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FOREWORD

Vanessa K. Ing[†] and *Joyce C. Li*^{††}

The Annual Review is a yearly publication of the *Berkeley Technology Law Journal* that provides a summary of many of the year's major developments at the intersection of law and technology. Our aim is to provide a valuable resource for judges, policymakers, practitioners, students, and scholars. Each Note provides a primer on a particular area of law, a development in that area of law, and commentary on that development.

The seventeen Notes in this issue continue a tradition of covering a wide range of topics. The Notes address developments in patent, copyright, trademark, and privacy, as well as technology-focused regulations and legislature. Following the Notes in each area of law, we have included a Survey of Additional IP Developments, which contains brief descriptions of important issues that were not addressed in the Notes.

I. PATENT LAW

The first Note¹ in this Section unpacks the Supreme Court's decision in *Life Technologies v. Promega*² in light of its objectives as the court of last resort. This Note explores the role the presumption against extraterritoriality has played in shaping U.S. patent law and the Court's deference to the presumption: The Court continues to limit the reach of U.S. patent law overseas, even when Congress created a specific statutory exception.

The second Note³ analyzes the Supreme Court's decision in *Samsung Electronics Co. v. Apple Inc.*,⁴ which introduced apportionment to the world of design patent damages ignoring legislative intent and precedent. This Note presents flaws in the Supreme Court's textual argument and suggests that the

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1. Katharine Cummings, Note, *Just Out of Reach: Congress, Courts, and Industry Struggle to Define the Scope of U.S. Patent Law Overseas*, 33 *BERKELEY TECH. L.J.* 861 (2018).

2. 137 S. Ct. 734 (2017).

3. Ted Kang, Note, *Samsung v. Apple: The Ill-fated Introduction of Apportionment-by-Component for Designs*, 33 *BERKELEY TECH. L.J.* 889 (2018).

4. 137 S. Ct. 429 (2016).

legislative branch was better suited to revise an outdated law. Finally, the Note examines the aftermath of the Supreme Court's decision still playing out in the lower courts and evaluates the chosen test for identifying the relevant article of manufacture.

The third Note⁵ examines the Supreme Court's decision in *SCA Hygiene Products Aktiebolag v. First Quality Baby Products, LLC*,⁶ where the Court held that defendants in patent infringement suits may not bring the defense of laches to bar damages within the six-year statutory period. This Note argues that the removal of laches fails to serve the fundamental purposes of laches and opens up opportunities for abuse by encouraging patent owners to silently wait until infringing products are well-developed and integrated into the industry.

The fourth Note⁷ discusses the Supreme Court's decision in *Impression Products v. Lexmark International*,⁸ which applies patent exhaustion to both conditional sales and foreign sales. This Note proposes an alternative framework which allows a narrow exception to the patent exhaustion to balance patent owners' rights and consumers' rights.

The last Note⁹ in this Section summarizes the background, reasoning, and aftermath of the Supreme Court's decision in *TC Heartland v. Kraft*,¹⁰ which narrowed venue for corporate defendants in patent infringement actions. Looking forward, the Note evaluates how judicial interpretations of the patent venue statute and legislative reform could better serve the policies at the intersection of patent law and venue.

II. COPYRIGHT LAW

The first Note¹¹ in this Section examines the role of human moderation on social media platforms for purposes of copyright infringement liability. The Note critiques the Ninth Circuit's *Mavrix v. LiveJournal*¹² decision, in which agency law is applied to determine whether such moderation undermines the legal protections afforded to Internet service providers. The Ninth Circuit's

5. Chris Chuang, Note, *SCA v. First Quality: Letting Go of Laches in Patent Law*, 33 BERKELEY TECH. L.J. 917 (2018).

6. 137 S. Ct. 954 (2017).

7. Hye Jin Kim, Note, *Avoiding Patent Exhaustion at Home and Abroad: Impression Products v. Lexmark International*, 33 BERKELEY TECH. L.J. 945 (2018).

8. 137 S. Ct. 1523 (2017).

9. Melissa Wee, Note, *TC Heartland v. Kraft and the Resurrection of the Place of Incorporation or "Regular and Established Place of Business" Test for Patent Venue*, 33 BERKELEY TECH. L.J. 981 (2018).

10. 137 S. Ct. 1514 (2017).

11. Katherine Burkhart, Note, *Mavrix v. LiveJournal: Unsafe Harbors in the Age of Social Media*, 33 BERKELEY TECH. L.J. 1015 (2018).

12. *Mavrix Photographs, LLC v. LiveJournal, Inc.*, 873 F.3d 1045 (9th Cir. 2017).

approach, this Note argues, is not only fundamentally at odds with the goals underlying copyright law itself, but a departure from modern dealings with online platforms, as well.

The second Note¹³ evaluates the Ninth Circuit's decision in *Fox Television Stations, Inc. v. Aereo LLC*,¹⁴ which held that Internet video retransmitters are not eligible for the Copyright Act's section 111 compulsory license. By examining the lengthy legislative history behind section 111 and the current regulatory backdrop of telecommunications, this Note argues that the *Aereo* decision breaks with a national policy tradition that favors television innovation, and pairs uncomfortably with the U.S. Supreme Court's decision in *American Broadcasting Companies, Inc. v. Aereo, Inc.* to create a legal roadblock that gives Internet retransmitters the burden of cable system designation, but not the benefits of any statutory license.

The third Note¹⁵ criticizes the Copyright Office's recent Section 1201 Report for rejecting the nexus to copyright infringement requirement for liability, most notably put forth by the Federal Circuit's 2004's *Chamberlain* decision, of section 1201 of the DMCA and argues that instead Congress should amend the anti-circumvention provisions to require this nexus. This note examines the history of the DMCA's Passage, the harm to innovation and erosion of fair use caused by its passage, and the circuit split borne of its unclear language. The note concludes that Congress should disregard the Copyright Office's advice and instead amend section 1201 to require a nexus to copyright infringement as this would be the simplest solution to correct the harms of its passage and end the chilling effect on legal activities that benefit the public.

The fourth Note¹⁶ analyzes the Supreme Court's decision in *Star Athletica v. Varsity Brands*,¹⁷ where the Court created a new separability test for copyright's useful article doctrine. This Note explores the aftermath of the opinion, providing a summary of scholars' concerns and interpretations, and examining a few of the cases that have since used the new test. This Note argues that, in light of these concerns and the new test, courts should keep in mind certain limiting principles when applying the test in order to avoid

13. Dina Ljekperic, Note, *Fox Television Stations, Inc. v. Aereo LLC: How the Narrow Framework of the 1976 Copyright Act Cut the Cord on Internet Television Retransmissions*, 33 BERKELEY TECH. L.J. 1037 (2018).

14. 851 F.3d 1002 (9th Cir. 2017).

15. Derek Russell Chipman, Note, *More Breaking, Less Rulemaking: Why Congress Should Go Beyond the Copyright Office's 1201 Report and Amend the DMCA to Require a Nexus to Infringement*, 33 BERKELEY TECH. L.J. 1067 (2018).

16. Trenton Davis, Note, *A Missed Opportunity: The Supreme Court's New Separability Test in Star Athletica*, 33 BERKELEY TECH. L.J. 1091 (2018).

17. 137 S. Ct. 1002 (2017).

providing copyright protection to functional aspects of useful articles.

This fifth Note¹⁸ evaluates the Ninth Circuit's recent decision to uphold the constitutionality of national security letter nondisclosure orders, which are routinely imposed upon ISPs that have received government demands for user information. The Note argues that the court should have found that such nondisclosure orders constitute invalid prior restraints on political speech.

The last Note¹⁹ in this Section examines the Ninth Circuit's decision in *Antonick v. Electric Arts*,²⁰ where the court held that expert testimony was not relevant under the intrinsic prong of the extrinsic/intrinsic test, a test for determining non-literal copyright infringement. The note examines software copyright infringement cases in other Circuits and argues that courts should allow expert testimony in software copyright cases.

III. TRADEMARK LAW

The first Note²¹ in this Section evaluates the Ninth Circuit's decision in *Elliott v. Google*,²² where the court held that verb usage of a registered trademark does not render that mark generic under the Lanham Act. Analyzing the evolution of branding techniques, this note hypothesizes how the decision in Elliott could further incentivize companies to circumvent the restrictions set by the genericide doctrine.

The second and last Note²³ in this Section examines the Supreme Court's decision in *Matal v. Tam*,²⁴ which held the disparagement provision of the Lanham Act to be unconstitutional. This Note applies the *Tam* analysis to trademark dilution and discusses the potential implications of the current state of trademark law.

18. Rachel Dallal, Note, *Speak No Evil: National Security Letters, Gag Orders, and the First Amendment*, 33 BERKELEY TECH. L.J. 1115 (2018).

19. Ran Duan, Note, *Antonick v. Electronic Arts: Expert Witnesses and Software Copyright Infringement*, 33 BERKELEY TECH. L.J. 1147 (2018).

20. 841 F.3d 1062 (9th Cir. 2016).

21. Christopher Brown, Note, *Let Me Google that for You: Elliot v. Google and its Conflicts with the Genericide Doctrine in a Digital Age*, 33 BERKELEY TECH. L.J. 1169 (2018). 860 F.3d 1151 (9th Cir. 2017), cert. denied, 138 S. Ct. 362 (2017)

22. 860 F.3d 1151 (9th Cir. 2017), cert. denied, 138 S. Ct. 362 (2017).

23. Zahraa Hadi, Note, *If Disparagement is Dead, Dilution Must Die Too*, 33 BERKELEY TECH. L.J. 1189 (2018).

24. 137 S. Ct. 1744 (2017).

IV. PRIVACY LAW

The first Note²⁵ in this Section analyzes how courts are applying the particularity requirement of the Fourth Amendment to cloud content. The Note asserts that the approaches taken by the courts can be organized into four categories and explores existing and novel methods to satisfy the particularity requirement.

The second and last Note²⁶ in this Section discusses the meaning of personally identifiable information (PII) in the Video Privacy Protection Act (VPPA) to understand what scope of protection should be implemented for digital identifiers, following a trend of VPPA cases against online service providers. This Note examines broad and narrow interpretations of PII implemented by district courts and concludes that a broad interpretation of PII best fits the VPPA's purpose and congressional intent.

V. REGULATION AND LEGISLATURE

The first Note²⁷ in this Section focuses on the Supreme Court's decision in *Sandoz Inc. v. Amgen Inc.*,²⁸ which interprets critical provisions of the Biologics Price Competition and Innovation Act (BPCIA). It begins by providing a summary of recent cases and clarity about the remedies associated with the BPCIA. The Note then argues that *Sandoz* may be inconsistent with the greater purpose and text of the BPCIA, and the decision may have unintended consequences as a result. For instance, the Supreme Court's holding may incentivize pay-for-delay settlements, and force reference product sponsors to "blindly litigate" all of its patents early. *Sandoz* still left many questions open and much of the BPCIA requires more interpretation. The Note concludes that lower courts will continue to face challenges with interpreting the BPCIA and reconciling it with rules of civil procedure and discovery.

The final Note²⁹ examines the different paradigms for interpreting the meaning of "unauthorized access" under the Computer Fraud and Abuse Act (CFAA) and the implications of each paradigm for algorithmic auditors and online competitors whose work aims to root out discrimination in online

25. Bihter Ozedirne, Note, *Fourth Amendment Particularity in the Cloud*, 33 BERKELEY TECH. L.J. 1221 (2018).

26. Yarden Kakon, Note, *"Hello, My Name is User #101": Defining PII Under the VPPA*, 33 BERKELEY TECH. L.J. 1249 (2018).

27. Rithika Kulathila, Note, *BPCIA Update: Entropy is the Price of an Ordered Framework*, 33 BERKELEY TECH. L.J. 1275 (2018).

28. 137 S. Ct. 1664 (2017).

29. Annie Lee, Note, *Algorithmic Auditing and Online Competition Under the CFAA: The Revocation Paradigm of Interpreting Access and Authorization*, 33 BERKELEY TECH. L.J. 1305 (2018).

artificial intelligence algorithms. It examines the Ninth Circuit's recent articulation of a new revocation paradigm in *Facebook v. Power Ventures*,³⁰ and argues that while the new paradigm brings some clarity to the notoriously vague statute, it also creates a powerful ability for dominant online platforms to single out third parties for access denial, which is particularly problematic for algorithmic auditors and competitors. Finally, the Note calls for renewed interest in legislative reform of the CFAA to narrow the scope of the statute by adding an additional scienter requirement.

30. 844 F.3d 1058 (9th Cir. 2016), *cert. denied*, 138 S. Ct. 313 (2017).

JUST OUT OF REACH: CONGRESS, COURTS, AND INDUSTRY STRUGGLE TO DEFINE THE SCOPE OF U.S. PATENT LAW OVERSEAS

Katharine H. Cummings[†]

I. INTRODUCTION

Since the first Congress enacted the original Patent Act in 1790, Congress has generally continued to limit the reach of United States patent law to activity within the nation’s borders.¹ Congress wrote this limitation into the current Patent Act, restricting its reach to activity within and imports into the United States.² The presumption against extraterritoriality—a tool of statutory interpretation—reinforces the statute’s express geographic limitations. This is the presumption that “legislation of Congress, unless a contrary intent appears, is meant to apply only within the territorial jurisdiction of the United States.”³ The presumption against extraterritoriality applies “‘unless there is the affirmative intention of the Congress clearly expressed’ to give a statute extraterritorial effect.”⁴

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1. *See* Patent Act of 1790, ch. 7, § 4, 1 Stat. 109, 111 (“[I]f any person or persons shall devise, make, construct, use, employ, or vend within these United states, any art, manufacture, engine, machine or device . . . the sole and exclusive right of which shall be so as aforesaid granted by patent . . .”).

2. *See* 35 U.S.C. § 271(a) (2012) (“Except as otherwise provided in this title, whoever without authority makes, uses, offers to sell, or sells any patented invention, within the United States or imports into the United States any patented invention during the term of the patent therefor, infringes the patent.”).

3. *Foley Bros. v. Filardo*, 336 U.S. 281, 285 (1949) (applying the presumption against extraterritoriality to hold that a federal employment statute did not apply to work performed in foreign countries); *see also* *Microsoft Corp. v. AT&T Corp.*, 550 U.S. 437, 454–55 (2007) (“The presumption that United States law governs domestically but does not rule the world applies with particular force in patent law.”).

4. *Morrison v. Nat’l Australia Bank Ltd.*, 561 U.S. 247, 255 (2010) (quoting *EEOC v. Arabian Am. Oil Co.*, 499, U.S. 244, 248 (1991)).

In 35 U.S.C. § 271(f),⁵ enacted in 1984,⁶ Congress expressly rebutted patent law's strong presumption against extraterritoriality⁷ by allowing infringement liability based on certain extraterritorial actions.⁸ The exact limits of § 271(f), however, were not clear.

The Supreme Court addressed § 271(f) in *Life Technologies v. Promega*.⁹ In *Life Technologies*, Promega alleged infringement against Life Technologies for exporting one component of a patented multicomponent product from the United States to be assembled abroad.¹⁰ The Federal Circuit interpreted the statute broadly and greatly expanded the reach of U.S. patent law overseas.¹¹ The Supreme Court reversed. It determined that a party exporting a single component of a multicomponent patented invention for assembly abroad does not infringe under § 271(f)(1).¹² The Court elected not to address issues surrounding induced infringement, but rather allowed those issues to percolate in the lower courts.¹³

The Supreme Court correctly restrained the extraterritorial application of § 271(f) in *Life Technologies*. Although § 271(f) explicitly provides for some extraterritorial application, the precise bounds of the statute's extraterritorial

5. 35 U.S.C. § 271(f) (2012).

6. Patent Law Amendments Act of 1984, Pub. L. No. 98-622, 98 Stat. 3383 (1984) (codified as amended in scattered sections of Title 35 in the United States Code).

7. See *Microsoft Corp.*, 550 U.S. at 442.

8. 35 U.S.C. § 271(f) (2012) states:

(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.

(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.

9. 137 S. Ct. 734 (2017).

10. See *id.* at 738.

11. *Promega Corp. v. Life Techs. Corp.*, 773 F.3d 1338, 1356 (Fed. Cir. 2014), *rev'd and remanded*, 137 S. Ct. 734 (2017).

12. See *Life Techs.*, 137 S. Ct. at 737.

13. See *Life Techs. Corp. v. Promega Corp.*, 136 S. Ct. 2505 (2016) (writ of certiorari granted limited to Question 2).

reach are unclear. The section should not be interpreted to allow for unjustifiably broad extraterritorial application of United States patent law. The long history of restrictions on extraterritorial applications of United States patent law counsels toward a narrow reading of § 271(f). While some practitioners have lamented the Court's decision to strike down the Federal Circuit's broad interpretation of § 271(f) without providing its own thorough interpretation of the statute or analysis of its elements, the Supreme Court's minimalist decision befits its status as a court of last resort. By declining to articulate the precise bounds of § 271(f), the Court correctly declined to issue an advisory opinion.¹⁴ Rather, the Court opted to allow lower courts to address the limits of § 271(f).

Part II of this Note discusses the history of the presumption against extraterritoriality and the presumption's application to U.S. patent law. Part II also explores the origin of § 271(f) and Congress's intent to rebut the presumption against extraterritorial application. Part III sets forth the *Life Technologies v. Promega* case, the Federal Circuit's expansive opinion, and the Supreme Court's concise reversal. Part IV analyzes the Supreme Court's opinion in *Life Technologies* in light of its objectives as the court of last resort. Part V concludes that, while the Court's opinion may not have been as comprehensive as practitioners and others would have liked, it did succeed in restraining the external expansion of U.S. patent law while enabling future clarification and interpretation of § 271(f).

II. THE PRESUMPTION AGAINST EXTRATERRITORIALITY SHAPES U.S. PATENT LAW

The presumption against extraterritoriality has origins in patent law dating back over 150 years.¹⁵ In light of this long history, the Supreme Court has been hesitant to rebut the presumption, even when Congress has expressly communicated a desire to expand the reach of U.S. patent law overseas, as it did in § 271(f).¹⁶ The Court's resistance is partly due to § 271(f)'s ambiguous language, which does not clearly indicate when the exception should apply. Although the Supreme Court has not provided a bright-line interpretation of § 271(f)'s bounds, the context and "remainder of the statutory scheme" give

14. See *Life Techs.*, 137 S. Ct. at 743 (Alito, J. concurring) ("[T]oday's opinion establishes that more than one component is necessary, but does not address *how much* more.").

15. See *Brown v. Duchesne*, 60 U.S. 183, 195 (1856) (stating that Congress's power to enact patent laws is "domestic in its character, and necessarily confined within the limits of the United States").

16. See *Microsoft Corp. v. AT&T Corp.*, 550 U.S. 437, 442 (2007) ("Recognizing that § 271(f) is an exception to the general rule that our patent law does not apply extraterritorially, we resist giving the language in which Congress cast § 271(f) an expansive interpretation.").

courts and practitioners insight into interpreting the statute.¹⁷

A. EARLY ORIGINS OF THE PRESUMPTION AGAINST
EXTRATERRITORIALITY IN PATENT LAW: *BROWN V. DUCHESNE*

The Supreme Court has been steadfast in maintaining the territoriality of patent law since as early as 1856. In 1856, the Court addressed the geographic reach of United States patent law in *Brown v. Duchesne*.¹⁸ In that case, Duchesne sailed a ship from France to the port of Boston to trade.¹⁹ The ship was made in France and had an “improvement” built into it as part of its original equipment.²⁰ Brown had a U.S. patent on this improvement and sued Duchesne for infringement.²¹ The Court was asked

whether any improvement in the construction or equipment of a foreign vessel, for which a patent has been obtained in the United States, can be used by such vessel within the jurisdiction of the United States, while she is temporarily there for the purposes of commerce, without the consent of the patentee.²²

The Court turned to the Constitution to find its answer: “Congress shall have the 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.”²³ Chief Justice Taney, writing for the Court, found that this language conferred “no power on Congress to regulate commerce, or the vehicles of commerce, which belong to a foreign nation, and occasionally visit [U.S.] ports in their commercial pursuits.”²⁴ Further, the Court cautioned that Congress must stay within the limits of its legislative authority and that it should not be “*presumed* that [Congress] intended to go *beyond*” those limits when “legislating to protect authors and inventors.”²⁵ There is nothing “in the patent laws that should lead to a different conclusion.”²⁶

The Court admitted that there was “technical damage, in the eye of the law” because the use of the improvement on Duchesne’s ship trespassed on Brown’s U.S. patent rights.²⁷ However, the Court qualified this statement by

17. *United Sav. Ass’n v. Timbers of Inwood Forest Assocs.*, 484 U.S. 365, 371 (1988).

18. *Brown*, 60 U.S. at 194.

19. *Brown v. Duchesne*, 4 F. Cas. 369, 369 (C.C.D. Mass. 1855), *aff’d*, 60 U.S. 183 (1856).

20. *Id.*

21. *See id.*

22. *Brown*, 60 U.S. at 194.

23. U.S. CONST. art. I, § 8, cl. 8.

24. *Brown*, 60 U.S. at 195.

25. *Id.* (emphasis added).

26. *Id.*

27. *Id.*

questioning the idea that U.S. patent laws could have authority over “improvements on foreign ships, lawfully made in their own country, which have been patented” in the United States.²⁸ Accordingly, the Court determined that finding infringement would require reaching beyond the domestic limits of patent laws. Holding Duchesne liable would give Brown and other patent owners the power to influence the actions of foreign nations that would “seriously embarrass the commerce of the [United States] with foreign nations.”²⁹ Further, finding liability here would “embarrass the [United States]’ treaty-making power in its negotiations with foreign nations, and also [would] interfere with the legislation of Congress when exercising its constitutional power to regulate commerce.”³⁰ The Court suggested that Congress would be the appropriate body to negotiate treaties regulating the admittance of foreign ships to U.S. ports, not the Court in granting relief to a plaintiff.³¹

The Court was aware of the global repercussions of holding that the French ship infringed a U.S. patent. Looking to avoid such a political statement, the Court presumed that Congress did not intend to extend patent laws in such a way as to affect extraterritorial actions. Thus, the Court determined that since the power and reach of the patent laws are “necessarily [domestic] and confined within the limits of the United States,” the foreign defendant was not liable for infringement.³² Inspired by foreign policy concerns, the Court concluded that “the rights of property and exclusive use granted to a patentee [do] not extend to a foreign vessel lawfully entering” a U.S. port.³³

B. THE PRESUMPTION PERSISTS: *DEEPSOUTH PACKING V. LAITRAM*

Over 100 years after *Brown v. Duchesne*, the Supreme Court again addressed the notion of extraterritoriality in patent law. In *Deepsouth Packing v. Laitram*, Laitram sued Deepsouth for infringement of its patents on shrimp deveining machinery.³⁴ The patents at issue were combination patents.³⁵ Combination patents comprise components, none of which are novel or patentable alone, but which create a novel and patentable invention when “arranged and combined together.”³⁶ Here, Laitram gained protection for its invention because it “combined ordinary elements in an extraordinary way—a novel

28. *Id.*

29. *Id.* at 195–97.

30. *Id.* at 197.

31. *See id.*

32. *Id.* at 195.

33. *Id.* at 198.

34. *See Deepsouth Packing Co. v. Laitram Corp.*, 406 U.S. 518, 519 (1972).

35. *See id.* at 520.

36. *Id.* at 520–21 (quoting *Prouty v. Draper, Ruggles & Co.*, 41 U.S. 336 (1842)).

union of old means was designed to achieve new ends.”³⁷

The district court enjoined Deepsouth from making or using its machinery in the United States.³⁸ Since the court prohibited Deepsouth from combining the components in the United States, the company sought to continue making the unprotectable components in the United States and then export them for assembly abroad.³⁹ Deepsouth’s conduct relied on a narrow interpretation of § 271(a), which instructs that any entity that “makes . . . any patented invention, within the United States,” without authority, infringes the patent.⁴⁰ As Deepsouth read the statute, as long as it did not assemble the unprotectable components in the United States, it did not “make” the invention in the United States and, therefore, it did not infringe on Laitram’s patents.⁴¹ The district court found that Deepsouth’s export for assembly abroad did not infringe, but the Court of Appeals for the Fifth Circuit reversed. The Supreme Court granted certiorari to determine whether Deepsouth could export from the United States the components of its machinery for assembly and sale abroad without infringing Laitram’s U.S. patents.⁴²

Laitram argued that only a “hypertechnical reading” of the Patent Act would allow Deepsouth to export components for assembly abroad.⁴³ Such a “hypertechnical reading,” Laitram claimed, would impinge on Laitram’s patent rights.⁴⁴ Laitram asserted that Deepsouth should be liable for infringement under § 271(a) because Deepsouth practically made the machinery in the United States and merely left the final step to be completed abroad.⁴⁵ Laitram argued that the narrow interpretation of “make” used by Deepsouth was contrary to the language in the Constitution that originally authorized Congress to create patent laws “To promote the Progress of Science and useful Arts.”⁴⁶

Justice White wrote the majority opinion, cautioning against expanding patent rights without a sign from Congress.⁴⁷ Noting the importance of its decision for foreign trade, the Court determined that Laitram’s “mere inference from ambiguous statutory language” was insufficient to be understood as a signal from Congress to ignore the presumption against

37. *Id.* at 521.

