certification for its activities exemplifies the expansive use of the state secrets privilege. Judge Pregerson’s response of “What’s the problem?” is a hint at the court’s growing unwillingness to accept “it’s a secret” as an answer.¹³⁵ A District of Columbia district court also recently recognized the lack of government diligence when invoking the privilege, noting that although the government asserted the privilege “some 245 times” to avoid producing documents, they “totally failed to comply with the threshold [Reynolds] requirements” and at least one of the documents they sought to protect had already been produced in discovery.¹³⁶

132. For cases subsequent to the Vietnam-era surveillance, see *Halkin v Helms*, 598 F.2d 1 (1978); *Ellsberg v. Mitchell*, 709 F.2d 51 (1983). For present day cases, see *Hepting*, 439 F. Supp. 2d 974 (2006); *ACLU v. NSA*, 493 F.3d 644 (2007).

133. *Weaver*, *supra* note 114, at 100.

134. *Id.* at 101.

135. *See* Oral Arguments, *supra* note 130.

136. *Int'l Action Ctr. v. United States*, 2002 U.S. Dist. LEXIS 16874 at *7-8 (D.D.C. 2002).

C. Abating the Privilege in *Hepting*

The holding of the Northern District of California in *Hepting* exhibits skepticism towards blanket use of the privilege, mirroring the ruling in *Spock*.¹³⁷ In *Hepting*, Judge Walker decided, after his in camera review of the secret materials, that the case could proceed. He recognized that state secrets might not allow *all* evidence to be presented, but decided to allow the case to proceed until, in light of the facts revealed during discovery, the plaintiff's case could not be made (or the defendants' defenses were actually precluded) due to a concealed state secret.¹³⁸ He refused to dismiss the case at the pleading stage and discussed procedures for determining the levels of security required by various materials.¹³⁹ In justifying his ruling, Judge Walker noted:

It would be premature to decide these issues at the present time. In drawing this conclusion, the court is following the approach of the courts in *Halkin v Helms* and *Ellsberg v Mitchell*; these courts did not dismiss those cases at the outset but allowed them to proceed to discovery sufficiently to assess the state secrets privilege in light of the facts.¹⁴⁰

The pair of *Halkin* cases (*Halkin I* and *II*) and *Ellsberg* were wiretapping cases that followed the Vietnam War. At that time, revelations about the government's practically unlimited ability to wiretap and citizens' outraged responses created litigation, led to the Church Report, and induced Congress to pass FISA.¹⁴¹ Amid this post-Vietnam response, the *Halkin* cases and *Ellsberg* each examined the government's right to wiretap without a warrant. The cases also grappled with a key question left open by *Reynolds*: how much scrutiny should be given to a government claim of privilege?

The cases treat government assertions of the state secrets privilege with remarkably different levels of deference when applied to warrantless surveillance. While the *Ellsberg* decision did advocate judicial review of government claims of secrecy, the two *Halkin* cases seemed to actually expand the level of discretion given to the government to shield evidence

137. *Spock v. United States*, 464 F. Supp. 510, 519 (S.D.N.Y. 1978) (holding that the state secrets privilege "should be construed narrowly" and progressing with the litigation with plans to safeguard any state secrets.).

138. *Hepting*, 439 F. Supp. 2d at 995.

139. *Id.* at 1010.

140. *Id.* at 994.

141. *See Sales, supra* note 43, at 814.

as a state secret.¹⁴² What they have in common, as Judge Walker notes, is that neither court dismissed the case; instead, each only barred the discovery of certain evidence.¹⁴³

1. *The Halkin Cases*¹⁴⁴

In *Halkin I*, the district court stated that “[c]ourts should accord the ‘utmost deference’ to executive assertions of privilege upon grounds of military or diplomatic secrets.”¹⁴⁵ The court need only be satisfied that “there is a reasonable danger that compulsion of the evidence will expose military matters which, in the interest of national security, should not be divulged.”¹⁴⁶ As a result of this standard, the court in *Halkin I* allowed the government to invoke the privilege and withhold the requested evidence.

Dissenting from the ensuing denial of rehearing en banc, two D.C. Circuit judges argued that the court failed to consider the countervailing interests in disclosure of the secret information—as *Reynolds* required.¹⁴⁷ The judges went on to deride the panel for failing to consider the Supreme Court’s holding in *Keith* which “erect[ed] firm limits on the authority of the executive to conduct warrantless surveillance, even in the name of national security.”¹⁴⁸ Finally, the dissenting judges noted the danger of giving the executive branch such great deference to declare un-examined evidence a secret:

142. *Halkin v. Helms*, 598 F.2d 1 (D.C. Cir. 1978) (*Halkin I*); *Halkin v. Helms*, 690 F.2d 997 (D.C. Cir. 1982) (*Halkin II*); *Ellsberg v. Mitchell*, 709 F.2d 51 (D.C. Cir. 1983).

143. *Hepting*, 439 F. Supp. 2d at 993.

144. In *Halkin I*, 27 individuals and organizations who actively opposed the war in Vietnam sued the NSA, the FBI, and other government employees, claiming that they were the subjects of warrantless surveillance. In this action, plaintiffs were attempting to compel discovery of certain information that could prove their case, but the government refused to provide the requested documents. Some facts about the surveillance programs had already come to light by way of the press and a presidential commission on intelligence activities (the Rockefeller Commission). The government invoked the state secrets privilege and claimed that admitting or denying the acquisitions of the plaintiffs’ communications would reveal important military and state secrets regarding the capabilities of the NSA to collect and analyze foreign intelligence. See *Halkin I*, 598 F.2d at 3. *Halkin II* was an appeal that came after the court’s refusal to compel the information led to the plaintiff’s case being dismissed. See *Halkin II*, 690 F.2d 997.

145. *Halkin I*, 598 F.2d at 9.

146. *Id.*

147. *Id.* at 12 (“Where there is a strong showing of necessity, the claim of privilege should not be lightly accepted” (quoting *United States v. Reynolds*, 345 U.S. 1, 11 (1953))).

148. *Id.* at 13.

The “utmost deference” which the panel has given the government’s Ex parte, in camera assertions is not justified in precedent, conflicts with other decisions of this court . . . and slights the role of the court in protecting the civil liberties guaranteed by the Fourth Amendment.¹⁴⁹

The dissenting judges declared, “the privilege becomes a shield behind which the government may insulate unlawful behavior from scrutiny and redress by citizens who are the target of the government’s surveillance.”¹⁵⁰

The *Reynolds* decision was partially responsible for the difficult position the *Halkin* court faced because the *Reynolds* Court did not clearly delineate when a document should be examined in camera. “The court itself must determine whether the circumstances are appropriate for the claim of privilege, and yet do so without forcing a disclosure of the very thing the privilege is designed to protect.”¹⁵¹ Unable to articulate how to make this decision, the *Reynolds* Court relied on analogy, comparing it to the standard required for a witness who wishes to avoid giving testimony that he claims will incriminate him.¹⁵² Should the witness have to share the testimony with the court to confirm that it is, in fact, incriminating? Or should the court always accept a witness’s bare assertion of the privilege? The *Reynolds* Court determined that, when formulating the balance between requiring the government’s full disclosure and accepting the government’s bare assertion of the state secrets privilege, a court may not necessarily require disclosure. At the same time, the Court expressly disclaimed the extreme of accepting the government’s assertion on its face.¹⁵³

The *Reynolds* Court advocated something more than acceptance of a bare assertion but something less than requiring full disclosure. But what is that *something more*? What beyond a mere claim of privilege satisfies the court “that a responsive answer to the question or an explanation of why it cannot be answered might be dangerous”?¹⁵⁴ In the *Halkin* cases, the satisfaction seemed to spring from the government’s fulfilling the three formal procedural requirements set out in *Reynolds* and some additional

149. *Id.* at 14.

150. *Id.* at 13-14.

151. *United States v. Reynolds*, 345 U.S. 1, 8 (1953).

152. *Id.*

153. *Id.* Analogizing to the question of how much disclosure should be required to invoke the privilege against self-incrimination, the Court observed that despite “some saying that the bare assertion by the witness must be taken as conclusive, and others saying that the witness should be required to reveal the matter behind his claim of privilege to the judge for verification. . . . Neither extreme prevailed.” The Court reasoned that “some like formula of compromise must be applied here.” *Id.*

154. *Id.* at 9.

statements from the executive appearing in an in camera affidavit. In camera review of the actual evidence was not required, although it is questionable whether reading an affidavit and accepting a government official's word should qualify as a judicial check on the executive.

In *Halkin II*, the plaintiffs appealed the dismissal of their case that came as a result of the withheld evidence.¹⁵⁵ Regarding state secrets, the appellants only made procedural arguments, about the government's method of invoking the privilege. According to the court:

Since that ruling resulted in maintaining the secrecy of the information sought, it is scarcely surprising that appellants have not chosen to contest the sensitivity of the information on its merits. Even had they the means and the desire to do so, our task would be no different, for the standard set down in *Reynolds* is itself *purely a procedural framework for testing claims of privilege*.¹⁵⁶

The court went on to say that beyond ensuring that the procedural requirements are met, *Reynolds* requires that “the court must be satisfied from all the evidence and circumstances . . . that a responsive answer to or an explanation of why it cannot be answered might be dangerous because injurious disclosure might result.”¹⁵⁷ However, it is not clear how this satisfaction—that the answer or explanation was harmful—was gained in *Halkin*. The court reviewed an in camera affidavit from the director of the CIA,¹⁵⁸ but never examined the evidence that the government sought to withhold. The court took the government at its word that the “‘seemingly innocuous’ information [could be] part of a classified ‘mosaic’ that ‘can be analyzed and fitted into place to reveal with startling clarity how the unseen whole must operate.’”¹⁵⁹ Once an agent of the executive met the formal *Reynolds* requirements, and attested to the secrecy of the evidence in an affidavit, the court accepted the privilege.

Halkin II seemed to further expand the executive's discretion and dilute chances for judicial review, saying, “Secrets of state . . . are absolutely privileged from disclosure in the courts. . . . Once the court is satisfied that the information poses a reasonable danger to secrets of state, *even the most compelling necessity cannot overcome the claim of privilege*.”¹⁶⁰ Here the

155. *Halkin v. Helms*, 690 F.2d 997, 997 (D.C. Cir. 1982) (*Halkin II*).

156. *Id.* at 991 (emphasis added).

157. *Id.*

158. *Id.* at 986.

159. *Id.* at 993.

160. *Id.* at 990 (emphasis added).

court severely minimizes the *Reynolds* requirement that a court look for a “showing of necessity” to “determine how far the court should probe in satisfying itself that the occasion for invoking the privilege is appropriate.”¹⁶¹ This was in spite of the fact that the necessity of the evidence in the *Halkin* case was great. Following the court’s refusal to compel the discovery, the case was dismissed because it lacked evidence that such discovery might have provided.¹⁶²

2. *The Ellsberg Case*

Ellsberg v. Mitchell, the other case relied on in *Hepting* for allowing plaintiffs to proceed to discovery, indicated much more stringent treatment of the state secrets privilege.¹⁶³ The court in *Ellsberg* insisted on in camera review when the government’s claim of secrecy was dubious and served to end its opponent’s law suit.¹⁶⁴ The court discussed how to determine “whether (and in what spirit) the trial judge in a particular case should examine the materials sought to be withheld,” noting “[w]hen a litigant must lose if the claim is upheld and the government’s assertions are dubious in view of the nature of the information requested and the circumstances surrounding the case, careful in camera examination is not only appropriate . . . but obligatory . . .”¹⁶⁵

The in camera review of the evidence caused the court in *Ellsberg* to determine that the materials were properly withheld.¹⁶⁶ However, like *Halkin*, the court did not dismiss the case, but merely refused to compel the requested discovery.¹⁶⁷ In both cases, despite showing different levels of deference for the executive’s assertion of the privilege (*Ellsberg* called for “considerable deference” as opposed to “utmost deference”¹⁶⁸) the court denied access to evidence but allowed the trial to proceed.

161. *United States v. Reynolds*, 345 U.S. 1, 11 (1953).

162. *See Halkin II*, 690 F.2d at 987.

163. *See Ellsberg v. Mitchell*, 709 F.2d 51 (D.C. Cir. 1983). *Ellsberg* is a civil case following by criminal proceedings pertaining to the Pentagon Papers litigation. Plaintiffs in *Ellsberg* (defendants, their attorneys, and advisors from the criminal cases) claimed that over the course of the criminal proceedings at least one of them was the subject of warrantless wiretapping. *Id.* at 52-53. The discovery in the civil case was disrupted by a government claim of the state secrets privilege and buttressed by a declaration from the Attorney General and a sealed evidentiary exhibit provided to the district court for in camera review. *Id.* at 54.

164. *Id.* at 59.

165. *Id.* (internal citations omitted) (emphasis added).

166. *Id.* at 52.

167. *Id.* at 59.

168. *Id.* at 58.

Judge Walker's decision in *Hepting* reflects skepticism of the state secrets doctrine, as well as awareness of the potential for abuse and the court's obligations to protect civil liberties—themes present in *Ellsberg*¹⁶⁹ and the *Halkin* dissent, although absent in *Halkin II*. *Ellsberg* is the key precedent that Judge Walker relies upon in *Hepting*. While some evidence may be withheld based on the state secrets privilege and that withheld evidence may result in dismissal of the case, the privilege itself should not automatically call for dismissal of the case as long as privileged evidence can be disentangled from non-privileged evidence.¹⁷⁰ Additionally, Judge Walker's decision to allow *Hepting* to proceed to discovery parallels the dissenting judge's response to the D.C. Circuit's refusal to rehear *Halkin I* en banc.¹⁷¹ Like the dissenting judges in *Halkin*, the court in *Hepting* recognized that “[w]here there is a strong showing of necessity, the claim of privilege should not be lightly accepted” and notes that “AT&T's alleged actions here violate the constitutional rights clearly established in *Keith*.”¹⁷² Judge Walker's decision properly rejects the view that *Reynolds* requires only procedural hurdles that can be overcome by bare assertions and instead preserves the balancing test that *Reynolds* suggested.

V. THE DANGER OF EXPANDING THE STATE SECRETS PRIVILEGE

A. Expansion of the State Secrets Doctrine in Non-Wiretap Cases

In recent years, the use of the state secrets privilege has been expanding, both in frequency of use and in the types of protection it provides. Rather than simply serving as an evidentiary privilege to keeping secret documents out of discovery, the privilege has been more frequently invoked in order to dismiss entire cases—a far more serious denial of access to the courts. This non-justiciability application of the doctrine has previously been invoked in cases where the presence of state secrets is clear and all parties involved in the dispute entered into the scenario with full knowledge of the secrecy required.¹⁷³ More recently, the government has

169. *Id.* at 59.

170. *Id.* at 57 (“The privilege may not be used to shield any material not strictly necessary to prevent injury to national security; and whenever possible, sensitive information must be disentangled from nonsensitive information to allow for the release of the latter.”).

171. *Halkin v. Helms*, 598 F.2d 1, 11 (D.C. Cir. 1978) (*Halkin I*).

172. *Hepting v. AT&T Corp.*, 439 F. Supp. 2d 974, 982, 1010 (N.D. Cal. 2006)

173. *See, e.g.*, *Tenet v. Doe*, 544 U.S. 1, 9 (2005) (attempting to enforce an espionage contract with government); *Weinberger v. Catholic Action of Haw./Peace Educ. Project*, 454 U.S. 139, 146-47 (1981) (attempting to force publication of environmental impact

attempted to invoke the non-justiciability application in situations where the government is accused of blatant wrongdoing against innocent individuals. Furthermore, as exemplified in *Hepting*, the government seeks not to exempt evidence or hold an in camera trial, but to entirely avoid defending its actions. In *Reynolds*, the government only invoked the state secrets privilege to shield certain evidence from discovery; the courts allowed the case as a whole to proceed. In *Hepting*, by contrast, the government is invoking the non-justiciability application in order to dismiss the entire case at the outset.

The government has recently invoked the state secrets privilege to dismiss several cases filed in response to the “extraordinary rendition” program.¹⁷⁴ In *El-Masri* a German citizen claimed the CIA kidnapped, tortured and interrogated him after mistaking him for a terrorist with a similar name.¹⁷⁵ The Fourth Circuit upheld the district court’s decision to dismiss the case at the pleading stage under the state secrets privilege, saying that “the judiciary’s role as a check on presidential action in foreign affairs is limited.”¹⁷⁶ Like the court in *Halkin*, the Fourth Circuit accepted an affidavit from the executive explaining why the evidence could not be released; however, the court held that if “an explanation by the executive of why a question cannot be answered would itself create an unacceptable danger of injurious disclosure, the court is obliged to accept the executive branch’s claim of privilege without further demand.”¹⁷⁷ Here, the court allowed for the possibility that not only can the executive withhold evidence from trial, but it can also withhold it from in camera review *and* it is not even required to explain *why* it withholds the evidence if the executive merely states that such an explanation would be damaging to national security.

This logic allowed the executive to force the dismissal of the lawsuit of a potentially innocent man who claims the government conspired to kidnap and torture him because of a case of mistaken identity. The privilege here is not only ending valid litigation on the government’s word—it

report on the storage of nuclear weapons); *Totten v. United States*, 92 U.S. 105, 107 (1875) (attempting to enforce espionage contract with government).

174. For the government’s use of the state secrets privilege to prevent trials on two extraordinary rendition detainees, see *El-Masri v. United States*, 479 F.3d 296 (4th Cir. 2007), *cert. denied*, 128 S. Ct. 373 (2007), *Arar v. Ashcroft*, 414 F. Supp. 2d 250 (E.D.N.Y. 2006). Here, though the government asserted state secrets to dismiss the case, the court found the state secrets issue moot because it was able to dismiss all counts on other grounds. As this Note went to press, the case was on appeal to the Second Circuit.

175. See *El-Masri v. Tenet*, 437 F.Supp. 2d 530, 536 (E.D. Va. 2006).

176. See *El-Masri v. United States*, 479 F.3d at 303.

177. *Id.* at 305-306.

is killing litigation filed in response to claims of *criminal* behavior by the government. *El-Masri* is not the only recent case to have faced complete dismissal prior to discovery following the invocation of the state secrets privilege—it has also been invoked, for example, to end litigation over government employees' claims of wrongful conduct in the workplace.¹⁷⁸ In comparison to the results in *Halkin*, *Ellsberg*, and *Reynolds*, where privileged evidence was singled out and withheld, these cases of dismissal create a serious denial of the court system and shield questionable government activities from scrutiny.

Coupled with the expansion of the *way* the government is using the privilege is the sheer increase in *volume* of the privilege's invocation.¹⁷⁹ The Bush administration's attorneys have invoked the privilege more than any other president in the nation's history.¹⁸⁰

As the executive's use of the privilege increases, courts may become more willing to question the facts underlying the invocations. The Ninth Circuit, most recently, seemed inclined to question how much deference the executive should be given. Judge Pregerson asked the government's attorney during *Hepting* oral arguments, "[A]re you saying the courts are to rubber stamp the determination that the executive makes that there's a state secret?"¹⁸¹ The Ninth Circuit panel seemed mindful of both the history of government misuse of wiretaps and the expansive use of the state secrets privilege to purge litigation that questions government wrongdoing, especially in times of war.¹⁸²

178. See, e.g., *Edmonds v. United States Dep't of Justice*, 323 F. Supp. 2d 65 (D.D.C. 2004). In *Edmonds*, plaintiff's claims of retaliation following the loss of her job due to reporting alleged FBI misconduct were dismissed after the government invoked the state secrets privilege to withhold a classified declaration that supported her claim. The court held that without it she would be unable to prove the prima facie elements of her case. See also *Tilden v. Tenet*, 140 F. Supp. 2d 623 (E.D. Va. 2000) (dismissing sex discrimination action against Central Intelligence Agency because there was no way the lawsuit could proceed without disclosing state secrets).

179. See Scott Shane, *Invoking Secrets Privilege Becomes a More Popular Legal Tactic by U.S.*, N.Y. TIMES, June 4, 2006 at 32, available at <http://www.nytimes.com/2006/06/04/washington/04secrets.html>.

180. *Id.*

181. See Oral Arguments, *supra* note 130.

182. Judge Pregerson, for example, asked government council, "I mean, is it the government's position that when our country is engaged in a war that the power of the executive when it comes to wiretapping is unchecked?" Oral Arguments, *supra* note 130.

B. The State Secrets Privilege in the Future

Although courts have historically been reluctant to question government assertions of secrecy,¹⁸³ the increase in the number of assertions of the privilege should make courts cautious. The government's efforts toward expanding the state secrets privilege—from an exceptional standard of evidentiary privilege into a rule depriving citizens of recourse against their government's wrongful conduct—is creating an overbroad policy of immunity for the government out of what was once a narrow evidentiary rule. The court in *El-Masri* seemed to support this expansion of the privilege by noting that “to the extent an executive claim of privilege ‘relates to the effective discharge of a President’s powers, it is constitutionally based.’”¹⁸⁴ However, the *El-Masri* court overlooked the fact that in upholding the President's supposed constitutional power, it denied the plaintiff's constitutional right of access to the court.

The outcome of *Hepting* may provide an answer about how much deference courts will be willing to give the executive in the future when the state secrets privilege is asserted. The adherence to a mere “procedural framework” endorsed in *Halkin* encountered serious questions when *Hepting* was argued before the Ninth Circuit.¹⁸⁵ Rather than allowing a request from the executive to end the lawsuit, the Ninth Circuit may instead call for the privilege to be used more narrowly—to only eliminate such evidence as will actually protect national security.¹⁸⁶ Judge Pregerson, for one, seemed to indicate that the district court judge should consider whether individual evidence was privileged or not. When AT&T's lawyer

183. Steve Aftergood of the Federation of American Scientists points out on his Secrecy News Blog, “Although the executive branch's assertion of the state-secrets privilege has been denied by judges on at least four occasions . . . those denials seem to have been based on technical defects or procedural failings rather than a substantial judicial assessment of the merits. . . .” Posting of Steve Aftergood to Secrecy News, Court Denies State Secrets Claim in Wiretapping Case, http://www.fas.org/blog/secrecy/2008/04/us_intelligence_agencies.html (July 21, 2006 11:55 EST). See also discussion, *infra* Section III.C.

184. *El-Masri v. United States*, 479 F.3d 296, 303 (4th Cir. 2007) (quoting *United States v. Nixon*, 418 U.S. 683, 711 (1974)).

185. Judge McKeown noted that disallowing discovery based purely on government assertions “put us in the position of being in the ‘trust us’ category.” Oral Arguments, *supra* note 130.