38. *See id.* at 519.

39. *See id.* at 523–24.

40. *See id.* at 522–24 (quoting 35 U.S.C. § 271(a) (2012)).

41. *See id.* at 524.

42. *See id.* at 519.

43. *Id.* at 524.

44. *See id.*

45. *See id.*

46. *Id.* at 529 (quoting U.S. CONST. art. I, § 8) (internal quotation marks omitted).

47. *See id.* at 530.

extraterritoriality and to expand the bounds of U.S. patent law.⁴⁸ Instead, the Court contended that the language of § 271 showed Congress’s intent for U.S. inventors to seek protection abroad through foreign rather than U.S. patents.⁴⁹ The Court concluded that the U.S. “patent system makes no claim to extraterritorial effect,” and thus Deepsouth’s assembly of components abroad did not infringe on Laitram’s U.S. patents.⁵⁰

C. FILLING THE GAP: PATENT LAW AMENDMENTS ACT OF 1984

In enacting 35 U.S.C. § 271(f) Congress intended to rebut the presumption against extraterritoriality and relied on the facts of *Deepsouth* to shape the exception.⁵¹ While Congress did not clearly define the scope of the statute, the origin of § 271(f) and its neighboring statutes inform the section’s interpretation.

Judges, legislators, and commentators have described Deepsouth’s evasion of infringement liability through extraterritorial assembly as the *Deepsouth* “loophole.”⁵² Deepsouth narrowly avoided infringement liability by saving the final step of assembly to be completed beyond the reach of U.S. patent law.⁵³ Deepsouth was successful in doing so because the patented machinery was entirely made up of commodity components that were not protectable themselves.⁵⁴ Therefore, it was not an infringement for Deepsouth to make those components in the United States and then ship them abroad for assembly and sale.⁵⁵

Congress strengthened patent protection in the early 1980s in reaction to growing competition with foreign manufacturers and concern over lack of U.S. innovation, caused in part by legal loopholes like that exploited by Deepsouth.⁵⁶ In 1984, Congress enacted 35 U.S.C. § 271(f) in “response to the . . . *Deepsouth* decision which interpreted the patent law not to make it

48. *Id.*

49. *See id.*

50. *Id.*

51. *See* S. REP. NO. 98-663, at 2–3 (1984).

52. *See, e.g.,* Microsoft Corp. v. AT&T Corp., 550 U.S. 437, 444 n. 3 (2007); Brief for Petitioners at 5, Life Techs. Corp. v. Promega Corp., 137 S. Ct. 734 (2017) (No. 14-1538), 2016 WL 4578846, at *5; Brief for Respondent at 27, Life Techs. Corp. v. Promega Corp., 137 S. Ct. 734 (2017) (No. 14-1538), 2016 WL 6216126, at *27; S. REP. NO. 98-663, at 6 (1984); James R. Farrand, *Territoriality and Incentives Under the Patent Laws: Overreaching Harms U.S. Economic and Technological Interests*, 21 BERKELEY TECH. L.J. 1215, 1219 (2006); Timothy R. Holbrook, *Extraterritoriality in U.S. Patent Law*, 49 WM. & MARY L. REV. 2119, 2127 (2008).

53. *See Deepsouth*, 406 U.S. at 524.

54. *See id.* at 520–22.

55. *See id.* at 524.

56. Farrand, *supra* note 52, at 1225 n. 19 (discussing the pattern of relative strength of patent laws from the late 1920s to the 1980s).

infringement where the final assembly and sale is abroad.”⁵⁷ To close the *Deepsouth* loophole, the bill amended patent law to attach infringement liability for supplying components to make the invention abroad just as it would if “the invention [were] ‘made’ or ‘sold’ in the United States.”⁵⁸ The new statute was needed to counteract *Deepsouth*’s chilling effect on “invention, innovation, and investment” in the United States.⁵⁹

Section 271(f) creates infringement liability for a party that supplies, from the United States, “all or a substantial portion” of components of a patented invention for overseas assembly that would constitute infringement if it had occurred within the United States.⁶⁰ Furthermore, the statute creates liability for a party that exports any component specifically made for use in a patented invention for overseas assembly that would constitute infringement if it had occurred within the United States.⁶¹

The surrounding “statutory scheme”⁶² offers guidance for interpreting the two main elements of § 271(f): (1) the supply of components abroad; and (2) the intent to act in such a way that would constitute infringement in the United States. Comparison to § 271(a) shows Congress’s clear choice to expand the reach of patent law extraterritorially, whereas §§ 271(b) and (c) provide the basis for understanding the role of intent in § 271(f).

The extraterritorial bounds of § 271(f) are the inverse of the territorial bounds set by § 271(a). While the culpable infringer under § 271(f) must have supplied components “in or from the United States,” therefore grounding its actions within the U.S. borders, it is liable for activity that occurs outside the U.S. borders.⁶³ However, § 271(a) classifies infringement as the trespass of another’s patent rights “within the United States or [the] import[] into the United States [of] any patented invention.”⁶⁴ Section 271(f) is meant to apply to activity not covered by § 271(a)—the combination of supplied components “outside of the United States.”⁶⁵ The Supreme Court’s narrow interpretation of § 271(a) in *Deepsouth* did not bind courts interpreting the different statutory provisions of § 271(f), although the Court’s method in *Deepsouth* is still relevant

57. S. REP. NO. 98-663, at 2–3 (1984) (“Permitting the subterfuge which is allowed under the *Deepsouth* interpretation of the patent law weakens confidence in patents among businesses and inventors.”).

58. *Id.* at 3.

59. *Id.*

60. 35 U.S.C. § 271(f)(1) (2012); *see also supra* note 8.

61. *See* 35 U.S.C. § 271(f)(2) (2012); *see also supra* note 8.

62. *United Sav. Ass’n v. Timbers of Inwood Forest Assocs.*, 484 U.S. 365, 371 (1988).

63. *See* 35 U.S.C. § 271(f) (2012).

64. 35 U.S.C. § 271(a) (2012).

65. 35 U.S.C. § 271(f) (2012).

to the inquiry.⁶⁶

The indirect infringement statutes inform the interpretation of the intent requirement in § 271(f), which Congress did not otherwise detail. While § 271(f) is unique in that it applies indirect infringement liability where there has been no direct infringement,⁶⁷ it borrows language from the inducement and contributory infringement statutes.⁶⁸ The language of § 271(f)(1) borrows the term “active inducement” from § 271(b), which states: “Whoever actively induces infringement of a patent shall be liable as an infringer.”⁶⁹ Similarly, § 271(f)(2) imports the knowledge element from the contributory infringement statute, § 271(c), requiring that the infringer know it supplied a component specially made for a patented invention.⁷⁰ Both §§ 271(b) and (c) require that the indirect infringer know that its actions allow for direct patent infringement.⁷¹ Further, inducement under § 271(b) requires affirmative action to achieve a desired, infringing result.⁷² Since Congress wrote § 271(f)(1) based on § 271(b),⁷³ the notions of knowledge and intent in § 271(b) inducement

66. See *Deepsouth Packing Co. v. Laitram Corp.*, 406 U.S. 518, 527–28 (1972).

67. See 35 U.S.C. § 271(f) (2012). Indirect infringement occurs when an accused party “falls short of practicing every single element of a claimed invention,” but “acted with some measure of intentionality or scienter.” Robert P. Merges, *A Few Kind Words for Absolute Infringement Liability in Patent Law*, 31 BERKELEY TECH. L.J. 1, 3 n.1 (2016). Generally, indirect infringement requires direct infringement—that is, infringement under § 271(a). See *Limelight Networks, Inc. v. Akamai Techs., Inc.*, 134 S. Ct. 2111, 2117–18 (2014) (stating that “liability for inducement must be predicated on direct infringement” and that a party “cannot be liable for inducing infringement that never came to pass”). However, in § 271(f) there can be no direct infringement as the actions that would be directly infringing (the combination of components) happen outside the United States and are therefore out of the reach of § 271(a). See *Aro Mfg. Co. v. Convertible Top Replacement Co.*, 365 U.S. 336, 341 (1961); *Limelight Networks*, 134 S. Ct. at 2117.

68. 130 CONG. REC. H10,525 (daily ed. Oct. 1, 1984), reprinted in 1984 U.S.C.C.A.N. 5827, 5828.

69. 35 U.S.C. § 271(b) (2012).

70. 35 U.S.C. § 271(c) (2012) states:

Whoever offers to sell or sells within the United States or imports into the United States a component of a patented machine, manufacture, combination or composition, or a material or apparatus for use in practicing a patented process, constituting a material part of the invention, knowing the same to be especially made or especially adapted for use in an infringement of such patent, and not a staple article or commodity of commerce suitable for substantial noninfringing use, shall be liable as a contributory infringer.

See also *Aro*, 365 U.S. at 488.

71. See 35 U.S.C. §§ 271(b)–(c) (2012); *Global-Tech Appliances, Inc. v. SEB S.A.*, 563 U.S. 754, 765–66 (2011) (holding that contributory infringement under § 271(c) and induced infringement under § 271(b) require knowledge of the patent infringement).

72. See *Global-Tech*, 563 U.S. at 760.

73. See 130 CONG. REC. H10,525 (daily ed. Oct. 1, 1984), reprinted in 1984 U.S.C.C.A.N.

provide a framework for interpreting the meaning of inducement in § 271(f)(1). Similarly, the scienter requirements of § 271(c) inform the meaning of § 271(f)(2).⁷⁴ Thus, these related patent infringement statutes provide a basis for courts and practitioners to interpret § 271(f) where Congress has not fully articulated its scope.

D. INTERPRETING § 271(f): *MICROSOFT V. AT&T*

The Supreme Court interpreted § 271(f) in *Microsoft v. AT&T*. In that case, AT&T sued Microsoft for infringement of a patent protecting an apparatus to digitally encode and compress recorded speech.⁷⁵ AT&T claimed that Microsoft's Windows operating system infringed on this patent because it could process speech in the same manner as AT&T's patent.⁷⁶

Microsoft sold its Windows operating system to foreign computer manufacturers to install onto the computers they sold.⁷⁷ To do so, Microsoft sent a master version of the Windows software, via disk or electronic transmission, from the United States to the foreign manufacturers, which generated copies from the master version.⁷⁸ For this reason, AT&T sued under § 271(f)(1), claiming that Microsoft effectively "supplie[d] . . . from the United States" a component of its patented invention.⁷⁹

Microsoft responded to AT&T's § 271(f)(1) claim by arguing that the uninstalled software was not a "component" of the patented speech processor because it was intangible in its uninstalled form.⁸⁰ Further, Microsoft contended that, even if the software in abstract form was considered to be a component, the copies of Windows made abroad were not "supplie[d] . . . from the United States."⁸¹

The Federal Circuit expanded the extraterritorial reach of patent law by finding Microsoft liable for § 271(f)(1) infringement, attributing its decision to congressional intent.⁸² However, the Supreme Court reversed and found Microsoft's actions non-infringing under § 271(f)(1), limiting the scope of the statute.⁸³ The Court determined that software in the abstract is "an idea without physical embodiment" and that it cannot be a component amenable

5827, 5828.

74. *See id.*

75. *See Microsoft Corp. v. AT&T Corp.*, 550 U.S. 437, 441 (2007).

76. *See id.* at 441–42.

77. *See id.* at 445.

78. *See id.*

79. *Id.* at 446–47 (internal quotation marks omitted) (quoting 35 U.S.C. § 271(f) (2012)).

80. *Id.* at 447.

81. *Id.* (internal quotation marks omitted) (quoting 35 U.S.C. § 271(f) (2012)).

82. *See AT&T Corp. v. Microsoft Corp.*, 414 F.3d 1366, 1371–72 (Fed. Cir. 2005).

83. *See Microsoft*, 550 U.S. at 447.

to combination until a user or manufacturer copies, installs, and runs it on a computer.⁸⁴ Justice Ginsburg's opinion for the Court held that infringement could only occur when a user or manufacturer installed Windows on a computer, enabling the computer to perform the patented speech manipulation.⁸⁵ Further, the Court noted that the manufacturers abroad installed Windows software on the computers by making copies of a master version and that those installed copies "were not themselves supplied from the United States."⁸⁶ Thus, because Windows software in abstract form was not a component, and because the copies of Windows installed on the foreign computers were not supplied from the United States, the Court held that Microsoft was not liable under § 271(f)(1).⁸⁷

To reach its conclusion, the Supreme Court discussed the application of the presumption against extraterritoriality to § 271(f). The Court decided that the presumption against extraterritoriality quieted any doubts that Microsoft's actions were not covered by § 271(f)(1) because "United States law . . . does not rule the world."⁸⁸ "Recognizing that § 271(f) is an exception to the general rule that our patent law does not apply extraterritorially," the Court "resist[ed] giving the language in which Congress cast § 271(f) an expansive interpretation."⁸⁹ Echoing *Deepsouth*, the Court stated that AT&T should obtain and enforce foreign patents to prevent copying abroad rather than asking the Court to expand the reach of United States patent law beyond what was intended by Congress in § 271(f)(1).⁹⁰

In its conclusion, the Court stated that Congress was the proper institution to amend the scope of patent law, and not the "Judiciary forecasting Congress's likely disposition."⁹¹ Nearly a decade later, Congress had not acted, and the Court took another opportunity to consider § 271(f) in *Life Technologies v. Promega*.

III. *LIFE TECHNOLOGIES V. PROMEGA*

A. FACTS

In *Life Technologies v. Promega*, Promega sued Life Technologies for infringement of its U.S. Patent No. RE 37,984 (the Tautz patent).⁹² The patent

84. *Id.* at 449–52.

85. *See id.* at 442.

86. *Id.* at 453.

87. *See id.* at 454.

88. *Id.* at 454–55.

89. *Id.* at 442.

90. *See id.* at 456.

91. *Id.* at 458–59.

92. *See Life Techs. Corp. v. Promega Corp.*, 137 S. Ct. 734, 738 (2017).

claims a genetic testing toolkit used to “amplify” deoxyribonucleic acid (DNA) by making many copies of a specific nucleotide sequence from small samples of genetic material.⁹³ The patent protects a combination of five components: “(1) a mixture of primers that mark the part of the DNA strand to be copied; (2) nucleotides for forming replicated strands of DNA; (3) an enzyme known as *Taq* polymerase; (4) a buffer solution for the amplification; and (5) control DNA.”⁹⁴

Promega was the exclusive licensee of the Tautz patent, and it sublicensed the patent to Life Technologies, which manufactured and sold the kits in certain law enforcement fields allowed by the license.⁹⁵ Life Technologies eventually began to sell the kits outside of the specific fields delineated in the license agreement, namely for use in clinical and research markets worldwide.⁹⁶ Evidence and testimony presented at trial suggested that Life Technologies violated the license knowingly.⁹⁷

Life Technologies manufactured four out of the five kit components in the United Kingdom.⁹⁸ However, Life Technologies manufactured the fifth component, *Taq* polymerase, in the United States, which it then shipped to its United Kingdom facilities to be combined with the other components.⁹⁹ Promega sued Life Technologies for patent infringement under § 271(f)(1), claiming that infringement liability arose from the supply of *Taq* polymerase from the United States.¹⁰⁰

B. PROCEDURAL HISTORY

In an expansive opinion, the Federal Circuit held that Life Technologies was liable for infringement under § 271(f)(1) for supplying a single component for combination abroad.¹⁰¹

Turning first to an analysis of the language of § 271(f)(1), the court

93. *Id.*

94. *Id.*

95. *See id.*

96. *See id.*

97. *See* Brief for Plaintiff-Cross Appellant at 16–19, *Promega Corp. v. Life Techs. Corp.*, 773 F.3d 1338 (Fed. Cir. 2014) (Nos. 2013-1011, 2013-1029, 2013-1376), 2013 WL 4812402, at *16–18.

98. *See Life Techs.*, 137 S. Ct. at 738.

99. *See id.*

100. *See id.*

101. *Life Techs.*, 773 F.3d at 1341, *rev'd and remanded*, 137 S. Ct. 734 (2017). This holding reversed Western District of Wisconsin's ruling that the supply of a single component was not sufficient for liability under § 271(f)(1) and inducement required involvement of a third party. *Promega Corp. v. Life Techs. Corp.*, No. 10-cv-281-bbc, 2012 WL 12862829, at *6–8 (W.D. Wis. Sept. 13, 2012), *aff'd in part, vacated in part, rev'd in part*, 773 F.3d 1338 (Fed. Cir. 2014), *rev'd and remanded*, 137 S. Ct. 734 (2017), and *aff'd*, 875 F.3d 651 (Fed. Cir. 2017).

reasoned that ordinary, dictionary definitions of both “substantial” and “portion” do not imply a specific quantity.¹⁰² Instead, the court interpreted the phrase “substantial portion” to suggest that “a single important or essential component can be a ‘substantial portion of the components’ of a patented invention.”¹⁰³ The court rejected Life Technologies’ argument that, by referring to “components” plural, the statute required more than one component to be supplied abroad for the statute to apply.¹⁰⁴ The court asserted that “components” plural referred to all the components of the patented invention, not merely the component or components supplied.¹⁰⁵ Additionally, the court stated that the comparison of § 271(f)(1) with § 271(f)(2) was inappropriate as the separate provisions are applied in different contexts and the language of § 271(f)(2) “does not control” that of § 271(f)(1).¹⁰⁶

The court applied its qualitative definition of “substantial portion” and reasoned that the kits would be non-functional without *Taq* polymerase as it was essential to the process of DNA amplification.¹⁰⁷ Therefore, the court concluded that *Taq* polymerase was one of the principal components of the kit.¹⁰⁸ Following this reasoning, the court found the single component of *Taq* polymerase to be a “substantial portion” of the patented invention, and therefore within the scope of § 271(f)(1).¹⁰⁹

The Federal Circuit also reversed the district court’s holding that inducement required the involvement of a third party.¹¹⁰ Instead of looking to the parallel language of § 271(b), the court turned to the definition of “inducement” and found that a broad understanding of the word means: “to bring about, to cause.”¹¹¹ The court pointed out that the term in the statute was directed at “the combination,” not a person or entity.¹¹² If Congress had intended to include a third-party actor, the court reasoned, it could have indicated the inducement of “another” in the statute.¹¹³

Life Technologies petitioned for a writ of certiorari on two questions:

1. Whether the Federal Circuit erred in holding that a single entity can “actively induce” itself to infringe a patent under 35 U.S.C.

102. *See id.* at 1353.

103. *Id.*

104. *See id.* at 1354.

105. *See id.*

106. *Id.*

107. *See id.* at 1356.

108. *See id.*

109. *See id.*

110. *See id.* at 1351.

111. *Id.*

112. *See id.*

113. *See id.*

§ 271(f)(1).

2. Whether the Federal Circuit erred in holding that supplying a single, commodity component of a multi-component invention from the United States is an infringing act under 35 U.S.C. § 271(f)(1), exposing the manufacturer to liability for all worldwide sales.¹¹⁴

The Supreme Court granted certiorari only for the second question, declining to analyze the meaning of inducement under § 271(f)(1).¹¹⁵

C. THE SUPREME COURT DECISION

The Supreme Court granted certiorari to untangle the meaning of “substantial portion” and how to measure it. In the majority opinion written by Justice Sotomayor,¹¹⁶ the Court resolved that “substantial portion” implied a quantitative, not qualitative, measurement.¹¹⁷ The Court reasoned that the language surrounding the phrase “substantial portion” conveyed a “quantitative meaning.”¹¹⁸ Further, the Court reasoned that a qualitative or “case-specific” approach would be ineffective and ambiguous.¹¹⁹ Such an approach would only complicate the analysis by leaving it to juries to interpret.¹²⁰ Also, a qualitative approach, like the one presented by the Federal Circuit, would be unproductive because it would rely on the “importance” of components to the patented invention.¹²¹ Few, if any, components of multicomponent inventions are unimportant or unnecessary for the function of the invention, and so, *any* component could invoke liability under a qualitative interpretation of the statute.¹²² Thus, the Court concluded that a “quantitative interpretation hews most closely to the text of the statute and provides an administrable construction.”¹²³

114. Petition for Certiorari at i, *Life Techs. Corp. v. Promega Corp.*, 137 S. Ct. 734 (2017) (No. 14-1538), 2015 WL 3941490, at *i.

115. *See* *Life Techs. Corp. v. Promega Corp.*, 137 S. Ct. 734, 737 (2017) (“We granted certiorari to determine whether a party that supplies a single component of a multicomponent invention for manufacture abroad can be held liable for infringement under § 271(f)(1).”).

116. Justice Sotomayor was joined by Justices Kennedy, Ginsburg, Breyer, and Kagan. Justices Thomas and Alito joined as to all but Part II-C. Justice Alito filed an opinion concurring in part and concurring in the judgment, in which Justice Thomas joined. Chief Justice Roberts did not participate in the decision.

117. *See id.* at 739.

118. *Id.* at 740.

119. *See id.*

120. *See id.*

121. *See id.* at 741.

122. *See id.*

123. *Id.*

Having resolved that a quantitative approach was appropriate, the Court turned to the statutory text to determine whether a single component could be a “substantial portion” and create liability under § 271(f)(1).¹²⁴ Similar to the district court’s reasoning, the Supreme Court compared the language of § 271(f)(1) to that of § 271(f)(2) to hold that a single component is not sufficient to trigger § 271(f)(1) liability.¹²⁵ The Court noted that “§ 271(f)(1) refers to ‘components,’ plural, [but] § 271(f)(2) refers to ‘any component,’ singular.”¹²⁶ The Court reasoned that reading them in this way, where § 271(f)(1) refers to more than one component and § 271(f)(2) refers to a single component, allows the provisions to “work in tandem.”¹²⁷

The Court also looked to the history of § 271(f).¹²⁸ The Court determined that its interpretation of the statute comported with Congress’s intent: fix the *DeepSouth* loophole and expand the reach of patent laws to components of a patented invention manufactured in the United States but assembled overseas.¹²⁹ However, the Court concluded that a single component exported for assembly abroad “is outside the scope of the statute” because it is not “all or a substantial portion of the components” as Congress intended for § 271(f) infringement liability to apply.¹³⁰

In his concurrence, Justice Alito, joined by Justice Thomas, disagreed that Congress simply wanted to close the *DeepSouth* loophole.¹³¹ He suggested that Congress wanted to go further, but stated that how much further was not determinable from the origins of § 271(f); the legislative history is not substantial enough to properly infer Congress’s intent.¹³² Justice Alito also highlighted that the majority’s opinion simply held that a *single* component was not a “substantial portion” of a patented invention’s components, but did not say how many more components were necessary to constitute a “substantial portion.”¹³³

In conclusion, the Court’s quantitative interpretation of “substantial portion” informed the holding that a single component of a multicomponent patent could not be a “substantial portion of the components” and that its

124. *See id.*

125. *See id.* at 742 (interpreting § 271(f)(1) in light of § 271(f)(2)); *Promega Corp. v. Life Techs. Corp.*, No. 10-cv-281-bbc, 2012 WL 12862829, at *6–8 (W.D. Wis. Sept. 13, 2012) (similarly interpreting § 271(f)(1) in light of § 271(f)(2)).

126. *Life Techs.*, 137 S. Ct. at 742.

127. *Id.* at 741–42.

128. *See id.* at 742.

129. *See id.* at 742–43; *see also supra* Section II.C

130. *Life Techs.*, 137 S. Ct. at 743; *see also supra* note 8.

131. *See id.* (Alito, J. concurring).

132. *See id.*

133. *See id.*

supply is not an infringing act under § 271(f)(1).¹³⁴ Therefore, the Court found that the supply of *Taq* polymerase from the United States did not trigger § 271(f)(1) infringement liability.¹³⁵ Put simply, one is not enough.

IV. WHAT DID THE COURT DO?

The Supreme Court's opinion in *Life Technologies* is brief and may be unsatisfactory to those looking for substantial guidance on interpreting the statute.¹³⁶ In an attempt to clarify the ambiguity surrounding § 271(f)(1) and "not to compound it," the Court simply instructed that the supply of more than one component is necessary for liability to attach under the provision.¹³⁷ While patent owners, competitors, and the attorneys that represent them may find the Court's opinion unsatisfactorily meager in guiding their practice, the *Life Technologies* decision was sufficient to block an overreaching interpretation and application of the statute in the future. The Court's minimal ruling stifled

134. *Id.* at 743.

135. *See id.* at 737–38.

136. An unscientific survey of various online sources, including law firm blogs, revealed dissatisfaction with the Supreme Court's lack of direction among those choosing to comment about the case. *See, e.g.*, John Duffy, *Opinion Analysis: A "Substantial Portion of the Components" Means "More Than One Component"*, SCOTUSBLOG (Feb. 23, 2017), <http://www.scotusblog.com/2017/02/opinion-analysis-substantial-portion-components-means-one-component> [<https://perma.cc/4SKR-NB3K>]; Life Technologies Corp. v. Promega Corp.: *Supreme Court Holds That Infringement Under 35 U.S.C. § 271(f)(1) Requires Providing More Than One Component of an Invention*, SULLIVAN & CROMWELL LLP (Feb. 23, 2017), https://www.sullcrom.com/siteFiles/Publications/SC_Publication_Life_Technologies_Corp_v_Promega_Corp.pdf [<http://perma.cc/27qa-P4UR>]; Katya Ascher, *Quantity Not Quality: Patent Infringement by Components Exported from the US Is a Game of Numbers*, LEXOLOGY (May 31, 2017), <https://www.lexology.com/library/detail.aspx?g=02095c15-97dc-4b69-9da4-e65b064adc55> [<https://perma.cc/Q4HV-JRRL>]; Clifford Ragsdale Lamar, *High Court's Patent Guidance on Exporting Component Parts*, LAW360 (Feb. 27, 2017), <https://www.law360.com/articles/895954/high-court-s-patent-guidance-on-exporting-component-parts> [<https://perma.cc/7BDL-YEF2>]; Brenden S. Gingrich & Jeffrey C. Wu, *Life Technologies Corp. v. Promega Corp.: Supreme Court Limits Infringement Liability for Suppliers Under § 271(f)(1)*, KNOBBE MARTENS (Mar. 8, 2017), <https://www.knobbe.com/news/2017/03/life-technologies-corp-v-promega-corp-supreme-court-limits-patent-infringement> [<https://perma.cc/RVM6-3HAN>]; Tania Uren & Gavin Recchia, *U.S. Supreme Court Clarifies Extraterritorial Reach of U.S. Patents*, LEXOLOGY (April 24, 2017), <https://www.lexology.com/library/detail.aspx?g=ee0da762-e5bf-4922-808c-99fbb21f81bd> [<https://perma.cc/3BLS-PRZ9>]; Brinks, Gilson, & Lione, *Supreme Court Rules That Patent Infringement Liability Based on Supply of "A Substantial Portion" of the Components of an Invention Manufactured Abroad Requires More Than the Supply of a Single Commodity Component of the Invention*, BRINKS GILSON & LIONE (Mar. 3, 2017), <http://www.brinksgilson.com/supreme-court-rules-that-patent-infringement-liability-based-on-supply-of-a-substantial-portion-of-the-components-of-an-invention-manufactured-abroad-requires-more-than-the-supply-of-a-single-com> [<https://perma.cc/ZSC6-52FG>].

137. *Life Techs.*, 137 S. Ct. at 740.

the Federal Circuit's expansive interpretation of § 271(f) and reopened the provision for further interpretation by lower courts or direct amendment by Congress. The Supreme Court's decision allows lower courts enough flexibility to work through the statute until the Court is ready to rule again, or Congress clarifies the law. By saying seemingly very little, the Supreme Court's decision is significant.

A. "ONE IS NOT ENOUGH" IS ENOUGH FOR THE COURT

1. *The Life Technologies Decision Left Room for Interpretation*

The Court's opinion does not thoroughly interpret the meaning of "substantial portion of the components" under the statute, but the opinion creates the opportunity for lower courts to construe the scope of the statute.¹³⁸

Life Technologies only provides that a substantial portion is less than all of the components, but more than one component. As highlighted in Justice Alito's concurrence, there is no indication as to how many more components are necessary to make a substantial portion.¹³⁹ The majority's analysis, focusing on whether the words are singular or plural, does not offer any guidance.

This sparse opinion allows lower courts to explore the different scenarios that may affect how a "substantial portion" is quantified. For example, some multi-component patents include only two components,¹⁴⁰ while others can have many more. Lower courts will have the opportunity to determine if a substantial portion of components for a five-component patent is similar to that of a fifty-component patent. Lower courts may also have the opportunity to address the issue presented by a two-component invention: where a single component is not enough, but two components are all, what constitutes a "substantial portion"?

Further, because the parties agreed that the Tautz patent contained five components, the Court did not define "component" under § 271(f).¹⁴¹ This analysis will be important for lower courts to address; as the *Life Technologies* decision determined that a "substantial portion" is meant to be interpreted quantitatively, parties will need to know how to count their components.¹⁴² The Supreme Court properly declined to opine on the interpretation of "component" in dicta, but rather allowed the district courts to grapple with the issue in the first instance.

The Supreme Court also declined to grant certiorari on the issue of the

138. See *supra* note 136; *infra* Section IV.B.2.

139. See *Life Techs.*, 137 S. Ct. at 743 (Alito, J. concurring).

140. See U.S. Patent No. 3,870,675 A (issued Mar. 11, 1975).

141. See *Life Techs.*, 137 S. Ct. at 738. In *Microsoft* the Court held that a component must be tangible. See *Microsoft Corp. v. AT&T Corp.*, 550 U.S. 437, 451–52 (2007).

142. See *Life Techs.*, 137 S. Ct. at 741.

inducement requirement of § 271(f)(1) and left the Federal Circuit's opinion in place to either be precedential or challenged. The inducement requirement of the provision adds an analysis of the mindset and purpose of the actor supplying components. The Federal Circuit found that a third party was not necessary for "active inducement" and that a party could, in effect, induce itself.¹⁴³ This is an uncommon interpretation of inducement. Usually, inducement relies on a third-party actor—to be liable for inducement, a party must induce another to infringe a patent.¹⁴⁴ By allowing a single party to be liable for "active inducement," the Federal Circuit's decision broadened the application of § 271(f)(1).

The Federal Circuit's opinion that a party can "induce itself" is expansive and unconventional, but compatible with the notions of knowledge and intent that § 271(f) implies. A party that is capable of inducing itself likely has knowledge of its actions and acts with intent. The concept of inducing oneself is absent from § 271(b) analysis because if a party were both to induce infringement and to directly infringe, it would already be liable for direct infringement under § 271(a). However, because direct infringement under § 271(a) is inapplicable where the components of a patented invention are combined and sold abroad, *Life Technologies* addressed the unique question of whether a U.S. manufacturer may be liable for inducing infringement through its own foreign facilities. In denying certiorari to determine whether a party can induce itself under § 271(f)(1), the Court did not address the Federal Circuit's novel ruling or the extent to which knowledge and intent affect the infringement analysis.¹⁴⁵ Instead, the Court's opinion allows the Federal Circuit to act within the restraints of *stare decisis* if it finds that its ruling has had ill effects in the district courts.

2. *An Obscure Statute with Big Implications: Careful Interpretation Is Paramount*

Section 271(f) is a relatively specific statute, enacted in response to a specific fact pattern.¹⁴⁶ While its world of application may be smaller than that of other statutes, it can have significant implications. Because of this, it is extremely important that courts interpret and apply the statute correctly, and the Supreme Court was right to decline to issue an advisory opinion.

As discussed above, Congress wrote § 271(f) as an exception to the

143. See *Promega Corp. v. Life Techs. Corp.*, 773 F.3d 1338, 1351–53 (Fed. Cir. 2014), *rev'd and remanded*, 137 S. Ct. 734 (2017).

144. See Petition for Certiorari at 13–15, *Life Techs. Corp. v. Promega Corp.*, 137 S. Ct. 734 (2017) (No. 14-1538), 2015 WL 3941490, at *13–15.

145. See *Life Techs.*, 773 F.3d at 1351–53; see also *Life Techs.*, 137 S. Ct. at 737–39.

146. See S. REP. NO. 98-663, at 3 (1984) (noting the bill's intention to remedy the "subterfuge . . . allowed under the *Deepsouth* interpretation").

longstanding presumption against extraterritoriality.¹⁴⁷ The presumption has a long history in patent law, and the Supreme Court has been hesitant to expand the reach of patent law beyond the United States' borders, even when the statute arguably allows it to do so.¹⁴⁸ The Court does not take the presumption against extraterritoriality lightly and has recently exercised it to “resist giving . . . § 271(f) an expansive interpretation.”¹⁴⁹

The application of § 271(f) can also have impressive monetary implications. Damages analysis may include worldwide sales figures because the statute attaches infringement liability for activity that happens abroad. In *Life Technologies*, a jury awarded Promega over \$50 million in lost profits on worldwide sales of the infringing kits.¹⁵⁰ Regardless of the Supreme Court's decision in *Life Technologies*, foreign manufacturers that do not source products from the United States are always safe from § 271(f) liability.¹⁵¹ As such, manufacturers may choose to move their facilities abroad to avoid triggering immense damages based on worldwide sales.¹⁵² When patent damages are not limited to U.S. sales, there are much higher stakes for infringement liability.¹⁵³ Thus, proper interpretation of the statute is crucial. The Court in *Life Technologies* showed proper judicial restraint in declining to issue an advisory opinion on § 271(f) since the statute purposefully pushes the boundaries of patent law and can inflate damage awards to a global scale.

147. See *supra* Section II.C.

148. See *Microsoft Corp. v. AT&T Corp.*, 550 U.S. 437, 442 (2007).

149. *Id.*

150. The district court vacated this award, but it was then reinstated by the Federal Circuit, and then once again vacated by the Supreme Court's opinion and the subsequent Federal Circuit decision. See *Promega Corp. v. Life Techs. Corp.*, No. 10-cv-281-bbc, 2012 WL 12862829, at *1–2 (W.D. Wis. Sept. 13, 2012), *aff'd in part, vacated in part, rev'd in part*, 773 F.3d 1338 (Fed. Cir. 2014), *rev'd and remanded*, 137 S. Ct. 734 (2017), and *aff'd*, 875 F.3d 651 (Fed. Cir. 2017).

151. See Sean B. Fernandes, *Microsoft Corp. v. AT&T: A Welcome Return to Patent Law's Tradition of Territoriality*, 23 BERKELEY TECH. L.J. 75, 101 (2008) (discussing the potential disincentives of § 271(f) and the irony of a “statute intended for the protection of U.S. manufacturing” being “used to discriminate against domestic producers”).

152. See Donald S. Chisum, *Normative and Empirical Territoriality in Intellectual Property: Lessons from Patent Law*, 37 VA. J. INT'L L. 603, 607–08 (1997).

153. In *WesternGeco v. ION Geophysical*, the Federal Circuit ruled that profits lost on sales outside the United States for combinations infringing under § 271(f) were unavailable as a matter of law. See *WesternGeco L.L.C. v. ION Geophysical Corp.*, 791 F.3d 1340, 1351 (Fed. Cir. 2015), *cert. granted, judgment vacated sub nom.* *WesternGeco LLC v. ION Geophysical Corp.*, 136 S. Ct. 2486 (2016). *WesternGeco* has petitioned for certiorari on this issue. If the Federal Circuit's holding stands, the significance of damages will be lessened in § 271(f) implications. See *Petition for Certiorari, WesternGeco L.L.C. v. ION Geophysical Corp.*, 837 F.3d 1358 (Fed. Cir. 2016) (15-1085), 2016 WL 792196.

3. *A Proportional Method for Defining “Substantial Portion”*

The Supreme Court’s opinion in *Life Technologies* may be unsatisfactory for practitioners because it did not provide guidance as to how many more than one component constitutes a “substantial portion,” and it did not discuss how factors of knowledge and intent influence this analysis.¹⁵⁴ However, the Supreme Court was right to decline to issue an advisory opinion detailing a method of interpretation. There are many complex factors at issue that make a single test difficult to formulate. For example, the Court could have provided a proportional test, which would have given practitioners and judges greater guidance, but also would have raised substantial problems of its own.

A seemingly simple solution, the Court could have imposed a proportional test to analyze how many components are necessary for a “substantial portion.” Doing so would have still rejected the Federal Circuit’s qualitative test but would have also addressed problems created by the Supreme Court’s proposition that a single component was not sufficient.¹⁵⁵ Specifically, a proportional test would resolve the complications posed by a simple numeric minimum, which creates inequalities because combination patents use different numbers of components. For example, if there had been only two components in the patent at issue in *Life Technologies*, would the Court still have reasoned that one component was not a “substantial portion”? The Court’s “one is not enough” logic would suggest that § 271(f)(1) cannot apply although this would be fifty-percent of the invention.¹⁵⁶ And yet, the holding would not prevent a patentee from arguing for liability based on the supply of two components of a hundred-component product, although this would be a mere two-percent of the components. A proportional test would eliminate this discrepancy, as the set proportion would be equal among inventions regardless of the number of components.

To determine a reasonable proportion, the Court could have looked to § 271(f)’s history. Although the statutory history is limited, as Justice Alito noted, it is clear and direct.¹⁵⁷ Section 271(f) resulted from the Court’s *Deepsouth* decision, as Congress was worried that others could abuse the loophole *Deepsouth* identified and exploited.¹⁵⁸ In that case, *Deepsouth* manufactured *all* of the components in the United States and supplied *all* of those components abroad for combination. Understandably, this is the origin of the “all . . . components” language in § 271(f)(1). However, Congress wrote

154. *See supra* note 136.

155. *See supra* Section IV.A.

156. *See supra* Section IV.A.

157. *See Life Techs. Corp. v. Promega Corp.*, 137 S. Ct. 734, 743 (2017) (Alito, J. concurring).

158. *See* S. REP. NO. 98-663, at 3 (1984).

§ 271(f)(1) to apply beyond the specific facts of *Deepsouth* by including “a substantial portion” as well.¹⁵⁹ Congress could have meant to stay close to the idea that a culpable party would make or effectively make the patent, and therefore supply all or *substantially* all of the components.¹⁶⁰

When it included “all or a substantial portion” in the statutory language, Congress loosened the grasp of the Court’s “hypertechnical reading of the patent code” that let actors with bad intent and knowledge of their actions pass without liability.¹⁶¹ Because of this, a reasonable measure by which to understand “substantial portion” might look to the alleged infringer’s intent. But using a quantitative assessment for a qualitative concept, such as intent, is inherently flawed. What proportion of components of an invention must be supplied to indicate that the supplier knows that its actions are effectively circumventing U.S. patent law? What proportion of components of a patented invention must an infringer supply such that the action is tantamount to making the invention in the United States and then exporting it?

Divining the proper proportion is itself a problematic task, but even if courts could settle on a proportion, applying any threshold raises additional issues. As the actors in *Deepsouth* displayed, if there is a cut-off for infringing action, actions one step below that cut-off will be non-infringing. This is the problem with defining infringement only as “making” or “supplying . . . all” of the components—one less than “all” evades liability. This may be why Congress chose to add “or a substantial portion” for § 271(f)(1) infringement, to make the provision more ambiguous and therefore more difficult to dodge. A numeric definition of “substantial portion” creates a similar cutoff, allowing bad actors to supply one component fewer to avoid liability. As soon as the bounds of § 271(f)(1) are defined, the statute becomes evadable.¹⁶² A simple

159. See Timothy R. Holbrook, *Boundaries, Extraterritoriality, and Patent Infringement Damages*, 92 NOTRE DAME L. REV. 1745, 1754 (2017) (“The language of ‘a substantial portion’ broadens § 271(f)(1) beyond the facts of *Deepsouth*.”).

160. The Court could also have looked to interpretations of phrases similar to “substantial portion” in other statutes, like “substantially all.” For example, in 1990 the Seventh Circuit held that “substantially all” meant eighty-five percent in a statute regulating trucker’s pension funds. *Cont’l Can Co. v. Chi. Truck Drivers, Helpers & Warehouse Workers Union (Indep.) Pension Fund*, 916 F.2d 1154, 1160 (7th Cir. 1990). The Seventh Circuit said that “substantially all” was a legal term of art that Congress uses regularly, particularly in tax statutes. See *id.* In fact, some of the Supreme Court Justices repeatedly misstated the statutory text as “all or substantially all” (as opposed to “all or a substantial portion”) during the oral argument. See Transcript of Oral Argument at 36:7–10, *Life Techs. Corp. v. Promega Corp.*, 137 S. Ct. 734 (2017) (No. 14-1538).

161. *Deepsouth Packing Co. v. Laitram Corp.*, 406 U.S. 518, 524 (1972).

162. See Brief for the United States as Amicus Curiae Supporting Petitioners at 23–26, *Life Techs. Corp. v. Promega Corp.*, 137 S. Ct. 734 (2017) (No. 14-1538), 2016 WL 4728374 at *23–26 (discussing that if the statute required the supply of all the components, a “domestic

proportionality test quickly becomes difficult to enforce. For this reason, the Supreme Court was correct not to rule on the matter in *Life Technologies*. While practitioners may have appreciated more guidance on how to interpret § 271(f), the Court's opinion served a practical purpose.

B. THE SUPREME COURT'S PRAGMATIC APPROACH

Although the Supreme Court's minimalist decision in *Life Technologies* seemingly gave little practical advice on how to interpret the statute, the simple "one is not enough" decision was sufficient for the Court's purposes.

The unusual ability of the Federal Circuit to use its expertise to construe patent law for the entire nation, without the benefit of competing analysis from its twelve sister Circuits, gives the Supreme Court a special role in reviewing its decisions.¹⁶³ The Court must redirect the Federal Circuit where it misinterprets patent law, as there are no other circuit courts to redirect a wayward Federal Circuit. At the same time, the Supreme Court should exhibit restraint and allow the Federal Circuit and district courts to fully explore the various factual contours of a question before intervening to provide its own standards or rules.

The Court's opinion achieved these two ends: First, pointing to its recent *Microsoft* decision in its analysis, the Court's opinion thwarted the Federal Circuit's expansive definition of "substantial portion."¹⁶⁴ Second, the Court's opinion opened up the statute for further argument in the lower courts. The questions identified above¹⁶⁵—how to correctly quantify "substantial portion," whether by proportion or otherwise, as well as how to appropriately define "component" and interpret inducement under the statute—are challenging and may be more fully illuminated by future cases. Seeing how the statute behaves with different fact patterns allows the courts to consider how it should be applied to various numbers of components and levels of intent to evade patent infringement liability. By leaving these questions open for further litigation in lower courts, the Supreme Court avoided needless speculation about how actors might try to circumvent the law.

supplier could have avoided liability by supplying all but one of the components to the foreign assembler").

163. See Rochelle Cooper Dreyfuss, *What the Federal Circuit Can Learn from the Supreme Court—and Vice Versa*, 59 AM. U. L. REV. 787, 794–95 (2010) (discussing the relationship between the Federal Circuit and the Supreme court).

164. See *Life Techs. Corp. v. Promega Corp.*, 137 S. Ct. 734, 742 (2017).

165. See *supra* Section IV.A.

1. *Unwinding the Federal Circuit's Expansive Interpretation*

The Federal Circuit's decision in *Life Technologies* was expansive.¹⁶⁶ By considering any necessary component to be a "substantial portion," the decision allowed for the supply of nearly any component to attach liability under § 271(f)(1). If the component was required to make the patented invention function, it could be considered a "substantial portion." Few, if any, components of a patent are unnecessary for the functioning of that invention. Thus, the Federal Circuit effectively expanded § 271(f)(1) liability to attach to the supply of *any* component.¹⁶⁷ The Federal Circuit's opinion further expanded the application of § 271(f)(1) by allowing a party to "induce itself" and thus imposed unprecedented liability under the statute.

The Federal Circuit did not observe the presumption against extraterritoriality when it broadened § 271(f)(1). Section 271(f) is a clear exception to the presumption against extraterritoriality, but the presumption should still limit the extent to which the statute is applied. "Even . . . when a statute provides for some extraterritorial application, the presumption against extraterritoriality operates to limit that provision"¹⁶⁸ The Supreme Court was clear in its recent *Microsoft* decision that the Federal Circuit had expanded the scope of patent law too broadly and that the presumption against extraterritoriality meant that it should limit the reach of patent laws overseas.¹⁶⁹ However, the Federal Circuit did not heed this cautionary precedent. Instead, the Federal Circuit's expansive interpretation amplified extraterritorial implications of the statute and had the potential to "undermine the international system of national patents and lead to a type of U.S. patent imperialism."¹⁷⁰

As the Supreme Court had recently stated that "the presumption [against extraterritoriality] tugs strongly against construing § 271(f)" broadly, it is unsurprising that the Court reversed the Federal Circuit's opinion in *Life Technologies*.¹⁷¹ The Federal Circuit is the only Article III appellate court that has

166. The Federal Circuit has a history of expansive interpretations of § 271(f). See Fernandes, *supra* note 151, at 89–93 (discussing *Eolas Technologies, Inc. v. Microsoft Corp.*, 399 F.3d 1325 (Fed. Cir. 2005) (holding that § 271(f) is applicable to all varieties of patents and components); *Union Carbide Chems. & Plastics Tech. Corp. v. Shell Oil Co.*, 425 F.3d 1366 (Fed. Cir. 2005) (holding that § 271(f) is applicable to method claims); *AT&T Corp. v. Microsoft Corp.*, 414 F.3d 1366 (Fed. Cir. 2005) (holding that software was a "component" under the statute because the statute is not limited to tangible components and that supplying a master disk with that software was considered a "supply").

167. See *Life Techs.*, 137 S. Ct. at 741.

168. *Morrison v. Nat'l Austl. Bank Ltd.*, 561 U.S. 247, 265 (2010).

169. See *Microsoft Corp. v. AT&T Corp.*, 550 U.S. 437, 442 (2007).

170. Bernard Chao, *Patent Imperialism*, 109 NW. U. L. REV. ONLINE 77, 86 (2014).

171. *Microsoft*, 550 U.S. at 455; see *Life Techs.*, 137 S. Ct. at 742.

national, rather than regional, jurisdiction, hearing cases based on subject matter, including all patent appeals.¹⁷² Splits creating different precedent within the Circuits and indicating the need for Supreme Court review are unavailable.¹⁷³ The Federal Circuit thus makes the law for the entire nation, unless the Supreme Court steps in to overrule or amend a decision.¹⁷⁴ This means that the Supreme Court must monitor the Federal Circuit's decisions much more closely, and must take action when it disagrees with an opinion, as there is no other judicial body to oppose the Federal Circuit.

As a result, the Supreme Court has increased both the number of Federal Circuit cases it reviews and the scrutiny of its review.¹⁷⁵ While the Court's reversal rate of Federal Circuit decisions is not substantially greater than that of the other circuits,¹⁷⁶ the Supreme Court seems to have a particular interest in patent cases decided by the Federal Circuit.¹⁷⁷

The Federal Circuit was created to be a specialized court in an attempt to reduce the dockets of the regional circuits and enable technically proficient judges to oversee patent cases.¹⁷⁸ When Congress created the Federal Circuit, critics warned that judges might get "tunnel vision" and view patent cases in a vacuum, without considering of other areas of the law.¹⁷⁹

It is possible that the Supreme Court, a generalist court, has reviewed so many Federal Circuit opinions in an attempt to reconcile its specialist patent jurisprudence with more comprehensive considerations.¹⁸⁰ For example, the Federal Circuit's opinion in *Life Technologies* included a thorough review of the

172. See Daniel Kazhdan, *Beyond Patents: The Supreme Court's Evolving Relationship with the Federal Circuit*, 94 J. PAT. OFF. SOC'Y 275, 276 (2012) (describing the Federal Circuit as "the only non-regional court of appeals").

173. See Timothy R. Holbrook, *Is the Supreme Court Concerned with Patent Law, the Federal Circuit, or Both: A Response to Judge Timothy B. Dyk*, 16 CHI.-KENT J. INTELL. PROP. 313, 315 (2016) ("No . . . splits exist in patent law given the Federal Circuit's national jurisdiction.").

174. See Dreyfuss, *supra* note 163, at 805 (describing the Federal Circuit as a "court of last resort" when the Supreme Court does not act).

175. See Kazhdan, *supra* note 172, at 279–82 (discussing the rising rate and harsher tone of Supreme Court review of Federal Circuit patent cases).

176. See Timothy B. Dyk, *Thoughts on the Relationship Between the Supreme Court and the Federal Circuit*, 16 CHI.-KENT J. INTELL. PROP. 67, 71–72 (2016) (noting that the reversal rate at the Supreme Court from 2006 to 2015 for all circuits, except the First Circuit, were at or above 60%).

177. See Holbrook, *supra* note 173, at 313–15, 319 (describing the Supreme Court's relationship to patent cases and stating that "[t]he Supreme Court is interested in patent law far more than the other areas").