186. Judge Hawkins, discussed the state secrets privilege's ordinary procedure, “Ordinarily in a piece of litigation where there is some contention that state secrets may be involved, the ordinary course . . . would be to let the litigation go forward and as the government asserts the privilege, the Article III district judge looks at the information in camera and then makes that determination” He then asked, “Why wouldn't that work here?” Oral Arguments, *supra* note 130.

noted that the government's invocation of the privilege tied their hands as far as providing a valid defense, Pregerson said, "That'll be something Judge Walker will have to look into in the future, I suppose."¹⁸⁷

C. The Importance of In Camera Review

The Ninth Circuit, in questioning whether executive affidavits explaining why evidence cannot be released could serve as a judicial check, may reinvigorate the importance of in camera reviews.¹⁸⁸ The Supreme Court said in *Reynolds*, thirty years before the Vietnam War and more than seventy years before September 11, "[W]e will not go so far as to say that the court may automatically require a complete disclosure to the judge before the claim of privilege will be accepted in any case"¹⁸⁹ Since *Reynolds*, courts have only required in camera review of the documents at issue in about one-third of reported cases where the privilege has been invoked.¹⁹⁰ Since the presidency of George H.W. Bush, the privilege has been invoked in at least twenty-three reported cases, but in only five of those cases did a court require in camera review of the allegedly secret evidence.¹⁹¹ In determining whether to enforce in camera reviews, courts must remember that "it is costless for the president to assert a secrecy privilege: the overwhelming odds are that the assertion will be successful, and even if unsuccessful, the process of overturning claims of privilege is lengthy and the only potential cost of excessive claims of national security is in bad publicity."¹⁹²

The United States has participated in unpopular wars twice since *Reynolds* was decided. During each war the government likely exceeded the boundaries of legality in order to surveil the communications of its own citizens. The government has done this in spite of laws that clearly prohibit domestic surveillance without a warrant. During and following both wars, litigation arose and the government attempted to hide its illegal behavior by invoking the state secrets privilege. The state secrets privilege

187. Oral Arguments, *supra* note 130.

188. Judge Pregerson asked, "But what are the checks on it? If we're getting affidavits from folks in the executive branch and we have to take their word for it, what is the check?" Oral Arguments, *supra* note 130.

189. *United States v. Reynolds*, 345 U.S. 1, 10 (1953).

190. Weaver, *supra* note 114, at 101.

191. *Id.* Note this article was published in 2005. The Washington Post has since noted that George W. Bush has invoked the privilege, himself, 23 times since September 11, 2001. Dana Priest, *Secrecy Privilege Invoked in Fighting Ex-Detainee's Lawsuit*, WASH. POST, May 13, 2006 at A03, available at <http://www.washingtonpost.com/wp-dyn/content/article/2006/05/12/AR2006051202008.html>.

192. Weaver, *supra* note 114, at 86.

has been very successful in blocking inquiry into government wrongdoing in large part because the judiciary has relinquished much of its power for judicial review in response to *Reynolds*. In attempting to apply *Reynolds*, courts have repeatedly passed over in camera review of allegedly secret evidence in favor of trusting the executive's claims of national security concerns. Given the executive's historic misuse of the privilege, courts must begin re-employing in camera review to ensure that the government is not abusing the doctrine to cover up further wrongdoing. The Ninth Circuit has the opportunity to disallow such broad, abuse of the privilege by altering the precedent on federal court review of government assertions of secrecy.

Allowing the automatic dismissal of cases such as *Hepting* will not enhance national security. The EFF, plaintiffs' council in *Hepting*, has compiled a list of forty-eight court cases where national security was at issue and federal district court judges securely handled documents ex parte and in camera.¹⁹³ In *Hepting*, after examining the disputed documents, Judge Walker found it would be possible to shield information detrimental to national security without completely forsaking the plaintiffs' right to air their grievances against the government.¹⁹⁴ He stated, "[t]he compromise between liberty and security remains a difficult one. But dismissing this case at the outset would sacrifice liberty for no apparent enhancement of security."¹⁹⁵ In making this statement, Walker apparently rejected the non-justiciability approach of allowing the executive to shut down litigation based on their bare assertion that the very subject matter of the case is a state secret.

Khalid El-Masri, Sibel Edmonds, and the other aggrieved individuals like them whose lawsuits against the government were eliminated by the state secrets privilege have a right to their day in court if it is at all possible to provide it without putting the country at risk. *Reynolds* created the process of balancing citizens' right to trial and the nation's security.¹⁹⁶ This method of balance has been advocated by both *Ellsberg* and the dis-

193. Electronic Frontier Foundation, No National Security Information has ever Leaked from Federal Courts in more than 50 years of FISA and States Secrets Cases; Congress Can Trust Them Fully in the Pending Cases (2007), available at <http://www.eff.org/files/nsa/courts.pdf>.

194. *Hepting v. AT&T Corp.*, 439 F. Supp. 2d 974, 995 (N.D. Cal. 2006) ("To defer to a blanket assertion of secrecy here would be to abdicate that duty [to adjudicate disputes].").

195. *Id.*

196. See *United States v. Reynolds*, 345 U.S. 1, 9-10 (1953).

senting judges in *Halkin I*.¹⁹⁷ These cases support Judge Walker's assessment that liberty and security must be balanced when the state secrets privilege is asserted. When the government's assertion of the privilege is questionable, in camera review of the evidence (not just an affidavit from the government) is the best tool courts have to make the compromise between liberty and security. As the court said in *Halpern* (where the court held an entire trial in camera to balance security and liberty), the state secret privilege does not apply "when disclosure to court personnel in an in camera proceeding will not make the information public or endanger the national security."¹⁹⁸

At minimum, federal judges have a duty to examine the materials the government seeks to withhold and determine if a fair trial is possible. The Supreme Court has itself noted that when there is doubt, the court should use the tools at its disposal, including in camera review, to determine what materials should be withheld and what may be disclosed.¹⁹⁹

VI. CONCLUSION

In the aftermath of September 11, 2001, the federal government has been repeatedly accused of wrongful conduct against individuals. When those individuals brought suit, rather than defend its conduct, the government invoked the state secrets privilege. Courts have a responsibility to engage in judicial scrutiny of government claims of privilege and provide citizens with an avenue for redress if at all possible. Judges should not allow the mere utterance of the phrase "state secrets" to end litigation.

When it established the state secrets privilege in *Reynolds*, the Supreme Court said, "[j]udicial control over the evidence in a case cannot be abdicated to the caprice of executive officers."²⁰⁰ The question remains: how, by allowing a mere affidavit to end litigation and cover up the government's own wrongdoing; how, given the government's historic temptation to invoke the privilege when it is more convenient or less embarrassing than admitting the truth; how, without requiring in camera review and merely taking the word of the executive; how, then can the judicial control *not* be abdicated to the caprice of the executive?

197. See *Ellsberg v. Mitchell*, 709 F.2d 51, 59 (D.C. Cir. 1983); *Halkin v. Helms*, 598 F.2d 1, 12 (D.C. Cir. 1978) (*Halkin I*).

198. *Halpern v. United States*, 258 F.2d 36, 44 (2d Cir. 1958).

199. *Kerr v. U.S. Dist. Court*, 426 U.S. 394, 405-06 (1976) ("[T]his Court has long held the view that in camera review is a highly appropriate and useful means of dealing with claims of governmental privilege.").

200. *Reynolds*, 345 U.S. at 9-10.

WARSHAK V. UNITED STATES: THE KATZ FOR ELECTRONIC COMMUNICATION

By Tamar R. Gubins

*The law, though jealous of individual privacy, has not kept pace with . . . advances in scientific knowledge.*¹

“[I]n the application of a constitution, our contemplation cannot be only of what has been but of what may be.” The progress of science in furnishing the Government with means of espionage is not likely to stop with wire-tapping. Ways may some day be developed by which the Government, without removing papers from secret drawers, can reproduce them in court, and by which it will be enabled to expose to a jury the most intimate occurrences of the home. . . . Can it be that the Constitution affords no protection against such invasions of individual security?²

I. INTRODUCTION

Initially, Orin Kerr, a leading scholar in internet surveillance, referred to *Warshak v. United States* as “a rather odd case involving e-mail privacy.”³ When the Sixth Circuit handed down its opinion in June 2007,⁴ he boosted his description to “blockbuster.” The Sixth Circuit predominantly affirmed a district court preliminary injunction prohibiting the United States from compelling Internet Service Providers (ISPs) to disclose the contents of e-mail communication without providing notice to the account holder unless the government has obtained a warrant supported by prob-

© 2008 Tamar Gubins. The author hereby permits the reproduction of this Note subject to the Creative Commons Attribution 3.0 License, the full terms of which can be accessed at <http://creativecommons.org/licenses/by/3.0/legalcode>, and provided that the following notice be preserved: “Originally published in the Berkeley Technology Law Journal 23:1 (2008).”

1. *Berger v. New York*, 388 U.S. 41, 49 (1967).

2. *Olmstead v. United States*, 277 U.S. 438, 474 (1928) (Brandeis, J., dissenting) (quoting *Weems v. United States*, 217 U.S. 349, 373 (1910)).

3. Posting of Orin Kerr to The Volokh Conspiracy, *Warshak v. United States*, <http://volokh.com/posts/1176832897.shtml> (April 17, 2007, 2:53 p.m. EST).

4. Posting of Orin Kerr to The Volokh Conspiracy, *Sixth Circuit Blockbuster on E-mail Privacy*, <http://www.volokh.com/posts/1182181742.shtml> (June 18, 2007, 11:49 a.m. EST).

able cause.⁵ The affirmation was based on a Fourth Amendment reading finding that an individual has a reasonable expectation of privacy in the contents of such communication, with regard to the commercial ISP that facilitated the transmission.⁶ Essentially, the court held that an ISP that stores or sends e-mail is not a third party from whom electronic communication can be compelled without Fourth Amendment limitations. The Sixth Circuit partially modified the district court injunction, allowing warrantless compulsion of communication where an ISP both has a clearly stated policy of monitoring the contents of e-mails and actually does monitor them. The court reasoned that in such instances an informed user would not be able to maintain a reasonable expectation of privacy.⁷

The Sixth Circuit's opinion boldly extended Fourth Amendment protection to e-mail, an extension comparable to the protection of telephonic communication in 1967. At that time, the Supreme Court reversed forty years of precedent to find warrantless wiretapping as an unreasonable Fourth Amendment search.⁸ One year later Congress passed the Wiretap Act, providing strong statutory protection for telephone conversations. Since the Wiretap Act, Congress has made a few major revisions and numerous smaller amendments to electronic surveillance laws.⁹ The courts, however, have been reluctant to question statutory rules or find Fourth Amendment protection for technologies not covered by congressional acts, resulting in a contraction of such protection.¹⁰ As a result, Americans have effectively lost Fourth Amendment privacy protection with each new development in communication technology. Additionally, Congress has been slow to expand existing statutory protections, and has not instituted meaningful new protection for electronic communications.¹¹ In today's political climate driven by fears of terrorism, statutory revisions are unlikely to

5. *Warshak v. United States*, 490 F.3d 455 (6th Cir. 2007), *reh'g en banc granted*, *Warshak v. United States*, No. 06-4092, 2007 U.S. App. LEXIS 23741 (6th Cir. Oct. 9, 2007). Having vacated the original decision in favor of rehearing en banc, the Sixth Circuit heard oral arguments on Dec. 5, 2007.

6. *Id.* at 470.

7. *Id.* at 472-73.

8. *See Katz v. United States*, 389 U.S. 347 (1967).

9. Daniel J. Solove, *The Coexistence of Privacy and Security: Fourth Amendment Codification and Professor Kerr's Misguided Call for Judicial Deference*, 74 *FORDHAM L. REV.* 747, 769 (2005).

10. *See generally id.*

11. "Loose-and-low" is how one blogger refers to the burdens the Electronic Communications Privacy Act imposes on government officials before they may obtain e-mails. Posting to the Susan Crawford Blog, *Boundaries*, <http://scrawford.net/blog/boundaries/1051/> (Nov. 16, 2007).

provide new protections—protections that judicial reinforcement of Fourth Amendment protection could, and should, provide.

Warshak raises issues of privacy in communication and how electronic communication should be regarded under the law: is it like telephonic and mailed communication, where the Fourth Amendment and statutory protections apply? Or is e-mail like a bank deposit slip, which has statutory protections created by Congress, but not Fourth Amendment protection? *Warshak* also defines who constitutes a third party for the purposes of waiving reasonable expectations of privacy.

In its June 2007 decision, the Sixth Circuit three-judge panel dismissed procedural arguments that would have enabled it to avoid the larger constitutional issues, and announced that electronic communication deserved more protection than Congress's Electronic Communications Privacy Act (ECPA) provides. The Sixth Circuit, however, vacated the opinion and reheard the case en banc in December 2007. Whether the court will repeat this important pronouncement, repudiate it, or use procedural grounds to avoid it, remains to be seen.

Part II of this Note describes the reasoning of the vacated Sixth Circuit decision in *Warshak*. Part III reviews both privacy jurisprudence and the statutory systems protecting individual privacy in communications, and surveys the varying degrees of protection for different types of communication offered by both. Part IV looks at technological changes in communication and shows how a growing share of communications is inadequately protected, reflecting the current state of statutory and jurisprudential interpretation. Part V compares the costs and benefits of protecting privacy by statute versus by case law, and argues that the courts should not always defer to Congress. This Note concludes that the Sixth Circuit and future courts should affirm the principle that the Fourth Amendment provides protection for electronic communication. Congress could then revise and pass surveillance legislation that reflects this important principle.

II. WARSHAK: FACTS AND PROCEDURAL HISTORY

A. Factual History and District Court Decision

In March 2005, the Department of Justice opened a fraud investigation into Steven Warshak, the owner of Berkeley Premium Nutraceuticals, Inc., a Cincinnati company that sells natural supplements purported to improve everything from energy levels to sexual performance.¹² In the course of

12. *Warshak v. United States*, 490 F.3d 455, 460 (6th Cir. 2007), *vacated* *Warshak v. United States*, No. 06-4092, 2007 U.S. App. LEXIS 23741 (6th Cir. Oct. 9, 2007)

that investigation, the United States obtained a sealed order from a Magistrate Judge in Ohio that required ISP NuVox Communications to provide, among other things, “[t]he contents of wire or electronic communications (not in electronic storage unless greater than 181 days old) that were placed or entered in directories or files owned or controlled by [Warshak’s accounts].”¹³ The order defined “communications not in electronic storage” to be “any e-mail communications received by the specified accounts that the owner or user of the accounts has already accessed, viewed, or downloaded.”¹⁴ In September 2005, the government was granted a second, similar order, to receive communications from Yahoo! accounts also in Warshak’s name.¹⁵ Both orders prohibited the ISP from divulging the existence or contents of the order to anyone, including Warshak.¹⁶

For more than a year the government monitored Warshak’s communications without his knowledge; he learned of it only after a Magistrate Judge unsealed the orders.¹⁷ Within two weeks of notification Warshak

(granting rehearing en banc and staying mandate); Berkeley Brands Enzyte, <http://www.bpn.com/enzyte.html> (last visited Apr. 6, 2008). In 2006 Warshak was indicted on 107 counts of crimes from wire fraud to money laundering. Posting of Orin Kerr to The Volokh Conspiracy, The Facts and Injunction in Warshak v. United States, http://volokh.com/archives/archive_2007_06_17-2007_06_23.shtml#1182231378 (June 19, 2007, 1:36 AM EST).

13. Warshak v. United States, No. 1:06-cv-357 2006 U.S. Dist. LEXIS 50076 at *3-4 (S.D. Ohio 2007).

14. *Id.* The government thus sought two categories of communication: (1) any opened, downloaded, or viewed communication, no matter how old, and (2) any unopened communication more than 180 days old. *Id.*; The Stored Communications Act provides:

A governmental entity may require the disclosure by a provider of electronic communication service of the contents of a wire or electronic communication, that is in electronic storage in an electronic communications system for one hundred and eighty days or less, only pursuant to a warrant A governmental entity may require the disclosure by a provider of electronic communications services of the contents of a wire or electronic communication that has been in electronic storage in an electronic communications system for more than one hundred and eighty days by the means available under subsection (b)

18 U.S.C. § 2703(a) (2000 & Supp. V 2005).

15. Warshak, 490 F.3d at 460.

16. *Id.* The notice requirement for a § 2703(d) order can be waived by the court for up to ninety days at a time if “there is reason to believe that notification of the existence of the court order may have an adverse result” § 2705(a)(1)(A). Section 2705(a)(2) states that an “adverse result” includes “(B) flight from prosecution; (C) destruction of or tampering with evidence;” or the catch-all “(E) otherwise seriously jeopardizing an investigation or unduly delaying a trial.” 18 U.S.C. § 2705(a)(2).

17. Warshak, 490 F.3d at 460-61.

filed suit against the United States, alleging that the orders and resulting seizures violated the Fourth Amendment and the Stored Communications Act (SCA), and seeking injunctive relief.¹⁸

The District Court granted a preliminary injunction, persuaded by Warshak's argument that an e-mail is similar to a letter or package, and thus not searchable without a warrant under the Fourth Amendment. It rejected the government's counterargument that an e-mail is more like a postcard, with no "envelope" to block prying eyes.¹⁹ The court stated that an individual has a "reasonable expectation of privacy in his personal emails" which he does not surrender just because the communication is stored on the server of a commercial ISP.²⁰ The District Court issued a preliminary injunction barring the United States from seizing "the contents of any personal email account maintained by an Internet Service Provider in the name of any resident of the Southern District of Ohio . . . without providing the relevant account holder or subscriber prior notice"²¹

B. Vacated Decision by Sixth Circuit Three-Judge Panel

The Sixth Circuit substantially affirmed the injunction granted by the District Court; this Section summarizes that opinion.²² The United States

18. *Id.* at 461.

19. *Warshak v. United States*, No. 1:06-cv-357, 2006 U.S. Dist. LEXIS 50076, *13-17 (S.D. Ohio 2007).

20. *Id.* at *19.

21. *Id.* at *32. The court found that the reasonable expectation of privacy gave Warshak a likelihood of success on the merits, one of the four equitable factors used to analyze a preliminary injunction. *Id.* at 19. The other three factors, whether Warshak has shown that irreparable harm results absent an injunction, whether such an injunction would substantially harm the United States, and whether an injunction is in the public interest, were also all found to favor a preliminary injunction. *Id.* The court stressed that it is in the public's interest "to be free of unlawful government searches and seizures [because that] is a core concern of the Fourth Amendment." *Id.* at *26, *28. The District Court declined to evaluate Warshak's second assertion, the claim that the Section 2703(d) orders obtained by the United States violated the SCA. *Id.* at *20.

22. The United States made three additional claims, all of which were dismissed by the Sixth Circuit. First, that Warshak's claims lacked standing and were not ripe for adjudication because there was no specific order to get additional communication or account information. As the government had sought such orders in the past and refused to agree not to seek future orders, Warshak's concern was not entirely hypothetical and the court dismissed this argument. *Warshak*, 490 F.3d at 465-68. The government also contended that Warshak's claim could not be upheld because, in mounting a facial challenge, he would need to prove that there is no instance where the Act would be valid. The court listed examples where the rule was not as strict as the government contended, and particularly pointed to an early wiretap case where a facial challenge was upheld. *Id.* at 476-80. Lastly, the government averred that the District Court was mistaken in finding the four factors of preliminary injunction in Warshak's favor, specifically arguing that War-

argued that compelling disclosure from a third party is subject only to a general reasonableness standard, not the stricter probable cause required for a warrant, because an individual loses his expectation of privacy to information that he has voluntarily disclosed.²³ The Sixth Circuit, however, agreed with the District Court regarding reasonable expectation of privacy in the contents of electronic communication. It reasoned that although sharing information with a third party can repudiate the expectation of privacy, a commercial ISP is more like an intermediary—like a postal carrier—than a third party for purposes of Fourth Amendment seizures. If the ISP just stores or sends communication and does not routinely access or monitor it, an account holder maintains a reasonable expectation of privacy to the contents of the communication.²⁴

Drawing on telephone eavesdropping cases, the court held that whether an individual maintains a reasonable expectation of privacy in e-mail stored on the server of an ISP depends on (1) with whom the communication is shared, and (2) what information is divulged.²⁵

Even though a conversation is transmitted through a telephone company, an individual maintains an expectation of privacy to the content of the conversation with regard to the phone company, since the phone company is not the recipient.²⁶ The Sixth Circuit distinguished between information shared with a third party and information that an “intermediary . . . merely has the ability to access,”²⁷ concluding that the latter must have some protection. Otherwise phone conversations, packages or storage containers would have no protection simply because they were stored or sent through an intermediary.²⁸ Although packages or containers leave the pos-

shak would not suffer irreparable harm absent an injunction. The Sixth Circuit agreed with the District Court that Warshak had shown a threat of harm, and at the very least the District Court could not be said to have abused its discretion. *Id.* at 480-81.

23. Brief of Defendant-Appellant at 16-17, *Warshak v. United States*, 490 F.3d 455 (6th Cir. 2007), *vacated* *Warshak v. United States*, No. 06-4092, 2007 U.S. App. LEXIS 23741 (6th Cir. Oct. 9, 2007), *available at* http://www.eff.org/legal/cases/warshak_v_usa/warshak_proof_reply_brief.pdf.

24. *See Warshak*, 490 F.3d 455. While the Sixth Circuit agreed that certain third parties can be subpoenaed without a search warrant, they distinguished recipients of communication from the carrier of that communication, warning that the investigated party may still have a “legitimate expectation of privacy attaching to the records obtained.” *Id.* at 469 (quoting *United States v. Phibbs*, 999 F.2d 1053, 1077 (6th Cir. 1993)).

25. *Id.* at 470.

26. “The mere fact that a communication is shared with another person does not entirely erode all expectations of privacy.” *Warshak*, 490 F.3d at 470.

27. *Id.*

28. *Id.*

session of the sender, there are societal expectations that the contents will not be inspected by the intermediary.

The kind of information transmitted is also significant: only content information is entitled to Fourth Amendment protection. In *Smith v. Maryland*, the recording of telephone numbers dialed by a user was not found to be a search, as the numbers were considered unrelated to the contents of the conversations.²⁹ A reasonable person would assume that phone records regularly seen by telephone company employees, and used by the company to route calls, would not be private. This is not the kind of information to which a person could have a reasonable expectation of privacy, and could be compelled by the government without probable cause. However, the scope of what can be compelled is limited to this kind of information.³⁰

By analogy, there are privacy expectations to the contents of e-mails. Although an ISP has access to the communication, it is a carrier—like the post office or phone company—rather than a bona fide third party for the purposes of the third party rule as applied to the contents.³¹ The determination that the ISP is not a third party with respect to e-mail contents is crucial. The government could have obtained the contents of the communication without showing probable cause or violating the Fourth Amendment had it subpoenaed a true third party, such as the recipient of the communication. But “this rationale is inapplicable where the party subpoenaed is not expected to access the content of the documents.”³² By analogy to *Smith*, the ISP was a third party with respect to the address on the e-mail, but not its contents. Absent a waiver, the government has two options to compel an ISP to disclose content: obtain a search warrant based on probable cause, or provide notice to the user.

The government argued that Warshak contracted away any expectation of privacy through user agreements and policies allowing the ISP to access e-mails. The court held that while it is possible to waive a privacy expectation, the policy must clearly state that contents will be monitored (such as the right to “audit, inspect, and monitor”), rather than provide a weak caveat that some contents might be accessed on a limited basis.³³ Warshak’s user agreement was not a waiver because it merely allowed limited ac-

29. *Smith v. Maryland*, 442 U.S. 735 (1979).

30. *See Warshak*, 490 F.3d at 471.

31. *See infra* Section III.A.2, for a detailed explanation of the third party rule.

32. *Warshak*, 490 F.3d at 471.

33. *Id.* at 472-73 (“[M]ere accessibility is not enough to waive an expectation of privacy.”).

cess.³⁴ But the Sixth Circuit modified the injunction to allow an ISP to be compelled to disclose e-mails without notice if its user agreement specifically called for monitoring of communication contents.³⁵

On October 9, 2007, the Sixth Circuit vacated the panel decision and granted the government's petition for rehearing en banc.³⁶ The government's brief argued on procedural grounds that the injunction was improperly granted by the Sixth Circuit.³⁷ *Warshak* was reheard on December 5, 2007. On review the Sixth Circuit could avoid the Fourth Amendment constitutional issue by finding for the government on procedural grounds.