178. See Dreyfuss, *supra* note 163, at 788–90 (describing the creation of the Federal Circuit as a specialized court).

179. *Id.* at 790.

180. See Holbrook, *supra* note 173, at 316 (discussing the Supreme Court acting as an antidote to the "judicial myopia" of the Federal Circuit's patent law decisions).

technology at issue, precedent, and statutory interpretation, but it vigorously protected the patent without regard to the national and worldwide implications of doing so.¹⁸¹ The Supreme Court's reversal interpreted § 271(f) much more narrowly, limiting the protection of patents extraterritorially. "The Court's interest here [was] not simply patent law: it [was] a broader interest in reformulating and bolstering the presumption against the extraterritorial application of U.S. law."¹⁸² Unlike the Federal Circuit, "the Supreme Court does not view patent law as distinct from other areas of the law."¹⁸³

The Supreme Court must take an active role in reviewing Federal Circuit opinions both because of the Court's desire to interpret patent law in concert with other areas of the law and because of the Federal Circuit's role as a national appellate court. And the Court has done so in recent years.¹⁸⁴ The Supreme Court's reversal of the Federal Circuit in *Life Technologies* fit into this pattern and was an important action to prevent the Federal Circuit's sweeping interpretation of § 271(f)(1) that easily expanded patent protection across U.S. borders for the supply of any component from the United States. Legal practitioners, inventors, and others involved in patents may be unsatisfied that this decision does not give them more guidance on how to fully understand § 271(f), but by reversing the Federal Circuit, the Supreme Court has enabled that to happen in the future. The statute is now able to further percolate in the lower courts where its interpretation can be worked out, which will give the Court a better idea of how to address it in the future. Congress, of course, may choose to directly amend the statute and offer clarification, expediting the process.

2. *Percolation in Lower Courts*

Percolation is the "mechanism[] through which case law can be critiqued, reexamined, tested, and corrected, and issues worthy of Supreme Court review can be flagged."¹⁸⁵ As a result, courts can identify more issues related to the statute, as well as correct unintended consequences. Percolation of the statute in lower courts ripens it for the Supreme Court to clarify in the future. The Supreme Court "can derive important information from the fact that several courts [below] have confronted the same problem or resolved the same legal issue in similar ways."¹⁸⁶ Further, percolation can help the Supreme Court

181. See *supra* Section III.B.

182. Holbrook, *supra* note 173, at 316.

183. *Id.*

184. See Dreyfuss, *supra* note 163, at 792–93 (discussing recent cases that show the Supreme Court's recent increase in intervention in patent law).

185. Paul R. Gugliuzza, *Saving the Federal Circuit*, 13 CHI.-KENT J. INTELL. PROP. 350, 351 (2013).

186. Rochelle C. Dreyfuss, *Percolation, Uniformity, and Coherent Adjudication: The Federal*

shape its own approach, as the Court will be aware of cases in lower courts that are addressing similar issues. “And because the reviewed court will often have considered prior courts’ resolutions, its decisions will usually provide the Justices with an understanding of the reason it deviated.”¹⁸⁷ These factors allow the Supreme Court to have a more thorough understanding of the landscape surrounding the issue at hand, enabling it to better clarify the doctrine.

Percolation of § 271(f) in lower courts after *Life Technologies* will likely have an important role in determining relevant issues, as well as the unintended consequences of proposed solutions. For example, a lower court could institute a proportionality test similar to the one suggested above.¹⁸⁸ If a court found the proportion to be too large or too small, the court could try a different number. A court could attempt another approach altogether if the court found the proportional test too easily evaded. Further, different courts may employ different definitions of “component” in interpreting the statute, with varying results. The courts will also be able to analyze the extent to which knowledge and intent play a role in § 271(f) infringement liability. Percolation allows for experimentation, and the trial and error inherent in experimentation uncovers strategies that work and those that fail. It is important that this trial and error take place in the lower courts before the Supreme Court can make a defining decision. For this reason, the Court’s *Life Technologies* opinion was appropriately circumspect in allowing the statute to percolate further in the lower courts.

V. CONCLUSION

The Supreme Court’s opinion in *Life Technologies* was pragmatic. Practitioners may disagree, as “one is not enough” does not address how many more components create a “substantial portion,” nor does it indicate how notions of knowledge and intent factor into the analysis. However, the decision did achieve two important goals. First, it reversed the expansive Federal Circuit decision that disregarded the longstanding presumption against extraterritoriality and could have had harmful consequences on an international scale. Second, the Supreme Court’s decision enabled § 271(f) to percolate further in the lower courts. The Court’s opinion only said what it needed to say to reverse the Federal Circuit and left the remainder of the statute open for interpretation. The Supreme Court may be presented with another opportunity in the future to further clarify § 271(f), taking into consideration new outcomes and ideas explored by lower courts.

Circuit Experience, 66 S.M.U. L. REV. 505, 525 (2013).

187. *Id.* at 526.

188. *See supra* Section IV.A.

Without clear direction from Congress, the decision in *Life Technologies*, with its virtues and faults, was all the Supreme Court could practically achieve on the limited record before it. Prior to the enactment of § 271(f), the Supreme Court invited Congress to create policy rebutting the presumption against extraterritoriality if it desired. Congress eventually wrote § 271(f) to do just that—it created an exception allowing limited patent protection beyond the U.S. borders, but poorly defined the extent of that limit. The language of § 271(f) is ambiguous and does not give clear indication as to how Congress intended the statute to apply. While the Court has positioned itself to hear future argument on § 271(f), Congress may resolve to clarify, amend, or completely re-write the statute before the Court reconsiders.

Meanwhile, inventors may choose to seek foreign patents to protect their inventions abroad rather than attempt to defend them through murky U.S. patent statutes like § 271(f). The Supreme Court has suggested this alternative in numerous opinions as a sensible means of proceeding without depending on the U.S. legal system or violating longstanding traditions of patent territoriality.¹⁸⁹

189. *See* *Deepsouth Packing Co. v. Laitram Corp.*, 406 U.S. 518, 531 (1972) (“Respondent holds foreign patents; it does not adequately explain why it does not avail itself of them.”); *see also* *Microsoft Corp. v. AT&T Corp.*, 550 U.S. 437, 456 (2007) (“If AT&T desires to prevent copying in foreign countries, its remedy today lies in obtaining and enforcing foreign patents.”).

SAMSUNG V. APPLE: THE ILL-FATED INTRODUCTION OF APPORTIONMENT-BY- COMPONENT FOR DESIGNS

Ted Kang[†]

I. INTRODUCTION

In *Samsung v. Apple*,¹ the sprawling, high-stakes dispute² between the two titans of the smartphone industry³ finally reached the Supreme Court. For the first time in over a century, the Court faced a case involving design patents, the lesser-known brother of utility patents that protects ornamental designs rather than functional inventions.⁴ The Court had to decide whether Apple should have been awarded the total profits from infringing Samsung phones and tablets.⁵ If affirmed, these total profits, totaling over \$400 million, would be awarded even though Apple's infringed design patents only protected the phone's front rectangular face, rounded corners, beveled screen, and graphical user interface.

The Supreme Court, in a short decision, awarded a measure of relief for Samsung. The Court arrived on a textual solution that complied with the statutory language of 35 U.S.C. § 289, the special remedy for design patent infringement, but also ignored a clear, judicially recognized congressional intent against apportionment. In doing so, the Court ushered in a new

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1. *Samsung Elecs. Co. v. Apple Inc.*, 137 S. Ct. 429 (2016).

2. See Florian Mueller, *Apple vs. Samsung: List of All 19 Lawsuits Going on in 12 Courts in 9 Countries on 4 Continents*, FOSS PATENTS (Aug. 20, 2011), <http://www.fosspatents.com/2011/08/apple-vs-samsung-list-of-all-19.html> [<https://perma.cc/26RK-EENK>] (listing the nineteen ongoing lawsuits in nine different countries between Samsung and Apple in August 2011).

3. See *Manufacturers' Market Share of Smartphone Subscribers in the United States from 2013 and 2017, by Month*, STATISTA, <https://www.statista.com/statistics/273697/market-share-held-by-the-leading-smartphone-manufacturers-oem-in-the-us> [<https://perma.cc/AH7J-YMTB>] (showing Samsung and Apple holding from fifty-nine to seventy-five percent of the US smartphone market between 2013 and 2017, as measured by number of smartphone subscribers).

4. See Petition for a Writ of Certiorari at 1, *Samsung Elecs. Co. v. Apple Inc.*, 137 S. Ct. 429 (2016), 2015 WL 9184827 [hereinafter Petition for a Writ of Certiorari].

5. *Apple*, 137 S. Ct. at 433.

apportionment-by-component regime to the world of design patents, declaring that the total profits should be derived not necessarily from the final product sold to consumers, but from a component of the product to which the patented design had been applied.⁶

This Note examines the path taken by the Supreme Court in *Samsung v. Apple* and its fallout. It explains why the Court's decision was lacking and how deferring to congressional action could have produced a clearer path forward for design patent remedies. Then, the Note discusses how to best move forward by addressing the new test for identifying the relevant article of manufacture. Part II provides the legal background of design patents and the history of § 289, the additional remedy for design patent infringement. Part III summarizes the ongoing legal struggle, from the Northern District of California up to the Supreme Court and back. Part IV discusses the difficult situation in which the Supreme Court found itself, examines the Court's textual argument for introducing a quasi-apportionment regime, and considers whether rejecting apportionment and prompting congressional action might have been the better solution. Part V analyzes the strengths and weaknesses of a newly developed test for identifying the relevant article of manufacture, which was introduced by the district court on remand. Finally, Part VI provides concluding thoughts.

II. LEGAL BACKGROUND

A. AN INTRODUCTION TO DESIGN PATENTS

Design patents offer property rights over any “new, original, and ornamental design for an article of manufacture.”⁷ Using design patents, designers can protect iconic designs like the Coca-Cola bottle,⁸ the Statue of Liberty,⁹ the Fender electric guitar,¹⁰ and even elements of an iPhone.¹¹ In many ways, a design patent is not much different from its more popular brother, the utility patent. Like utility patents, design patents are granted by the United States Patent and Trademark Office (USPTO), codified under the same title—Title 35—of the United States Code, and subject to many of the same statutory provisions.¹² The primary difference is the protected subject matter:

6. *Id.*

7. 35 U.S.C. § 171 (2012).

8. U.S. Patent No. D48,160.

9. U.S. Patent No. D11,023.

10. U.S. Patent No. D164,227.

11. *See* U.S. Patent No. D618,677; U.S. Patent No. D593,087; U.S. Patent No. D618,677; U.S. Patent No. D604,305.

12. 35 U.S.C. § 171(b) (2012) (stating that “the provisions of this title relating to patents

utility patents protect useful, functional inventions and design patents protect ornamental designs.¹³

To obtain a design patent, the designer must file an application with the USPTO and pass a pre-grant examination where the designer must show that the design is novel and nonobvious.¹⁴ However, design patents usually only receive a cursory pre-grant examination and are granted far more readily than utility patents.¹⁵

Statutory language restricts the design patentable subject matter to *ornamental* designs for an article of manufacture.¹⁶ The ornamentality requirement precludes the protection of primarily functional designs, or designs “dictated by” their function,¹⁷ preventing design patents from claiming rights over a useful invention that should be judged as a utility patent. Thus, a design patent cannot be “essential to the use of the article” and the existence of “several ways to achieve the function of an article of manufacture” leads courts to judge the design as primarily ornamental.¹⁸

A granted design patent consists primarily of a title, one claim, and most importantly, diagrams of the design.¹⁹ The one claim uses standard, form language to indicate that the patent claims the ornamental design depicted in the diagrams.²⁰ The diagrams are drawn with solid and broken lines: solid lines indicating the protected, ornamental elements and broken lines representing unclaimed portions.²¹

Design patents were first introduced in 1842 to respond to a rising wave

for inventions shall apply to patents for designs, except as otherwise provided”).

13. *Compare* 35 U.S.C. § 101 (2012), *with* 35 U.S.C. § 171(b) (2012) (contrasting new, useful, inventions with new, original ornamental designs).

14. *See Design Patent Application Guide*, U.S. PATENT & TRADEMARK OFFICE, <https://www.uspto.gov/patents-getting-started/patent-basics/types-patent-applications/design-patent-application-guide#laws> [<https://perma.cc/Z4K9-BCKH>] [hereinafter *PTO Guide*] (describing the utility patent law requirements that also apply to design patents).

15. *See* Dennis Crouch, *Design Patents: Sailing Through the PTO*, PATENTLY-O, (Apr. 2, 2009), <https://patentlyo.com/patent/2009/04/design-patents-sailing-through-the-pto.html> [<https://perma.cc/6X2S-MRQC>] (contrasting the over 80% of utility patent applications that are initially rejected in prosecution to the 25.6% in design patents based on author’s sample); *see also* Janice M. Mueller & Daniel Harris Brean, *Overcoming the “Impossible Issue” of Nonobviousness in Design Patents*, 99 KY. L. J. 419, 423–27 (2011) (discussing the USPTO’s inattention to the nonobviousness requirement).

16. *See* 35 U.S.C. § 171 (2012).

17. *L.A. Gear, Inc. v. Thom McAn Shoe Co.*, 988 F.2d 1117, 1123 (Fed. Cir. 1993).

18. *Id.* at 1123–24.

19. *See PTO Guide*, *supra* note 14.

20. 37 C.F.R. § 1.153 (2012).

21. *See PTO Guide*, *supra* note 14 (in the section discussing “Broken Lines”).

of design piracy that began to affect the American metal and textile industries,²² and to “fill the interstices left by copyright, trademark, and utility patent law.”²³ Thus, design patents, trade dress, and copyright overlap, giving design owners flexibility to choose between the multiple regimes.²⁴ One appealing aspect of design patents over the other protection regimes is the availability of total profits as damages in an infringement case. Unlike copyright and trade dress owners, design patent owners can receive the total profits from a product once some or all of that product has been found to infringe on a patented design. To understand this extraordinary remedy, we must look to 35 U.S.C. § 284, the general provision for damages for patent infringement, and 35 U.S.C. § 289, the special remedy for design patents.

1. *An Introduction to § 284*

35 U.S.C. § 284 rewards a patent owner with damages “adequate to compensate for the infringement, but in no event less than a reasonable royalty for the use made of the invention by the infringer.”²⁵ The statute provides for two types of damages. The first is the lost profits that the patent owner would have earned had the infringer not infringed. Second, if lost profits cannot be sufficiently proven, the patent owner can recover a reasonable royalty, the amount that would have been set in a hypothetical negotiation between a willing patent owner and a willing licensee before infringement began.²⁶

There is rich jurisprudence behind § 284 and the calculation of lost profits or reasonable royalty, but this Note focuses on the facets related to causation and apportionment principles. In the calculation of lost profits, a patent owner must establish a factual basis for causation—“that but for the infringer’s improper acts, [the patent owner] would have made greater sales, charged higher prices, or incurred lower expenses.”²⁷ Linked to causation is the apportionment requirement, which requires that damages be apportioned to account for only the value of the patented invention and not unpatented elements included in the final product.²⁸

An example of the causation and apportionment requirements lies in the

22. Jason J. Du Mont & Mark D. Janis, *The Origins of American Design Patent Protection*, 88 IND. L.J. 837, 848–55 (2013) (describing growing design piracy in the cast-iron goods industry and in the calico print industry).

23. See Peter Lee & Madhavi Sunder, *Design Patents: Law Without Design*, 17 STAN. TECH. L. REV. 277, 279 (2013).

24. *Id.* at 282–85.

25. 35 U.S.C. § 284 (2012).

26. 7-20 DONALD S. CHISUM, CHISUM ON PATENTS § 20.07 (2017).

27. *Id.* § 20.05.

28. *Id.*

calculation of a reasonable royalty. To calculate a reasonable royalty, a determination of the royalty *base* and a royalty *rate* is made, and the product of the two factors is equal to the reasonable royalty.²⁹ The royalty base refers to some “revenue pool implicated by the infringement,” while the royalty rate is the “percentage of that pool ‘adequate to compensate’ the plaintiff for that infringement.”³⁰ Section 284’s “adequate to compensate” language indicates that damages must be causally linked to the to the actual damage inflicted by the infringement and apportioned to exclude the value of unpatented elements.³¹ In stark contrast, § 289 awards total profit without the need for apportionment or causation.

2. *The “Total Profit” Remedy of § 289*

Although the § 284 remedy is available to utility and design patent owners alike, it is rarely invoked by design patent owners. Instead, they rely on § 289, which provides a powerful remedy available only to design patents owner. 35 U.S.C. § 289 states:

Whoever during the term of a patent for a design, without license of the owner, (1) applies the patented design, or any colorable imitation thereof, to any article of manufacture for the purpose of sale, or (2) sells or exposes for sale any article of manufacture to which such design or colorable imitation has been applied shall be liable to the owner to the extent of his total profit, but not less than \$250, recoverable in any United States district court having jurisdiction of the parties.

This extraordinary remedy awards the *total profit* made from the sale of any *article of manufacture* which has *applied* a patented design. Utility patent holders who must seek a reasonable royalty would drool at the prospect of total profit disgorgement. To see why Congress explicitly created such a powerful remedy specifically for design patents owners, we must look to the inception of § 289.

29. Zelin Yang, *Damaging Royalties: An Overview of Reasonable Royalty Damages*, 29 BERKELEY TECH. L.J. 647, 666–68 (2014) (describing the evolution of the calculation of the royalty base and royalty rate).

30. *Cornell Univ. v. Hewlett-Packard Co.*, 609 F. Supp. 2d 279, 286 (N.D.N.Y. 2009).

31. *See* Yang, *supra* note 29, at 649–57.

3. *The History Behind* § 289

a) The Carpet Cases

A pair of Supreme Court cases, *Dobson v. Hartford*³² and *Dobson v. Dornan*³³ (“the Carpet Cases”), prompted Congress to enact stronger protections for design patents. In these cases, four separate claims of design patent infringement against the Dobson brothers, who ran a carpet manufacturing operation in Philadelphia, were consolidated into two trials.³⁴ The plaintiffs, manufacturing firms from New England, accused the Dobson brothers of rampant, willful infringement of their protected carpet designs, and in each case, the Dobson brothers were quickly found liable.³⁵ Unfortunately for the New England firms, the Dobson brothers claimed to be selling their carpets at a loss, so there was no award of infringers’ profits to collect.³⁶ Instead, the New England firms had to argue that they should be compensated for the profit lost from losing carpet sales to the Dobson brothers.³⁷

In another unfortunate turn for the plaintiffs, Justice Blatchford, a proponent of apportionment for damages in utility patent cases, wrote the opinions in both cases.³⁸ Justice Blatchford stated that the entire profits from the manufacture of a carpet should not be awarded “unless it is shown, by reliable evidence, that the entire profit is due to the figure of the pattern.”³⁹ Justice Blatchford concluded that “to allow the patentee to collect the ‘entire profit’—would be to confound all distinctions between cause and effect.”⁴⁰ Thus, the Court only awarded nominal damages, six cents, after finding that the plaintiffs had not met their burden of proving what portion of the lost profits was attributable to the protected designs versus other aspects of the carpet.⁴¹

32. 114 U.S. 439 (1885).

33. 118 U.S. 10 (1886).

34. *Hartford*, 114 U.S. at 440–41; *Dornan*, 118 U.S. at 12.

35. Jason J. Du Mont & Mark D. Janis, *American Design Patent Law: A Legal History*, Ch. 6—*Design Patent Remedies* 1, 11–14 (Ind. Legal Studies Research Paper No. 343, 2016), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2784746 [https://perma.cc/BC4J-CEC9].

36. *See Hartford*, 114 U.S. at 442–43; *Dornan*, 118 U.S. at 12–13.

37. *See Hartford*, 114 U.S. at 442–43; *Dornan*, 118 U.S. at 12–13.

38. *See* DuMont & Janis, *supra* note 35, at 23 (describing Justice Blatchford as the “architect of the apportionment rule”).

39. *Hartford*, 114 U.S. at 444.

40. *Id.*

41. *See Hartford*, 114 U.S. at 444–47; *Dornan*, 118 U.S. at 16–18.

b) Congress Responds: The Act of 1887

The response to the Carpet Cases was swift.⁴² Lower courts began requiring evidence of apportioned value before rewarding lost profits with little sympathy for the difficulties in producing such evidence.⁴³ Thus, much of the protection offered by design patents was defanged. In response, the textile industry, which had an outsize influence on the design patent regime, lobbied for congressional action.⁴⁴

Before long, the House and Senate introduced two identical bills that looked to overturn the apportionment rule for design patents.⁴⁵ The proposed bills offered minimum statutory damages of \$250, which would provide relief against infringers, like the Dobson brothers, who claimed to be operating at a loss.⁴⁶ In addition, the proposed bill offered recovery of damages “in an amount equal to the total amount of the profit made by” the infringer, offering relief from the evidentiary problems regarding apportionment that plagued the design patent holders following the Carpet Cases.⁴⁷

The Senate and House Reports accompanying the two bills offer a view of the congressional intent. Senators argued that as a result of the Carpet Cases, design patents “provide[d] no remedy for a consummated infringement” and cited the precipitous decline of design patent issuances, which had fallen by half.⁴⁸ In addition, the Senate report reflected the belief that design patent rights were unique and needed exceptional protections “on account of their peculiar character” and also recognized the difficulty of determining the value of designs, which were “as short-lived as the caprice of purchasers.”⁴⁹

Most importantly, the House Report explicitly rejected the use of an apportionment rule, stating that “otherwise none of [the] profit [could] be recovered, for it is not apportionable.”⁵⁰ The report reasoned that the entire profit was mandated as “it is the design that sells the article, and so that makes it possible to realize any profit at all.”⁵¹ At the time, most design patents protected textiles, so Congress considered total profits the appropriate remedy

42. See DuMont & Janis, *supra* note 35, at 30.

43. See *id.* at 27–28.

44. *Id.* at 12. (indicating that between 1870 to 1880, about 45% of granted design patents were related to carpets and rugs).

45. S. 1034, 49th Cong. (1st Sess. 1886); H.R. 5570, 49th Cong. (1st Sess. 1886).

46. DuMont & Janis, *supra* note 35, at 31–32.

47. *Id.*

48. S. REP. NO. 206, at 1 (1886).

49. *Id.* at 2.

50. *Id.*

51. *Id.*

because the designs were the central driver of consumer demand.⁵² After little debate, the bill passed by a 70-10 margin on February 4, 1887.⁵³ The language of the bill remained intact when it was incorporated into the revised patent statute as § 289 in 1952.⁵⁴

4. *Section 289 Jurisprudence*

Courts have had ample time since the passage of the Act of 1887 to interpret the total profits remedy for design patent infringement. Until *Apple v. Samsung*, the courts had followed the congressional intent against apportionment, acknowledging the Carpet Cases, the congressional response to those cases, and awarding the total profits from an article of manufacture that applied an infringing design.⁵⁵

The courts had accepted that “total profit” means the entire profits derived from an infringing article of manufacture.⁵⁶ The relevant article of manufacture under § 289 has almost always been understood to be the final product sold to consumers, even for multi-component products.⁵⁷ Owing to the near unanimity of § 289 jurisprudence, the Supreme Court had not considered any case regarding § 289 before the battle between Samsung and Apple.

III. *APPLE V. SAMSUNG*

A. THE DISTRICT COURT AND FEDERAL CIRCUIT

In April 2011, Apple sued Samsung for utility patent infringement, design patent infringement, and trade dress dilution over the iPhone.⁵⁸ The trial commenced in July 2012 and culminated in three days of jury deliberation. The jury found that Samsung had infringed on Apple’s utility patents, design

52. See DuMont & Janis, *supra* note 35, at 36–37.

53. *Id.* at 41.

54. See *Patent Law Codification and Revision: Hearings on H.R. 3760, 82nd Cong., 1st Sess. 109–10* (1951) (statement of P. J. Federico, U.S. Patent Office).

55. See *Nike, Inc. v. Wal-Mart Stores, Inc.*, 138 F.3d 1437, 1441–42 (Fed. Cir. 1998) (detailing the difficulties of apportionment in design cases, and the history of § 289 including the Carpet cases and the resulting Act of 1887 that provided for total disgorgement of infringer’s profits).

56. See, e.g., *Untermeyer v. Freund*, 58 F. 205, 212 (2d Cir. 1893); *Braun Inc. v. Dynamics Corp. of Am.*, 975 F.2d 815, 824–25 (Fed. Cir. 1992); *Nordock, Inc. v. Systems, Inc.*, 803 F.3d 1344, 1354–55 (Fed. Cir. 2015).

57. See, e.g., *Nordock*, 803 F.3d at 1354–55; *Nike*, 138 F.3d at 1441–42. *But see* *Bush & Lane Piano Co. v. Becker Bros.*, 222 F. 902, 902–06 (2d Cir. 1915) (the only case where the court recognized a product not sold to consumers, a piano case, as the relevant article of manufacture; however, the factual situation was unique as piano purchasers could have the piano placed in one of several available piano cases).

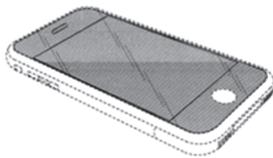
58. *Apple Inc. v. Samsung Elecs. Co.*, 786 F.3d 983, 989 (Fed. Cir. 2015).

patents, and trade dress.⁵⁹ As a result, the jury awarded approximately \$1.049 billion in damages, the largest jury award involving patent infringement in the United States at the time.⁶⁰

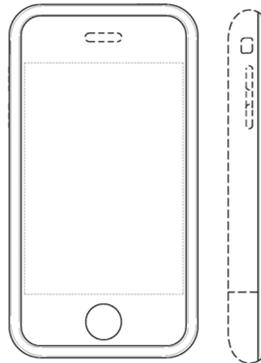
One contentious issue at trial involved the jury instructions for determining design patent infringement.⁶¹ Apple had three design patents that were found to be infringed: the D618,677 patent (the D'677 patent), which covered a black, rectangular face of a phone with rounded corners, the D593,087 patent (the D'087 patent), which covered a rectangular face of a phone with rounded corners and a raised rim, and the D604,305 patent (the D'305 patent), which covered a graphical user interface comprising of colorful square icons on a black screen.⁶²

Figure 1

The D'677 Patent



The D'087 Patent



The D'305 Patent



Since design patents can only protect the *ornamental* aspect of designs, Samsung wanted it made clear that the jury was to distinguish between the protected ornamental designs and the unprotected conceptual or functional features.⁶³ Samsung offered evidence that the rounded corners served to make the phone easier to slip into one's pocket and that the raised rim served to protect the phone from damage from impacts.⁶⁴ However, the district court

59. *Id.*

60. Christopher V. Carani, *Apple v. Samsung: Design Patents Take Center Stage*, 5 LANDSLIDE 25, 25 (2013).

61. *See Apple*, 786 F.3d at 998–1001.

62. *Apple Inc. v. Samsung Electronics Co.*, No. 11-CV-01846-LHK, 2017 WL 3232424, at *17 (N.D. Cal. July 28, 2017).

63. *Apple*, 786 F.3d. at 998.

64. *See* Petition for a Writ of Certiorari, *supra* note 4, at 15 (citing Samsung's un rebutted evidence that rounded corners improved “pocketability” and that the bezel keeps the glass from hitting the ground when dropped).

declined to make such a distinction as infringement is based only on whether the overall appearance of the iPhone and the Samsung counterparts were substantially similar.⁶⁵ Based on overall appearance, the jury found that Samsung had infringed.⁶⁶ After a battle over improper notice dates on a few of Apple's patents, which required a partial retrial for patent damages, the final judgment came to just over \$900 million.⁶⁷

Samsung appealed to the Federal Circuit, which examined Apple's trade dress infringement claims as well as the case for design patent infringement. The Federal Circuit awarded Samsung a victory by vacating the jury verdict as to Apple's trade dress claims.⁶⁸ The Federal Circuit found that Apple's registered and unregistered trade dress were functional and not protectable under Ninth Circuit law.⁶⁹

However, the finding of functionality that invalidated Apple's trade dress claims did not also doom their design patent infringement claims, which requires a higher threshold for finding a design patent functional and thus invalid.⁷⁰ The court held that the district court had been correct in instructing the jury to compare the overall appearance. Even when a design patent included unprotected functional elements, the district court need not "eliminate entire elements from the claim scope."⁷¹ Thus, the Federal Circuit upheld the finding of design patent infringement.⁷²

In the matter of damages, Samsung argued that the district court legally erred in allowing the jury to award Samsung's entire profits from the infringing smartphones as damages.⁷³ Samsung claimed that the damages should have been limited to the profits attributable to the infringement, since consumers chose Samsung based on a host of other factors besides the infringing design.⁷⁴

The Federal Circuit flatly rejected Samsung's apportionment theory, holding that "the clear statutory language [of § 289] prevents us from adopting

65. See *Egyptian Goddess, Inc. v. Swisa, Inc.*, 543 F.3d 665, 678 (Fed. Cir. 2008).

66. See *Petition for a Writ of Certiorari*, *supra* note 4, at 16.

67. See *Apple*, 2017 WL 3232424, at *2.

68. See *Apple*, 786 F.3d. at 995–97.

69. *Id.*

70. See Matthew A. Smith, *Design Patents*, PATENTLY-O (Ed. 0.9 Prelim. Draft for Comment, 2012), https://patentlyo.com/media/docs/2012/12/2012-12-17_design_patents.pdf [<https://perma.cc/5H4Q-LB7R>] (contrasting the looser trade dress standard for functionality with the "dictated by" standard in design patents).

71. See *Apple*, 786 F.3d. at 998–99.

72. *Id.* at 1001–02.

73. *Id.*

74. *Id.*

a ‘causation’ rule as Samsung urges.’⁷⁵ The Federal Circuit would not deviate from its previous § 289 jurisprudence, which recognized that Congress explicitly rejected apportionment for design patents when creating the Act of 1887.

Samsung also offered a new argument for limiting damages, claiming that the profits awarded for design patent infringement should have been limited to the infringing article of manufacture, the “portion of the product as sold that incorporates or embodies the subject matter of the patent,” rather than the entire infringing product.⁷⁶ Apple argued that this was a “novel interpretation” of § 289 that was not supported by any precedent.⁷⁷ The Federal Circuit agreed, stating that “[t]he innards of Samsung’s smartphones were not sold separately from their shells as distinct articles of manufacture to ordinary purchasers.”⁷⁸ The Federal Circuit then remanded the case to determine the remaining damages that were not predicated on Apple’s trade dress claims.

In September 2015, the Northern District of California entered partial final judgment for Apple in the amount of approximately \$548 million for design and utility patent infringement.⁷⁹

B. THE SUPREME COURT

In December 2015, Samsung petitioned for a writ of certiorari to the Supreme Court, asking: “[W]here a design patent is applied to only a component of a product, should an award of infringer’s profits be limited to those profits attributable to the component?”⁸⁰

In March 2016, the United States Supreme Court granted certiorari. In response, dozens of amicus briefs were filed that highlighted the issues at stake. Many technology companies and proponents of apportionment proclaimed the basic unfairness of allowing a patent holder to disgorge the infringer of the total profits for an article even if the infringing design only accounted for 1%

75. *Id.* at 1002.

76. *Apple*, 786 F.3d. at 1003.

77. *Apple Inc. v. Samsung Electronics Co.*, No. 11-CV-01846-LHK, 2017 WL 3232424, at *3 (N.D. Cal. July 28, 2017).

78. *Apple*, 786 F.3d. at 1002.

79. *Apple*, 2017 WL 3232424, at *3.

80. Petition for a Writ of Certiorari, *supra* note 4, at i. Another question was presented regarding the inclusion of functional elements in the infringement analysis, but the Supreme Court refused certiorari on this question. This question addresses another theme running through this case: whether design patents should protect minimalist designs like that of the iPhone which combine form and function, but that is outside the scope of this note.

of the value of the article.⁸¹ They argued that while designs might have motivated customer decisions for carpets, it would be silly to argue that consumers bought iPhones primarily owing to its rounded corners, raised rim, and square graphical user interface.⁸² Many of the briefs also supported Samsung's argument that the article of manufacture in § 289 did not necessarily refer to the final product sold to consumers but could also refer to a component that applied the infringing design.⁸³ In addition, technology companies raised the specter of a new wave of patent trolls looking to capitalize on this imbalance between design patent damages and design value.⁸⁴

On the other hand, many fashion and consumer product companies filed briefs in support of the total profit rule.⁸⁵ They cited the clear congressional record displaying the intent to create a rule rewarding total profit in the face of evidentiary difficulties in apportioning the value of designs.⁸⁶ Given the congressional intent, the briefs argued that the legislative branch was in the rightful position to modify rules for design patent damages and that the Court would be legislating from the bench by returning to an apportionment regime.⁸⁷ Furthermore, these industries cited the importance of design patents in curbing copycat designs and argued that a return to apportionment would severely hamper those efforts.⁸⁸

The United States even weighed in via the Solicitor General's amicus curiae brief for neither party.⁸⁹ This brief had an outsize influence on the case. In the

81. *See, e.g.*, Brief of Public Knowledge and the Electronic Frontier Foundation as Amici Curiae in Support of Petitioners, *Samsung v. Apple*, 134 S. Ct. 429 (2016), 2016 WL 233232 [hereinafter Brief of Public Knowledge]; Brief for the Internet Association et al. as Amici Curiae Supporting Petitioners, *Samsung v. Apple*, 134 S. Ct. 429 (2016), 2016 WL 3194217 [hereinafter Brief of Internet]; Brief Amicus Curiae of the Computer & Communications Industry Association in Support of Petitioner, *Samsung v. Apple*, 134 S. Ct. 429 (2016), 2016 WL 3227039 [hereinafter Brief of CCIA].

82. *See, e.g.*, Brief of Public Knowledge, *supra* note 81, at 4–7.

83. *See, e.g.*, Brief of CCIA, *supra* note 81, at 14–20.

84. *Id.* at 7–10.

85. *See, e.g.*, Brief of Tiffany and Company et al. as Amici Curiae in Support of Respondent, *Samsung v. Apple*, 134 S. Ct. 429 (2016), 2016 WL 4239194 [hereinafter Brief of Tiffany]; Brief for Bison Designs, LLC et al. as Amici Curiae in Support of Respondent, *Samsung v. Apple*, 134 S. Ct. 429 (2016), 2016 WL 4239198 [hereinafter Brief of Bison Designs]; Brief of Amici Curiae 113 Distinguished Industrial Design Professionals and Educators in Support of Respondent, *Samsung v. Apple*, 134 S. Ct. 429 (2016), 2016 WL 4151446.

86. *See, e.g.*, Brief of Bison Designs, *supra* note 85, at 14–23.

87. *See, e.g.*, Brief of Tiffany, *supra* note 85, at 21.

88. *Id.* at 10–18.

89. Brief for the United States as Amicus Curiae Supporting Neither Party, *Samsung v. Apple*, 134 S. Ct. 429 (2016), 2016 WL 3194218 [hereinafter U.S. Amicus Brief].

brief, the Solicitor General maintained that while the language of § 289 does not permit apportionment from the sale of an article of manufacture to which the design has been applied, the article of manufacture to which the design had been applied did not necessarily have to be the final product sold to consumers.⁹⁰ Siding with Samsung, the United States asserted that the article of manufacture could be a component of the final product, as long as it could be “naturally characterized as the ‘article of manufacture’ to which the patented design had been applied.”⁹¹ In addition, the brief presented a four-factor test for identifying the relevant article of manufacture, assuming that the relevant article of manufacture was not always the final product sold to consumers.⁹²

The Supreme Court heard arguments in October 2016 and in December 2016, the Court returned a unanimous verdict for Samsung. In a short opinion, Justice Sotomayor held that “the text resolves the case.”⁹³ Adopting a plain meaning definition of “article of manufacture,” the Court held that the “article of manufacture” for which total profits are awarded under § 289 was not necessarily limited to the product that is sold to consumers but may be a component of that product. This argument was essentially the same as that offered by the Solicitor General’s brief. The Court offered a two-part test for rewarding damages under § 289. First, a court must identify the relevant infringing article of manufacture. Second, a court must determine the total profits derived from that article of manufacture by the infringer.⁹⁴

The Court declined to provide a test for “identifying the relevant article of manufacture at the first step of the § 289 damages inquiry,” although it noted that the United States had supplied a test in its brief.⁹⁵ Instead, the Court remanded to the Federal Circuit to lay out a test.⁹⁶ The Federal Circuit further remanded the case to the Northern District of California to attempt to craft a test for identifying the relevant article of manufacture.⁹⁷

In October 2017, Judge Koh in the Northern District of California declared a new trial to determine damages in light of the Supreme Court’s decision.⁹⁸ She also laid out a test for identifying the relevant article of manufacture, borrowing directly from the Supreme Court amicus brief filed by

90. *Id.* at 17–18.

91. *Id.* at 19.

92. *Id.* at 25–31.

93. *Samsung Elecs. Co. v. Apple Inc.*, 137 S. Ct. 429, 434 (2016).

94. *Id.* at 434.

95. *Id.* at 436.

96. *Id.*

97. *Apple Inc. v. Samsung Elecs. Co.*, No. 11-CV-01846-LHK, 2017 WL 4776443, at *50 (N.D. Cal. Oct. 22, 2017).

98. *Id.* at *110–12.

the United States.⁹⁹ The four-factor test considers: (1) the scope of the design claimed in the design patent; (2) the relative prominence of the design within the product as a whole; (3) whether the design is conceptually distinct from the product as a whole; and (4) the physical relationship between the patented design and the rest of the product. The last factor includes both whether the design pertains to a component that a user or seller can physically separate from the product as a whole, and whether the design is embodied in a component that is manufactured, or can be sold separately from the rest of the product.¹⁰⁰ With the new test in place, a new trial will commence to determine damages.¹⁰¹ And the battle continues.

IV. THE IMPROPER INTRODUCTION OF APPORTIONMENT-BY-COMPONENT

A. TREADING A FINE LINE: ON THE TEXTUAL TIGHTROPE

The Supreme Court was admittedly placed in a difficult position. On the one hand, they were faced with a clear congressional intent against apportionment and a line of cases interpreting § 289 in light of that intent. On the other, they were faced with a result that seemed simply unfair, awarding the total profits from an incredibly functional and complex smartphone merely because it had simple elements like rounded corners and a raised rim. The decision tried to tread the fine line between the two results: ushering in a quasi-apportionment regime that, arguably, squeaks by the textual constraints of the statute while still steering clear of unfairly rewarding the total profits for a multi-component device when only a subset of the components are infringing. Yet, it was not the Court's place to defy congressional intent to avoid a seemingly unfair result and the resulting *apportionment-by-component* regime leaves much to be desired.

The Court maintained adherence to the statutory demands of § 289 by still rewarding "total profits." However, the Court, in contravention of congressional intent, has unquestionably introduced a type of apportionment regime into design patents. While utility patent damages are apportioned by distinguishing the value of the invention from the other unpatented elements in a product, design patents damages will now be apportioned by distinguishing the relevant infringing component from the overall product and calculating the total profits from that component.

In introducing this quasi-apportionment regime, the Supreme Court

99. *Id.*

100. *Id.* at *82–87.

101. *Id.* at *110–12.

offered a disappointingly short decision that primarily recites the dictionary definition of an “article of manufacture” to conclude that the plain meaning is broad enough to encompass a product sold to consumers as well as a component of that product. The Court reasoned that an “article” is just “a particular thing” and that a “manufacture” means “the conversion of raw materials by the hand, or by machinery, into articles suitable for the use of man.”¹⁰² Therefore, “[a]n article of manufacture, then, is simply a thing made by hand or machine.”¹⁰³ Equipped with this broad definition of article of manufacture, the Court concluded that the term article of manufacture could encompass the final product or a component to which the patented design is directly applied.

Unfortunately, although one must admire its simplicity, this textualist strategy is a bit dubious. The strategy breaks a commonly held rule of statutory interpretation: “each part . . . of a statute should be construed in connection with every other part . . . to produce a harmonious whole.”¹⁰⁴ The adoption of a broad interpretation of “article of manufacture” does not synchronize harmoniously with the remaining text of § 289. Specifically, the term “total profit” puts odd constraints on the relevant article of manufacture if an article is broadly understood to be a component of the end product.

Black’s Law Dictionary defines “total” as “whole; not divided” and “profit” as “the excess of revenues over expenditures in a business transaction.”¹⁰⁵ This plain meaning interpretation of “total profit” indicates that the infringing article of manufacture to which the design is applied has a market constraint, needing to actually be sold in a marketplace to determine the revenues and expenditures. Furthermore, this interpretation is also supported by the congressional record from the enactment of the Act of 1887, which stated that total profits should be determined by “the profits actually made from the infringing article . . . that is, what the infringer realized from the infringing articles minus what they cost him.”¹⁰⁶

This plain meaning interpretation of “total profits” clashes with the Court’s broad interpretation of “article of manufacture.” The Court never specifies that the relevant article of manufacture, when it is a component of the final product, has to be one that is for sale. While the Court specifies that

102. *Apple*, 137 S. Ct. at 434–35.

103. *Id.*

104. 2A NORMAN SINGER & SHAMBIE SINGER, SUTHERLAND STATUTORY CONSTRUCTION § 46:5 (7th ed. 2017) (describing the “whole statute” interpretation rule).

105. *Total*, BLACK’S LAW DICTIONARY (10th ed. 2014); *Profit*, BLACK’S LAW DICTIONARY (10th ed. 2014).

106. H. R. REP. NO. 49-1966 (1886).

the relevant article of manufacture does not have to be the final product sold to consumers, it leaves undiscussed whether it still must be sold in a market in some fashion. The Court's articulation of the new § 289 inquiry, which separates the identification of the relevant article of manufacture and the calculation of total profits into two distinct steps, indicates that the Court did not intend for the second step to influence the first. However, it is unclear how courts should determine "total profit" in the second step if the first step of the § 289 inquiry determines that the relevant article of manufacture is not one that is sold in the marketplace.

The United States' influential amicus curiae brief attempted to offer a solution. First, on whether the component must be salable:

Because the award of profits is premised on the "sale" of the "article of manufacture," the relevant "article" must be capable of being sold. But if a particular component is otherwise naturally characterized as the "article of manufacture" to which the patented design has been applied, the sale of the complete product in commerce is properly viewed as a sale of the component as well, since title to the component is transferred as an incident of the larger sale.¹⁰⁷

This argument claims that there is no separate market requirement for a component as long as the end product is salable, as sale of the final product means that the component was sold as well. Even if this were true, the statutory language of § 289 still requires awarding of the "total profit" from the relevant article of manufacture, so the problem remains: how does one calculate the total profits of a component that has never been sold alone.

The United States' brief attempts to address the problem: "To be sure, in cases where the relevant 'article of manufacture' is not sold separately but is instead a component of a larger product, identifying the infringer's profit on that article may require an inquiry that is functionally similar to a traditional causation analysis."¹⁰⁸ In essence, the United States argues that if the relevant article of manufacture is a component that is or can be sold, total profits should be calculated based on the plain meaning definition, by subtracting the costs from the revenue. However, if the component is not sold, we must turn to an inquiry that is "functionally similar to a traditional causation analysis," or the evidentiary methods used for apportionment in utility patents.¹⁰⁹ But, this

107. U.S. Amicus Brief, *supra* note 89, at 18–19.

108. *Id.* at 15.

109. *See id.* (equating the traditional causation analysis with § 284 analysis).

causation analysis is precisely what the Act of 1887 was enacted to prevent. In the Carpet Cases, Justice Blatchford demanded apportionment principles as rewarding total profits would “confound all distinctions between cause and effect,”¹¹⁰ and The Act of 1887 and § 289 were an explicit rejection of those principles. Now, to account for the Supreme Court’s broad, plain meaning interpretation of “article of manufacture,” it seems the United States’ brief is explicitly arguing for a reintroduction of these principles in the realm of design patents.

It is unclear whether courts will require a market constraint on the relevant article of manufacture if it is a component, and if not, how courts will attempt to calculate total profits for a component that cannot be sold. However, if the Solicitor General’s influential suggestions are adopted, as they were by the Supreme Court and Judge Koh, it will mean the introduction of causation principles that were explicitly rejected in the Act of 1887 and § 289, in clear contravention of congressional intent. If not, courts will be in the unenviable position of creating novel jurisprudence to decide how to calculate total profits for a component that cannot be sold separately.

The interpretation of an “article of manufacture” adopted by the Supreme Court, while perhaps providing the fairest result in the immediate case, only adds confusion to the § 289 jurisprudence. It seems unlikely that the Supreme Court’s interpretation can coexist harmoniously with a plain meaning interpretation of “total profit” without the introduction of causation principles that were explicitly rejected by Congress.

B. A LESSON FROM THE CARPET CASES

Given the Supreme Court’s questionable avenue for addressing the case’s tension between congressional intent and fairness, the Court should have taken a lesson from the Carpet Cases. The Supreme Court’s decision to follow the letter of the law in the Carpet Cases was exactly what triggered Congress to enact the design patent damages reforms codified in § 289.

In many ways, allowing Apple to collect total profits in line with congressional intent would have been more proper and led to more clarity around design patents in the long run. First, it appears that the Supreme Court performed some textual jiu-jitsu to circumvent the clear legislative intent against apportionment, which is an improper judicial overreach. Second, the decision itself left many questions unanswered, leaving Samsung and Apple to continue their judicial battle for the foreseeable future and possibly causing more confusion for patent owners trying to estimate possible damages as a

110. *Dobson v. Hartford*, 114 U.S. 439, 444 (1885).

part of litigation strategy. Finally, the newly introduced *apportionment-by-component* regime seems lacking, constrained by outdated language written when carpets accounted for nearly half the design patents granted, and falls short of accurately capturing what design patents damages should be trying to accomplish. Instead of the Court's misguided decision, which promises an arduous process of attempting to cobble together a new apportionment jurisprudence for design patents, the Court could have exercised judicial restraint and placed pressure on Congress to revisit § 289 and revise the special remedy for design patents for the modern era.

It was improper for the Court to introduce any apportionment to design patents in the first place. Although there are competing views on the importance of legislative history in statutory interpretation,¹¹¹ the clear history surrounding the development of the Act of 1887 and § 289, which the Federal Circuit has repeatedly cited, suggests that the Court deviated from congressional intent. It was telling that the Court's short opinion did not attempt to harmonize the multiple cases displaying judicial recognition of the 1887 Act's clear purpose to "declare that the measure of profits recoverable on account of the infringement should be considered to be the total net profits upon the whole article."¹¹²

The decision seems likely to have created a host of new issues, leading to increased litigation costs for Apple and Samsung and a murkier design patent remedies landscape for other design patent owners. The Court failed to create a test for step one of the new § 289 inquiry, identifying the relevant article of manufacture. Although the Supreme Court should not act as a trial court and determine the specific article of manufacture for the iPhone, it could have provided a test for identifying the relevant article of manufacture generally. Failure to do so will mean even further legal costs for Apple and Samsung as they battle over not only how the new § 289 inquiry should be applied but what the actual inquiry should be. Another case has already had to apply the Supreme Court's decision, requiring a two-step § 289 inquiry but having to decide a relevant test for the first step independently.¹¹³ It is possible that § 289 jurisprudence will become fractured as more courts are similarly forced to

111. Compare Alex Kozinski, *Should Reading Legislative History Be an Impeachable Offense?*, 31 SUFFOLK U. L. REV. 807 (1998), with *Train v. Colorado Public Interest Research Group*, 426 U.S. 1, 8–13 (1976) (declaring that the Court of Appeals erred by not referencing legislative history).

112. *Untermeyer v. Freund*, 58 F. 205, 211–12 (2d Cir. 1893).

113. *Columbia Sportswear N. Am., Inc. v. Seirus Innovative Accessories, Inc.*, No. 3:17-cv-01781-HZ, 2017 WL 5494999 (S.D. Cal. Nov. 16, 2017) (luckily, this court has also adopted the four-factor test suggested in the United States' amicus curiae brief).

create independent approaches.

Furthermore, the Court has only added more confusion into the design patent remedies landscape. One issue involves the calculation of total profits, a topic which the Supreme Court declined to engage with altogether. As discussed previously, it is not clear whether the component that is the relevant article of manufacture in step one of the § 289 inquiry needs to actually be salable. A plain meaning interpretation of “total profit” indicates that it should be, but the influential United States’ amicus curiae brief disagrees.¹¹⁴

In addition, that the article of manufacture can be a component of the final product also adds confusion for patent owners who are trying to estimate the amount of protection a design patent offers. Section 289 states: “Nothing in this section shall prevent, lessen, or impeach any other remedy which an owner of an infringed patent has under the provisions of this title, but he shall not twice recover the profit made from the infringement.” This section has normally precluded the recovery of damages for utility patent infringement when total profits from the entire product were awarded for design patents infringement.¹¹⁵ Now, it is unclear how courts will award damages in cases, like this one, where the same product infringes on several design and utility patents. Given the distinct apportionment inquiries for utility patents and design patents, it is unclear how these apportionment regimes will interplay and when an award will be considered “twice recover[ed].”¹¹⁶ This will only lead to more confusion for design patent owners as they try to estimate damages leading up to infringement litigation, and uncertain damages will also hamper efficient settlements. The Supreme Court, in relying on such a shallow analysis, could have unwittingly introduced a new host of issues relating to patent damages.