III. JUDICIAL AND STATUTORY PRIVACY PROTECTIONS

A. Fourth Amendment Jurisprudence: Reasonable Expectation of Privacy

The Fourth Amendment of the United States Constitution confers "[t]he right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures," unless a warrant is issued based on probable cause.³⁸ To determine whether or not a defendant's Fourth Amendment rights are violated, generally courts ask whether a "search" or "seizure" has occurred, and if so, if it was "reasonable."³⁹ Historically, "trespass or interference with property" has been deemed a search or seizure, and reasonableness has been determined on a case-by-case basis.⁴⁰ Subject to many exceptions, the general rule is that a warrantless search or seizure is invalid and the evidence recovered is inadmissible in court.⁴¹

34. *Id.* at 474; The Sixth Circuit was not persuaded that, because all ISPs monitor content for spam and viruses, users have waived their expectation to privacy. The monitoring is mechanized and content is not transmitted to employees. The court analogized that such filters were similar to screening post for explosives.

35. *Id.* at 475.

36. *Warshak v. United States*, No. 06-4092, 2007 U.S. App. LEXIS 23741 (6th Cir. Oct. 9, 2007).

37. Petition of the United States for Rehearing En Banc, *Warshak v. United States*, 490 F.3d 455 (6th Cir. 2007), *vacated* *Warshak v. United States*, No. 06-4092, 2007 U.S. App. LEXIS 23741 (6th Cir. Oct. 9, 2007), *available at* http://volokh.com/files/Warshak_en_banc_petition.pdf.

38. U.S. CONST. amend. IV.

39. Orin S. Kerr, *Search and Seizure: Past, Present, and Future*, in OXFORD ENCYCLOPEDIA OF LEGAL HISTORY (forthcoming), *available at* <http://ssrn/abstract=757846>; *see* DANIEL J. SOLOVE, THE DIGITAL PERSON 188-89 (2004).

40. Kerr, *supra* note 39, at 6; SOLOVE, *supra* note 39, at 189.

41. SOLOVE, *supra* note 39, at 189, 192-93. A common criticism of the 1986 Electronic Communications Privacy Act is that it does not contain this suppression remedy.

The courts have given ample consideration to what constitutes an unreasonable search or seizure in the physical context of the home.⁴² It is undisputed that Fourth Amendment protection from unreasonable search and seizures applies to tangible articles on private property when a law enforcement official wishes to enter the property or take items from it.⁴³ Less clear is what protections apply to articles outside the home, items in public view, or intangibles, like conversation. As technology changes and advances, the courts must constantly re-evaluate the boundaries of protection that the Fourth Amendment provides.⁴⁴

While early Fourth Amendment jurisprudence focused on property rights, the fulcrum of analysis shifted to privacy in the 1960s.⁴⁵ The modern test that determines whether Fourth Amendment rights have been violated is a “reasonable expectation of privacy” test.⁴⁶ The two prongs of the test ask (1) whether one actually expected privacy, and (2) whether that expectation was reasonable.⁴⁷ As the first prong is necessarily subjective, courts usually focus on this second prong.⁴⁸

Therefore, under the ECPA, any electronic communications that are intercepted in violation of the Act are still admissible in court. *See* Orin S. Kerr, *A User’s Guide to the Stored Communications Act, and a Legislator’s Guide to Amending It*, 72 GEO. WASH. L. REV. 1208, 1241 (2004).

42. *See, e.g.,* *Kyllo v. United States*, 533 U.S. 27 (2001).

43. Kerr, *supra* note 39, at 7-8.

44. *See, e.g.,* *Katz v. United States*, 389 U.S. 347 (1967); *Kyllo*, 533 U.S. 27 (evaluating sensory enhancement technology in light of the Fourth Amendment and holding that use of a thermal-imaging device to detect heat inside a private home, without a warrant, was an unreasonable search).

45. In the 1960s, judicial understanding of the underlying foundation of Fourth Amendment protection moved from property interests to protection of privacy. *See* *Wong Sun v. United States*, 371 U.S. 471, 485 (1963) (“[T]he Fourth Amendment may protect against the overhearing of verbal statements as well as against the more traditional seizure of ‘papers and effects.’”). *See also* *Warden v. Hayden*, 387 U.S. 294, 304 (1967) (“The premise that property interests control the right of the Government to search and seize has been discredited. . . . We have recognized that the principal object of the Fourth Amendment is the protection of privacy rather than property, and have increasingly discarded fictional and procedural barriers rested on property concepts.”). *See generally* Kerr, *supra* note 39. However, the Supreme Court at this time cautioned that the Fourth Amendment was more than just a general right to privacy. *Katz*, 389 U.S. at 350 (“[T]he Fourth Amendment cannot be translated into a general constitutional ‘right to privacy.’ That Amendment protects individual privacy against certain kinds of governmental intrusion, but its protections go further, and often have nothing to do with privacy at all.”).

46. *Katz*, 389 U.S. at 360-61 (Harlan, J., concurring); *see* Orin S. Kerr, *The Fourth Amendment and New Technologies: Constitutional Myths and the Case for Caution*, 102 MICH. L. REV. 801, 808 (2004).

47. *Katz*, 389 U.S. at 361 (Harlan, J., concurring) (“[T]he rule that has emerged from prior decisions is that there is a twofold requirement, first that a person have exhib-

Section III.A.1 reviews the historic shift from the property and trespass underpinnings of Fourth Amendment protection to a privacy-based understanding. Section III.A.2 sets forth the connection between privacy rights and disclosure to third parties under the modern framework.

1. *Fourth Amendment Protection for Communication: From Physical Trespass to Privacy Protection.*

Fourth Amendment protection for communications began with postal mail. In 1878, the Supreme Court held that letters were protected from unreasonable search and seizure, even if in the physical possession of the postal service rather than the sender or recipient.⁴⁹ In holding that sealed letters and packages were protected, the court distinguished them from unsealed mail (e.g., postcards) “purposely left in a condition to be examined” and thus not subject to protection.⁵⁰

In the middle of the nineteenth century, the telegraph and the telephone raised new questions about the limits of warrantless surveillance. Taking up this question in the early twentieth century, the Supreme Court initially provided scant protection.

In 1928, in *Olmstead v. United States*, the Court took a narrow, property-centric view of the Fourth Amendment, finding no violation in warrantless phone tapping because it was accomplished without any physical trespass on the defendant’s property.⁵¹ While reaffirming that a government agent may not search a sealed letter traveling through the postal service as it was a physical “paper” covered by the Fourth Amendment, it held that applying the same principle to telephone conversations would “attribut[e] an enlarged and unusual meaning to the Fourth Amendment.”⁵²

ited an actual (subjective) expectation of privacy and, second, that the expectation be one that society is prepared to recognize as ‘reasonable.’”); *see generally* Kerr, *supra* note 39, at 8.

48. *See generally* Dorothy K. Kagehiro et al., *Reasonable Expectation of Privacy and Third-Party Consent Searches*, 15 LAW AND HUMAN BEHAVIOR 121, 122 (1991). Not all scholars and commentators agree the Fourth Amendment should be seen in terms of privacy. *See, e.g.*, Scott E. Sundby, “Everyman”’s Fourth Amendment: Privacy or Mutual Trust between Government and Citizen? 94 COLUM. L. REV. 1751 (1994).

49. *See Ex parte Jackson*, 96 U.S. 727, 733 (1878).

50. *Id.*

51. *See Olmstead v. United States*, 277 U.S. 438, 457 (1928).

52. *Id.* at 464, 466.

Olmstead was later overturned⁵³ and is now most famous for Justice Brandeis' minority opinion, which is credited with establishing a constitutional right to privacy.⁵⁴ Brandeis claimed that the founders' goal for the Constitution was to impart a right to the citizenry "to be let alone" by the government, and that any "unjustifiable intrusion by the Government upon the privacy of the individual . . . must be deemed a violation of the Fourth Amendment."⁵⁵ Prophetically, Brandeis speculated that technology might someday allow the government access to private documents without having to enter a house to get them.⁵⁶ He went on to ask rhetorically, "Can it be that the Constitution affords no protection against such invasions of individual security?"⁵⁷

After *Olmstead*, the Court shifted to a view of the Fourth Amendment right to privacy that was not based on the physical confines of the home or tangible papers.⁵⁸ The apex of this shift⁵⁹ came in *Katz v. United States*, a seminal case regarding Fourth Amendment protection in telephone conversations.⁶⁰ Katz was convicted of illegal gambling, largely based on telephone conversations he made from a public, but enclosed, telephone booth.⁶¹ Unbeknownst to Katz, and without obtaining a warrant based on probable cause, these conversations were recorded by FBI agents by

53. See, e.g., *Katz v. United States*, 389 U.S. 347, 353 (1967), *Berger v. New York*, 388 U.S. 41, 51 (1967).

54. See *Olmstead*, 277 U.S. at 478 (Brandeis, J., dissenting) (claiming that the founders "conferred, as against the Government, the *right to be let alone*—the most comprehensive of rights and the right most valued by civilized men.") (emphasis added). Thirty-eight years earlier, in 1890, Brandeis and his law partner Samuel Warren had published "The Right to Privacy." Samuel D. Warren & Louis D. Brandeis, *The Right to Privacy*, 4 HARV. L. REV. 193 (1890). One possible impetus for the article may have been Warren's frustration that the details of his life were often published on gossip pages. See DANIEL J. SOLOVE ET AL., INFORMATION PRIVACY LAW 11 (2d ed. 2006).

55. *Olmstead*, 277 U.S. at 478 (Brandeis, J., dissenting).

56. *Id.* at 474.

57. *Id.*

58. Compare *Goldman v. United States*, 316 U.S. 129 (1942) (finding no Fourth Amendment violation in using a sound magnification device on an adjoining wall to overhear a conversation because there was no trespass) and *Silverman v. United States*, 365 U.S. 505 (1961) (finding a Fourth Amendment violation stemming from a microphone that passed through a heating duct because the microphone constituted a physical intrusion) with *Wong Sun v. United States*, 371 U.S. 471, 485 (1963) ("[T]he Fourth Amendment may protect against the overhearing of verbal statements as well as against the more traditional seizure of 'papers and effects.'") and *Katz*, 389 U.S. 347.

59. Peter P. Swire, *Katz is Dead. Long Live Katz*, 102 MICH. L. REV. 904 (2004) ("[*Katz*] is the king of Supreme Court surveillance cases.").

60. *Katz*, 389 U.S. 347.

61. See *id.* at 348.

means of a recording device placed on the outside of the telephone booth, referred to as a wiretap by the court.⁶² The Supreme Court held that recording the conversations without first obtaining a warrant limiting the scope of the search was an unconstitutional search and seizure under Fourth Amendment constraints.⁶³

The Supreme Court disregarded the government's claim that the phone booth was a public area not entitled to protection. Rather, the Court focused on what a person might want to keep private, regardless of the person's physical surroundings.⁶⁴ In doing so the Supreme Court took pains to define the boundaries of the Fourth Amendment broadly, stating that "the *Fourth Amendment* protects people—and not simply 'areas'—against unreasonable searches and seizures."⁶⁵

The four decades since *Katz* have been marked by judicial limiting of the broad Fourth Amendment protections offered by that opinion.⁶⁶ The third party doctrine discussed in the next section, in particular, severely limited privacy rights by holding that information shared with another party may be compelled from that party. One commentator went so far as

62. *Id.* at 348.

63. *Id.* at 348, 363-64.

64. *Id.* at 351.

65. *Id.* at 353 (emphasis in original). *Katz* also sets up the reasonable expectation of privacy framework for determining if a search or seizure violates the Fourth Amendment. The two-part objective/subjective framework asks first whether an individual relied on a right to privacy, and second if such reliance was reasonable. *Id.* In his dissent Justice Black cautioned that the Court should not "rewrite the Amendment in order 'to bring it into harmony with the times' and thus reach a result that many people believe to be desirable." This is the minimalist approach taken by the majority in *Olmstead*, and exactly what Justice Brandeis cautioned against when he suggested that the Fourth Amendment should be broadened to protect rights that the founders would have wanted the Constitution to protect, even if they could not have foreseen the technological changes that threatened those rights. *Id.* at 364 (Black, J., dissenting).

66. *See, e.g.*, *United States v. Miller*, 425 U.S. 435 (1976) (finding no expectation of privacy to certain banking records); *Smith v. Maryland*, 442 U.S. 735 (1979) (holding that no warrant was needed to collect information about dialed numbers through use of a pen register, because there is no reasonable expectation of privacy in phone numbers dialed); *Fisher v. United States*, 425 U.S. 391 (1976) (holding that the government may compel documents held by an attorney); *United States v. Smith*, 978 F.2d 171 (5th Cir. 1992) (finding that a telephone conversation held using a cordless phone, and thus involving radio waves traveling from the handset to the base, is obtainable without a search warrant). *But see* *Kyllo v. United States*, 533 U.S. 27 (2001) (holding that a thermal imaging device, used without a warrant on a public street to measure ambient heat in a suspected marijuana growers home, was an unconstitutional search under the Fourth Amendment). One interpretation of *Kyllo* is that Fourth Amendment protection was upheld not to protect privacy, but because the device was aimed at a home, the "quintessential property interest." *See Swire, supra* note 59, at 906 n.9.

to claim that “there has been no case beyond wiretapping where application of the test has led to protection of privacy.”⁶⁷ Although *Katz* and the *Olmstead* dissent are often referenced as bulwarks of the important principle that the government should not trespass into “the privacies of life,” their influence have eroded.⁶⁸

2. *Third Parties and Privacy Protection*

Although the mail and wiretap cases require a governmental agent to obtain a warrant in order to access a sealed letter or a telephone conversation, the same is not true for obtaining that information from a third party. Despite the protection it provides, *Katz* cautions that information “knowingly expose[d] to the public” is not entitled to Fourth Amendment protection,⁶⁹ establishing what Daniel Solove refers to as the “secrecy paradigm”: Where information is voluntarily shared with another party, it may be legally obtained without a warrant.⁷⁰ This standard applies to information truly open to the public⁷¹ or simply information voluntarily shared with a third party, such as a business, from whom it can be compelled.⁷²

The seemingly simple third party rule is complicated by the difficulty in determining what information has been shared in such a way that the individual has waived her right to privacy under federal constitutional norms.⁷³ There is no reasonable expectation of privacy in bank records, deposit slips or checks, for example, because that information is considered to be “shared” with the bank and visible to its employees.⁷⁴ The Court

67. Swire, *supra* note 59, at 906.

68. *Boyd v. United States*, 116 U.S. 616, 630 (1886).

69. *Katz*, 389 U.S. at 351. *See also Ex parte Jackson*, 96 U.S. 727, 735 (1878) (cautioning that the contents of a letter or package may be obtained from the recipient without a warrant, even if they cannot be taken from the sender or intercepted in transit without a warrant); Swire, *supra* note 59, at 906.

70. SOLOVE, *supra* note 39, at 198-99.

71. *See e.g.*, *Guest v. Leis*, 255 F.3d 325 (6th Cir. 2001) (finding no expectation of privacy in material posted to a public internet billboard).

72. *See, e.g.*, *United States v. Miller*, 425 U.S. 435, 443 (1976) (finding no legitimate expectation of privacy in bank statements held by a third party bank). *See also Lopez v. United States*, 373 U.S. 427, 438 (1963) (finding no expectation of privacy in a conversation when the third party discloses the content of the conversation).

73. *Miller*, 425 U.S. 435.

74. *Id.* at 442. Patricia Bellia believes that the *Miller* court, in so finding, misread an earlier Supreme Court decision which found that the government could compel papers in the possession of the object’s account without a warrant. Patricia Bellia, *Surveillance Law Through Cyberlaw’s Lens*, 72 GEO. WASH. L. REV. 1375, 1401 (2004) (discussing *Couch v. United States*, 409 U.S. 322 (1973)). Bellia argues that the documents in *Couch* were compellable only because the accountant was given the papers with the expectation that the information would be shared during the preparation of tax material. *Id. Miller*, by

has applied this rule to matters as varied as postcards, because the information therein is freely readable by anyone who handles it;⁷⁵ telephone records, because they are viewed by phone company employees in the course of business;⁷⁶ and the contents of a garbage bag placed in the street, which are considered available to the public and conveyed to the garbage collector.⁷⁷

On the other hand, information or property that has been placed in the hands of a third party but that is deliberately kept secret is still protected from searches.⁷⁸ The contents of a sealed letter, for example, are still protected by the Fourth Amendment even if the letter is in the physical possession of the postal service. The average postal service customer cannot assume that her mail carrier will not read the postcards she mails, but she does have a valid expectation that the carrier will not open a sealed letter and read its contents. Therefore a warrant is required for officials to obtain the contents of a sealed letter. By the same token, even though a phone company has the technical ability to eavesdrop on a phone conversation, *Katz* holds that the parties to the call still maintain a reasonable expectation of privacy in the contents of their telephone conversations.

Within the third party rule there is an important distinction as to what kind of third party can be compelled to disclose information. In the letter example, the rule indicates that a recipient can be required to disclose the contents of the letter to government officials because the information was shared with the recipient by the sender. But the mailman may not be so compelled, because the information was not shared with him. This holds true for the telephone as well. *Katz* instructs that the phone company is not a third party from whom the content of the communication can be compelled, but, of course, the other participant in the conversation is such a

contrast, more broadly states any document given to a third party may be compelled. *Id.* (discussing *Miller*, 425 U.S. 435).

75. *Ex parte Jackson*, 96 U.S. 727, 733 (1878).

76. *See Smith v. Maryland*, 442 U.S. 735, 744-46 (1979).

77. *California v. Greenwood*, 486 U.S. 35, 41-42 (1988). The various states have developed their own, varying jurisprudence with regard to what search and seizure protection one has from local law enforcement. In California, for example, there is a reasonable expectation of privacy in dialed telephone numbers and in the contents of sealed garbage bags awaiting pick up. Stephen E. Henderson, *Learning from All Fifty States: How to Apply the Fourth Amendment and its State Analogs to Protect Third Party Information from Unreasonable Search*, 55 CATH. U. L. REV. 373, 396 n.118 (2006) (cataloguing how each state's jurisprudence addresses the third party doctrine).

78. *See, e.g., United States v. Thomas*, No. 88-6341, 1989 U.S. App. LEXIS 9628, at *6 (6th Cir. July 5, 1989) (holding that there is a reasonable expectation of privacy in the contents of a safety deposit box, based on the holding in *Katz*).

third party, and the same information could be compelled from that person.⁷⁹

The Sixth Circuit's vacated panel decision applied this proposition to the e-mail context by holding that while the contents of an electronic communication can be compelled from the recipient, the underlying ISP is not a third party from whom the same information could be compelled, because the contents of the communication were not shared with them by either the sender or the recipient. As with phone conversations, a third party's technical ability to gain access to the contents of the communication is not enough to diminish the primary party's expectation of privacy.

B. Statutory Attempts to Protect Privacy

The term "eavesdrop" originated from the act of standing "within the 'eavesdrop' of a house in order to listen to secrets."⁸⁰ Changes in communication and technology mean that one does not have to lurk outside a door or window in the hopes of overhearing secrets. In addition to the jurisprudence defining the contours of the Fourth Amendment, state and federal statutes further restrict information gathering by government agents or entities. Many of these statutory provisions were legislative responses to Supreme Court decisions defining Fourth Amendment rights.⁸¹

Intrusion into private life has always been an issue of public import. In the absence of federal rules, concern over government wiretapping during prohibition triggered several state statutes.⁸² Twenty-five states had passed such statutes⁸³ by the time Justice Brandeis wrote his forceful plea for Fourth Amendment protection against future technological threats to "the right to be let alone—the most comprehensive of rights and the right most valued by civilized men."⁸⁴ The state limitations did not, however, apply to federal officials.

In 1934 Congress passed the Federal Communications Act. Section 605 provided that no one, without permission, should "intercept any . . . communication and divulge or publish the existence, contents, substance, purport, effect, or meaning of such intercepted communication. . . ."⁸⁵ This early fortification proved inadequate, containing no enforcement provision

79. See Bellia, *supra* note 74, at 1405.

80. V THE OXFORD ENGLISH DICTIONARY 45 (2d ed. 1989).

81. Swire, *supra* note 59, at 916.

82. *Berger v. New York*, 388 U.S. 41, 46 (1967).

83. DANIEL J. SOLOVE ET AL., *PRIVACY, INFORMATION, AND TECHNOLOGY* 83 (2006).

84. *Olmstead v. United States*, 277 U.S. 438, 478 (1928) (Brandeis, J., dissenting).

85. 47 U.S.C. § 605 (1934).

and allowing illegally-obtained evidence to be used in state courts; many intrusive non-wiretapping activities remained free from restraint.⁸⁶

In 1968 Congress passed the Wiretap Act,⁸⁷ codifying *Katz* by requiring government agents to obtain a warrant from a federal judge, based on probable cause, before wiretapping.⁸⁸ The Act's purpose was "(1) protecting the privacy of wire and oral communications, and (2) delineating on a uniform basis the circumstances and conditions under which the interception of wire and oral communications may be authorized."⁸⁹ The Act covered wire and aural communications only, leaving out other kinds of communication.⁹⁰

Almost twenty years later, in 1986, Congress enacted the Electronic Communications Privacy Act (ECPA) to update the Wiretap Act and extend coverage to electronic communication and data transmissions.⁹¹ It was passed in part because the Justice Department had decided that the Wiretap Act did not cover e-mail communication and Congress, in response, felt the need to extend some protection to it.⁹² The ECPA also encompasses the Stored Communications Act (SCA) and the Pen Register Act.

The SCA applies to electronic communication stored by third parties.⁹³ On a crude level, the SCA allows the government to compel disclosure of stored communications from a third party by means of a court order under certain circumstances.⁹⁴ In fact, the SCA is much more intricate, complicating matters with two distinctions. First, the SCA designates two types

86. See SOLOVE ET AL., *supra* note 83, at 83. See, e.g., *Goldman v. United States*, 316 U.S. 129 (1942) (finding no Federal Communications Act § 605 violation where eavesdropping is effected by placing a sound magnification device against a wall to listen to conversations in a neighboring office).

87. The so-called Wiretap Act was formally Title III of the Omnibus Crime Control Act of 1968. Pub. L. No. 90-351, (codified as amended at 18 U.S.C. §§ 2510-22 (2000 & Supp. V 2005)).

88. It is widely understood that the Supreme Court's decisions in *Katz* and *Berger* largely informed the legislative drafting of the Wiretap Act. See, e.g., Solove, *supra* note 9, at 754.

89. S. REP. No. 90-1097 (1968), as reprinted in 1968 U.S.C.C.A.N. 2112, 2153.

90. Pub. L. No. 90-351, (codified as amended at 18 U.S.C. §§ 2510-22 (2000 & Supp. V 2005)). It was later amended in 1986 to include electronic communication as well. U.S. DOJ: Prosecuting Computer Crimes Manual at 55 (2007), available at <http://www.cybercrime.gov/ccmanual/02ccma.pdf>.