Finally, the newly introduced quasi-apportionment regime does not accurately capture what design patents are meant to protect. An underlying theme running through this case was that the awarding of total profit seemed unfair because the remedy not only captured the value of the smartphone design but all the other functional elements of the smartphone as well. By introducing the quasi-apportionment regime, the Court sought to avoid this unfair result and somehow separate the value of the design patent from the rest of the product. However, given the constraints of § 289 and the history of the Act of 1887, the Court had to settle on apportioning by choosing a physical component that most accurately reflects the protected design in the final

114. See U.S. Amicus Brief, *supra* note 89, at 15.

115. See *Catalina Lighting, Inc. v. Lamps Plus, Inc.*, 295 F.3d 1277, 1290–91 (Fed. Cir. 2002) (declaring that § 289 damages more than adequately compensated for the § 284 infringement, so § 284 damages could not also be collected).

116. 35 U.S.C. § 289 (2012).

product and calculating total profits, rather than apportioning the value of the design from the final product. This *apportionment-by-component* is a shoddy imitation that fails to account for what should lie at the heart of the design patent damages inquiry: how much a design contributed to the product's profits.

The "value" of the design patent could be determined as it is with utility patents, using the range of evidentiary methods that have been developed for utility patent damage apportionment.¹¹⁷ The "total profit" language of § 289 is what constrains the inquiry to choosing a component that has applied the patented design and calculating revenue minus cost. Sometimes, that could reflect the value of the patented design, but more often, it is likely that it reflects the manufacturing and physical properties of the component, like the material used, how efficiently it was manufactured, or how effectively a manufacturing agreement was negotiated.

For example, imagine that the outer plastic case of a Samsung phone is determined to be the relevant article that has most naturally applied the infringing design. In this example, the total profits inquiry would ask how much it cost Samsung to produce these cases, which would largely depend on the type of material used for the case, the efficiency of industrial processes used to build the case, and even possibly the labor costs that were associated with building the case. Total profits can be calculated only with a proper accounting of costs. Of course, lowering these costs would result in higher total profits; however, none of these considerations are related to the design itself: the *overall appearance* that Samsung infringed and gave the iPhone its simplistic and appealing design.

Given the issues surrounding the Court's decision, it raises the question of whether the Court should have just followed the interpretation of § 289 that had persisted for over a century. An unfair result consistent with legislative intent could have spurred those in the powerful technology industry to lobby Congress for reforms as the textile industry did in the aftermath of the Carpet Cases.

The scope of design patents has unquestionably evolved since the late nineteenth century when most granted designs patents pertained to carpet designs.¹¹⁸ The need to account for the newly granted designs that cover multi-component products could be better served if Congress revamped the

117. J. Gregory Sidak & Jeremy O. Skog, *Using Conjoint Analysis to Apportion Patent Damages*, 25 FED. CIR. B.J. 581, 586–98 (2016) (discussing the possible uses and limitations of survey-based conjoint analysis).

118. Du Mont & Janis, *supra* note 35, at 12.

language of § 289 altogether. Congress would be in a better position to see if evidentiary methods have evolved such that the value of designs could now be accurately apportioned from the final product. Congress could then replace the “total profit” language, if necessary, with “total value” or explicitly endorse a causation requirement. While the Court likely adopted the textual path towards an *apportionment-by-component* regime because it seemed to be the fairest result in the immediate case, allowing Congress to act and revise the outdated language of the § 289 could have led to a clearer future for design patent damages.

V. WHERE TO GO FROM HERE: THE *SAMSUNG* FACTORS

While the Supreme Court’s decision may be lacking, the highest Court has spoken and decreed a new two-step inquiry for § 289: to calculate design patent damages under § 289, one must first identify the relevant article of manufacture that has applied the protected design, then calculate the total profits generated by that article.¹¹⁹

With the new test proposed by Judge Koh in the Northern District of California, we can begin to fill in some questions left by the Supreme Court’s decision. The new test for identifying the relevant article of manufacture adopts the four factors from the influential United States amicus curiae brief: the scope of the patented design, the relative prominence of the patented design within the product, whether the design is conceptually distinct, and the physical relationship between the design and the rest of the product.

Section V.A below analyzes the four factors and determines how they will operate in identifying the relevant article of manufacture. It will also identify some cases where the four-factors would produce the desired results. Section V.B will discuss a possible addition to Judge Koh’s test. The Section argues that the new addition could both more accurately capture Congress’s original intent and provide slightly stronger protection for designs that are the basis of customer demand.

A. ANALYZING THE *SAMSUNG* FACTORS

The first Samsung factor focuses on “the scope of the design claimed in the plaintiff’s patent, including the drawing and written description.”¹²⁰ The first factor thus considers which parts of the design are actually claimed to determine the article of manufacture to which the design was applied. This

119. *Samsung Elecs. Co. v. Apple Inc.*, 137 S. Ct. 429, 436 (2016).

120. *Apple Inc. v. Samsung Elecs. Co.*, No. 11-CV-01846-LHK, 2017 WL 4776443, at *82–83 (N.D. Cal. Oct. 22, 2017) (citing U.S. Amicus Brief, *supra* note 89, at 27).

factor would be used to ensure that the scope of the design is limited to the claimed elements, as indicated by the solid lines in the design patent's diagram. Although the scope of a design should be kept in mind as the other factors are considered, it should not be dispositive.¹²¹ For example, in the case of a dinner plate with a design patent that claims only the decorative rim, it would nonetheless be proper to consider the entire plate as the relevant article of manufacture.¹²²

The next three factors aim to “assess competing contentions” when one party argues that the relevant article of manufacture is the final product and the other argues that the relevant article of manufacture is some component of the product.¹²³ The second factor, “the relative prominence of the design within the product as a whole,”¹²⁴ however, is likely only be helpful in the simple cases. This factor seems to be for the cases where the design is a minor component of the product, like a latch on a refrigerator.¹²⁵ In the harder cases, however, it seems the third and fourth factors would play more critical roles in identifying the relevant article of manufacture.

The third and fourth factors will most likely bear the brunt of the work in determining the relevant article of manufacture. The third factor considers “whether the design is conceptually distinct from the product as a whole.”¹²⁶ This factor would consider whether the product “contains other components that embody conceptually distinct innovations.”¹²⁷ This factor seems to be particularly powerful for multi-component products. As a design is likely to protect the external appearance an article, it would usually be easy to conceptually distinguish the external, ornamental elements from the other valuable, potentially functional, innards of a product. For example, a design patent on a type of book binding would be easily conceptually distinguishable from the literary work embodied in the book.¹²⁸

The fourth factor considers the “physical relationship between the patented design and the rest of the product.”¹²⁹ This factor will take into consideration whether the design pertains to a component that can be separated from the product as a whole, is sold separately from the product as

121. *Id.* at *84.

122. *Id.* at *76–77 (expanding on Justice Sotomayor's example in *Apple*, 137 S. Ct. at 429).

123. *Id.* at *85.

124. *See Apple*, WL 4776443, at *82–83 (citing U.S. Amicus Brief, *supra* note 89, at 28).

125. *See* U.S. Amicus Brief, *supra* note 89, at 28.

126. *Apple*, WL 4776443, at *82–83 (citing U.S. Amicus Brief, *supra* note 89, at 28–29).

127. U.S. Amicus Brief, *supra* note 89, at 28–29.

128. *Id.*

129. *Apple*, WL 4776443, at *82–83 (citing U.S. Amicus Brief, *supra* note 89, at 29).

a whole, or is manufactured separately from the product as a whole.¹³⁰ If a design patent pertains to a component of a product that could be physically separated or sold separately, this factor could be dispositive and lead to an easy result. In harder cases, this factor can act as a constraint on the previous factor, whether the article is conceptually separable. Even if a design is conceptually distinct from the rest of the product, the final product could still be the relevant article of manufacture if the patented design and underlying product form one physically inseparable unit.

Thus, when applying the *Samsung* factors to find the relevant article of manufacture, we begin to imagine some common cases that will arise. Some of these cases will be easy. For example, if the patented design is not conceptually distinct from the overall product, it is likely that the design will also not be physically separable and will be featured prominently within the product as a whole. In that case, the *Samsung* factors point toward the entire product as the relevant article of manufacture. For example, if a design patent protected a simple button with some unique ornamental design, the button would clearly be the relevant article of manufacture as the button itself embodies the entire product.

Another easy case would be if the component with the patented design could be physically separated from the rest of the product or is sold separately. If a design can be physically separated, it is likely that the design would also be conceptually distinct and would not be featured as prominently within the product. For example, in *Bush & Lane Piano Co.*, the piano case could be physically separated from the rest of the piano.¹³¹ In this instance, the piano case was conceptually distinct and was not featured prominently, relative to the innards of the piano that produced the sound. Thus, the *Samsung* factors would point to the piano case as the relevant article of manufacture.

Another relatively easy case involves products where the design is conceptually distinct from the underlying product but the article to which the design is applied is physically inseparable and manufactured as one product unit. For these “single-component products,” the Supreme Court declared that the final product should be the relevant article of manufacture.¹³² For example, in the *Carpet Cases*, the designs on the carpets are conceptually distinct from the carpet itself but the design was woven into the fabric of the carpet and could not reasonably be physically separated or manufactured separately. For

130. *See id.*

131. *Bush & Lane Piano Co. v. Becker Bros.*, 222 F. 902, 904 (2d. Cir. 1915).

132. *Samsung Elecs. Co. v. Apple Inc.*, 137 S. Ct. 429, 434–35 (2016) (“*Apple IP*”) (declaring that in the case of a design for a single-component product, such as a dinner plate, the product is the article of manufacture to which the design has been applied).

the Carpet Cases, the second *Samsung* factor would note the prominence of the design over the entire carpet and the fourth *Samsung* factor would consider that the carpet is not made up of many components but creates one physical, unitary whole with the design. In these single-component products, the considerations of the second and fourth factors should outweigh the third factor, and the *Samsung* factors would determine that the whole product should be the relevant article of manufacture.

The more difficult cases, however, are those where the design is conceptually distinct from the underlying product but the article to which the design is applied is made of multiple components that are not cleanly, physically separable. Unfortunately, the design patents on the iPhone reflect this difficulty. For example, the D'087 patent, claims the rectangular front face, rounded corners, and raised rim of the iPhone.¹³³ The design is conceptually distinct from the innards of the iPhone, which is responsible for all the computing utility of the device. It is also conceptually distinct from the back face of the iPhone, which is not claimed by the design patent. It seems likely that the design embodying the front screen, rounded corners, and raised rim is not physically removable nor sold separately from the rest of the outer case of the phone.

There is a tension in this example between the conceptual design, which we can imagine, and the lack of a physical embodiment of the design that can easily be physically separated from the final product. Here, it is unclear, exactly what the relevant article of manufacture would be and will depend heavily on how the individual pieces that make up the screen, rounded corners, and raised rim were manufactured then combined into the final product.

The improvement offered by the *Samsung* factors in this case is that the factors will correctly exclude the functional innards of the iPhone. However, the iPhone example also displays an inherent limitation; the relevant article of manufacture will have to depend on the physical characteristics of the components and specifics of how the iPhone was manufactured. This again stems from the Supreme Court's misguided decision to squeeze a quasi-apportionment regime into the textual constraints of § 289 and focus on physical components as the method of apportionment. This focus on physical components means that the design patent damages inquiry will be a discussion about physical components and their method of inclusion into the final product rather than what should arguably lie at the heart of the design patent damages inquiry: how much the value of the design contributed to the final product's profits.

133. *Apple*, 137 S. Ct. at 433.

Overall, the *Samsung* factors seem to do some things well. The Court wanted a test that could differentiate between the Carpet Cases, where the entire profits could be awarded from the sale of a carpet, and the iPhone case, where a design patent should not award the total profits from a complex multi-component product. The test seems to choose the entire carpet as the relevant article of manufacture and is likely to choose some component of the iPhone that will exclude the value derived from the functional innards of the iPhone. However, the *Samsung* factors, which must overly focus on the physical and conceptual qualities of the design, fails to capture how the appeal of the design contributed to the final product's profits. The next Section will offer a slight improvement to the *Samsung* factors that can help capture the value of the design in certain cases where the "design sells the article."¹³⁴

B. A FIFTH FACTOR? LESSONS FROM THE ENTIRE MARKET VALUE RULE

The *Samsung* factors focus on the relationship between the physical and conceptual qualities of the design and the rest of the underlying product. The factors, however, do not seem to accurately capture the reason that the authors of the Act of 1887 gave such extraordinary remedies for design patents. In their view, designs were "peculiar creatures" that "sold the article."¹³⁵ This notion is also reflected in the Entire Market Value Rule (EMVR) principle from utility patents, which awards the total market value of a product when the entire value of the product could be attributed to the patented feature.¹³⁶

Unfortunately, the *Samsung* factors do not embody the EMVR concept. To illustrate this deficiency, imagine a design patent on a normal, drip coffee maker that has an especially appealing ornamental design applied on an outer, plastic shell. In fact, the design is so appealing that this coffee maker, which makes the same coffee in the same way as all the others in the market, has achieved total market domination.

For the sake of argument, we can assume that the outer shell is manufactured separately from the innards responsible for making the coffee. Applying the *Samsung* factors, a factfinder is likely to conclude that the scope of the design patent only protects the outer shell of this coffee maker. A factfinder is also likely to conclude that the ornamental shell of this coffee maker is conceptually distinct from the internal elements responsible for making coffee. Finally, a factfinder is likely to conclude that the outer shell is not sold separately, is not removable, and is manufactured separately from the rest of the coffee maker. Thus, the *Samsung* factors would point to the plastic

134. H.R. REP. NO. 49-1966, at 3–4 (1886).

135. *Id.*

136. *See* Rite-Hite Corp. v. Kelley Co., Inc., 56 F.3d 1538, 1549 (Fed. Cir. 1995).

outer shell as the relevant article of manufacture. However, the calculation of total profits from this outer shell would merely be a calculation of the revenue produced from the shell itself minus the cost to produce it. The total profits from this outer shell wholly fail to capture its relationship with the rest of the coffee maker. This also fails to account for the actual value of the design, which is responsible for selling the entire coffee maker, serving as “the basis for customer demand.”¹³⁷ Instead, the test focuses on the physical properties of the plastic shell and its production.

Given that the current four *Samsung* factors have little connection to the statutory language of § 289 besides the goal of finding the relevant article of manufacture “to which the design is applied,” the addition of one or more factors that would improve this process seems no less statutorily problematic than the Supreme Court’s introduction of a quasi-apportionment regime. Furthermore, the congressional purpose behind § 289 supports the inclusion of the EMVR principle.

Thus, the addition of an additional factor to the *Samsung* factors: “whether the design is the basis for all consumer demand” would be a needed improvement. This, unlike the other *Samsung* factors, would be a primarily economic consideration rather than a physical consideration of the design, and would more align with Congress’s intent in protecting designs that sold the article itself. It would only apply in cases where the other four *Samsung* factors reached a result in which the relevant article of manufacture was not the whole product, but evidence can show that nearly the entire value of the product could be attributed to the design. This would produce results more closely tied to the value of infringed designs, allowing courts to reach the correct result in our hypothetical coffee maker example and other similar cases.

VI. CONCLUSION

Unfortunately for Samsung and Apple, the battle continues as the Supreme Court did not offer much resolution. The Supreme Court chose to write a narrow decision, which introduced a two-step inquiry for § 289 but failed to provide guidance on how to implement either step. This, along with the Supreme Court’s misguided reintroduction of a quasi-apportionment regime that is constrained by the century-old statutory text of § 289, is likely to provide a confusing landscape for design patent damages going forward. Some progress has been made with the *Samsung* factors, but the *Samsung* factors are also constrained by the Supreme Court’s decision. The *Samsung* factors fail to capture what should be at the heart of the design patent damages inquiry: how

137. *Id.*

much value the design actually contributes to the overall profit of the product. Thus, the § 289 jurisprudence that develops in the wake of *Samsung* will likely be misguided. The best solution will be for Congress to step in and update the outdated § 289 language for the modern age.

SCA v. FIRST QUALITY: LETTING GO OF LACHES IN PATENT LAW

Chris Chuang[†]

I. INTRODUCTION

A patent dispute over diapers has led the Supreme Court to decide that defendants may not use a laches defense to bar damages for patent infringement claims within the six-year statutory period.¹

Over the past ten October Terms, the Supreme Court has reviewed proportionally more cases from the Federal Circuit than any other circuit.² Through these cases, the Supreme Court has had a major impact on the substance and procedure of patent law.³ Specifically, many of these cases have address the limitations placed on patent rights. The primary goal of intellectual property (IP) law is to promote innovation.⁴ A patentee's right to exclude others from making, selling, and using the patented item creates dangers like

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1. *SCA Hygiene Prods. Aktiebolag v. First Quality Baby Prods., LLC*, 137 S. Ct. 954 (2017).

2. Timothy B. Dyk, *Thoughts on the Relationship Between the Supreme Court and the Federal Circuit*, 16 CHI.-KENT J. INTELL. PROP. 67, 68 (2016) (“The Supreme Court reviewed 0.28% of total appeals terminated in [the Federal Circuit] and 0.26% for the D.C. Circuit. In other words, the Supreme Court was significantly more likely to review cases from our court and the D.C. Circuit than from any of the other circuits.”). In the 2016 October term alone, the Supreme Court reversed four Federal Circuit decisions on patent law with resounding votes. *See Samsung Elecs. Co. v. Apple Inc.*, 137 S. Ct. 429 (2016); *Life Techs. Corp. v. Promega Corp.*, 137 S. Ct. 734 (2017); *SCA*, 137 S. Ct. 954 (2017); *Impression Prods. v. Lexmark Int’l, Inc.*, 137 S. Ct. 1523 (2017).

3. *See, e.g., Alice Corp. Pty. v. CLS Bank Int’l*, 134 S. Ct. 2347, 2352 (2014) (holding that a patent that applies generic computer implementation to an abstract idea “fails to transform that abstract idea into a patent-eligible invention”); *TC Heartland LLC v. Kraft Foods Grp. Brands LLC*, 137 S. Ct. 1514, 1519 (2017) (holding that patent venue is controlled exclusively by 28 U.S.C. §1400(b), removing personal jurisdiction as a means of establishing proper venue).

4. *See* U.S. CONST. art. I, § 8, cl. 8 (“To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries . . .”); *see also* Michael A. Carrier, *Cabining Intellectual Property Through A Property Paradigm*, 54 DUKE L.J. 1, 82 (2004) (“Providing incentives for development is the primary goal of IP. . .”).

monopoly loss and the Tragedy of the Anticommons, which hinder downstream innovation.⁵ Thus, limitations on patent rights, such as equitable defenses,⁶ are essential to a balanced patent system. This Note discusses the Supreme Court's decision in *SCA v. First Quality*, in which the Court upset that balance by removing the equitable defense of laches.⁷

A successful laches defense bars a plaintiff from bringing suit due to the plaintiff's unreasonable delay in bringing that suit.⁸ The same policy purpose may also be addressed by statutes of limitations. Thus, a laches defense is not traditionally available to the defendant when a statute of limitations applies to the cause of action.⁹ The central question in *SCA* is whether the common law defense of laches can be applied to bar a patent infringement claim for damages within the Patent Act's six-year limitations period. The Supreme Court found that the facts and law of this case were similar to that of a recent Supreme Court copyright case¹⁰ and held that laches cannot be applied against patent infringement damages due to the existence of a federal patent statute of limitations.

The Court in *SCA* gave little consideration to the policy purposes of

5. See Carrier, *supra* note 4, at 45 (explaining the danger of inventors charging prices "significantly above the marginal cost of production"); Dan L. Burk & Mark A. Lemley, *Policy Levers in Patent Law*, 89 VA. L. REV. 1575, 1613 (2003) (explaining that a large number of exclusive rights contributes to a "patent thicket" where a new inventor must pay monopoly prices to multiple patentees for each of the invention's components). The tragedy of the anticommons can cause proprietors or inventors to abandon a venture that becomes too costly because the cost of ownership is fragmented into many pieces. JAMES BESSEN & MICHAEL J. MEURER, *PATENT FAILURE: HOW JUDGES, BUREAUCRATS, AND LAWYERS PUT INNOVATORS AT RISK* 41 (2008) ("Heller illustrated the tragedy of the anti-commons by pointing to Moscow storefronts during the transition away from central planning. He noted that storefronts stood empty in the Moscow winter even though retail trade flourished in kiosks on the streets in front of those stores. He explained that store leases were too costly because the ownership of any one store was fragmented.").

6. See Carrier, *supra* note 4, at 110 ("Courts and Congress have recognized a wide array of equitable defenses to patent rights, including inequitable conduct, prosecution laches, patent misuse, exhaustion, implied license, repair, estoppel, and prior use of business method patents.").

7. *SCA*, 137 S. Ct. at 954.

8. See DAN B. DOBBS, *LAW OF REMEDIES, DAMAGES, EQUITY, REMEDIES* 75 (2d ed. 1993) ("In its most orthodox form, laches is unreasonable delay by the plaintiff in prosecuting a claim or protecting a right of which the plaintiff knew or should have known, and under circumstances causing prejudice to the defendant.").

9. See *Petrella v. Metro-Goldwyn-Mayer, Inc.*, 134 S. Ct. 1962, 1874–75 (2014) ("Nothing in this Court's precedent suggests a doctrine of such sweep. Quite the contrary, we have never applied laches to bar in their entirety claims for discrete wrongs occurring within a federally prescribed limitations period.").

10. See *Petrella*, 134 S. Ct. at 1967–68; *SCA*, 137 S. Ct. at 959.

statutes of limitations and the inequitable effects its holding could have on the patent landscape. This Note will explore the fundamental purposes underlying statutes of limitations and laches and show that the removal of laches fails to serve those purposes, opening up opportunities for the abuse of patent rights. Part II lays out the history, policy purposes, and mechanisms of statutes of limitations and laches. Part III summarizes the facts and holding of *SCA*. Part IV argues that laches should still be a valid defense against patent infringement claims, contrary to the Supreme Court's holding. Specifically, Part IV discusses the unique characteristics of patent law, such as the rise of non-practicing entities, patent hold-up scenarios, and the high likelihood of innocent infringers, which distinguish patent law from copyright law and necessitate the defense of laches in patent infringement suits. Part V concludes.

II. LEGAL BACKGROUND

A. STATUTE OF LIMITATIONS

In order to assess whether laches should be applied to patent infringement cases, it is important to understand the elements of, and policy purposes behind, statute of limitations and laches. A statute of limitations sets a time limit for a plaintiff to bring suit against a defendant.¹¹ These statutes date back to Roman law limiting actions to recover property.¹² Currently, statutes of limitations exist in virtually every country and are ubiquitous throughout U.S. federal and state law.¹³ Although the phrasing may differ, a statute of limitations typically specifies: (1) the duration of the limitations period; and (2) the event that starts the clock for the limitations period.¹⁴ Some statutes may also provide for the “postponement, suspension, or extension” of the

11. See *Developments in the Law: Statutes of Limitations*, 63 HARV. L. REV. 1177, 1179 (1950) (“[M]ost statutes provide either that ‘all actions shall be brought within’ or ‘no action shall be brought more than’ so many years after ‘the cause thereof accrued.’”) [hereinafter *Developments*].

12. See *id.* at 1177.

13. See Tyler T. Ochoa & Andrew Wistrich, *The Puzzling Purposes of Statutes of Limitation*, 28 PAC. L. J. 453, 454 (1997).

14. See *Developments*, *supra* note 11, at 1179; see, e.g., CAL. CIV. PROC. CODE § 340.6(a) (2009) (“An action against an attorney for a wrongful act or omission . . . shall be commenced *within one year after the plaintiff discovers*, or through the use of reasonable diligence *should have discovered*, the facts constituting the wrongful act or omission, or four years from the date of the wrongful act or omission, whichever occurs first.”) (emphasis added); 18 U.S.C. § 3301(b) (2016) (“No person shall be prosecuted, tried, or punished for a securities fraud offense, unless the indictment is found or the information is instituted *within 6 years after the commission of the offense.*”) (emphasis added).

limitations period under certain circumstances.¹⁵ Generally, criminal laws do not provide statutes of limitations for serious felonies such as murder or embezzlement of public funds.¹⁶

The statute of limitations provision of the Patent Act contains wording that differs from traditional statutes of limitations: “[e]xcept as otherwise provided by law, no recovery shall be had for any infringement committed more than six years prior to the filing of the complaint or counterclaim for infringement in the action”¹⁷ The Court in *SCA* compared § 286 with the Copyright Act statute of limitations: “[n]o civil action shall be maintained under the provisions of this title unless it is commenced within three years after the claim accrued.”¹⁸ Although the Court found the two statutes comparable, a closer look shows that the Court’s interpretation may be inconsistent with the statutes’ policy purposes.

Statutes of limitations serve several policy purposes. First, they give defendants “reasonable repose” in the form of protection from stale claims.¹⁹ In addition to a defendant’s interest to live with peace of mind, “reasonable repose” recognizes a defendant’s interest in a status quo that has developed over time. For example, under the doctrine of adverse possession, the injury to a property owner plaintiff is balanced against the injury to a defendant if the defendant had to surrender a property that was adversely-possessed for over twenty years.²⁰ Second, statutes of limitations encourage parties to diligently pursue their claims.²¹ A timely suit promotes justice and efficiency in the courts, because with the passage of time, evidence may be lost, memories may fade, and witnesses may disappear.²²

B. LACHES

The defense of laches is an equitable defense that can bar a plaintiff’s claim due to the plaintiff’s unreasonable delay in bringing the claim.²³ Originally, statutes of limitations only barred suits at law.²⁴ Laches was introduced in courts of equity and became known as a “gap-filling” doctrine to supplement

15. See *Developments*, *supra* note 11, at 1179.

16. See, e.g., CAL. PENAL CODE § 799(a) (2017).

17. 35 U.S.C. § 286 (2012).

18. 17 U.S.C. § 507(b) (2012).

19. Ochoa & Wistrich, *supra* note 13, at 457 (quoting *Jolly v. Eli Lilly & Co.*, 44 Cal. 3d 1103, 1112 (1988)).

20. See *id.* at 460, 464.

21. See *id.* at 457.

22. See *id.* at 456 (quoting *Wood v. Elling Corp.*, 20 Cal. 3d 353, 362 (1977)).

23. DOBBS, *supra* note 8, at 75.

24. See *Developments*, *supra* note 11, at 1184.

the law by providing relief in inequitable scenarios in which there was unreasonable delay but statutes of limitations were not applicable.²⁵ Thus, laches is very similar to statutes of limitations.

The Court has articulated that the defense of laches has two requirements: “(1) lack of diligence by the party against whom the defense is asserted, and (2) prejudice to the party asserting the defense.”²⁶ In determining whether plaintiff lacked diligence in filing suit, courts must determine whether the delay was unreasonable and inexcusable.²⁷ The defendant must also suffer material prejudice, which may be evidentiary prejudice or economic prejudice.²⁸

Courts continued to apply the doctrine of laches after the merger of courts of law and equity under the Federal Rules of Civil Procedure in 1938.²⁹ This led to disputes of whether laches should apply when there exists a statute of limitations for the same claim. In *Petrella*, the Supreme Court ruled on the issue of applying laches to a copyright claim brought within the three-year limitations period set forth in the Copyright Act.³⁰ The Court held that the Copyright Act’s express statute of limitations sufficiently takes into account a plaintiff’s delay by only granting retrospective relief within a three-year period; laches can therefore only be invoked in extraordinary circumstances.³¹ In *SCA*, the central question was again whether the defense of laches can be applied to

25. See *SCA Hygiene Prods. Aktiebolag v. First Quality Baby Prods., LLC*, 137 S. Ct. 954, 961 (2017) (“As *Petrella* recounted, the ‘principal application’ of laches ‘was, and remains, to claims of an equitable cast for which the Legislature has provided no fixed time limitation.’”).

26. *Costello v. United States*, 365 U.S. 265, 282 (1961).

27. *SCA Hygiene Prod. Aktiebolag v. First Quality Baby Prod., LLC*, No. 1:10CV-00122-JHM, 2013 WL 3776173, at *3 (W.D. Ky. July 16, 2013), *aff’d in part, rev’d in part*, 767 F.3d 1339 (Fed. Cir. 2014), *reh’g en banc granted, vacated*, No. 2013-1564, 2014 WL 7460970 (Fed. Cir. Dec. 30, 2014), and adhered to in part on *reh’g en banc*, 807 F.3d 1311 (Fed. Cir. 2015), *vacated in part*, 137 S. Ct. 954 (2017), and *rev’d*, 807 F.3d 1311 (Fed. Cir. 2015), and *vacated in part*, 137 S. Ct. 954 (2017).

28. See *id.* (“Economic prejudice occurs when the defendant will suffer the loss of monetary investments or incur damages which likely would have been prevented by earlier suit . . . Evidentiary prejudice may be established by demonstrating an inability to present a full and fair defense on the merits due to a loss of records, the death of a witness, or the unreliability of memories of long past events”) (internal quotations omitted).

29. See FED. R. CIV. P. 2; see also Elizabeth T. Kim, *To Bar or Not to Bar? The Application of an Equitable Doctrine Against A Statutorily Mandated Filing Period*, 43 U.C. DAVIS L. REV. 1709, 1713, 1722 (2010) (citing *Chirco v. Crosswinds Cmty., Inc.*, 474 F.3d 227 (6th Cir. 2007) (the court affirmed the use of laches as an exception “to the general rule of deference to statutory limitations”)).

30. See *Petrella v. Metro-Goldwyn-Mayer, Inc.*, 134 S. Ct. 1962 (2014).

31. See *id.* at 1977 (“In extraordinary circumstances, however, the consequences of a delay in commencing suit may be of sufficient magnitude to warrant, at the very outset of the litigation, curtailment of the relief equitably awardable.”).

bar the “quintessential legal remedy” of damages, this time in light of the Patent Act’s express time-based limitation.³²

Federal appellate courts have considered the laches defense in the patent context. Prior to the merger of law and equity, some circuit courts held that laches was applicable to bar damages in patent infringement cases.³³ After the merger, some circuits continued to apply laches to bar patent infringement damages and injunctive relief.³⁴

In 1992, the Federal Circuit decided *Aukerman v. Chaides Construction*, which established that laches is a cognizable defense for defendants seeking damages in patent infringement cases.³⁵ Additionally, the court held that “[a] presumption of laches arises where a patentee delays bringing suit for more than six years after the date the patentee knew or should have known of the alleged infringer’s activity.”³⁶ Furthermore, the Federal Circuit in *Aukerman* laid out the elements for laches in the patent context as: (1) unreasonable and inexcusable delay by the patentee; and (2) material prejudice suffered by the alleged infringer.³⁷

Although *SCA* overturned *Aukerman*, there are good reasons why laches should be available even where a statute of limitations applies to the same remedy. Despite their similar policy rationales, and the historical role of laches as a gap filler where statutes of limitations did not apply, the two legal tools have distinct roles. Laches should be a more flexible doctrine that can be called upon when a statute of limitations fails to afford defendants with reasonable repose or leads to inequitable results.

32. See *SCA*, 137 S. Ct. at 960.

33. See, e.g., *Wolf, Sayer & Heller v. U.S. Slicing Mach. Co.*, 261 F. 195, 197–98 (7th Cir. 1919) (“The evidence, we think, discloses such laches as to prevent appellee from collecting damages for past infringements . . .”), *abrogated by* *SCA Hygiene Prod. Aktiebolag v. First Quality Baby Prod., LLC*, 137 S. Ct. 954 (2017); *A.R. Mosler & Co. v. Lurie*, 209 F. 364, 371 (2d Cir. 1913) (“Where owners have remained thus supine for many years . . . it seems to us inequitable that they should come at this late day and insist on being granted an accounting for damages and profits . . .”), *abrogated by* *SCA Hygiene Prod. Aktiebolag v. First Quality Baby Prod., LLC*, 137 S. Ct. 954 (2017).

34. See, e.g., *Brennan v. Hawley Prod. Co.*, 182 F.2d 945, 948 (7th Cir. 1950), *abrogated by* *SCA Hygiene Prod. Aktiebolag v. First Quality Baby Prod., LLC*, 137 S. Ct. 954 (2017); *Lukens Steel Co. v. Am. Locomotive Co.*, 197 F.2d 939, 941 (2d Cir. 1952), *abrogated by* *SCA Hygiene Prod. Aktiebolag v. First Quality Baby Prod., LLC*, 137 S. Ct. 954 (2017).

35. See *A.C. Aukerman Co. v. R.L. Chaides Constr. Co.*, 960 F.2d 1020, 1028 (Fed. Cir. 1992) (“Where the defense of laches is established, the patentee’s claim for damages prior to suit may be barred.”), *abrogated by* *SCA Hygiene Prod. Aktiebolag v. First Quality Baby Prod., LLC*, 137 S. Ct. 954 (2017).

36. *Id.* at 1028.

37. See *id.*

III. SCA V. FIRST QUALITY CASE SUMMARY

A. FACTS AND PROCEDURAL HISTORY

Both SCA and First Quality sell diapers. In 2010, SCA filed a suit against First Quality for infringement of SCA's U.S. Patent No. 6,375,646 (the '646 Patent) and its corresponding Reexamination Certificate. The '646 Patent was directed to "absorbent pants-type diapers."

Nearly seven years prior to this lawsuit, SCA sent a notice letter to First Quality alleging that First Quality was infringing on SCA's '646 Patent. In response, First Quality stated that the '646 Patent was invalid in view of another earlier filed patent. Five months later, SCA sent another letter to First Quality alleging that First Quality was infringing on another SCA patent, U.S. Patent No. 6,726,670 ("the '670 Patent"). In response, First Quality denied infringement.³⁸

In July 2004, SCA initiated an ex parte reexamination at the U.S. Patent Office. In March 2007, the Patent Office issued a reexamination certificate to SCA and confirmed the validity of all of the '646 Patent's claims. Throughout this process, SCA never notified First Quality of the reexamination or SCA's intention to file suit against First Quality.³⁹

Over three years later, in August 2010, SCA sued First Quality in the U.S. District Court for the Western District of Kentucky. First Quality filed a motion for summary judgment on the doctrines of laches and equitable estoppel. The district court granted summary judgment to First Quality on both of those grounds.⁴⁰

First, the district court relied on *Aukerman* and a series of Federal Circuit cases stemming from *Aukerman* to establish that laches could bar damages in a patent infringement suit. Further relying on Federal Circuit case law, the district court reasoned that a rebuttable presumption of laches had been established since "a delay of more than six years after the omitted inventor knew or should have known of the issuance of the patent" had elapsed.⁴¹

Next, the district court found that SCA failed to rebut both elements of

38. *SCA*, 137 S. Ct. at 959.

39. *See id.*; SCA Hygiene Prod. Aktiebolag v. First Quality Baby Prod., LLC, No. 1:10CV-00122-JHM, 2013 WL 3776173, at *2 (W.D. Ky. July 16, 2013) ("It is undisputed that SCA did not notify First Quality as to the existence of the reexamination proceeding, nor did SCA ever advise First Quality that SCA intended to file suit against First Quality once the reexamination was complete.").

40. *SCA*, 137 S. Ct. at 956.

41. *SCA*, 2013 WL 3776173, at *3.

laches, i.e., unreasonable delay and material prejudice.⁴² SCA unreasonably delayed to sue First Quality because SCA completed its patent infringement analysis in October 2003, had tracked First Quality's activity since 2003, and had an entire department dedicated towards competitive intelligence.⁴³ Additionally, SCA did not respond and appeared to have backed down when First Quality denied infringement in 2003. First Quality suffered material prejudice as a result of SCA's delay because it made significant investments that it would not have made if it were involved in, or aware of the potential for, litigation.⁴⁴ First Quality invested over \$10 million in expanding new underwear lines and acquired the Tyco Healthcare Retail Group, which included some of the product lines at issue in the *SCA* litigation.⁴⁵

Additionally, the district court found that the defense of equitable estoppel was also applicable to serve as an absolute bar to SCA's patent infringement claims.⁴⁶ Unlike laches, the analysis of equitable estoppel focuses on whether the defendant reasonably relied on the plaintiff's misleading conduct to the defendant's detriment.⁴⁷

On appeal, the Federal Circuit affirmed the district court's grant of summary judgement regarding laches and reversed regarding equitable estoppel. In reversing the latter, the Federal Circuit stated that there remained genuine issues of material fact because of the relatively sparse interaction between SCA and First Quality. In its decision, the Federal Circuit relied on *Aukerman* to establish the applicability of laches as a bar to patent infringement damages.⁴⁸

The Federal Circuit then reheard the case en banc in light of the copyright infringement case, *Petrella*.⁴⁹ In *Petrella*, the Supreme Court held that the defense of laches could not be used to bar a copyright infringement claim

42. *See id.* at *4–*7.

43. *See id.* at *5.

44. *See id.* at *7.

45. *See id.*

46. *See id.* at *8.

47. *See* A.C. Aukerman Co. v. R.L. Chaides Constr. Co., 960 F.2d 1020, 1042–43 (Fed. Cir. 1992) (listing the three elements of equitable estoppel: statements of conduct of the patentee, reliance by the accused infringer, and material prejudice suffered by the accused infringer if the patentee were permitted to proceed).

48. *SCA Hygiene Prod. Aktiebolag v. First Quality Baby Prod., LLC*, 767 F.3d 1339, 1334 (Fed. Cir. 2014), *reh'g en banc granted, opinion vacated*, No. 2013-1564, 2014 WL 7460970 (Fed. Cir. Dec. 30, 2014), *and adhered to in part on reh'g en banc*, 807 F.3d 1311 (Fed. Cir. 2015), *vacated in part*, 137 S. Ct. 954 (2017).

49. *See* *SCA Hygiene Prod. Aktiebolag v. First Quality Baby Prod., LLC*, 807 F.3d 1311, 1315 (Fed. Cir. 2015), *vacated in part*, 137 S. Ct. 954 (2017).

within the Copyright Act's statute of limitations,⁵⁰ because the statute already takes into account delay of filing suit.⁵¹ The Federal Circuit distinguished patent cases from *Petrella* by highlighting two relevant portions of the Patent Act that the court interpreted to allow for the application of laches.⁵² First, the Federal Circuit pointed to the beginning of § 286, which states “[e]xcept as otherwise provided by law,”⁵³ as providing exceptions to the six-year time limitation rule. Then, the Federal Circuit interpreted § 282(b)(1) to mean that Congress codified the defense of laches against patent infringement damages. Section 282(b)(1) reads: “[t]he following shall be defenses in any action involving the validity or infringement of a patent and shall be pleaded: (1) Noninfringement, absence of liability for infringement or unenforceability.”⁵⁴

The Federal Circuit held that the language of § 282 and its legislative history characterize § 282 as “general” and “broadly sets out defenses available in a patent infringement or validity suit.”⁵⁵ Furthermore, the Federal Circuit relied on commentary by P.J. Federico, “a principal draftsman of the 1952 recodification,” who explicitly stated that § 282 includes laches.⁵⁶ Thus, under the combination of § 286 and § 282(b)(1), the Federal Circuit affirmed en banc that the laches defense could be used to bar patent infringement damages.

B. SUPREME COURT OPINION

In March 2017, the Supreme Court ruled in favor of SCA and established that the defense of laches could not be invoked to bar damages within the six-year limitations period set forth in § 286.⁵⁷ The Court relied heavily on *Petrella*, which held that laches cannot preclude a copyright infringement claim for damages within the Copyright Act's 3-year limitations period.⁵⁸

Borrowing from *Petrella*, the Court based its decision on separation-of-powers and the traditional role of laches. First, the Court categorized § 286 as a statute of limitations enacted by Congress that “speaks directly to the issue of timeliness and provides a rule for determining whether a claim is timely

50. See 17 U.S.C. § 504(b) (2012).

51. See *Petrella v. Metro-Goldwyn-Mayer, Inc.*, 134 S. Ct. 1962, 1972–73 (2014).

52. See *SCA*, 807 F.3d at 1315.

53. 35 U.S.C. § 286 (2012).

54. 35 U.S.C. § 282(b)(1) (2012).

55. *SCA*, 807 F.3d at 1321–22.

56. *Id.* at 1322–23.

57. Alito, J., delivered the opinion of the Court, in which Roberts, C. J., and Kennedy, Thomas, Ginsburg, Sotomayor, and Kagan, JJ., joined. Breyer, J., filed a dissenting opinion. See *SCA Hygiene Prods. Aktiebolag v. First Quality Baby Prods., LLC*, 137 S. Ct. 954, 967 (2017).

58. See *id.* at 959.

enough to permit relief.”⁵⁹ Therefore, the judiciary may not act contrary to Congressional intent by upholding a defense of laches within the statutory period. Second, the Court emphasized that the traditional purpose of laches to fill gaps in the legislation is not applicable in this case. The Court’s analysis rests upon its conclusion that § 286 embodies a statute of limitations, and where there is a statute of limitations, “there is no gap to fill.”⁶⁰ Analogizing this case to *Petrella*, the Court overruled *Ankerman* in part, rejecting the Federal Circuit’s holding that laches is available as a defense to a patent infringement claim for damages within the statutory time period.⁶¹

1. *The Supreme Court Rejects First Quality’s Argument*

The respondent, First Quality, attempted to distinguish this case from *Petrella* by distinguishing between the language of the Copyright Act and the language of the Patent Act. First Quality contended that § 286 is not a true statute of limitations since a true statute of limitations “runs forward from the date a cause of action accrues.”⁶² For example, the statute of limitations in the Copyright Act requires a plaintiff to file a copyright infringement suit “within three years after the claim accrued.”⁶³ By contrast, the limitations period in § 286 “runs backward from the time of the suit.”⁶⁴

The Court rejected this argument. In *Petrella*, the Court described the Copyright Act’s statute of limitations in terms almost identical to the statutory period in *SCA*. Specifically, the Court characterized the Copyright Act as allowing plaintiffs to “gain retrospective relief running only three years back from the date the complaint was filed.”⁶⁵ Despite the differences in statutory language, the Court described both the patent and copyright limitations as creating a “look-back period.”⁶⁶ Thus, the Court rejected First Quality’s argument and concluded that the rule it established in *Petrella* is fully applicable to patent infringement cases.

2. *The Supreme Court Rejects Federal Circuit’s Argument*

The Federal Circuit’s reasoning can be summarized into one statutory argument: § 286’s disclaimer “[e]xcept as otherwise provided by law” points to

59. *Id.* at 960.

60. *Id.* at 961, 967.

61. *See id.* at 957.

62. *Id.* at 957.

63. 17 U.S.C. § 507(b) (2012).

64. *SCA*, 137 S. Ct. at 961 (citing Brief for Respondents, *SCA v. First Quality*, 137 S. Ct. 954 (2017) (No. 15-927) 2016 WL 4771957, at *41).

65. *Id.* at 961 (citing *Petrella v. Metro-Goldwyn-Mayer, Inc.*, 134 S. Ct. 1962 (2014)).

66. *Id.* at 962.

§ 282(b), which codifies the defense of laches for patent infringement cases.⁶⁷

The Court rejected this argument because it did not find any exact wording or phrase in the federal statute pointing out laches as a defense; the § 282 language, “[n]oninfringement, absence of liability for infringement or unenforceability,” is too vague to describe laches. Furthermore, the Court rejected the notion that Congress codified laches as a defense because “it would be exceedingly unusual, if not unprecedented” for Congress to intend to include both a statute of limitations provision and a laches defense for damages.⁶⁸

3. Justice Breyer’s Dissent

Justice Breyer dissented alone, opining that laches should be available to bar damages under patent law even within the limitations period. Writing almost as many pages as the majority,⁶⁹ Justice Breyer supported his stance with a comprehensive set of reasons. First, he identified an inequitable gap in the law left by § 286, which should be plugged by the gap-filling doctrine of laches.⁷⁰ Second, he dove into the prior federal case law to show that Congress intended to keep laches a defense.⁷¹ Third, he argued that *SCA* cannot take on the same reasoning and holding in *Petrella* due to differences between copyright and patent law.⁷² The analysis below will return to Justice Breyer’s opinion to conclude that the Court took the wrong approach in *Petrella* and a worse approach in *SCA*.

67. The Federal Circuit found the codification of a laches defense in 35 U.S.C. § 282(b): “The following shall be defenses in any action involving the validity or infringement of a patent and shall be pleaded: (1) Noninfringement, absence of liability for infringement or unenforceability.”

68. *SCA*, 137 S. Ct. at 963.

69. Counting the facts and procedural history of the case, the majority wrote nine pages while Justice Breyer wrote seven pages. *See id.* at 954.

70. *See id.* at 968 (“[A] patentee might wait for a decade or more while the infringer (who perhaps does not know or believe he is an infringer) invests heavily in the development of the infringing product . . . Laches works to fill the gap by barring recovery when the patentee unreasonably and prejudicially delays suit.”).

71. *See id.* at 971. Justice Breyer specifically highlighted six cases that “the majority concedes that it is unable to distinguish,” including: *Wolf, Sayer & Heller v. U.S. Slicing Mach. Co.*, 261 F. 195 (7th Cir. 1919); *A.R. Mosler & Co. v. Lurie*, 209 F. 364 (2d Cir. 1913); *Universal Coin Lock Co. v. Am. Sanitary Lock Co.*, 104 F.2d 781 (7th Cir. 1939); *Banker v. Ford Motor Co.*, 69 F.2d 665 (3d Cir. 1934), *Brennan v. Hawley Prod. Co.*, 182 F.2d 945 (7th Cir. 1950); and *Lukens Steel Co. v. Am. Locomotive Co.*, 197 F.2d 939 (2d Cir. 1952).

72. *See id.* at 971–73. For example, copyright does not have 150 years of case precedent holding that laches and statute of limitations can coexist. In addition, copyright does not have “lock-in” problems which can considerably incentivize delaying suits.

IV. DISCUSSION: LACHES ARE STILL NECESSARY

The Supreme Court reasoned that since § 286 is similar to § 507(b) in the Copyright Act, § 286 is a statute of limitations.⁷³ Laches is a gap-filling doctrine that does not apply where there exists a statute of limitations (and thus no gaps).⁷⁴ Therefore, the doctrine of laches may not be applied to bar legal remedies for patent cases brought within the statutory six-year limitations period.⁷⁵ First Quality and Justice Breyer objected to this line of reasoning on the grounds that § 286 is not a true statute of limitations (unlike § 507(b)) and that inequitable scenarios may arise within the six-year statutory period that require laches as a defense.

The majority was right about the similarities between the copyright and patent provisions, but wrong about the implications for laches. As the following sections will explore, § 286 is practically similar to § 507(b)'s statute of limitations in light of the "separate-accrual rule." However, both statutes leave gaps in the law that can lead to inequitable scenarios, which have greater impact in the patent, versus copyright, context. These gaps call for the application of laches to avoid the very unfairness that laches was developed to prevent.

In this Part, Section A analyzes differences and similarities between § 286 and § 507(b). Section B addresses the question of whether these statutes adequately fulfill the traditional purposes of statutes of limitations or leave gaps that can only be filled by laches. Section C discusses the future of *SCA* and other patent infringement cases. Finally, Section D offers suggestions to amend the Patent Act to cure the current inequitable effects of § 286.

A. SECTION 286 AND § 507(b) ARE EFFECTIVELY EQUIVALENT

At first glance, the Patent Act's § 286 seems different from the Copyright Act's § 507(b) since § 286 defines the statutory period by counting backward while § 507(b) defines the statutory period by counting forward. However, the Supreme Court concluded that "[a]lthough the relevant statutory provisions in *Petrella* and this case are worded differently, *Petrella*'s reasoning easily fits the provision at issue here."⁷⁶ While the Court was right to conclude that the two provisions are more alike as a practical matter than their language suggests, it failed to fully explain why this is the case. The key to understanding the fundamental similarity is the separate-accrual rule, discussed below.

73. *See id.* at 960 (explaining the similarities between *Petrella*, § 507(b), and § 286).

74. *See id.* at 961 (2017) (citing *Petrella v. Metro-Goldwyn-Mayer, Inc.*, 134 S. Ct. 1962, 1974–75 (2014)).

75. *See id.* at 957.

76. *Id.* at 961.

1. *Counting Forward vs. Counting Backward*

A statute of limitations can be recognized by elements contained in the wording and the purposes it accomplishes. The Supreme Court has stated, “[s]tatutes of limitations establish the period of time within which a claimant must bring an action. As a general matter, a statute of limitations begins to run when the cause of action ‘accrues’—that is, when ‘the plaintiff can file suit and obtain relief.’”⁷⁷ Thus, a statute of limitations should describe: (1) the period of time within which a claimant must bring suit (the limitations period); and (2) the event that starts the clock for the limitations period (usually the point in time when the plaintiff is able to file suit). It follows from the second element that statutes of limitations traditionally count forward from a specific start point to establish a window of time to file suit.

While § 507(b) contains both elements, § 286 only contains the first element. Section 507(b) states, “[n]o civil action shall be maintained under the provisions of this title unless it is commenced within three years after the claim accrued.”⁷⁸ In copyright law, the limitations period is three years, which begins to run when a copyright claim accrues. By contrast, § 286 states, “Except as otherwise provided by law, no recovery shall be had for any infringement committed more than six years prior to the filing of the complaint or counterclaim for infringement in the action”⁷⁹ In patent law, the limitations period is six years, which does not begin to run at any point. Instead, § 286 counts backward from the date of filing to determine whether the infringement event falls within the limitations period.