91. See Electronic Communications Privacy Act of 1986, 18 U.S.C §§ 2510-2711 (2000).

92. HARRY HENDERSON, *PRIVACY IN THE INFORMATION AGE* 67 (1999).

93. See 18 U.S.C. §§ 2701-2711 (2000).

94. 18 U.S.C. § 2703 (2000).

of providers—electronic communication service providers (ECS) and remote computing service providers (RCS). Secondly, it distinguishes between types of communications—communications opened or stored for more than 180 days versus unopened communication stored for less than 180 days.⁹⁵ These distinctions “fr[oze] into the law the understandings of computer network use as of 1986” when the statute was written,⁹⁶ conceptions rendered obsolete by later technological development.⁹⁷

Under section 2703(d) of the SCA, the government may obtain electronic information by court order only upon a showing of “specific and articulable facts showing that there are reasonable grounds to believe that the contents . . . are relevant and material to an ongoing criminal investigation,”⁹⁸ a lower threshold than the requirement for obtaining a warrant. Where there is reason to believe that notifying the subject might have an “adverse result,” the SCA also allows the government to delay normal requirements of notification to the account holder by ninety days and prevent the compelled party from informing the account holder.⁹⁹ The SCA provides four specific examples of “adverse result” in its definition and then further states that an adverse result is anything that “seriously jeop-

95. The crux of the 180 day distinction is that only unopened e-mails less than 180 days old are entitled to very much protection. *See id.* For a detailed explanation of both of these distinctions see Kerr, *supra* note 41. For an in-depth description of the parts of the statute and different interpretations of their application see Bellia, *supra* note 74, at 1413-26.

96. Kerr, *supra* note 41, at 1214.

97. *See, e.g., id.*; Bellia, *supra* note 74, at 1397 (“[The provisions of the SCA] are becoming increasingly outdated and difficult to apply [R]evision of the statutory framework is urgently needed.”); Deirdre K. Mulligan, *Reasonable Expectations in Electronic Communications: A Critical Perspective on the Electronic Communications Privacy Act*, 72 GEO. WASH. L. REV. 1557, 1559 (2004) (“Many who support the [ECPA] would agree that it has failed to keep pace with changes in and on the Internet . . .”). *See also* Konop v. Hawaiian Airlines, Inc., 302 F.3d 868, 874 (9th Cir. 2002) (“ECPA was written prior to the advent of the Internet. . . . [T]he existing statutory framework is ill-suited to address modern forms of communication. . . .”).

98. 18 U.S.C. § 2703(d) (2000).

99. 18 U.S.C. § 2705(a)(1)(A) (2000).

ardiz[es] an investigation.”¹⁰⁰ The government used the SCA to obtain Warshak’s e-mail and delay notification to Warshak for over 180 days.¹⁰¹

The Pen Register Act covers “trap and trace device[s]” used to capture transmitted information.¹⁰² Originally the Pen Register Act allowed the government access only to numbers dialed on a telephone line, but the USA-PATRIOT Act expanded the definition in 2001.¹⁰³ Today, upon obtaining a court order, the Act allows the government to “install and use a pen register or trap and trace device” that records “electronic or other impulses,” limited to “the dialing, routing, addressing, and signaling information utilized in the processing and transmitting of wire or electronic communications.”¹⁰⁴ This change allows the government to use a trap and trace device to acquire *non-content* information of e-mails—header information.¹⁰⁵ However, it may not be used to acquire *content* information, like the telephone conversation or the body of an e-mail.¹⁰⁶

Even this simple distinction between content and non-content for pen registers raises questions as technology changes. Under settled law, a dialed phone number is non-content information voluntarily shared with the

100. “Adverse result” is defined as (A) fear of harm to themselves or others, (B) flight, (C) destruction of evidence or (D) witness intimidation. 18 U.S.C. § 2705(a)(2). An adverse result may also be anything that “otherwise seriously jeopardiz[es] an investigation,” which means that the government can easily get an order prohibiting the ISP from informing the account holder of the 2703(d) order and delaying notification for up to 90 days at a time. 18 U.S.C. § 2705(a)(2)(E) (2000).

101. *See* Warshak v. United States, No. 1:06-cv-357 2006 U.S. Dist. LEXIS 50076 at *3-6 (S.D. Ohio 2007). This Note focuses on protection of privacy from government intrusion. For a discussion of limitations of the SCA with regard to protecting privacy from *private* intrusion, see Rachel V. Groom, Note, *In re Pharmatrak & Theofel v. Farley-Jones: Recent Applications of the Electronic Communications Privacy Act*, 19 BERKELEY TECH. L.J. 455, 460 (2004) (“As [*Theofel*] shows, eighteen years of technological advances raise doubts about the ability of the ECPA to address the problem of privacy violations on the Internet.”).

102. 18 U.S.C. § 3121 (2000). A pen register is a device that records the digits one dials when using a telephone, but does not record spoken conversation. *In re United States*, 515 F. Supp. 2d 325, 328 (E.D.N.Y. 2007).

103. Solove, *supra* note 9, at 757.

104. 18 U.S.C. § 3121(c) (2000 & Supp. V 2005).

105. Solove, *supra* note 9, at 757.

106. The Pen Register Act codifies the 1979 Supreme Court decision in *Smith v. Maryland*, finding no Fourth Amendment protection from use of a pen register because there is no reasonable expectation of privacy in non-content information. In the telephone communication context, the conversation is the content of the phone call, while the steps one takes to initiate that private conversation are considered non-content. The phone number dialed, for example, would be non-content information and could be acquired through a Pen Register.

service provider that may be collected by means of a pen register. But what about post-cut through dialed digits (PCTDD), which are numbers keyed in after the call is connected?¹⁰⁷ Anyone who has called a credit card company or bank has keyed in account numbers, pins and passwords. The government has argued that such information is like the dialed phone number and is not “content,” and thus should be collectable without a warrant.¹⁰⁸ The 1986 Pen Register Act, written before these types of automated systems became popular, does not provide an answer on this issue, and amendments to the Pen Register Act in 2001 offer no additional clarification.¹⁰⁹ Recently, a federal district court in New York decided that PCTDD is content information and that individuals do retain a reasonable expectation of privacy in them.¹¹⁰

Overall, the ECPA and its subcomponents, the SCA and Pen Register Act, provide quite narrowly defined protections. These limited provisions do not address the broad, ongoing changes in communications technologies. Even Professor Orin Kerr, who generally believes that privacy protections should be defined by statute, argues that the protections provided by the SCA are inadequate.¹¹¹

IV. UNWITTINGLY SURRENDERING REASONABLE EXPECTATIONS OF PRIVACY WITH NEW COMMUNICATIONS TECHNOLOGIES

Katz provided protection for telephone conversations because the Fourth Amendment protects people, “and not simply ‘areas.’”¹¹² New technologies allow us to communicate in ways not previously envisioned

107. PCTDD are any “‘digits that are dialed . . . after the initial call setup is completed.’” PCTDD can be account or pin numbers, but can also include telephone numbers, such as when the original connected call is to a calling card or a collect call, which then requires a further input of the destination phone number. *In re United States*, No. H-07-613, 2007 U.S. Dist. LEXIS 77635, *2 at n.1 (D. Tex. 2007).

108. *In re United States*, 515 F. Supp. 2d 325 (E.D.N.Y. 2007).

109. The USA-PATRIOT Act of 2001 updated the Pen Register Act to include wireless communication, but only states that a warrant is necessary for content information without further defining “content.” 18 U.S.C. § 3127 (2000), *amended by* USA-PATRIOT Act of 2001, Pub. L. No. 107-56, § 216, 115 Stat. 272, 288 (2001).

110. *In re United States*, 515 F. Supp. 2d at 325.

111. Kerr, *supra* note 41, at 1233-34 (suggesting that congress should bolster the “surprisingly low” standard for compelling communication from third parties as this was “precisely the result that the SCA was enacted to avoid.”) Kerr also advocates the adoption of a suppression remedy. *Id.* at 1241. Part V compares judicial and statutory privacy protection.

112. *Katz v. United States*, 389 U.S. 347, 353 (1967).

by either the Supreme Court or Congress at the time of *Katz*, and certainly not imagined by the drafters of the Fourth Amendment. Four decades of applying the *Katz* framework to new technologies has generally resulted in a limiting of protection for our communication. Voice mail messages, Voice over Internet Protocol (VoIP), e-mail, and other new communication technologies have blunted *Katz*'s impact, making it easier for the government to gain access to the contents of communications.

Voice mail messages were once protected under the same strict standards as any telephone conversations. Changes to the Wiretap Act through the USA-PATRIOT Act of 2001, however, mean that all voice mail is now considered "stored communication" and may be accessed under the looser standards of the SCA.¹¹³

VoIP is another new voice technology that might allow normally protected phone conversations to be obtainable without a warrant. VoIP takes analog audio signals and turns them into digital data packets that are transmitted over the Internet, a much more efficient means of communication than the circuit switching employed for typical phone calls.¹¹⁴ Businesses are switching to IP telephony, as are consumers who find it cheaper and more convenient.¹¹⁵ But the data packets can be more easily recorded and stored by either party to a conversation, turning this into a form of communication that would fall under the SCA rather than the Wiretap Act.¹¹⁶ This creates a confusing dual system where some phone conversations are entitled to strong protections under the Wiretap Act, while others are subject to the weaker constraints of the SCA.

Technological changes not only affect which statute covers each category of communication, but also change what one can reasonably expect to keep private. VoIP services, for example, are now able to mine the contents of users' conversations. Pudding Media is a new company that offered free VoIP service in exchange for the ability to target advertisements to users based on the content of their conversations.¹¹⁷ As a user spoke, voice recognition software sent advertisements to the user's computer

113. See Swire, *supra* note 59, at 911.

114. How Stuff Works, VoIP: Circuit Switching, <http://communication.howstuffworks.com/ip-telephony2.htm> (last visited Apr. 6, 2008).

115. Leslie Cauley, *Consumers Finally Get a Grip on VoIP*, USA TODAY, Feb. 13, 2007, at 1B ("In 2002, VoIP claimed about 150,000 U.S. users. . . . By the end of 2006, it was 8.6 million. . . . Lower cost is its chief draw.")

116. See Swire, *supra* note 59, at 911.

117. Louise Story, *A Company Will Monitor Phone Calls and Devise Ads to Suit*, N.Y. TIMES., Sept. 24, 2007, at C1.

based on keywords in the conversation.¹¹⁸ Trying to alleviate privacy concerns raised following significant press exposure, the company website assured customers that Pudding Media would not record conversations, and that the advertising process would be completely automated.¹¹⁹ Under the vacated opinion in *Warshak*, this kind of communication would likely be protected. It is not being recorded or stored by the company, and while the company is combing the content of the communication, it is only an automated process so the expectation of privacy is not lost. However, the Sixth Circuit made it clear that users could give up their reasonable expectation of privacy based on how a service provider monitors their communications;¹²⁰ it is certainly possible that VoIP service offerings will be modified in a way that would change the reasonable expectation of privacy.

The increasing use of e-mail, the form of communication at issue in *Warshak*, means that communication that would previously have taken place over the telephone is now conducted through commercial ISPs. Consequently, communication that once would have been protected under the Wiretap Act now falls under the SCA. The ease of communication is offset by subjecting most communications to lesser protection.

V. JUDICIAL ACKNOWLEDGEMENT THAT ELECTRONIC COMMUNICATIONS ARE SUBJECT TO FOURTH AMENDMENT PROTECTION IS NEEDED

Katz created Fourth Amendment protection for telephone communication, which Congress later codified in the Wiretap Act. Most judicial decisions after *Katz* limited the broad protection that was created in *Katz* and championed by Justice Brandeis in *Olmstead*.¹²¹ But many still agree that the “privacies of life” are worth protecting.

118. *Id.*

119. Pudding Media, Consumers, <http://puddingmedia.com/consumers.html> (last visited Feb. 3, 2008) (on file with author) (“Pudding Media’s technology is based on speech recognition, so the process is completely automated, doesn’t involve humans and doesn’t record calls.”). Pudding Media has since discontinued this direct-to-consumer product offering.

120. *Warshak v. United States*, 490 F.3d 455, 475 (6th Cir. 2007), *vacated* *Warshak v. United States*, No. 06-4092, 2007 U.S. App. LEXIS 23741 (6th Cir. Oct. 9, 2007).

121. *See e.g.*, *Smith v. Maryland*, 442 U.S. 735 (1979); *United States v. Miller*, 425 U.S. 435 (1976); *United States v. Forrester*, 495 F.3d 1041 (9th Cir. 2007). *But see* *United States v. Thomas*, No. 88-6341, 1989 U.S. App. LEXIS 9628 (6th Cir. July 5, 1989); *Kyllo v. United States*, 533 U.S. 27 (2001).

This Part evaluates the costs and benefits of developing communication protections legislatively, considered in Section V.A, or judicially, considered in Section V.B. Section V.C argues that, in light of the trade-offs, an initial judicial finding of Fourth Amendment protection for electronic communication (similar to the vacated *Warshak* result) is most appropriate. *Warshak* presents an opportunity for the judicial branch to reaffirm, in the context of electronic communication, the liberal Fourth Amendment protection outlined in *Katz*. When case law and statutory systems attempt to detail a broad proposition and apply it to specific facts, such attempts necessarily limit the original intention. A new *Katz*, one that reiterates the privacy protection offered by the Fourth Amendment and applies that protection to electronic communication, is necessary. Such a rule does not preclude further statutory response, and would likely spur legislative action to add detail, much in the way that the 1968 Wiretap Act gave particular meaning to *Katz*.

A. The Legislative Option

Technologies are ever changing. In considering whether judges or legislatures should take charge of privacy protections, the fast pace of technological development might appear to favor legislative leadership. In theory, legislatures are able to respond quickly to changes in technology by updating legislation regularly.¹²² With the Electronic Communication Protection Act, for example, Congress acted quickly to provide a set of rules to govern a new communication medium.

Despite this potential, Congress does not always amend the statutory framework to keep up with changes in technology, which can lead to outdated laws and insufficient protection.¹²³ Even as the passing of the ECPA exemplifies that Congress is able to react quickly to new technology, the twenty-two year subsequent treatment of the Act demonstrates that Congress does not always revisit and update legislation adequately.¹²⁴ The SCA is riddled with outdated elements that Congress has not amended even as electronic communication technologies have been modified and improved.¹²⁵ When the ECPA was enacted it would have been impossible to imagine how pervasive e-mail usage would become. No commercial ISP existed until 1990 and the World Wide Web did not become practical

122. Kerr, *supra* note 46, at 807.

123. Solove, *supra* note 9, at 769. Congress has made only five major revisions to electronic surveillance laws in the last seventy years. *Id.*

124. See notes 93-97 and accompanying text (SCA description).

125. See note 95 and accompanying text (RCS/ECS).

until 1991.¹²⁶ The number of Americans using the Internet continues to grow dramatically—from sixty percent in 2004 to seventy-three percent in 2006.¹²⁷ The ECS/RCS provider distinction within the SCA, for example, may have been a useful differentiation in 1986, but is mystifying today.¹²⁸ Websites now can be ECS providers, RCS providers, both, or neither, creating confusion as to which rules should apply in any given context.¹²⁹ Congress has not eliminated or reformed this distinction, despite much public and scholarly criticism.¹³⁰

Congress also has access to expert input, can request committee reviews, and can commission detailed reports on new technologies to better inform statutory changes.¹³¹ This arguably allows a legislature to create well-informed and detailed statutory systems that address privacy concerns arising from new technologies. Opposing this view, Professor Daniel Solove rhetorically asks whether “we really need two years and thousands of pages of detailed information to understand how e-mail works,” and contends that expert testimony and amicus briefs can be just as effective in educating judges on the technological issues.¹³²

Congress may also be best positioned to take into account the needs of law enforcement. In his concurrence in *Katz*, Justice White highlighted that there might be instances where a warrant would not be required, such as where national security was at issue.¹³³ Today national security is of paramount concern, and Congress, with its hearings, reports and studies, may best be able to balance the public’s privacy rights with the need to provide law enforcement with effective tools to fight crime and terrorism. Certainly Congress has, at times, attempted to reach this balance, such as with the 1978 Foreign Intelligence Surveillance Act and the USA-PATRIOT Act of 2001.

Congress, however, is subject to political realities that do not always make it the best arbiter of constitutional provisions; it may not be able to give equal weight and consideration to all interests. Law enforcement is highly organized and politically savvy, much more so than a diffuse public

126. Mulligan, *supra* note 97, at 1572.

127. JOHN B. HARRIGAN, PEW INTERNET & AM. LIFE PROJECT, HOME BROADBAND ADOPTION 2006 (2006), available at http://www.pewinternet.org/pdfs/PIP_Broadband_trends2006.pdf.

128. See note 95 and accompanying text (RCS/ECS).

129. Kerr, *supra* note 41, at 1215-18.

130. See, e.g., *id.*

131. Kerr, *supra* note 46, at 807.

132. Solove, *supra* note 9, at 771-72.

133. See *Katz v. United States*, 389 U.S. 347, 363 (1967) (White, J., concurring).

with privacy concerns but little in the way of organized political clout.¹³⁴ After the USA-PATRIOT Act was passed, for example, the DOJ created a website to increase public support for the Act, and then-Attorney General John Ashcroft went on a speaking tour of eighteen cities to garner additional backing, all at public expense.¹³⁵

An elected Congress is also easily swayed by public opinion. Such a system responds well to the wishes of the majority, but public fear or outcry can lead to laws that do not give sufficient weight to constitutional concerns or protect all interests.¹³⁶ The USA-PATRIOT Act, for example, was passed just forty-five days after 9/11 by wide margins in both the House and Senate.¹³⁷ The national atmosphere following such an affecting terrorist action made careful consideration and opposition to the Act difficult, but the growing concern about the Act shows that significant opposition exists.¹³⁸ By 2003, many communities and three states had “passed resolutions denouncing the USA-PATRIOT Act as an assault on civil liberties,”¹³⁹ and six years after 9/11 the debate is vigorous and all viewpoints are now better represented. This example shows how Congress can quickly react to public fear in ways that do not give sufficient consideration to privacy concerns.

B. Judicial Option

An argument supporting a strong judicial role in defining privacy protections, raised regularly since *Olmstead*, is that the Constitution should be a living document that always has meaning—even after 200 years of tech-

134. Swire, *supra* note 59, at 914-15.

135. Dahlia Lithwick & Julia Turner, *A Guide to the Patriot Act, Part I*, SLATE, Sept. 8, 2003, <http://www.slate.com/id/2087984>. Lithwick & Turner refer to Ashcroft’s speaking tour as the “‘Patriot Rocks’ concert tour.” *Id.*

136. *See, e.g.*, Swire, *supra* note 59, at 915 (discussion of the passage of the USA-PATRIOT Act in the wake of the September 11 attack).

137. Office of the Clerk of the U.S. House of Representatives, Final Results for Roll Call 398, <http://clerk.house.gov/evs/2001/roll398.xml>; United States Senate, U.S. Senate Roll Call Votes 107th Congress—1st Session, http://www.senate.gov/legislative/LIS/roll_call_lists/roll_call_vote_cfm.cfm?congress=107&session=1&vote=00313. The House passed the PATRIOT Act by more than a five to one margin, while in the Senate, one lone senator voted against the Act.

138. *See* Lithwick & Turner, *supra* note 135; *see also* Beryl A. Howell, *Seven Weeks: The Making of the USA-PATRIOT Act*, 72 GEO. WASH. L. REV. 1145, 1161 (2004) (“The administration was not interested in congressional deliberation, compromise . . . [i]nstead, it wanted its legislation passed immediately” and it pressured “Congress with the uncertain threats of future terrorist attacks and telling the public that congressional delay was handing terrorists an ‘advantage.’”).

139. Lithwick & Turner, *supra* note 135.

nological changes. Justice Brandeis clearly articulated this argument in his *Olmstead* dissent:

“Time works changes, brings into existence new conditions and purposes. Therefore a principle to be vital must be capable of wider application than the mischief which gave it birth. This is peculiarly true of constitutions. They are not ephemeral enactments, designed to meet passing occasions. . . . In the application of a constitution, therefore, our contemplation cannot be only of what has been but of what may be. Under any other rule . . . [r]ights declared in words might be lost in reality.”¹⁴⁰

Brandeis then applied this proposition to the Fourth Amendment by arguing that the founding fathers intended it to grant citizens a “right to be let alone” by the government, which should be upheld regardless of the means of intrusion utilized.¹⁴¹ The concept reiterates an 1886 decision where the Court stated that the Fourth and Fifth Amendments protect more than “rummaging [through] drawers,” because “the struggles [of the nations founders] against arbitrary power in which they had been engaged for more than twenty years, would have been too deeply engraved in their memories to have allowed them to approve of such insidious disguises of the old grievance which they had so deeply abhorred.”¹⁴²

The majority in *Olmstead* considered whether Brandeis’ interpretation of Fourth Amendment protection did more than just apply the Fourth Amendment to new technology and actually read more into the Amendment than was originally intended. At the time, the Fourth Amendment was still interpreted as protecting the physical confines of a person’s house or tangible effects.¹⁴³ It is now settled law that the Fourth Amendment applies to a sphere of privacy rather than just to physical property.¹⁴⁴ However, the concern raised in *Olmstead*, that the Court should refrain from reading unintended meaning into the Constitution because of technological or societal changes, is an ongoing one. It was echoed by Justice Black’s dissent in *Katz* when he stated that “it is [not] the proper role of this Court to rewrite the Amendment in order ‘to bring into harmony with the times’

140. *Olmstead v. United States*, 277 U.S. 438, 472-73 (1928) (Brandeis, J., dissenting) (quoting *Weems v. United States*, 217 U.S. 349, 373 (1910)).

141. *Id.* at 478.

142. *Boyd v. United States*, 116 U.S. 616, 630 (1886).

143. *Olmstead*, 277 U.S. at 464-66 (“[T]he courts may not adopt such a policy [protecting the contents of telephone conversations] by attributing an enlarged and unusual meaning to the Fourth Amendment.”).

144. *See supra* Section III.A.1.

and thus reach a result that many people believe to be desirable,”¹⁴⁵ and it is still raised today.

Praising Justice Brandeis’ dissent in *Olmstead*, Professor Lawrence Lessig goes further, calling not just for judicial interpretation of the Fourth Amendment that applies the words of the Fourth Amendment to today’s realities, but inviting judicial activism. Lessig finds it better to “err on the side of harmless activism than on the side of debilitating passivity.”¹⁴⁶ Otherwise, Lessig argues, legislatures act without regard to constitutional requirements and the freedom from government intrusion, so highly valued by the Constitution’s framers, can be easily eroded.¹⁴⁷

This viewpoint is criticized by some scholars,¹⁴⁸ but Fourth Amendment jurisprudence, *Katz* in particular, supports a judicial system that actively reinterprets and applies Fourth Amendment privacy protection as new technologies develop.¹⁴⁹ With *Katz* and its companion case, *Berger v. New York*, the Supreme Court reversed decades of leaving privacy protection to state and federal legislatures, and found a Fourth Amendment privacy right to telephone communications.¹⁵⁰ Even more recently, in *Kyllo v. United States*, the Supreme Court reaffirmed that the Fourth Amendment offers protection to new technologies. There, the Court found that using a thermal imaging device without a warrant to measure the ambient heat of a private dwelling in order to determine if drugs were being grown, was an unreasonable search.¹⁵¹

Because of the post-1968 reluctance of the courts to broaden Fourth Amendment privacy protection, Orin Kerr claims that this concept of an active court is “romantic but somewhat inaccurate.”¹⁵² He admits that *Berger* and *Katz* influenced the subsequent statutory structure but argues that this function of the Court is now defunct, highlighting later judicial deference to the statutory scheme as proof.¹⁵³

145. *Katz v. United States*, 389 U.S. 347, 364 (1967) (Black, J., dissenting).

146. LAWRENCE LESSIG, CODE VERSION 2.0 327 (2006).

147. *See id.* at 325-26.

148. *See, e.g.*, Kerr, *supra* note 46, at 858.

149. *See, e.g.*, *Ex parte Jackson*, 96 U.S. 727 (1878) (applying Fourth Amendment search and seizure rules to documents sent through postal mail); *Katz*, 389 U.S. 347 (giving Fourth Amendment protection to the contents of wire communication).

150. *See supra* Section III.A.1. *See also* *Berger v. New York*, 388 U.S. 41, 59-60 (1967) (striking down portions of a New York State eavesdropping statute allowing wire-tapping without a warrant or judicial review).

151. *Kyllo v. United States*, 533 U.S. 27 (2001).

152. Kerr, *supra* note 46, at 805.

153. *Id.* at 855.

Kerr argues that making a broad, general ruling claiming Fourth Amendment protection for e-mail, or the “‘all at once’ approach,” leads to overbroad conclusions and mistakes.¹⁵⁴ He believes that a fact-specific, case-by-case review is the appropriate judicial evaluation of electronic communication cases. To bolster his point, Kerr points to mistakes that he claims are found in the *Warshak* analysis.¹⁵⁵

C. The Middle Ground: Court Involvement, Followed by Additional Congressional Rule-Making

One extreme position would have judges actively define privacy protection. The other would have the legislatures take a central role in demarcating privacy protections, with minimal intrusion from and review by the judicial branch. As the previous Sections show, both approaches have costs and benefits. In reconsidering *Warshak*, the full Sixth Circuit should develop a middle ground, reminding Congress of the intent of the Fourth Amendment by finding a broad privacy right in e-mail communication, but leaving to Congress the detailed rule-making necessary to apply the Fourth Amendment to modern communication.

Warshak comes after more than twenty years of public debate and congressional investigation focused on stored and electronic communication. The technologies may be constantly changing, but the concept of electronic communication is not new. Kerr states that his “argument applies only when technologies are in flux.”¹⁵⁶ While electronic communication is constantly evolving, it is no longer a new concept. If the courts wait until technology ceases to advance, they will always defer to Congress. The decades of public debate and congressional action can now inform judicial responses, including that of the Sixth Circuit, to address Fourth Amendment protection for a technological movement that has drastically changed the way Americans communicate, on a scale similar to the invention of the telephone.

In *Warshak*, the government argues that there is no reasonable expectation of privacy in electronic communication because the nature of e-mail means that the ISP has access to the contents of e-mail communication. The provider’s employees have access to the e-mail and regularly filter it

154. Brief of Amicus Curiae Orin S. Kerr in Favor of the Petition of the United States for Rehearing En Banc at 9-11, *Warshak v. United States*, 490 F.3d 455 (6th Cir. 2007), *vacated* *Warshak v. United States*, No. 06-4092, 2007 U.S. App. LEXIS 23741 (6th Cir. Oct. 9, 2007), *available at* <http://volokh.com/files/warshakamicus.pdf> (“[T]he panel opinion includes several conclusions that are highly questionable or simply wrong.”).

155. *Id.*

156. Kerr, *supra* note 46, at 859.

for material objectionable to the user, like spam. Under third party doctrine, therefore, there should be no Fourth Amendment protection for this type of material because one cannot reasonably expect it to be private.

Katz, however, stands not just for what one actually expects to be private, but also what society *wants* to be kept private.¹⁵⁷ Given the state of telephony technologies when *Katz* was decided, the Court may have shaped an expectation of privacy in telephone conversations based on what it believed *should* be private, rather than what one could reasonably expect would actually be private.

Prior to *Katz*, for example, the police routinely used wiretapping techniques during prohibition to further their law enforcement objectives.¹⁵⁸ Common practical and social telephone use, too, dictated that telephone users should have known that a third party would easily be able to overhear their conversations. Through the 1960s most phone calls were manually connected by switchboard operators who had the ability to participate in or listen to conversations.¹⁵⁹ Party lines—lines shared between multiple users—were also in widespread use before *Katz*, and eavesdropping on party lines was common.¹⁶⁰ Reminiscing about her childhood party line and the prevalence of eavesdropping, one woman recently said, “I still, to this day, have the feeling that if it’s private, you don’t talk about it on the phone.”¹⁶¹

157. *In re United States*, 515 F. Supp. 2d 325, 336 (E.D.N.Y. 2007).

158. SOLOVE ET AL., *supra* note 83, at 73 (“Before *Katz*, police frequently tapped phones. A person might expect that wiretapping would be likely.”).

159. Wikipedia, Switchboard Operator, http://en.wikipedia.org/wiki/Switchboard_operator (last modified Jan. 29, 2008). Copious references to switchboard operators in old movies and mysteries illustrate that most telephone users at the time of *Katz* might expect an operator to eavesdrop on a call and repeat the fruits of her activities to others.

160. Wikipedia, Telephony, [http://en.wikipedia.org/wiki/Party_line_\(telephony\)](http://en.wikipedia.org/wiki/Party_line_(telephony)) (last modified Mar. 19, 2008). See also Privateline.com, Telephone History Party Lines, <http://www.privateline.com/TelephoneHistory5/partyline.htm> (last visited Apr. 6, 2008) (“Party lines for non-business subscribers were the rule before World War II, not the exception. In cities and country, most people shared a line with two to ten to twenty people. You could talk only five minutes or so before someone else wanted to make a call. And anyone on the party line could pick up their receiver and listen in to your conversation.”). The 1959 movie “Pillow Talk,” where Rock Hudson and Doris Day’s characters have their first encounter because she overhears his conversations on their shared party line, is a popular culture example showing the prevalence of shared party lines. This particular example was likely exaggerated because party lines were not common in metropolises like New York City after the 1930s, but they remained in wide use in other parts of the country until much later. Rick Hampson, *Digital Times, Private Lives are Breaking Up Party Lines*, USA TODAY, Oct. 23, 2000, 19A (“In the Midwest . . . half the residential lines were party lines.”).

161. Hampson, *supra* note 160.

In later describing the *Katz* test, Justice Blackmun wrote that:

Situations can be imagined, of course, in which *Katz*' two-pronged inquiry would provide an inadequate index of Fourth Amendment protection. . . . [W]here an individual's subjective expectations had been 'conditioned' by influences alien to well-recognized Fourth Amendment freedoms, those subjective expectations obviously could play no meaningful role in ascertaining what the scope of Fourth Amendment was. In determining whether a 'legitimate expectation of privacy' existed in such cases, a normative inquiry would be proper.¹⁶²

Despite awareness that an ISP has the ability to look at e-mails, filter them for spam, or even target advertisements based on the contents of such communications, many think that there *should* be Fourth Amendment protection for e-mail, and *Warshak* is a good opportunity for the courts to find such protection.¹⁶³ Like *Katz* did for telephone communication, *Warshak* can find a reasonable expectation of privacy in electronic communication.

The courts need not go farther than the *Katz* holding. It would be sufficient to simply reiterate the Fourth Amendment justification for communication protection and make it clear to congressional rule-makers that privacy protection extends to electronic communication. In 1878, the Supreme Court gave Fourth Amendment protection to mailed correspondence¹⁶⁴ and, in 1967, affirmed that such protection applied to more modern modes of communication.¹⁶⁵ Technology has again revolutionized communication and information storage, and the Court should reaffirm that Fourth Amendment protection applies to communication regardless of the technology used.

Such a decision in *Warshak* would still allow Congress to amend existing statutes or establish new ones. No court decision would be able to address all factual scenarios, so congressional refinements would be neces-

162. *Smith v. Maryland*, 442 U.S. 735, 741 n.5 (1979).

163. See Brief of Amici Curiae Electronic Frontier Foundation, ACLU of Ohio Foundation, Inc., ACLU, & Center for Democracy & Technology Supporting the Appellee and Urging Affirmance at 6, *Warshak v. United States*, 490 F.3d 455 (6th Cir. 2007) (No. 06-4092), available at http://w2.eff.org/legal/cases/warshak_v_usa/warshak_amicus.pdf ("It is equally plain that society expects and relies on the privacy of messages that are sent or received using email providers just as it relies on the privacy of the telephone system."). See also Reynolds Holding, *E-mail Privacy Gets a Win in Court*, TIME, Jun. 21, 2007, <http://www.time.com/time/nation/article/0,8599,1636024,00.html>.

164. *Ex parte Jackson*, 96 U.S. 727 (1878).

165. *Katz v. United States*, 389 U.S. 347 (1967).

sary. In making these rules Congress would draw on resources such as expert opinions and committee reports and would be able to weigh law enforcement needs and national security concerns, but would act with the knowledge that electronic communication was constitutionally entitled to strong privacy protection.

Most importantly, in *Warshak* the Sixth Circuit should not avoid the constitutional issues by denying the injunction on procedural grounds and ignoring the substantive concerns.¹⁶⁶ Even if the Sixth Circuit finds no reasonable expectation of privacy in the contents of e-mail communication, such a finding could galvanize congressional action.¹⁶⁷ The judicial history shows that such court decisions can be effective in spurring a congressional response: a refusal to find Fourth Amendment protection in bank records¹⁶⁸ prompted Congress to pass the Right to Financial Privacy Act, and finding that no right to privacy exists in pen-register data¹⁶⁹ prompted passage of the Pen Register Act.¹⁷⁰ Although the congressional response did not require that law enforcement officials obtain a “super-warrant” to collect information, it did add a layer of privacy protection.¹⁷¹ In both cases Congress became interested in passing new legislation precisely because of Court decisions that highlighted the issue. While a clear finding of Fourth Amendment protection would provide the most privacy protection for e-mail communication, a substantive finding of no Fourth Amendment protection could still lead to some additional privacy protection by way of congressional action.¹⁷²

VI. CONCLUSION

The Supreme Court used the opportunity presented in the 1960s wire-tapping cases *Berger* and *Katz* to remind the country and Congress that the

166. See *supra* note 22 for a summary of the procedural arguments proffered by the United States. *But see* Posting of Orin Kerr to The Volokh Conspiracy, *Warshak v. United States*, <http://volokh.com/posts/1176832897.shtml> (April 17, 2007, 2:53 PM EST).

167. See Swire, *supra* note 59, at 916-17.

168. *United States v. Miller*, 425 U.S. 435 (1976).

169. *Smith v. Maryland*, 442 U.S. 735 (1979).

170. Swire, *supra* note 59, at 916-17.

171. “Super-warrant” refers to a warrant issued under the Wiretap Act, for which the requirements are more strict than a standard Fourth Amendment search warrant. Daniel J. Solove, *Reconstructing Electronic Surveillance Law*, 72 GEO. WASH. L. REV. 1264, 1282 (2004).

172. *But see id.* at 918 (suggesting that the factors influencing the passage of privacy-protecting statutes after *Miller* and *Smith v. Maryland* no longer exist, and future court decisions may not lead to congressionally sponsored privacy protection).

Fourth Amendment had specific meaning and conferred a particular right against government intrusion, even as new technologies exponentially increased the ability of the government to intrude in the lives of citizens. Far from inhibiting statutory regulation, these cases are part of a history that includes detailed statutory protections regulating government behavior. Soon after these cases were decided Congress passed the Wiretap Act, which was informed by these decisions. Later court decisions that limited Fourth Amendment protection also galvanized Congressional action in this field.

Sometimes in response to court decisions, and sometimes proactively, Congress has admirably enacted or amended laws to govern new technologies and limit the government's ability to use technological advancement as an excuse to intrude on the lives of citizens. Congress can effectively weigh various interests and create the appropriate level of protection. However, due to institutional limitations, the judicial branch must occasionally remind Congress of the essential protection conferred by the Fourth Amendment.

In *Warshak* the Sixth Circuit was presented with an opportunity to again remind Congress that the Fourth Amendment limits government intrusions. The district court and the three-judge Sixth Circuit panel that originally decided the case rose to the occasion. Now the Sixth Circuit, en banc, has the opportunity to affirm that choice.

PAN, TILT, ZOOM: REGULATING THE USE OF VIDEO SURVEILLANCE OF PUBLIC PLACES

By Jeremy Brown

I. INTRODUCTION

Local governments have been using video cameras to surveil public areas for four decades. In that time, legislatures and courts have generally refrained from regulating such use. In recent years, though video surveillance systems have begun to change. Gone are the days of stand-alone cameras that record grainy images onto bulky tapes. In their place are integrated camera networks equipped with intelligent software and almost limitless storage capacity. Facial recognition programs and tracking mechanisms are in the works. Such developments in video-surveillance technology could help police combat crime. But they could also erode privacy rights and substantially change the character of public places.

This Note argues that the government should regulate police use of video systems to surveil public areas. This regulation could take many forms but would, at its core, answer two key questions: 1) how should police use video surveillance; and 2) for what purpose should they use it? All levels of government could enact laws that would help to answer these questions, but regulation cannot succeed without action from local governments. It is the officials in police stations and city hall chambers who know most about their individual systems and are in positions to create rules that can efficiently govern their day-to-day operations. Many of those same officials have so far failed to create rules, however. The federal government and state governments could step in and encourage local governments to create operational rules. At the same time, they could develop laws that are grounded in their particular areas of authority and expertise.

Part II reviews the history of municipal use of video surveillance systems in the United States. It argues that while technological limitations prevented police from misusing surveillance systems in the past, a new generation of video systems is more susceptible to misuse because it does not face these limitations. Regulation, if properly crafted, could help to prevent misuse.

Part III explores the inadequacy of judicial regulation. Courts have recognized some limits on the use of video surveillance. But those lim-

its—many of which are found in the dicta of cases addressing other forms of surveillance—are hazily defined and largely untested. The systems in use and in development are not technologically advanced enough to bump against those limits. As a result, lower courts may not have the means to soundly and effectively regulate video surveillance until the Supreme Court creates a new framework for assessing Fourth Amendment privacy rights.

Part IV discusses federal regulation, arguing that Congress should pass video surveillance legislation and that the E-Government Act of 2002 could offer a model.¹ States should also consider regulatory legislation. The states are uniquely positioned to address some of the issues that video surveillance raises and, in the absence of federal action, could help to fill the regulatory gap.

Part V argues that local governments must regulate their video systems. They can do so—at an operational level—by developing policies and procedures similar to those that govern many other police practices.² Such policies could complement state and federal legislation and could provide numerous benefits for local governments.

Part VI concludes that regulation is not enough. In the area of video surveillance, where police have significant discretion and limited oversight, custom is as important as law. If regulation is to succeed, police must create and promote best practices that respect the spirit of that regulation.

II. MUNICIPAL USE OF VIDEO SURVEILLANCE

A. Evolution of Video Surveillance

Local law-enforcement agencies did not adopt surveillance cameras until the late 1960s because of concerns about “underdeveloped technology, excessive cost and unfavorable public opinion.”³ In 1971, the city of

1. Pub. L. No. 107-347, 116 Stat. 2899. The Act requires federal agencies to conduct privacy impact assessments before “developing or procuring information technology that collects, maintains, or disseminates information that is in an identifiable form.” 44 U.S.C. § 3501 (Supp. II 2002).

2. See, e.g., MADISON POLICE DEP’T., CITY OF MADISON, MADISON POLICE POLICY MANUAL, available at http://www.ci.madison.wi.us/POLICE/PDF_Files/PolicyandProcedureManual.pdf (describing procedures for videotaping demonstrations, in-car video capture, and storing video evidence); CITY OF BALTIMORE, CITIWATCH AT THE ATRIUM POLICIES AND PROCEDURE MANUAL (2008) (describing procedures for network of hundreds of all-weather fixed surveillance cameras).

3. Robert R. Belair & Charles D. Bock, *Police Use of Remote Camera Systems for Surveillance of Public Streets*, 4 COLUM. HUM. RTS. L. REV. 143, 147 (1972).

Mt. Vernon, New York, unveiled a federally funded two-camera system that the Department of Justice considered a prototype for future surveillance systems.⁴ The DOJ installed two cameras one block apart and mounted them atop utility poles.⁵ Officers used and controlled the cameras remotely from the police station.⁶ The cameras could rotate 355 degrees horizontally and tilt up to 120 degrees vertically, allowing them to peer through the windows of ground-floor shops.⁷ Still, the state-of-the-art system had limitations.⁸ Among them was the cost of tapes, which were so expensive that police departments had no choice but to regularly record over them.⁹

Cameras have come a long way in the decades since the Mt. Vernon experiment.¹⁰ They can now be linked to form integrated systems that cover not just a few downtown blocks but large stretches of public space.¹¹ Extensive digital networks can support the transmission of video signals and provide data to police officers who are in the field.¹² Cameras can cap-

4. *Id.* at 143-44. The Mt. Vernon system attracted considerable press attention. Publications such as *Time Magazine*, *T.V. Guide*, the *Chicago Tribune*, and the *Cleveland Press* featured articles about it. John Glenn, the astronaut and soon-to-be Ohio senator, narrated a network documentary in which Mt. Vernon police described zooming in through a restaurant window and viewing a pristine close-up of a diner's sandwich. *Id.* at 145.

5. *Id.* at 144.

6. *Id.* at 144-45.

7. *Id.* at 145 n.14.

8. *Id.* at 144-45.

9. *Id.* at 145.

10. This Note focuses on the public-sector use of cameras. Private actors, however, have also begun to use cameras in ways that could erode expectations of privacy. *See, e.g.*, Aimee Jodoi Lum, Comment, *Don't Smile, Your Image Has Just Been Recorded on a Camera-Phone: The Need for Privacy in the Public Sphere*, 27 U. HAW. L. REV. 377 (2005).

11. CONSTITUTION PROJECT, GUIDELINES FOR PUBLIC VIDEO SURVEILLANCE: A GUIDE TO PROTECTING COMMUNITIES AND PRESERVING CIVIL LIBERTIES xi (2007), available at http://www.constitutionproject.org/pdf/Video_surveillance_guidelines.pdf.

12. Mesh networks offer particular promise. Traditional wireless hotspots restricted access to relatively confined geographical areas. But mesh networks—networks in which many wireless signals link together to form a blanket of coverage—have further reach. A Motorola mesh network, for instance, has girded the Los Angeles Police Department's video surveillance network at the notoriously crime-plagued Jordan Downs housing project. Mark Lacter, *Motorola's High-Speed Wireless Networks Give Cops Slick New Tools to Fight Crime*, WIRED, Nov. 2007, at 54. Some developers of mesh network technology have said that public sector need for security wireless systems has fueled the domestic demand for their products. *See* Press Release, Firetide, Inc., Firetide Ablaze with Eight Consecutive Quarters of Record Revenue Growth (Oct. 23, 2007), available at <http://www.firetide.com/innercontent.aspx?taxid=16&id=892>; Rosie Lombardi, *Wi-Fi Growth*

ture images at high resolutions and can be equipped with infrared vision and motion detection technologies.¹³ Users can program cameras to automatically track, archive, and identify “suspect behavior.”¹⁴ The technology continues to push ahead: the U.S. Department of Homeland Security (DHS) is testing a program that would allow its agents to use cell phones and e-mail devices to record and share live video footage of suspected terrorists, and the French Interior Ministry has announced it would begin using flying drones outfitted with night-vision cameras to monitor crime.¹⁵

Concerns about crime and terrorism have increased the appeal of surveillance cameras.¹⁶ Camera enthusiasts and critics alike have pointed to the camera system in Britain—home to about a fifth of the world’s surveillance cameras¹⁷—as a harbinger of what video surveillance may eventually be like in the United States.¹⁸ In Britain, there are at least 4.2 million cameras, or one for every fourteen residents.¹⁹ In London, the average person is caught on camera 300 times a day.²⁰

The most advanced American video surveillance network is in Chicago.²¹ The city has linked together cameras from the transit and housing

Fuels Video Surveillance, NETWORK WORLD, Oct. 29, 2007, <http://www.networkworld.com/news/2007/102907-wi-fi-growth-fuels-video-surveillance.html>.

13. CONSTITUTION PROJECT, *supra* note 11, at xi.

14. *Id.*

15. Mimi Hall, *Surveillance System Raises Privacy Concerns*, SCI-TECH TODAY, Mar. 3, 2008, http://www.sci-tech-today.com/story.xhtml?story_id=0100010W171S; *France to Strengthen Video Surveillance System*, REUTERS, Oct. 12 2007, <http://www.reuters.com/article/technologyNews/idUSL1272534220071012>.

16. The global market for “network video surveillance products” increased more than 40% in 2006 and is expected to reach \$2.6 billion in sales by 2010. Press Release, IMS Research, *Network Video Surveillance Market Surges Ahead* (Jan. 23, 2007), *available at* <http://www.imsresearch.com/members/pr.asp?X=329>. Public sector demand is fueling much of that growth. Lombardi, *supra* note 12.

17. Libby Brooks, *CCTV is No Silver Bullet—It Risks Making Life Less Safe*, GUARDIAN, Nov. 1, 2007, at 34.

18. *See, e.g.*, Dina Temple-Raston, *In U.S., Calls Grow for U.K.-Style Security Cameras*, NAT’L PUB. RADIO, July 4, 2007, <http://www.npr.org/templates/story/story.php?storyId=11737314>; Steve Chapman, *Video Cameras, Safety and Our ‘Personal Space,’* CHI. TRIB. July 28, 2005, at C23. American cities have also taken cues from casinos. *See* Thomas Frank, *Face-Recognition Systems Weighed as Next Weapon Against Terrorism*, USA TODAY, May 10, 2007, at 1A; Marie Woolf, *ID Cards Could Be Used for Mass Surveillance System*, INDEPENDENT, Aug. 18, 2005, at 15; Vicki Haddock, *Hundreds of Thousands of Surveillance Cameras Across America Track Our Behavior Every Day*, S.F. CHRON., Oct. 17, 2007, at E1.

19. Brooks, *supra* note 17, at 34.

20. *Id.*

21. Don Babwin, *Chicago Video Surveillance Gets Smarter*, ABC NEWS, Sept. 27, 2007, <http://abcnews.go.com/print?id=3659139> (quoting an IBM video surveillance con-

authorities and other governmental agencies.²² The city hired IBM to install analytic software that would potentially allow network operators to program the cameras to automatically recognize the colors, makes, and models of cars.²³ The cameras would also alert the police of specific events, such as if a car has circled the Sears Tower, or if someone has left a bag unattended in a crowded park.²⁴

Cities of all sizes have adopted video systems. A 2006 study found that at least thirty-six California cities—such as Beverly Hills, Stockton, and San Francisco—have installed cameras.²⁵ So many cities across the country have installed or upgraded systems that research analysts estimate that the video surveillance market will almost double between 2006 and 2011, growing from \$6.6 billion to \$11.9 billion.²⁶ The head of the Los Angeles Police Department's Counter-Terrorism and Criminal Intelligence Bureau estimates that the number of police cameras in L.A. could expand tenfold.²⁷ Such robust prospects have drawn large technology companies into competition with traditional physical security companies²⁸ and have inspired a few high schools to offer occupational classes in security design.²⁹

B. No Regulation of Video Surveillance of Public Places

A public place is generally considered to be one in which individuals do not have reasonable expectations of privacy.³⁰ The result is that, “according to the law, everything that occurs in a public place cannot be held

sultant as saying that “Chicago is really light years ahead of any metropolitan area in the U.S. now”).

22. Gary Washburn, *Camera Network to Watch Over City*, CHI. TRIB., Sept. 10, 2004, at C1.

23. David Schaper, *Chicago's Video Surveillance Gets Smarter*, NAT'L PUB. RADIO, Oct. 26, 2007, <http://www.npr.org/templates/story/story.php?storyId=15673544>.

24. *Id.*

25. ACLU of Northern California, 2006 Public Records Survey Summary Findings, http://www.aclunc.org/docs/government_surveillance/report_spreadsheet_for_web.pdf (last visited April 18, 2008) [hereinafter Public Records Summary].

26. Ryan Blitstein, *Cisco to Buy Surveillance Software Firm BroadWare*, SAN JOSE MERCURY NEWS, May 23, 2007.

27. Rick Coca, *Cops Seek More Surveillance Cameras*, DAILY NEWS, Jan. 22, 2008, at 1A.

28. Blitstein, *supra* note 26.

29. Anne Dudley Ellis, *School Teaches Video Security Design*, FRESNO BEE, Apr. 13, 2007, at B2.

30. *See* Katz v. United States, 389 U.S. 347 (1967). This definition of private places, like so many others, is imperfect. DANIEL J. SOLOVE ET AL., INFORMATION PRIVACY LAW 41 (2d ed. 2006) (“[D]efining privacy has proven to be quite complicated, and many commentators have expressed great difficulty in defining precisely what privacy is.”).

out to be a private activity.”³¹ There is no federal or state legislation governing police video surveillance of public places.³² Nor have courts imposed clear constraints. They have held that individuals can expect to be videotaped in or on streets,³³ sidewalks,³⁴ taverns,³⁵ front yards,³⁶ hallways at self-storage facilities,³⁷ mountaintops,³⁸ open fields,³⁹ and the common areas in public bathrooms.⁴⁰

Few local governments have attempted to regulate video surveillance. Most large American police departments do not have written policies governing the use of video systems, according to one survey.⁴¹ Another survey found that only about a quarter of California cities with video systems had written policies.⁴² Relatively few cities may have policies in part because local officials generally believe that the Fourth Amendment does not restrict video surveillance of public areas.⁴³ The Middleton, New York police department, for example, states in its policies that video sur-

31. Grant Fredericks, Consultant, Forensic Video Solutions, Gaining Pub. Support and Protecting Privacy Panel, Enhancing Public Safety Through Video Tech. Symposium, Int'l Ass'n of Chiefs of Police (Feb. 13, 2007).

32. Thomas D. Colbridge, *Electronic Surveillance: A Matter of Necessity*, FBI L. ENFORCEMENT BULL., Feb. 2000, at 26.

33. *McCray v. State*, 581 A.2d 45 (Md. Ct. Spec. App. 1990).

34. *State v. Augafa*, 992 P.2d 723 (Haw. Ct. App. 1999).

35. *Sponick v. Detroit Police Dep't*, 211 N.W.2d 674 (Mich. Ct. App. 1973).

36. *State v. Holden*, 964 P.2d 318 (Utah Ct. App. 1998).

37. *State v. Bailey*, 2001 Del. Super. LEXIS 471 (Del. Super. Ct. Nov. 30, 2001).

38. *United States v. Sherman*, No. 92-30067, 1993 U.S. App. LEXIS 6011 (9th Cir. Mar. 13, 1993).

39. *State v. Costin*, 720 A.2d 866 (Vt. 1998).

40. *People v. Lynch*, 445 N.W.2d 803 (Mich. Ct. App. 1989).

41. See Thomas J. Nestel III, *Using Surveillance Camera Systems to Monitor Public Domains: Can Abuse Be Prevented?* 27-44 (Mar. 2006) (unpublished thesis, Naval Postgraduate School) (on file with author).

42. Public Records Summary, *supra* note 25.

43. See, e.g., Richard W. Chace, Serv. Indus. Ass'n, *An Overview on the Guidelines for Closed Circuit Television (CCTV) for Public Safety and Community Policing 6* (2001), http://www.siaonline.org/research/privacy_guidelines_overview.pdf; Colbridge, *supra* note 32, at 25; Gary S. McLane, *What Will Be the Impact of Video Surveillance in Public Areas by Mid-Sized Urban Agencies by 2007?*, at 3 (June 2002) (unpublished project presented to the Command College Class at the California Commission on Peace Officer Standards and Training (POST)) (on file with POST Library, Sacramento, Cal.); Carl M. Miller, *How Will the Implementation of Wireless Video Technology Impact Small Law Enforcement Agencies by 2007?*, at 14 (June 2002) (unpublished project presented to the Command College Class at the California Commission on Peace Officer Standards and Training (POST)) (on file with POST Library, Sacramento, Cal.) (“[C]ritics notwithstanding, video surveillance devices in public do not seem to violate any constitutional principles.”).

veillance “does not intrude upon an individual’s sphere of privacy, but rather records events occurring in public space for which individuals do not have a reasonable expectation of privacy.”⁴⁴ Similarly, Chicago Mayor Richard Daley has said that his city’s state-of-the-art system does not compromise legitimate privacy rights by monitoring public spaces: “The city owns the sidewalk. We own the street and we own the alley.”⁴⁵

C. Lack of Regulation Poses a Threat of Misuse

Police have praised video surveillance as an effective tool.⁴⁶ They have said that surveillance systems have helped them deter and investigate crimes.⁴⁷ They have credited cameras with leading to the arrest of terrorist bombers in Oklahoma City⁴⁸ and London.⁴⁹ They have claimed that surveillance systems can help catch police engaged in wrongdoing and exonerate those falsely accused.⁵⁰ They have argued that installing video systems costs less than stationing officers at every corner.⁵¹

Observers have warned that no matter what its virtues may be, video surveillance also poses a threat. “Every court” that has considered the issue, according to Ninth Circuit Judge Alex Kozinski, has noted that “video surveillance can result in extraordinarily serious intrusions into personal

44. City of Middletown Police Dep’t., Public Camera Policy and Procedure, <http://www.middletownpolice.com/cameramain.htm> (last visited Feb. 15, 2008).

45. Richard Roeper, *Smile, You’re on Camera—and It Cleaned up Your Act*, CHI. SUN-TIMES, Sept. 13, 2004, at 11.

46. *E.g.*, Remarks of Robert Keyes, Interim Police Chief of Clovis, Cal., at the U.S. Dep’t of Homeland Security Public Workshop—CCTV: Developing Privacy Best Practices, Law Enforcement Perspectives Panel 6-8 (Dec. 17, 2007) available at http://www.dhs.gov/xlibrary/assets/privacy/privacy_workshop_cctv_Transcript_Law%20Enforcement_Perspectives_Panel.pdf (describing the effectiveness of his city’s surveillance system).

47. *See, e.g.*, Alameda County District Attorney’s Office, *Police Surveillance*, POINT OF VIEW, Winter 2007, at 1; Tobin Hensgen, *Video Makes the Case*, L. ENFORCEMENT TECH., Sept. 1, 2007, at 54.

48. Barbara Bell, *Waukegan Police Set to Install Surveillance Cameras*, CHI. TRIB., Aug. 15, 2005, at CN2; Miller, *supra* note 43, at 14.

49. *See, e.g.*, Clark Kent Ervin, *Surveillance Cameras Strike Balance in Fight Against Terrorism*, BALT. SUN, Aug. 5, 2007, at 15A; Alexandra Marks, *Should US Cities Try a London Style Camera Network?*, CHRISTIAN SCI. MONITOR, July 11, 2007, at 1.

50. Miller, *supra* note 43, at 27, 29.

51. *E.g.*, Paul Davis, *Technology Serves as Force Multiplier*, L. ENFORCEMENT TECH., June 1, 2007, at 28; Max Marbut, *Someone’s Watching You*, JACKSONVILLE DAILY REC., Mar. 7, 2008, http://www.jaxdailyrecord.com/showstory.php?Story_id=49590 (quoting an officer as saying that “[t]he video system is very cost-effective . . . Remote control cameras are expensive, but they are a one-time cost. Here at the Main Library, I would need 12 more security officers to cover the building if we didn’t have the video system.”).

privacy.”⁵² Michigan Governor Jennifer Granholm, before beginning her political career, wrote that “even the most tenacious prosecutor would admit that there is an ‘Orwellian odor’ to camera surveillance on public street corners.”⁵³ The ACLU—perhaps the most vocal and visible opponent of video surveillance—has argued that video systems “infringe on the freedom of speech and association guaranteed by the First Amendment and threaten the anonymity and privacy protected by the Fourth.”⁵⁴

The sophistication of new video systems amplifies these concerns.⁵⁵ The technological constraints that prevented misuse of analog surveillance cameras—grainy images, limited storage capacity, and difficult duplication—no longer impede video surveillance.⁵⁶ In the way that the digital revolution has allowed consumers to easily distribute, download, and edit movies and songs, it has allowed police to do the same with surveillance footage. Such unbounded abilities could aid in investigations and prosecutions but could also allow system users to tamper with evidence or engage in voyeuristic behavior.

52. *United States v. Kouyoumejian*, 970 F.2d 536, 551 (9th Cir. 1992) (Kozinski, J., concurring).

53. Jennifer Mulhern Granholm, *Video Surveillance on Public Streets: the Constitutionality of Invisible Citizen Searches*, 64 U. DET. L. REV. 687, 689 (1987).

54. MARK SCHLOSBERG & NICOLE A. OZER, CALIFORNIA ACLU OF NORTHERN CAL., UNDER THE WATCHFUL EYE: THE PROLIFERATION OF VIDEO SURVEILLANCE SYSTEMS IN CALIFORNIA 7-8 (2007), available at http://www.aclunc.org/docs/criminal_justice/police_practices/Under_the_Watchful_Eye_The_Proliferation_of_Video_Surveillance_Systems_in_California.pdf. Meanwhile, the New York-based performance art group Surveillance Camera Players has earned notoriety for staging short plays in front of surveillance cameras. Sabrina Tavernise, *Watching Big Brother; On this Tour, Hidden Cameras are Hidden No More*, N.Y. Times, Jan. 17, 2004, at B1.

55. See, e.g., Kevin Fagan, *Surveillance Foes Renew their Battle*, S.F. CHRON., Aug. 18, 2007, at A1; Rich Lord, *Network of Surveillance Cameras Proposed*, PITT. POST-GAZETTE, June 27, 2007, at B1; Myron P. Medcalf, *Police to Put Cameras on St. Paul's Central Corridor; City Council Approval Will Mean \$1.2 Million to Place 60 Cameras Along University Avenue and in Downtown*, MINNEAPOLIS STAR TRIB., Aug. 4, 2007, at 5B.

56. See CONSTITUTION PROJECT, *supra* note 11, at 4-6 (describing technological improvements in video surveillance technology).

Privacy activists have pointed to a variety of potential threats.⁵⁷ At a basic level, those in control of surveillance cameras could zoom in on attractive women or track individuals because of their race.⁵⁸ At a more sophisticated level, hackers could break into wireless networks and hijack police cameras.⁵⁹ License plate readers could link information about the geographic movement of cars to private data like the insurance records of car owners.⁶⁰ Police could monitor attendance at political rallies, abortion or HIV clinics; they could read books or letters over the shoulders of commuters waiting for the next bus. Such surveillance—undetectable, unrelenting, and unchecked—could lead to the collection of large amounts of sensitive information and could change the public character of our society.⁶¹

This threat is real. Consider the story of Paris Lane. In 2004, a police surveillance video captured twenty-two year old Lane killing himself in the lobby of a Bronx public housing unit.⁶² A New York City police officer e-mailed a clip of the suicide to a friend,⁶³ and the footage ultimately found its way to a shock website. The website described the clip—which

57. See COMMENTS OF THE ELECTRONIC PRIVACY INFORMATION CENTER TO DEPARTMENT OF HOMELAND SECURITY ON DOCKET NO. DHS-2007-0076 (2008), available at http://epic.org/privacy/surveillance/epic_cctv_011508.pdf; SCHLOSBERG & OZER, *supra* note 54; NEW YORK CIVIL LIBERTIES UNION, WHO'S WATCHING: VIDEO CAMERA SURVEILLANCE IN NEW YORK CITY AND THE NEED FOR PUBLIC OVERSIGHT 7-12 (2006), http://www.nyclu.org/pdfs/surveillance_cams_report_121306.pdf; Deirdre K. Mulligan, Director, Samuelson Law, Tech. & Pub. Pol'y Clinic, UC Berkeley School of Law (Boalt Hall), In Defense of Public Spaces, Statement Before the Department of Homeland Security Data Privacy and Integrity Advisory Committee (June 7, 2006), available at http://groups.ischool.berkeley.edu/samuelsonclinic/files/Mulligan_DHS_Statement.pdf; AM. BAR ASS'N, STANDARDS FOR CRIMINAL JUSTICE: ELECTRONIC SURVEILLANCE sec. B, at 23 (3d ed. 1998), available at <http://www.abanet.org/crimjust/standards/electronicsectionb.pdf>.

58. Nestel, *supra* note 41, at 6-8 (citing instances in which casino employees and peace officers have used cameras to view women's breasts and buttocks).

59. Bob Pool, *Two Accused of Sabotaging Traffic Lights*, L.A. TIMES, Jan. 6, 2007, at B1.

60. Remarks of Clive Norris, Professor of Sociology at the University of Sheffield and Deputy Director of the Center for Criminological Research, at the U.S. Dep't. of Homeland Security Public Workshop—CCTV: Developing Privacy Best Practices, International Perspectives Panel 18-19 (Dec. 17, 2007), available at http://www.dhs.gov/xlibrary/assets/privacy/privacy_workshop_cctv_Transcript_International_Perspectives_Panel.pdf.

61. Mulligan, *supra* note 57.

62. Shaila K. Dewan, *Video of Suicide in Bronx Appears on Shock Web Site*, N.Y. TIMES, Apr. 1, 2004, at B3.

63. Murray Weiss, *Bx. Cop Caught in 'Net—Suicide-Video Scandal*, N.Y. POST, June 22, 2004, at 25.

showed Lane saying good-bye to a tearful woman before shooting himself in the face with a nine-millimeter handgun—as the “Self-Cleansing Housing Projects.”⁶⁴ Police did not learn of the leak until Lane’s foster mother contacted them.⁶⁵ Before the advent of digital technology,⁶⁶ computer users could not easily upload, copy, and e-mail flawless copies. Now, though, few obstacles prevent bored or reckless monitors from releasing such footage, and even fewer obstacles prevent those monitors from zooming in on a bedroom or following a woman down the street.⁶⁷

It is possible that few stories like that of Paris Lane have come to light because police misuse of video systems is difficult to detect.⁶⁸ Video systems make no noise and leave no physical trace. An officer may track a suspect or e-mail footage of that suspect to a friend without the suspect, much less his neighbors, ever knowing. The public would not have learned about the Paris Lane leak if a website had not posted the footage, if friends had not told Lane’s foster mother about the posting, and if Lane’s foster mother had not complained.

D. Need for Regulation

Regulation could prevent the misuse and ineffective use of video systems in three respects. First, regulation could shape the conduct of those officers who might be inclined to use video systems in ways that are unethical but not illegal. Regulation could clearly define the scope of permissible activities and remove ambiguity as to what conduct the law prohibits. Officers would not have to rely on their own sense of what is appropriate but could instead rely on the express guidance of regulatory rules.

Second, regulation could ensure accountability by attaching consequences to certain acts. Such consequences could provide monitors and operators with incentives for acting or not acting in particular ways: the greater the positive consequences, the greater the incentive to avoid misuse. If monitors understood that they could be disciplined for using video

64. Dewan, *supra* note 62, at B3.

65. *Id.*

66. See discussion *supra* Section II.A on analog video surveillance.

67. In another infamous incident, a camera-equipped New York City police helicopter that was supposed to be monitoring a mass bicycle ride through Lower Manhattan recorded a couple being intimate on a rooftop balcony. The recording became public when it was used in the trial of a cyclist and, eventually, the local CBS station aired it during a news broadcast. Police supervisors and the public would not have known that officers were using the cameras to watch the couple if not for an unrelated lawsuit. Jim Dwyer, *Police Video Caught a Couple's Intimate Moment on a Manhattan Rooftop*, N.Y. TIMES, Dec. 22, 2005, at B10.

68. Mulligan, *supra* note 57, at 2.

systems to track the movements of ex-girlfriends or fired for e-mailing sensitive footage to friends, they would have a strong reason not to do so.

Third, regulation could define behavioral standards. It could encourage the development of professional customs that incorporate best practices and create a working environment that promotes the responsible and efficient use of video systems.⁶⁹ Studies have found, for example, that officers have trouble concentrating on surveillance monitors—especially multiple ones—for more than twenty minutes.⁷⁰ Regulation that discourages officers from spending an extended period of time in front of monitors, except in exigent circumstances, could help officers to avoid the kinds of situations where they might be more inclined to use video systems improperly.

III. INADEQUACY OF JUDICIAL REGULATION

This Part: A) briefly reviews the judicial laws that apply to warrantless video surveillance of public places; B) focuses on the Fourth Amendment, which imposes the most significant limits upon video surveillance; and C) concludes that unless the Supreme Court amends the framework set forth in *Katz v. United States*, governments at all levels will continue to invest in video systems that erode privacy rights but that do not implicate existing Fourth Amendment rules.

A. Overview: Judicial Limitations

Video surveillance could implicate the First⁷¹ and Fourth⁷² Amendments and the Due Process⁷³ and Equal Protection⁷⁴ clauses of the Fourteenth Amendment.⁷⁵ If police used video systems to monitor and suppress

69. See *infra* Part VI (discussing the interplay between law and custom).

70. NAT'L INST. OF JUSTICE, THE APPROPRIATE AND EFFECTIVE USE OF SECURITY TECHNOLOGIES IN U.S. SCHOOLS: A GUIDE FOR SCHOOLS AND LAW ENFORCEMENT AGENCIES 30 (1999) (discussing studies that show that “[a]fter only 20 minutes of watching and evaluating monitor screens, the attention of most individuals has degenerated to well below acceptable levels”).

71. U.S. CONST. amend. I (“Congress shall make no law . . . abridging the freedom of speech . . . or the right of the people peaceably to assemble.”).

72. U.S. CONST. amend. IV (“The right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures, shall not be violated, and no warrants shall issue, but upon probable cause.”).

73. U.S. CONST. amend. XIV § 1 (“ . . . nor shall any State deprive any person of life, liberty, property without due process of law.”).

74. U.S. CONST. amend. XIV § 1 (“No State shall . . . deny to any person within its jurisdiction the equal protection of the laws.”).

75. Remarks of Chris Slobogin, Professor of Law, University of Florida Levin College of Law, at the U.S. Dep’t. of Homeland Security Public Workshop—CCTV: Developing Privacy Best Practices, Legal and Policy Perspectives Panel 2, 6 (Dec. 18, 2007),

expressions of free speech, courts might find such use has a First Amendment chilling effect.⁷⁶ If police used the systems to interfere with an individual's right to travel and repose, courts might find a Due Process violation; and if police used the systems to discriminate against protected classes, courts might find an Equal Protection violation.⁷⁷ Certain kinds of video surveillance might also violate the privacy provisions found in some state constitutions. More centrally, the source of judicial oversight of video surveillance of public areas is the Fourth Amendment.⁷⁸

B. Recognized Fourth Amendment Limits

The Supreme Court has considered the Fourth Amendment implications of the police use of tracking beepers,⁷⁹ electronic eavesdropping devices,⁸⁰ photographic cameras with zoom lenses,⁸¹ and thermal-imaging devices,⁸² but not the use of video surveillance systems. Seven circuit courts have considered the use of cameras in private places like offices and homes, but none have directly addressed the use in public places like street corners and parks.⁸³ The prevailing opinion in the legal community

available at http://www.dhs.gov/xlibrary/assets/privacy/privacy_workshop_cctv_Transcript_Legal_and_Policy_Perspectives_Panel.pdf.

76. *E.g.*, *Dombrowski v. Pfister*, 380 U.S. 479, 487 (1965) ("The chilling effect upon the exercise of First Amendment rights may derive from the fact of the prosecution, unaffected by the prospects of its success or failure."). Current uses seem unlikely to trigger a chilling effect, however. *See Watchtower Bible & Tract Soc'y of N.Y., Inc. v. Vill. of Stratton*, 536 U.S. 150, 163 (2002) ("[T]here must be a balance between these interests and the effect of the regulations on First Amendment rights. We must be astute to examine the effect of the challenged legislation and must weigh the circumstances and . . . appraise the substantiality of the reasons advanced in support of the regulation."); *Laird v. Tatum*, 408 U.S. 1, 13 (1972) ("Allegations of a subjective 'chill' are not an adequate substitute for a claim of specific present objective harm or a threat of specific future harm.").

77. Slobogin, *supra* note 75, at 6.

78. *Id.* at 2.

79. *United States v. Karo*, 468 U.S. 705 (1984); *United States v. Knotts*, 460 U.S. 276 (1982).

80. *Katz v. United States*, 389 U.S. 347 (1967).

81. *Dow Chemical Co. v. United States*, 476 U.S. 227 (1985).

82. *Kyllo v. United States*, 533 U.S. 27 (2001).

83. *United States v. Williams*, 124 F.3d 411 (3d Cir. 1997); *United States v. Falls*, 34 F.3d 674 (8th Cir. 1994); *United States v. Taketa*, 923 F.2d 665 (9th Cir. 1991); *United States v. Mesa-Rincon*, 911 F.2d 1433 (10th Cir. 1990); *United States v. Cuevas-Sanchez*, 821 F.2d 248 (5th Cir. 1987); *United States v. Biasucci*, 786 F.2d 504 (2d Cir. 1986); *United States v. Torres*, 751 F.2d 875 (7th Cir. 1984). In one unpublished decision, however, the Ninth Circuit did rule that individuals could not reasonably expect not to be videotaped as they sold drugs on mountain passes. *United States v. Sherman*, No. 92-30067, 1993 U.S. App. LEXIS 6011 (9th Cir. Mar. 13, 1993).

is that video systems do not violate the Fourth Amendment when cameras monitor public places because the plain view doctrine applies to whatever activity occurs in those places.⁸⁴ Fourth Amendment doctrine suggests, though, that there are three limits to the application of the plain-view doctrine to video surveillance: 1) police cannot use cameras posted in public places to monitor places where there is an expectation of privacy; 2) police cannot use zoom lenses to magnify individuals or their belongings to a degree that is invasive; and 3) police cannot use cameras on such a broad scale as to conduct mass searches without suspicion.

1. *Monitoring Places Where There is an Expectation of Privacy*

Police cannot use video systems to engage in warrantless surveillance of places where there is an expectation of privacy,⁸⁵ but it is difficult to identify which places have expectations of privacy. The Supreme Court held in *Katz v. United States* that “the Fourth Amendment protects people, not places.”⁸⁶ Fourth Amendment protection attaches, according to the *Katz* Court, if two conditions are met: 1) an individual must have an expectation of privacy; and 2) society must recognize that expectation as reasonable.⁸⁷ Since individuals can always claim to have expectations of privacy, courts have generally focused on whether society—or, more realistically, presiding judges⁸⁸—recognizes those expectations as reasonable.

Courts have generally held that what people do in public is exposed to plain view and that people do not have reasonable privacy expectations in what they expose to plain view.⁸⁹ But courts have split over the exact lim-

84. If the video system records conversations, however, it could violate the prohibition against warrantless electronic eavesdropping under the Wiretap Act. Ric Simmons, *Technology-Enhanced Surveillance by Law Enforcement Officials*, 60 N.Y.U. ANN. SURV. AM. L. 711, 725 n.46 (2005). So far, municipalities have not equipped their systems with such audio recording devices; however, a number have outfitted their systems with Shotspotter, which triangulates sounds to identify the location of gunshots. Shotspotter, Customers Overview, <http://www.shotspotter.com/customers/index.html> (last visited Jan. 8, 2008).

85. *Torres*, 751 F.2d at 875.

86. *Katz v. United States*, 389 U.S. 347, 351 (1967).

87. *Id.* at 361 (Harlan, J., concurring).

88. *See Minnesota v. Carter*, 525 U.S. 83, 97 (1998) (Scalia, J., concurring) (“In my view, the only thing the past three decades have established about the *Katz* test . . . is that, unsurprisingly, those ‘actual (subjective) expectations of privacy’ ‘that society is prepared to recognize as “reasonable,”’ bear an uncanny resemblance to those expectations of privacy that this Court considers reasonable.”).

89. *Kyllo v. United States*, 533 U.S. 27, 37 (2001) (“In the home, our cases show, *all* details are intimate details, because the entire area is held safe from prying government eyes.”).

its of the plain view doctrine.⁹⁰ One notable split is over the right of police to peer through house or apartment windows. Out of respect for this legal gray area, or maybe respect for community concerns about privacy, some police departments have digitally masked views of sensitive places like home windows or have stationed cameras or limited their tilting abilities so that they cannot look into those places.⁹¹

Courts have hinted that the plain view doctrine might operate like a sliding scale, with some things only partly in plain view and others completely in plain view. The Sixth Circuit recently held that students, even though they are among others, can reasonably expect not to be videotaped in school locker rooms.⁹² The Ninth Circuit reached a similar holding regarding police officers in a station locker room.⁹³ The Fifth Circuit has held that individuals cannot expect police or members of the public not to see into their backyards when flying overhead,⁹⁴ but they can expect that no one will monitor their backyards with video cameras for extended peri-

90. Some courts have held that individuals cannot reasonably expect police not to view them through their home windows. *People v. Wright*, 242 N.E.2d 180 (Ill. 1968) (finding that an officer standing on a public transit authority right of way did not violate the Fourth Amendment when he looked through the curtains of a nearby window); *Commonwealth v. Busfield*, 363 A.2d 1227 (Pa. Super. Ct. 1976) (finding that police did not violate a reasonable expectation of privacy when looking through sheer curtains from the neighboring property). Other courts have found that individuals can reasonably expect for officers not to view them through their home windows. *Carter*, 525 U.S. at 83 (finding that a police officer would have violated the Fourth Amendment rights of respondents by peering through a drawn window blind if the respondents had had standing); *United States v. Taborda*, 635 F.2d 131 (2d Cir. 1980) (police violated Fourth Amendment rights by not obtaining a warrant before using a telescope to see into an apartment). *See also* *People v. Henderson*, 220 Cal. App. 3d 1632, 1649 (Cal. Ct. App. 1990) (“The plain and simple fact is clandestine observations into a private residence from a vantage point inaccessible to the public or an uninvited guest is a search which, if conducted without a warrant, is the type of activity the Fourth Amendment proscribes.”); *Raettig v. State*, 406 So.2d 1273 (Fla. Dist. App. 1981) (finding that police violated Fourth Amendment privacy rights by using a flashlight to peer through a “minute crack on the surface” of a camper); *State v. Ward*, 617 P.2d 568 (Hawaii 1980) (finding that police violated constitutional privacy rights by using binoculars to watch a craps game being played in a seventh floor apartment, an eighth of a mile away).

91. *See* SAMUELSON LAW, TECH. & PUB. POL’Y CLINIC, UC BERKELEY SCHOOL OF LAW (BOALT HALL), POLICIES AND PROCEDURES COMPARED (Dec. 2008) (unpublished analysis of collected policies and procedures) (on file with the Samuelson Law, Technology, and Public Policy Clinic at UC Berkeley School of Law).

92. *Brannum v. Overton County Sch. Bd.*, 516 F.3d 489 (6th Cir. 2008).

93. *Bernhard v. City of Ontario*, No. 06-55736, 2008 WL 687352 (9th Cir. Mar. 13, 2008).

94. *Florida v. Riley*, 488 U.S. 445 (1989); *California v. Ciraolo*, 476 U.S. 207 (1986).

ods of time.⁹⁵ Video surveillance, the court found, was more invasive than “a one-time overhead flight or a glance over the fence by a passer-by.”⁹⁶

2. *Invasive Zooming*

In *Dow Chemical Co. v. United States*, the Supreme Court addressed a particularly advanced form of telescopic surveillance and found that police did not violate the Fourth Amendment when they flew an airplane over a chemical plant and used a \$22,000 mapmaking camera to photograph the facilities.⁹⁷ The *Dow* Court did not give blanket approval to the warrantless use of all zoom devices, but it indicated that at a certain level of magnification, zooming would be so invasive as to require a warrant. It observed that the *Dow* photographs did not capture “objects as small as 1/2-inch in diameter such as a class ring” or “identifiable human faces” or “secret documents.”⁹⁸ The Court might have ruled differently, this observation suggests, if the photographer had zoomed in so far that the camera recorded small or sensitive details.

3. *Mass Searches Without Suspicion*

Courts have hinted that mass suspicion-less searches might violate the Fourth Amendment. So far, video surveillance cases have concerned cameras that did not have the technological ability to conduct mass searches. Increasingly, though, cities are deploying integrated systems that—if sufficiently invasive, far-seeing and unrelenting—could conduct mass searches and implicate the Fourth Amendment.

In a case involving a tracking beeper,⁹⁹ the Supreme Court distinguished between individual beepers and integrated surveillance networks. The Court suggested that systems that allow for “twenty-four hour surveillance of any citizen in this country” and “dragnet-type law enforcement practices” could raise Fourth Amendment concerns.¹⁰⁰ The Seventh Circuit, in turn, recently opined that “[t]echnological progress poses a threat to privacy by enabling an extent of surveillance that in earlier times would have been prohibitively expensive” and that, “[s]hould government someday decide to institute programs of mass surveillance of vehicular movements,” courts must consider whether such surveillance constitutes a

95. *United States v. Cuevas-Sanchez*, 821 F.2d 248 (5th Cir. 1987)

96. *Id.* at 251.

97. *Dow Chemical Co. v. United States*, 476 U.S. 227, 251 n.13 (1985).

98. *Id.* at 238 n.5.

99. *United States v. Knotts*, 460 U.S. 276, 277 (1983) (“A beeper is a radio transmitter, usually battery operated, which emits periodic signals that can be picked up by a radio receiver.”).

100. *Id.* at 283-84.

Fourth Amendment search.¹⁰¹ Despite significant advances in video surveillance, there are few if any video systems in this country that could conduct the kind of mass searches without suspicion that courts have disavowed. Video systems connected to license plate readers could serve as the foundation for “programs of mass surveillance of vehicular movements,” but even those seem unlikely to trigger current Fourth Amendment rules, since courts have already accepted the legality of devices that can monitor the movements of particular vehicles.¹⁰²

C. Video Surveillance and the *Katz* Framework

Even if municipalities deployed the kinds of video systems that pushed Fourth Amendment limits, considerable time could pass before the Supreme Court heard and decided a case regarding the constitutionality of video surveillance of public places. One of the general disadvantages of case law is that it is slow to develop, and that is as true in the context of electronic surveillance as in any other area of the law. Americans had been using wiretaps for more than sixty years before the Supreme Court heard a wiretapping case;¹⁰³ and almost forty more years passed before the Court ruled that warrantless wiretapping violated the Fourth Amendment.¹⁰⁴ Britain developed its video surveillance infrastructure in less than ten years,¹⁰⁵ and if the Court takes longer than that to decide a case on the video surveillance of public places, then its decision will probably have to account for the fact that cities across the country have already installed expensive video systems.

Still, the Supreme Court could revisit its Fourth Amendment privacy jurisprudence and either modify *Katz* or replace it with a rule better suited to the technologies that have developed in the past forty years. The *Katz* rule, which encourages courts to determine the reasonableness of privacy expectations on the basis of place, seems to offer no protection against invasive new technologies if those technologies are used in public places. *Katz* claims that the Fourth Amendment “protects people, not places,” but

101. *United States v. Garcia*, 474 F.3d 994, 998 (7th Cir. 2007).

102. *Id.* at 994; *Buliga v. N.Y. City Taxi Limousine Comm’n*, 07-CV-6507, 2007 U.S. Dist. LEXIS 94024 (S.D.N.Y. Dec. 21, 2007); *Morton v. Nassau County Police Dep’t*, 05-CV-4000, 2007 U.S. Dist. LEXIS 87558 (E.D.N.Y. Nov. 27, 2007).

103. Michael Goldsmith, *The Supreme Court and Title III: Rewriting the Law of Electronic Surveillance*, 74 J. CRIM. L. & CRIMINOLOGY 1, 3-4 (1983).

104. *Berger v. New York*, 388 U.S. 41 (1967).

105. Remarks of Larry Strach, V.P. of Eng’g, Duos Technologies, at the U.S. Dep’t. of Homeland Security Public Workshop—CCTV: Developing Privacy Best Practices, Technology Perspectives Panel 17 (Dec. 17, 2007), available at http://www.dhs.gov/xlibrary/assets/privacy/privacy_workshop_cctv_Transcript_Technology_Perspectives_Panel.pdf.

it establishes a rule that effectively elevates place above other factors when considering the reasonableness of a privacy expectation.

Katz has had many critics,¹⁰⁶ and few commentators have seemed particularly pleased with the most recent opinion in the *Katz* line of cases, *Kyllo v. United States*.¹⁰⁷ *Kyllo* established a rule that police must obtain warrants to use sense-enhancing technologies¹⁰⁸ that are not in “general public use”¹⁰⁹ to monitor the insides of homes, but so far this rule has failed to provide much practical guidance.¹¹⁰ Meanwhile, other technologies have begun to strain the *Katz* framework and could ultimately compel the Court to reconsider the *Katz* rule. Deirdre Mulligan and Jack Lerner have argued, for instance, that digital-electricity usage readings could reveal intimate details about activities inside homes, like at what times individuals go to sleep and work and what kinds of appliances they use, and that such readings might give rise to litigation that forces courts to recon-

106. A common critique is that *Katz* sets forth a subjective and circular test. David A. Sklansky, *Back to the Future: Kyllo, Katz, and Common Law*, 72 MISS. L.J. 143, 158 (2002) (“But how are judges to tell whether society is in fact ‘prepared to recognize’ an expectation as ‘reasonable’? The inquiry has proved distressingly indeterminate, and many observers, on and off the Court, have thought it circular: an expectation of privacy is reasonable if the Court is willing to protect it.”); Anthony Amsterdam, *Perspectives on the Fourth Amendment*, 58 MINN. L. REV. 349, 384 (1974) (explaining that if Fourth Amendment privacy protection did depend on subjective expectations of privacy, “the government could diminish each person’s subjective expectation of privacy merely by announcing half-hourly on television . . . that we were all forthwith being placed under comprehensive electronic surveillance”); see also Bailey H. Kuklin, *The Plausibility of Legally Protecting Reasonable Expectations*, 32 VAL. U. L. REV. 19 (1997); Robert Morris, *Some Notes on Reliance*, 75 MINN. L. REV. 815 (1991).

107. *Kyllo v. United States*, 533 U.S. 27 (2001). See Daniel McKenzie, Note, *What Were They Smoking?: The Supreme Court’s Latest Step in a Long, Strange Trip Through the Fourth Amendment*, 93 J. CRIM. L. & CRIMINOLOGY 153 (2002); Richard H. Seamon, *Kyllo v. United States and the Partial Ascendance of Justice Scalia’s Fourth Amendment*, 79 WASH. U. L.Q. 1013, 1022 (2001) (“[T]he *Kyllo* majority did not apply the *Katz* test to the case before it.”).

108. The Supreme Court has defined sense-enhancing technologies as devices that aid police in “augmenting the sensory faculties bestowed upon them at birth.” *United States v. Knotts*, 460 U.S. 276, 284 (1983).

109. *Kyllo*, 533 U.S. at 34.

110. The rule raises questions about what constitutes general public use. The Court held “that obtaining by sense-enhancing technology any information regarding the interior of the home that could not otherwise have been obtained without physical ‘intrusion into a constitutionally protected area,’ constitutes a search—at least where (as here) the technology in question is not in general public use.” *Id.* at 34. The Court did not define “general public use” or provide any rule for determining when a technology is in general public use.

sider the third party doctrine¹¹¹ that has developed from *Katz* and perhaps even *Katz* itself.¹¹² Such technologies could readily reveal the type of information about domestic activities that *Kyllo* professed to protect—that is, “details of the home that would previously have been unknowable without physical intrusion.”¹¹³

IV. NATIONAL AND STATE LEGISLATIVE REGULATION

This Part argues that: A) Congress should pass legislation regulating video surveillance; B) this legislation could build upon the privacy protections established under the E-Government Act; and C) states should consider legislation that addresses state-level concerns related to video surveillance and that provides guidance in the absence of federal legislation.

A. Congressional Legislation

There are two reasons why Congress should regulate video surveillance. The first is that federal funding has encouraged and accelerated the adoption of video systems. The federal government should therefore impose accountability on its use.¹¹⁴ The second reason is that video surveillance raises national concerns.

The federal government has helped numerous local governments fund video systems.¹¹⁵ According to one estimate, the DHS alone has distrib-

111. The third party doctrine provides that “a person has no legitimate expectation of privacy in information he voluntarily turns over to third parties.” *Smith v. Maryland*, 442 U.S. 735, 743-44 (1979).

112. Deirdre K. Mulligan & Jack Lerner, *Taking the “Long View” on the Fourth Amendment: Stored Records and the Sanctity of the Home*, 2007 STAN. TECH. L. REV. 3, 10 (2007) (“The cultural dependence on private sector services that generate records containing personal information about activities occurring within the home are blurring the “firm line” around the home that the founders sought to protect. But it is just one example in a growing list. The Court’s disjointed approach to dataveillance and surveillance cannot sustain the privacy of the home as the framers’ or the current court envisioned it.”).

113. *Kyllo*, 533 U.S. at 40.

114. Charlie Savage, *US Doles Out Millions for Street Cameras; Local Efforts Raise Privacy Alarms*, BOSTON GLOBE, Aug. 12, 2007, at A1.

115. *Id.*; see also Tomas Alex Tizon, *Eighty Eyes on 2,400 People; If Terrorists Come to Tiny Dillingham, Alaska, Security Cameras Will be Ready. But Privacy Concerns Have Residents Up in Arms*, L.A. TIMES, Mar. 28, 2006, at A1 (explaining how DHS grants funded eighty cameras for a town of 2,400). But others have funded systems without federal help. See, e.g., Tami Abdollah, *Wanna be in Pictures? Tag in Montebello*, L.A. TIMES, Nov. 15, 2007, at B2; Mark McDonald, *\$5M Earmarked for Photo Surveillance*, PHILA. DAILY NEWS, Feb. 2, 2007 Local 08; Norberto Santana Jr., *National City Likely to Push for Bond*, SAN DIEGO UNION-TRIBUNE, May 29, 2004, at B1.

uted about \$230 million in video surveillance grants.¹¹⁶ These grants have directly funded systems in some cities and have encouraged other cities to consider installing video systems.¹¹⁷ In certain instances, the DHS grants have paid to install cameras at critical infrastructure¹¹⁸ sites and local governments have themselves paid to extend the video system to other sites.¹¹⁹ Some grants have helped to fund elaborate big-city systems. For example, the “first its kind”¹²⁰ Lower Manhattan Security Initiative, a dense system of license plate readers and public and private cameras,¹²¹ has attracted attention from press across the country¹²² and from the law enforcement community.¹²³

Federal funding may have also indirectly encouraged cities to install video systems. Once one city has a video system and word of the system begins to travel, other cities may begin to consider installing similar systems. The initial city serves as an early-adopter and maybe even a trend-setter. A visit to Chicago, for instance, inspired San Francisco Mayor Gavin Newsom to install cameras in his city.¹²⁴ The studies that have examined the impact of video systems have found the systems to have less effect on crime than alternative policing methods—like more beat officers

116. COMMENTS OF THE ELECTRONIC PRIVACY INFORMATION CENTER, *supra* note 57, at 2-3 (citing correspondence from Toby Levin, Senior Advisor, DHS Privacy Office as the source of this figure).

117. Savage, *supra* note 114. *See also* Rich Lord, *City Eyes Widened Security Camera Coverage*, PITT. POST-GAZETTE, Jan. 1, 2008, at B1; Larry Sandler, *City Camera Funding Rejected*, MILWAUKEE J. SENTINEL, June 14, 2007, at B1; Matt Stiles et al., *HPD Wants Cameras to Monitor Crime*, HOUS. CHRON., May 15, 2007, at A1;

118. *See* USA PATRIOT Act of 2001, 42 U.S.C. § 5195(c)(e) (Supp. II 2002) (defining critical infrastructure as “systems and assets, whether physical or virtual, so vital to the United States that the incapacity or destruction of such systems and assets would have a debilitating impact on security, national economic security, national public health or safety, or any combination of those matters.”).

119. *E.g.*, City of Richmond, Cal., City Council Agenda, at 5, item D (July 31, 2007).

120. *Cameras and Crime*, N.Y. POST, July 11, 2007, at 28.

121. Cara Buckley, *Police Plan Web of Surveillance for Downtown*, N.Y. TIMES, July 9, 2007, at A1.

122. *See, e.g.*, *New York Plans Heightened Security Network*, GRAND RAPIDS PRESS, Sept. 9, 2007, at G4; *Cameras to Watch Wall St., Environs*, L.A. TIMES, Sept. 7, 2007, at A27; *The Issue: Surveillance; Security Cameras Fight Terror*, ARIZ. REPUBLIC, July 15, 2007, Opinions, at 4.

123. *See, e.g.*, Linda Spagnoli, NYC Fights and WiNs! New York City Applies DHS Funding to Create the Citywide Mobile Network NYC WiN, L. ENFORCEMENT TECH., May 1, 2007, at 70.

124. Cecilia M. Vega, *Newsom Going to Big Apple for Climate Summit*, S.F. CHRON., Sept. 19, 2006, at B2.

or street lighting—that would cost the same amount of money.¹²⁵ But there are many anecdotes about the success of video systems.¹²⁶ These anecdotes—along with the visibility of early adopters, the availability of grant money, and the general desire to prevent terrorism and reduce crime—may have led some cities that would not have otherwise considered video systems to adopt them.¹²⁷ This combination of factors, in other words, may have skewed the incentives for video surveillance.¹²⁸

If the federal government is directly or indirectly pushing local governments to adopt video systems, it should push them to do so prudently. The federal government already requires its agencies to assess the impact that new technologies like video surveillance will have on privacy rights. Federal grants that fund state purchases of surveillance technologies without also requiring states to assess the privacy impact could be creating a situation that permits states to “completely circumvent congressional will that the privacy effects of technology be understood and explored and mitigated.”¹²⁹

The second reason that Congress should pass regulatory legislation is that video surveillance raises issues of national concern. The federal government sets the national security agenda.¹³⁰ It has created a complex

125. SCHLOSBERG & OZER, *supra* note 54, at 11 (“Numerous studies of existing camera programs demonstrate that they do not significantly reduce crime, especially violent crime in city centers. Furthermore, expectations that surveillance cameras will significantly increase the success rate of criminal prosecutions have not been met.”).

126. Marcus Baram, *Eye on the City: Do Cameras Reduce Crime*, ABC NEWS, July 9, 2007, <http://abcnews.go.com/print?id=3360287> (quoting Int’l Ass’n of Chiefs of Police research director John Firman as saying: “We know that cameras enhance that capacity but saying for sure that they reduced crime by 20 percent, that’s another thing. Anecdotally, we know that they have had an impact.”); *see also* Paula Lloyd, *Police Set on Dismantling Gangs*, FRESNO BEE, Apr. 3, 2008, at B4 (noting that police cameras captured a recent shooting); Scott Jason, *Chief Wants Surveillance to Discourage Theft, Graffiti*, MODESTO BEE, Feb. 21, 2007, at B01 (describing the impact that cameras have had on illegal graffiti in one California town).

127. *E.g.*, Larry Sandler, *National Ave. to Get Security Cameras*, MILWAUKEE J. SENTINEL, May 23, 2006, at A1 (discussing Milwaukee’s efforts to establish a video system, which included applying for a federal grant and sending a police captain to Chicago to learn about the system there).

128. Remarks of Deidre K. Mulligan, Director, Samuelson Law, Tech. & Pub. Pol’y Clinic, UC Berkeley School of Law, at the U.S. Dep’t. of Homeland Security Public Workshop—CCTV: Developing Privacy Best Practices, Panel on Developing Privacy Best Practices for the Use of CCTV 30 (Dec. 18, 2007).

129. *Id.*

130. *See* U.S. CONST. art. I, § 8, cl. 1, 10-12, art. II, § 2, cl. 1; *Youngstown Sheet & Tube Co v. Sawyer*, 343 U.S. 579 (1952).

statutory framework relating to surveillance and intelligence gathering.¹³¹ This infrastructure includes statutes that govern the use of invasive surveillance technologies.¹³² These statutes apply to wiretaps,¹³³ pen registers,¹³⁴ and trap-and-trace devices.¹³⁵ They do not apply to video surveillance.¹³⁶ The federal government is better positioned than lower levels of government to develop legislation that clarifies the way that video surveillance is supposed to advance the national security agenda and that explains the way that video surveillance should fit into the broader national security statutory framework.

Additionally, as video systems expand, they may take on an increasingly national character. They may even evolve into a national network similar to the American highway system or telecommunications grid.¹³⁷ The federal government could establish legal and technological standards that promote compatibility among systems and collaboration among the jurisdictions that use those systems.¹³⁸ The video systems in large cities, for instance, often consist of the overlapping systems run by agencies like the police department, the housing authority, and the transit authority. In the District of Columbia, for instance, the Metropolitan Police operate one camera system, and the National Park Police operate another.¹³⁹ In some large metropolitan areas, those systems will probably begin to stretch

131. SOLOVE, *supra* note 30, at 263-272.

132. *Id.*

133. Wiretap Act, 18 U.S.C. §§ 2510-22 (2000).

134. Pen Register Act, 18 U.S.C. §§ 3121-27 (2000).

135. *Id.*

136. SOLOVE, *supra* note 30, at 276-77.

137. The Australian government, for instance, has proposed a network of cameras and license plate readers that could form “the rudiments of a national monitoring network.” Paul Maley, *Hi-tech Crime Cameras on Roads by Next Year*, Jan. 1, 2008, THE AUSTRALIAN, at Local 1.

138. See HOMELAND SEC. COUNCIL, NATIONAL STRATEGY FOR HOMELAND SECURITY 4 (2007) (“The National Government also is responsible for developing national strategies as well as promulgating best practices, national standards for homeland security, and national plans, as appropriate.”); see also HOME OFFICE, NATIONAL CCTV STRATEGY (2007) (describing the importance of CCTV standards from the perspective of the British government); Council of Australian Governments (COAG), Special Meeting on Counter-Terrorism Communiqué (Sept. 27, 2005), <http://www.coag.gov.au/meetings/270905/index.htm> (“COAG also agreed to a national, risk-based approach to enhancing the use of CCTV for counter-terrorism purposes, including the development of a National Code of Practice for CCTV systems for the mass passenger transport sector. The Code will set a policy framework, objectives, protocols and minimum requirements.”).

139. Law Enforcement Perspectives, *supra* note 46, at 10.

across state lines.¹⁴⁰ Given such circumstances, “a national strategy,” as Senator Joe Lieberman has called it, could “help officials at the federal, state, and local levels use systems effectively to protect citizens, while at the same time making sure that appropriate civil liberties protections are implemented for the use of cameras and recorded data.”¹⁴¹

B. Scope of Federal Legislation—Learning from the E-Government Act

The E-Government Act of 2002,¹⁴² may offer a model for the type of legislation that could protect privacy interests without imposing undue burdens or restrictions on lower levels of government for video surveillance.

The E-Government Act created a federal office responsible for organizing rules and reports from various agencies into a single searchable source.¹⁴³ Congress, recognizing the privacy concerns that such a centralized and searchable database raised, included a provision that requires federal agencies to conduct “privacy impact assessments” (PIAs) whenever they buy new technologies.¹⁴⁴ “A PIA is an analysis of how personally identifiable information is collected, used, disseminated, and maintained,” and it is intended “to demonstrate that system owners and developers have consciously incorporated privacy protections throughout the entire life cycle of a system.”¹⁴⁵

140. Five of the ten most populous metropolitan areas in the country, for instance, include cities in more than one state. U.S. CENSUS BUREAU, U.S. DEP’T OF COMMERCE, CENSUS 2000: RANKING TABLES FOR METROPOLITAN AREAS (PHT-T3) tbl.3 (2001), available at <http://www.census.gov/population/cen2000/phc-t3/tab03.pdf>. A sixth metropolitan area straddles the U.S.-Canadian border. See John Wisely, *Security Gets Even Tighter on Border with Canada*, DET. FREE PRESS, Sept. 11, 2007, at 1.

141. Savage, *supra* note 114.

142. Pub. L. No. 107-347, 116 Stat. 2899, codified at 44 U.S.C. § 3501 (Supp. II 2002).

143. White House, About E-Gov: The E-Government Act of 2002, <http://www.whitehouse.gov/omb/egov/g-4-act.html> (last visited Apr. 4, 2008).

144. Memorandum from Joshua B. Bolten, Director, Office of Mgmt. and Budget to Heads of Executive Departments and Agencies, OMB Guidance for Implementing the Privacy Provisions of the E-Government Act of 2002 (Sept. 26, 2003), available at <http://www.whitehouse.gov/omb/memoranda/m03-22.html>; Privacy Impact Assessment for the SBIInet Program; Rebecca Fairley Raney, *In the Next Year, the Federal Government Will Move to Give the Public Easier Online Access to Data Services*, N.Y. TIMES, Dec. 23, 2002, at C4.

145. PRIVACY OFFICE, DEP’T. OF HOMELAND SEC., PRIVACY IMPACT ASSESSMENTS: OFFICIAL GUIDANCE 5 (2007) [hereinafter OFFICIAL GUIDANCE], available at http://www.dhs.gov/xlibrary/assets/privacy/privacy_pia_guidance_may2007.pdf.

The PIA requirement, under the E-Government Act, applies to federal agencies but does not apply to state or local governments.¹⁴⁶ Congress and federal agencies may extend requirements to the states as conditions for accepting federal funding.¹⁴⁷ The DHS has, so far, declined to extend the PIA requirement.¹⁴⁸ If the DHS installs a new video system, it must conduct a PIA.¹⁴⁹ If the DHS distributes grant money to the states and the states use that money to install the same video system, the states do not have to conduct PIAs.¹⁵⁰ This loophole in the PIA requirement allows states to use federal money while ignoring the same privacy interests that the federal government itself must attempt to protect.¹⁵¹

A requirement that state and local governments conduct PIAs before deploying video systems could serve as the kind of loose regulation that protects privacy and other policy interests while leaving those governments significant flexibility. In 2007, the DHS conducted a PIA that hints at the way a PIA requirement attached to video system grants might work in practice. The PIA was for a video system that DHS planned to deploy along the Arizona-Mexico border as part of its Secure Border Initiative (SBInet).¹⁵² The SBInet PIA specified how long the system would retain footage, who would have access to it and to camera controls, and what

146. See 44 U.S.C. § 3501 sec. 208 (Supp. II 2002).

147. *South Dakota v. Dole*, 483 U.S. 203, 206 (1987) (“Incident to [the spending power] power, Congress may attach conditions on the receipt of federal funds, and has repeatedly employed the power ‘to further broad policy objectives by conditioning receipt of federal moneys upon compliance by the recipient with federal statutory and administrative directives.’”).

148. Remarks of Toby M. Levin, Senior Advisor to the Dep’t. of Homeland Security Privacy Office, at the U.S. Dep’t. of Homeland Security Public Workshop—CCTV: Developing Privacy Best Practices, Panel on Developing Privacy Best Practices for the Use of CCTV 30 (Dec. 17, 2007), http://www.dhs.gov/xlibrary/assets/privacy/privacy_workshop_cctv_Transcript-_Developing_Privacy_Best_Practices_Panel.pdf.

149. The agency must conduct a PIA when “developing or procuring any new technologies or systems that handle or collect personally identifiable information.” Personally identifiable information “is any information that permits the identity of an individual to be directly or indirectly referred.” OFFICIAL GUIDANCE, *supra* note 145, at 8, 5.

150. Remarks of Deidre K. Mulligan, Director, Samuelson Law, Tech. & Pub. Pol’y Clinic, UC Berkeley School of Law, at the U.S. Dep’t. of Homeland Security Public Workshop—CCTV: Developing Privacy Best Practices, Panel on Developing Privacy Best Practices for the Use of CCTV 30 (Dec. 17, 2007), http://www.dhs.gov/xlibrary/assets/privacy/privacy_workshop_cctv_Transcript-_Developing_Privacy_Best_Practices_Panel.pdf.

151. *Id.*

152. DEP’T. OF HOMELAND SEC., PRIVACY IMPACT ASSESSMENT FOR THE SBINET PROGRAM 2 (2007) [hereinafter SBINET PIA], http://www.dhs.gov/xlibrary/assets/privacy/privacy_pia_cbp_sbinet.pdf.

kind of training those individuals would receive.¹⁵³ The PIA provided that internal system checks like passwords and periodic audits would guard against unwanted access or misuse.¹⁵⁴ And it required DHS to create policies and procedures that accounted for privacy interests.¹⁵⁵

In the end, the PIA process forced DHS to create a set of practical rules that applied to a specific video system. These rules are a form of regulation. They apply to the way users operate a system. In that sense, they are similar to the policies and procedures that local governments have created for more traditional police matters like pursuit and use-of-force. The traditional policies govern the use of a gun or patrol car while the rules the PIA helped to generate govern the use of a video system.

Congress could extend the PIA requirement to state and local governments through legislation that requires state and local governments that spend federal funds on video systems conduct PIAs, or take similar measures that achieve the same results that PIAs would. This legislation could, for instance, require that state and local governments develop written policies and procedures governing the use of video systems. The legislation could further require those policies to address a set of specified issues like who will have access to the system and how long the system will retain video footage. The process of addressing those issues could indirectly force state and local governments to work through PIA-style questions and could, like a PIA, culminate in the creation of ground-level regulation with built-in privacy protections.

C. State Legislation

State legislation could not provide all the benefits that federal legislation could. It could not integrate video surveillance into the existing federal surveillance statutory framework, and it could not articulate the relationship between video surveillance and national security goals. Nor could state legislation set national standards in the way that federal legislation could. However, although not sufficient, state legislation could serve as a substitute or even a supplement for federal legislation.

State-level legislation offers three principal benefits. The first is that video surveillance legislation fits within a state's police power.¹⁵⁶ Califor-

153. *Id.* at 8-12.

154. *See id.* at 10-11.

155. *Id.* at 4.

156. Within the federal system, while the federal government is one of limited powers, the states, as sovereign entities, retain the general police power—the power to regulate public health, safety, morals, and welfare. The Tenth Amendment reserves the police power to the states. U.S. CONST. amend. X. (“The powers not delegated to the United

nia, for one, has already imposed limited regulations on some types of video surveillance. It requires local governments to keep footage for at least a year if the video system that recorded that footage was “designed to record the regular and ongoing operations of the departments . . . including mobile in-car video systems, jail observation and monitoring systems, and building security taping systems.”¹⁵⁷ This statute does not apply to the footage collected through the surveillance of public areas like street corners and parks.¹⁵⁸ A similar statute, however, could build upon it and require that police departments retain footage for at least a certain period of time, or for less than a certain period of time. The state could even simply require departments to have stated retention policies.

The second principal benefit is that states distribute grants from the federal government (particularly DHS) to local governments.¹⁵⁹ The states are conduits through which requests and financial grants from the federal government must pass. States could impose an E-Government-style PIA requirement on grant applicants or recipients. Such a requirement would offer the same advantages that a similar federal-level PIA requirement would. The third principal benefit is that state legislation could address the manner in which video surveillance or other new technologies interact with state-level privacy protections.¹⁶⁰

V. LOCAL REGULATION

Local regulation would generally take the form of a set of written policies and procedures that govern the use of video systems. Some of the cities that have developed video surveillance policies have required their city

States by the Constitution, nor prohibited by it to the states, are reserved to the states respectively, or to the people.”).

157. CAL. GOV'T CODE § 34090.6(c) (Supp. 2008).

158. Public video surveillance would be occurring in the locations provided in the statute and would not be intended to monitor the “operations of the departments.” *Id.*

159. Remarks of Amy Lassi, Federal Emergency Management Agency Grant Program Directorate, at the U.S. Dep't. of Homeland Security Public Workshop—CCTV: Developing Privacy Best Practices, Community Perspectives Panel 21 (Dec. 17 2007), available at http://www.dhs.gov/xlibrary/assets/privacy/privacy_workshop_cctv_-_Transcript_Community_Perspectives_Panel.pdf (discussing the process for distributing grants).

160. Several states have constitutional privacy protections that are stronger than their federal-level counterparts. The California and Hawaii provisions are among the most notable. See Stephen E. Henderson, *Learning from All Fifty States: How to Apply the Fourth Amendment and Its State Analogs to Protect Third Party Information From Unreasonable Search*, 55 CATH. U. L. 373, 428 (2006).

councils to approve them;¹⁶¹ others have allowed their police departments to adopt policies as internal administrative rules.¹⁶² Existing policies tend to address the same issues that the SBInet PIA addressed. These issues include what the purpose of the system is, how to notify people that cameras are recording them, how to train system operators, and how long to retain video footage.¹⁶³

These written ground-level policies are indispensable. Federal and state regulation will not succeed without local action. It is local governments that intimately understand systems work. It is local governments that know what kinds of policies would work best with those systems. In California, for instance, San Francisco does not have officers watching surveillance feeds in real-time; officers may access footage only after the fact, if investigating a crime.¹⁶⁴ The Central Valley town of Clovis, by contrast, not only requires officers to actively watch video feeds but transmits those feeds to patrol cars so that officers can access them from the field.¹⁶⁵

Good policies benefit not only privacy interests but also local governments themselves. Policies could help to reduce the odds of misuse and of potential civil liability that might arise from the misuse of video systems.¹⁶⁶ They could help build community support by showing that police

161. See, e.g., S.F., CAL., COMMUNITY SAFETY CAMERA ORDINANCE § 19 (2006); D.C. Metropolitan Police Dep't, CCTV—Policies and Procedures, <http://mpdc.dc.gov/mpdc> (follow "Programs & Resources" link from left-hand navigation menu; select "Closed Circuit Television (CCTV)" from list of resources; then select "Policies & Procedures" from left-hand navigation menu) (last visited Apr. 4, 2008).

162. City of Clovis, Cal. Police Dep't., Closed Circuit Television System Policy; City of Richmond, Cal. Police Dep't., Use of Closed Circuit Television Cameras: Public Camera Policy and Procedure.

163. Compare SBINET PIA, *supra* note 152, and City of Santa Monica, Cal. Police Dep't., Public Video Security System Policy (2006). See also, City of Stockton Police Dep't., General Order J-1, Closed Circuit Television Cameras (2007); City of Palm Springs Police Dep't., General Order, Downtown Video Surveillance Camera Policy, General Order 2002-05 (2002).

164. S.F., Cal., Community Safety Camera Ordinance § 19 (2006).

165. Law Enforcement Perspectives, *supra* note 46, at 5-6.

166. Police misconduct could lead to constitutional actions, under 42 U.S.C. 1983, and, in some states, tort claims against local governments. 3 ANTIEAU ON LOCAL GOVERNMENT LAW § 38.02 (2d ed. 2007). Both officers and local governments can be held liable for constitutional violations. 42 U.S.C. § 1983 (2000) ("Every person who, under color of [law], subjects, or causes to be subjected, any citizen of the United States or other person within the jurisdiction thereof to the deprivation of any rights, privileges, or immunities secured by the Constitution and laws, shall be liable . . . for redress."). Municipal liability, as opposed to the liability of individual officers, can be found "only where the municipality *itself* causes the constitutional violation at issue . . . 'It is only

intend to use what is sometimes a controversial technology in a responsible way.¹⁶⁷ And they could improve system effectiveness by ensuring that police use the systems in an optimal way and for the stated purpose.

VI. CONCLUSION: TRAINING AND BEST PRACTICES

Legal history is full with examples of laws that failed because individuals ignored them or only nominally followed them.¹⁶⁸ To succeed, laws must shape behavior and become incorporated into custom and habit.¹⁶⁹ Video surveillance regulation is no different. If the police departments do not appreciate the goals of video surveillance regulation, they can probably figure out a way to work around it.¹⁷⁰ But there is reason to believe that the law enforcement community wants to use video systems in a manner that respects privacy rights and that it wants to develop and promote best practices.¹⁷¹ To make the most of this support, the law enforcement community and privacy activists must work together to develop and push through regulation now. They must act while the video surveillance infrastructure is still being built and can still be designed to incorporate privacy concerns. If they wait, it will be that much harder to try to build privacy protections into a completed surveillance infrastructure.

when the 'execution of the government's policy or custom . . . inflicts the injury' that the municipality may be held liable under § 1983.'" *City of Canton v. Harris*, 489 U.S. 378, 385 (1989). A written CCTV policy can help prevent misuse. CONSTITUTION PROJECT, *supra* note 11, at xii. And while the existence of a policy could not, on its own, prove a particular custom, it could serve as evidence of one. *St. Louis v. Praprotnik*, 485 U.S. 112, 127 (1988).

167. Ken Hampian, *How to Cure (or at Least Treat) the Video Monitoring Heebie Jeebies*, PUB. MGMT., Apr. 2007, at 25.

168. Thomas B. Stoddard, *Bleeding Heart: Reflections on Using the Law to Make Social Change*, 72 N.Y.U. L. REV. 967 (1997).

169. *Id.*

170. W. Dwayne Orrick, *Developing a Police Department Policy-Procedure Manual*, BIG IDEAS FOR SMALLER POLICE DEPARTMENTS (Int'l Ass'n of Chiefs of Police, Alexandria, Va.) at 11 (Winter 2005) (explaining that "the custom is policy . . . Informal customs attack the credibility of the department's operational procedures and administration"). There is also an abundance of literature regarding the failure of the warnings the Court established in *Miranda v. Arizona*, 384 U.S. 436 (1966), to adequately protect suspects from coercive police practices. Richard A. Leo, *Miranda's Revenge: Police Interrogation as a Confidence Game*, 30 LAW & SOC'Y REV. 259 (1996); Richard A. Leo & Welsh S. White, *Adapting to Miranda: Modern Interrogators' Strategies for Dealing with the Obstacles Posed by Miranda*, 84 MINN. L. REV. 397 (1999).

171. Law Enforcement Perspectives, *supra* note 46, at 14.

ADDITIONAL DEVELOPMENTS— PRIVACY

PICHLER v. UNITE

446 F. Supp. 2d 353 (E.D. Pa. 2006)

The United States District Court for the Eastern District of Pennsylvania ruled that the Union of Needletrades Industrial & Textile Employees AFL-CIO (“UNITE”) had violated the Driver’s Privacy Protection Act (DPPA) by recording the license plate numbers of vehicles in employee parking lots and using the numbers to obtain employees’ names and addresses from state motor vehicle records, a method sometimes referred to as “tagging.” On cross-motions for summary judgment, the court found UNITE liable and awarded statutory damages of \$2,500 to each named plaintiff. As part of a unionization drive, UNITE recorded license plate numbers from vehicles in the parking lot of Cintas. UNITE used Westlaw and private investigators to match license plate information with employees’ names and addresses.

The DPPA, 18 U.S.C. §§ 2721-2725, limits the release or use of personal information that State Departments of Motor Vehicles (DMVs) have on vehicle owners and sets civil penalties for violations. Section 2721(a)(1) of the DPPA forbids state officials from “knowingly disclos[ing] or otherwise mak[ing] available to any person or entity . . . personal information . . . about any individual obtained by the [DMV] in connection with a motor vehicle record.” Section 2724 provides for a civil cause of action: “A person who knowingly obtains, discloses or uses personal information from a motor vehicle record, for a purpose not permitted under this chapter shall be liable to the individual to whom the information pertains, who may bring a civil action in a United States district court.”

The DPPA contains fourteen exceptions, and UNITE claimed two of them as a defense: the “litigation exception” and the “government entity exception.” The former authorizes the use of personal information “in connection with any civil, criminal, administrative, or arbitral proceeding.” The latter allows access “for use by any government agency, including any court or law enforcement agency, in carrying out its functions, or any private person or entity acting on behalf of [a government agency] in carrying out its functions.”

The court held that the litigation exception did not apply, because at the time of the Cintas campaign, UNITE was “finding” new claims, not investigating them within the meaning of the statute. UNITE also claimed the “acting on behalf of a government agency” exception, arguing it was “playing the role of a ‘private attorney general’ in eradicating discrimination at Cintas.” The court ruled that UNITE did not qualify for this exception, because UNITE failed to show how any of its actions during the Cintas campaign were carried out on behalf of any government agency.

*IMS HEALTH INC. V. AYOTTE**490 F. Supp. 2d 163 (D.N.H. 2007)*

In *IMS Health*, the United States District Court for the District of New Hampshire struck down on First Amendment grounds a New Hampshire statute, 2006 N.H. Laws § 328, that prohibited the transfer and use of prescriber-identifiable information for certain commercial purposes. Specifically, the court held: (1) that the plaintiffs' First Amendment challenge was proper because the challenged statute restricted protected speech, (2) that intermediate, as opposed to strict, scrutiny applied because the statute affected only commercial speech, and (3) that the statute did not survive intermediate scrutiny. It granted the plaintiffs' motion for declaratory relief and a permanent injunction.

In reaching its holding, the court relied on a New Hampshire state court's detailed factual findings. The plaintiffs were two data mining companies, *IMS Health Inc.* and *Verispan, LLC.*, whose business entailed buying prescription drug information from pharmacies and other outlets throughout the United States, including New Hampshire. The companies then stripped the data to remove any patient-identifiable information, aggregated the data by prescriber (usually, by individual doctor), combined it with other publicly available sources, and sold or otherwise provided the complete package of information on doctors' prescription habits to third parties like pharmaceutical companies, researchers, and analysts. Pharmaceutical company clients of the plaintiffs used the data primarily for marketing purposes, including to help sales representatives better target and tailor promotional and educational pitches, known in the industry as the "detailing" of drugs, to particular doctors.

The court examined the statute and its legislative history, observing the New Hampshire state legislature's concern that "detailing and related practices violated physician and patient privacy and increased health care costs in the state. The court explained that the New Hampshire Senate had considered pharmaceutical industry-related testimony, including as to the impropriety in gifts and perks that pharmaceutical company representatives gave to doctors based on prescriber information gleaned from companies like the plaintiffs. According to the court, the state senate concluded that doctors prescribed fewer generics because detailing influenced them, which in turn raised healthcare costs. The court found that the legislation—the first of its kind in the United States—was enacted in part to reduce drug costs.

The statute provided that "records relative to prescription information containing patient-identifiable and prescriber-identifiable data shall not be licensed, transferred, used or sold...for any commercial purpose" with some exceptions, but expressly "includ[ing]...advertising, marketing, promotion, or any activity that could be used to influence" sales or prescriber behavior in New Hampshire." The statute went into effect in 2006, and the plaintiffs substantially complied with it.

IMS Health and *Verispan* challenged the statute on the grounds that it restricted First Amendment-protected free speech. The court agreed with the plaintiffs that the statute restricted protected commercial speech, by restricting both the disclosure of prescription information and later speech based on the information (the drug companies' sales and marketing efforts). The court held that the factual and scientific nature of the information was immaterial to free speech analysis.

Having established that the statute affected protected speech, the court next considered whether the speech impinged was commercial and therefore warranted intermediate

scrutiny rather than strict scrutiny under applicable First Amendment jurisprudence. The court held the statute's explicit application to only commercial use dispositive, such that intermediate scrutiny applied.

The court then applied the three-part framework for intermediate scrutiny that the Supreme Court laid out in *Central Hudson Gas & Electric Corp. v. Public Service Commission*, 447 U.S. 557 (1980). The *Central Hudson* test first asks whether the government actor defending a speech-restricting statute has identified a substantial government interest that the regulation supports. The New Hampshire Attorney General put forth three potential interests: promoting the privacy of prescribing doctors, promoting public health, and reducing health care costs. The court held that the statute did not address any substantial privacy interest, for prescribing doctors work in closely-regulated industry and therefore have diminished expectations of privacy. The court also distinguished cases recognizing a state's interest in protecting consumers, not trained professionals like doctors, from commercial solicitation.

As to the public health and care cost reduction rationales, the court proceeded past the *Central Hudson* test's first step—whether a substantial government interest exists—to a consideration of whether the challenged law directly advanced the government interest (*Central Hudson* step 2) and was not more restrictive than necessary to do so (step 3). It found fault in the chain of reasoning the legislature used to justify the law. The court held that the link from provision of prescriber-identifiable data, to the effect on detailing practices, to increase prescriptions of brand-name drugs, to eventual increased costs was too weak to qualify as “directly advancing” the proffered state interests.

MINNESOTA'S PLASTIC CARD SECURITY ACT

Minn. Stat. § 325.E64 (2007)

In response to credit card data breaches, Minnesota enacted the Plastic Card Security Act (“the Act”) imposing strict liability on merchants who retain a customer’s credit or debit card security data. The law applies to all merchants accepting payments from Minnesota residents, regardless of the merchant’s physical location. The Act is the first of its kind, and codifies a requirement of the Payment Card Industry Data Security Standard (PCI DSS).

Under the Act, merchants must not retain card security code data, PIN verification code numbers, or the full contents of any track of magnetic stripe data subsequent to the authorization of the transaction. In the case of PIN debit transactions, the data may be maintained a maximum of 48 hours. The Act’s restrictions on data retention have been in force since August 1, 2007, while provisions authorizing liability take effect on August 1, 2008.

If a merchant retains data in violation of the Act, and a security breach occurs, the merchant may be held strictly liable for any resulting damages. The Act defines security breach as an “unauthorized acquisition of computerized data that compromises the security, confidentiality, or integrity of personal information maintained by the person or business.” In addition, merchants are liable for breaches caused by their service providers. Financial institutions affected by the breach can recover from the merchant the costs of reasonable action undertaken to remedy the damage, including any payments by that financial institution to its cardholders, as a result of the breach.