First Quality and Justice Breyer clearly articulated this difference in statutory language in order to distinguish *SCA* from *Petrella*, and the *SCA* majority failed to give a satisfactory reply. The majority responded by saying that “*Petrella* described the Copyright Act’s statute of limitations in identical terms . . . ‘running only three years back.’”⁸⁰ Additionally, the majority stated that the discovery rule (i.e., the limitations period begins at the accrual of the claim) “is not a universal feature of statutes of limitations.”⁸¹ These responses do not address the substantive similarities between § 507(b) and § 286. The separate-accrual rule, however, offers a persuasive rebuttal to Justice Breyer and First Quality’s arguments.

77. *Heimeshoff v. Hartford Life & Accident Ins. Co.*, 571 U.S. 99, 105 (2013) (citing *Bay Area Laundry & Dry Cleaning Pension Tr. Fund v. Ferbar Corp.*, 522 U.S. 192, 201(1997)).

78. 17 U.S.C. § 507(b) (2012).

79. 35 U.S.C. § 286 (2012).

80. *SCA*, 137 S. Ct. at 961. However, just because the statute in *Petrella* was described as “running . . . back” does not make § 507(b) a count backwards statute.

81. *Id.* at 962.

2. *The Great Equalizer: The Separate-Accrual Rule*

The separate-accrual rule states that “when a defendant commits successive violations, the statute of limitations runs separately from each violation.”⁸² While both First Quality and SCA discussed the separate-accrual rule in their briefs, the Supreme Court did not address it at all. The rule, however, may provide the strongest argument in support of the Court’s decision. In the case of a traditional count-forward statute of limitations, such as in copyright law, this rule effectively extends the limitations period indefinitely if the defendant continues to commit violations.⁸³ Thus, the separate-accrual rule makes a count-forward statute of limitations have the same practical effect as a count-backward statute of limitations.

For example, consider the following hypothetical scenarios using the facts of *SCA*. The first applies a count-forward statute of limitations *without* the separate-accrual rule, and the second does the same *with* the separate-accrual rule.

By counting backwards, § 286 did not bar SCA from bringing suit since SCA was still selling the infringing diapers six years prior to the suit. However, if § 286 were a traditional count-forward statute of limitations and the separate-accrual rule did not apply, SCA would be completely barred from suing First Quality.

In order to arrive at this conclusion, it is important to determine the traditional elements of a statute of limitations: the limitations period and the event that would trigger the limitations period. The limitations period in § 286 is six years. The text of § 286 does not mention any beginning point of those six years since it describes a count-backward statute of limitations. For the sake of comparison, the beginning date of the six-year limitations period is assumed to be when SCA fully discovered its cause of action against First Quality.⁸⁴ Since SCA finished its patent infringement analysis in October 2003, October 31, 2003 is assumed to be the beginning of the limitations period.⁸⁵

Under this assumption, because SCA filed suit on August 2, 2010, SCA filed suit six years, nine months, and two days after the statute of limitations began. Thus, the six-year statute of limitations had run, and SCA would be

82. *Petrella v. Metro-Goldwyn-Mayer, Inc.*, 134 S. Ct. 1962, 1969 (2014).

83. *See id.* at 1964.

84. *See Heimeshoff v. Hartford Life & Accident Ins. Co.*, 134 S. Ct. 604, 610 (2013) (“Recognizing that Congress generally sets statutory limitations periods to begin when their associated causes of action accrue, this Court has often construed statutes of limitations to commence when the plaintiff is permitted to file suit.”).

85. *SCA Hygiene Prod. Aktiebolag v. First Quality Baby Prod., LLC*, No. 1:10CV-00122-JHM, 2013 WL 3776173, at *5 (W.D. Ky. July 16, 2013).

barred from all relief as a matter of law regarding the infringement of its '646 patent.

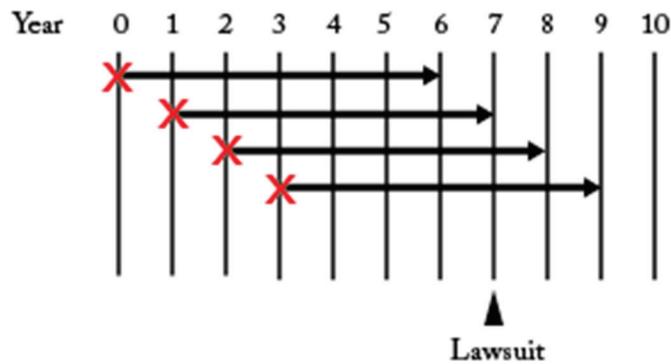
However, under the separate-accrual rule, SCA would not be time-barred by a traditional count-forward statute of limitations. First Quality created additional causes of action with each subsequent production or sale of an infringing diaper. These additional causes of action would have begun new count-forward limitations periods.

It then follows that both a count-forward statute of limitations (with separate accrual) and a count-backward statute of limitations should not bar SCA from bringing suit against First Quality. The practical effect of barring suits in both types of limitations periods is the same. Therefore, the difference between § 507(b)'s and § 286's statutory language is not a viable argument to distinguish the two, because copyright law is a count-forward statute of limitations that deploys a separate-accrual rule. Figure 1 provides a visualization of the mechanisms of count-forward and count-backward statute of limitations and how, in practical effect, both rules provide the same limitations periods.

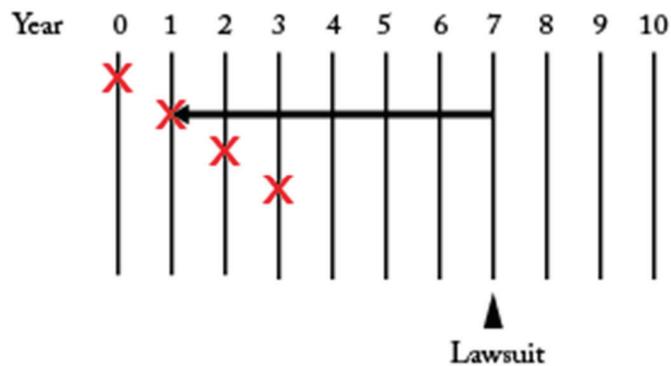
Fig. 1: Comparison of Running Forward and Running Backward limitations periods.

Regardless of whether a statute uses a running forward limitations period, (a), or a running backward limitations period, (b), the result of whether or not a claimant may bring suit is the same.

(a) Running Forward Limitations Period (e.g. § 507(b))



(b) Running Backward Limitations Period (e.g. § 286)



⇌ Limitations Period: 6 years

✗ Infringement Event

The separate-accrual rule, applied in copyright law and mirrored by a count-backward statute of limitations in patent law, is peculiar in the way that it separates infringement violations. Each successive action, infringing upon

the same patent by the same infringer and potentially through the development of the same product, is counted as a separate cause of action meriting a new limitations period. This is markedly different from traditional count-forward statutes of limitations without separate-accrual, such as those in the real property context. Under the traditional rules, a patent holder would only have six years to file suit from the moment the patent holder learned of infringement.

Some statutes of limitations, like those for the doctrine of adverse possession, do not include a separate-accrual rule. In fact, the doctrine of adverse possession shows that the separate-accrual rule is not required in a well-functioning property system. A person may gain title to a property through adverse possession when that person has trespassed upon the property for a set amount of time (the statutory period), among other requirements.⁸⁶ The policy purposes behind adverse possession include, among others, keeping stale claims out of court,⁸⁷ protecting individuals who believe that they rightfully own the land they are using,⁸⁸ and promoting the efficient use of land.⁸⁹ The separate-accrual rule does not apply; each successive instance of trespass does not trigger the start of a new statutory period for the purposes of establishing adverse possession (e.g., when the adverse possessor leaves for and returns from work). Otherwise, it would be impossible to fulfill the statutory period requirement for adverse possession and the doctrine would be moot.

With the separate-accrual rule, § 507(b)'s count-forward statute of limitations is effectively equivalent to § 286's count-backward statute of limitations. However, as discussed below, both statutes may fail to support fundamental statute of limitation policy purposes. Therefore, instead of supporting the Supreme Court's holding in *SCA*, the similarity between § 286

86. *See Ward v. Cochran*, 150 U.S. 597, 607 (1893) (“[I]f the adverse occupant has maintained an exclusive adverse possession for the full extent of the statutory limit, the statute then vests him with the right of property, which carries with it the right of possession, and therefore the title becomes complete in him.”) (citing *Horbach v. Miller*, 4 Neb. 31 (1875)).

87. *See Piatt v. Vattier*, 34 U.S. 405, 416 (1835) (“[The courts of equity] . . . will not entertain stale demands . . . has always refused its aid to stale demands, where the party has slept upon his rights, or acquiesced for a great length of time.”).

88. This is similar to granting reasonable repose. *See McIver v. Ragan*, 15 U.S. 25, 29 (1817) (“The statute of limitations is intended, not for the punishment of those who neglect to assert their rights by suit, but for the protection of those who have remained in possession under colour of a title believed to be good.”).

89. *See, e.g., Chaplin v. Sanders*, 676 P.2d 431, 435 (Wash. 1984) (“The doctrine of adverse possession was formulated at law for the purpose of, among others, assuring maximum utilization of land . . .”).

and § 507(b) indicates that both statutes allow for unequitable scenarios (gaps), and strongly suggests that laches still have a role in the IP system.

B. UNFAIR GAPS IN THE LAW STILL REMAIN AND REQUIRE THE APPLICATION OF LACHES IN PATENT LAW

Because of the functional similarities between § 286 and § 507(b), both the count-backward statute of limitations and the count-forward statute of limitations with the separate-accrual rule fail to provide reasonable repose to defendants and fail to discourage plaintiffs from delaying their suits. Although the Court rejected these policy arguments in *Petrella*,⁹⁰ it also overlooked key concerns.⁹¹ Decisions like *Petrella* and *SCA* perpetuate a particular type of “notice externality,” whereby IP owners are incentivized to obfuscate the scope of their rights.⁹² These deficiencies in § 507(b) and § 286 are particularly inequitable in the case of the innocent infringer, who is not placed on notice of his or her infringement. Furthermore, differences between copyright law and patent law show that it is most critical for laches to intervene on behalf of innocent patent infringers.

1. *Section 286 Is Inconsistent with the Purposes of Statutes of Limitations*

The Supreme Court stated that “[s]tatutes of limitations are designed to promote justice by encouraging plaintiffs to pursue claims diligently and begin to run when a claim accrues.”⁹³ However, a closer look into both of these policy rationales shows how § 286, and to a lesser extent § 507(b), fails to adequately serve fundamental statute of limitations rationales in the intellectual property context.

The language of § 286 provides no bar against a patentee who waits ten, fifteen, or twenty years to sue for patent infringement. A patentee may wait for an innocent infringer to build an empire based off of the infringing patent

90. *See, e.g.,* *Petrella v. Metro-Goldwyn-Mayer, Inc.*, 134 S. Ct. 1962, 1965–66 (2014) (“MGM insists that the laches defense must be available to prevent a copyright owner from sitting still, doing nothing, waiting to see what the outcome of an alleged infringer’s investment will be. It is hardly incumbent on copyright owners, however, to challenge each and every actionable infringement. And there is nothing untoward about waiting to see whether an infringer’s exploitation undercuts the value of the copyrighted work, has no effect on that work, or even complements it.”).

91. *See* Ochoa & Wistrich, *supra* note 13, at 457 (quoting *Jolly v. Eli Lilly & Co.*, 44 Cal. 3d 1103, 1112 (1988)).

92. Peter S. Menell & Michael J. Meurer, *Notice Failure and Notice Externalities*, 5 J. LEGAL ANALYSIS 1 (2013) (“The incentives of those claiming intellectual property diverge from the social interest. Inventors and creators can sometimes benefit from obfuscating the scope of rights and keeping others in the dark about their intellectual property.”).

93. *CTS Corp. v. Waldburger*, 134 S. Ct. 2175, 2178–79 (2014).

and then sue to collect damages incurred within the perpetually-extending limitations period. In the high-tech era of multi-component products, like smartphones, it is highly plausible that an enterprising inventor would not be aware of every patentee that may have a claim to its product.⁹⁴ Additionally, a tricky patentee may “slumber until evidence has been lost, memories have faded, and witnesses have disappeared” before initiating a suit.⁹⁵ Thus, the defendant would be at a severe disadvantage when alleging patent invalidity and at risk to lose a much greater amount in damages solely due to the passage of time.

While § 286 would limit infringement damages to the most recent six years, it does not protect the enterprising inventor from overcommitting time and money into the product over the course of twenty years. Infringement damages are likely to be higher in the later stages of an infringing product’s life than in its developmental stages. Thus, § 286 fails to encourage “plaintiffs to pursue claims diligently,” because plaintiffs have a financial incentive to wait and sue when a business becomes profitable.

Since a patentee may bring suit many years after learning of infringement, § 286 also fails to provide potential infringers with “reasonable repose” that they will not be sued.⁹⁶ Innovators are not guaranteed that six years *after* a release of their product they are free from patent infringement suits. Instead, innovators are forced to live in constant fear of litigation.

Section 286 thus fails to serve the two quintessential purposes of statutes of limitations. While § 286 acts as a limitation on damages reaching back to a maximum of six years prior to the suit, it neither provides reasonable repose nor adequate incentive to pursue timely suits. While plaintiffs may not get more than six-years’ worth of damages at one time, they can wait and choose which six years to collect on damages. In some cases, choosing a later six-year time frame would result in a much greater amount of damages, and thus much greater bargaining power for the plaintiff. Justice Breyer states in his dissent, “[t]he possibility of this [delayed suit] reveals a ‘gap.’ Laches works to fill the

94. In a case study, researchers found that thousands of patents and patent applications were essential to the 3G technology in cellular phones. Furthermore, these patents were assigned to over forty different companies. Mark A. Lemley & Carl Shapiro, *Patent Holdup and Royalty Stacking*, 85 TEX. L. REV. 1991, 2025–26 (2007) (“For [one important piece of the 3G technology], based on reporting at ETSI, they identified 6,872 essential patents and patent applications at the beginning of 2004 The relevant patents are assigned to forty-one different companies . . .”).

95. Ochoa & Wistrich, *supra* note 13, at 456.

96. *Id.* at 457 (quoting *Jolly v. Eli Lilly & Co.*, 44 Cal. 3d 1103, 1112 (1988)).

gap by barring recovery when the patentee unreasonably and prejudicially delays suit.”⁹⁷

While § 286 leaves open such gaps and fails to address important public policy issues, the following Section will show how these deficiencies are not limited to statute of limitations policy rationales. The deficiencies in § 286 also contribute to pressing problems specific to the patent context.

2. *Section 286 Contributes to the Non-Practicing Entity Problem in Patent Law*

Non-practicing entities (NPEs) pose problems in current patent law. Their business model of amassing patents in order to sue innovators for infringement damages or licenses runs counter to the fundamental goal of intellectual property rights.⁹⁸ There is the potential for abusive behavior where NPEs use the threat of injunction, significant damages, or the cost of litigation to extort settlement fees or exorbitant licensing fees from defendant companies.⁹⁹ There is increased danger for abusive behavior in the patent system under § 286, as a patentee may wait and choose to sue in the defendant’s most profitable six years.

The removal of laches as a defense contributes to the market problem of notice failure and notice externalities by further incentivizing NPEs to obscure their patents and delay filing suit. A notice externality arises when the property owner receives less return for providing notice than not providing notice. A patent owner may benefit more from withholding notice when costs of providing notice are high or when a third party infringes on the patent.¹⁰⁰

In particular, NPEs would benefit in a patent hold-out scenario, where their patents take on enormous value if the claimed technology becomes essential to a company’s large project.¹⁰¹ The possibility of high returns in hold-out scenarios encourages NPEs to hoard patents and withhold notice to

97. *SCA Hygiene Prods. Aktiebolag v. First Quality Baby Prods., LLC*, 137 S. Ct. 954, 968 (2017).

98. *See supra* note 4.

99. *See eBay Inc. v. MercExchange, L.L.C.*, 547 U.S. 388, 396 (2006) (“For these firms, an injunction, and the potentially serious sanctions arising from its violation, can be employed as a bargaining tool to charge exorbitant fees to companies that seek to buy licenses to practice the patent.”).

100. *See Menell & Meurer, supra* note 92, at 8 (“A notice externality arises when the private returns to providing notice information are less than the social value. This can happen because providing notice can be costly, but also because resource owners sometimes benefit when a third-party trespasses on or infringes her rights.”).

101. *See id.* at 15 (“The classic pipeline assembly problem illustrates the hold-out problem that can arise when single parcels having relatively low value on their own take on enormous leverage when they become essential to a large project.”).

potential defendants.¹⁰² Without notice, defendants then carry the heavy burden of identifying which claims, among millions, their products may be infringing.¹⁰³ Therefore, by removing the defense of laches for unreasonable delays in bringing infringement suits, *SCA* provides greater notice externalities and leaves innovators more vulnerable to wasteful NPE suits.

3. Innocent Infringers

As discussed above, the § 286 and § 507(b) deficiencies produce particularly harsh results for the innocent infringer who had no notice of the infringement. In his *SCA* dissent, Justice Breyer highlights six cases where a circuit court granted the defense of laches to bar patent infringement damages that the majority conceded were indistinguishable from *SCA*.¹⁰⁴ Of these six cases, two of the cases involved defendants who were oblivious to their infringing actions for many years while the patent owner had or should have had knowledge of infringement and later sued for infringement.

In *Mosler v. Lurie*, the defendants were not aware of infringement for more than eight years.¹⁰⁵ The patent right in *Mosler* was transferred several times to owners that did not practice the patented technology. They made no efforts to ascertain whether the patent was being infringed. Thus, they were unaware of open and notorious infringement and did nothing to warn the defendant for over eight years.¹⁰⁶ The court noted that if the defendants had notice of

102. *See id.* at 14 (“Many of the rights will prove valueless, but even a small possibility of extracting substantial value from independent developers who commercialize similar technologies can justify the up-front claiming investment.”).

103. *See id.* at 14 (“Nonpracticing entities in the patent world benefit from the difficulty that the developers face in searching the millions of patents and patent claims.”); *See* Malcolm Gladwell, *In the Air: Who Says Big Ideas Are Rare?*, NEW YORKER (May 12, 2008), <https://www.newyorker.com/magazine/2008/05/12/in-the-air> [<https://perma.cc/64XE-29KC>] (reporting that large NPE, Intellectual Ventures, files 500 patents a year).

104. *See* *SCA Hygiene Prods. Aktiebolag v. First Quality Baby Prods., LLC*, 137 S. Ct. 954, 971 (2017). Justice Breyer specifically highlighted six cases that “the majority concedes that it is unable to distinguish”: *Wolf, Sayer & Heller v. U.S. Slicing Mach. Co.*, 261 F. 195 (7th Cir. 1919); *A.R. Mosler & Co. v. Lurie*, 209 F. 364 (2d Cir. 1913); *Universal Coin Lock Co. v. Am. Sanitary Lock Co.*, 104 F.2d 781 (7th Cir. 1939); *Banker v. Ford Motor Co.*, 69 F.2d 665 (3d Cir. 1934), *Brennan v. Hawley Prod. Co.*, 182 F.2d 945 (7th Cir. 1950); and *Lukens Steel Co. v. Am. Locomotive Co.*, 197 F.2d 939 (2d Cir. 1952).

105. *A.R. Mosler & Co. v. Lurie*, 209 F. 364, 370 (2d Cir. 1913) (“Suit was begun in September, 1909. Infringement began in 1901 and was continuous thereafter by various manufacturers.”), *abrogated by* *SCA Hygiene Prod. Aktiebolag v. First Quality Baby Prod., LLC*, 137 S. Ct. 954 (2017).

106. *See id.* at 370–71.

infringement, they likely would have avoided infringement with minor adjustments to their product.¹⁰⁷

In *Universal Coin Lock Co. v. Am. Sanitary Lock Co.*, the defendants used the infringing product, coin-controlled locks, for 12 years in public toilet rooms before receiving notice of infringement.¹⁰⁸ Plaintiffs testified that they had seen several of the infringing locks over the years, but still failed to take any action against defendants.¹⁰⁹ Even after that time period and before bringing suit, the plaintiffs' only contact with the defendant was one conversation.¹¹⁰

In both *Mosler* and *Universal Coin Lock*, the court affirmed the ruling of laches for the defendants. Modern defendants may be similarly unaware of infringement because of the sheer number of patents amassed by NPEs and because NPEs' intentional failure to give notice. The problems illustrated by these older cases, combined with the contemporary rise of NPEs, demonstrate the policy gaps left by patent law's statutory statute of limitations—a gap that the Court should have recognized justifies allowing for laches.

4. *Copyright vs. Patent Cases*

As discussed above, the policy problems regarding reasonable repose and incentivizing timely suits are present in both copyright and patent law due to the similarities of the statutes of limitations. *Petrella* failed to recognize these issues when it barred the use of laches in the copyright context. Further, due to key differences between copyright and patent cases, the decision to extend *Petrella* in *SCA* has worsened the policy concerns. Thus, while there is a place for laches in both copyright and patent law, the need is greater in the patent context.

First, innocent infringers are more likely to exist under patent law than under copyright law. Plaintiffs claiming copyright infringement must prove that the defendant had access to and copied the copyrighted material. Thus, independent creation of a copyrighted work is a complete defense under copyright law.¹¹¹ However, such a defense does not exist under patent law.

107. *See id.* at 371.

108. *See Universal Coin Lock Co. v. Am. Sanitary Lock Co.*, 104 F.2d 781, 783 (7th Cir. 1939) (“It is undisputed that from 1922 up to June 10, 1936, except for the conversation between Woodward and Morris in 1934, plaintiff took no action against the defendants. This was 14 years after the defendants, generally and openly, in public toilet rooms in the city in which the officers of the plaintiff lived, had begun the use of guard flanges on their locks.”), *abrogated by* *SCA Hygiene Prod. Aktiebolag v. First Quality Baby Prod., LLC*, 137 S. Ct. 954 (2017).

109. *See id.* at 782.

110. *See id.* at 783.

111. Copyright plaintiffs must demonstrate that the accused infringer had access to the

Innocent inventors that happen to arrive at the same invention without any knowledge of the patent owner's invention are still liable for infringement.¹¹² Since the purpose of patent law is to “promote the Progress of Science and useful Arts,”¹¹³ innocent patent infringers should have the opportunity to alter their design and reconsider hefty investments before wasting resources in litigation.

One counter argument is that § 287's requirement of marking a patented product¹¹⁴ provides sufficient notice to the public. However, the marking requirement does not apply to methods or processes if there is no physical product, like in software. Furthermore, the marking requirement does not mitigate unfairly delayed suits against innocent infringers who fail to find existing patents in the prior art. Finally, innovators may not determine that they are infringing immediately following the identification of a relevant patent because the infringement analysis can be a lengthy and technically complex process.¹¹⁵

Second, patents can cause unfair “lock-in” scenarios in ways that copyrights cannot. Companies may choose between similar competing technologies for their product line. As companies continue to build on that technology, it becomes more tightly integrated with the end product, making it difficult for the company to switch to alternatives. This lock-in problem is particularly strong when the technology has been incorporated into an industry standard, which many industry participants have invested time and money to conform to. The patent holder of that technology has massive bargaining power to “extract supracompetitive royalties” from the industry players.¹¹⁶

work in question and actually copied the work. Thus, independent creation is a complete defense in copyright. *See* MELVILLE B. NIMMER & DAVID NIMMER, NIMMER ON COPYRIGHT § 12.11[D][1] (Matthew Bender, rev. ed. 2018).

112. Brief for Respondents at 45, *SCA v. First Quality*, 137 S. Ct. 954 (2017) (No. 15-927), 2016 WL 4771957, at *45 (“Making, using, or selling the patented invention constitutes direct infringement even if the infringer is unaware that the patent exists.” (citing *Global-Tech Appliances, Inc. v. SEB S.A.*, 563 U.S. 754, 761 n.2 (2011))) [hereinafter Brief for Respondents].

113. U.S. CONST. art. I, § 8, cl. 8.

114. 35 U.S.C. § 287 (2012) (“Patentees . . . may give notice to the public that the same is patented, either by fixing thereon the word ‘patent’ or the abbreviation ‘pat.’, together with the number of the patent . . .”).

115. *See* Brief for Respondents, *supra* note 112 at 46 (“[D]etermining whether a patent is infringed requires a complex ‘technical evaluation’ and ‘prolonged analysis’ of the patent specification, claims, and art - unlike copyright infringement.”).

116. *Broadcom Corp. v. Qualcomm Inc.*, 501 F.3d 297, 310 (3d Cir. 2007) (“When this occurs, the patent holder is in a position to ‘hold up’ industry participants from implementing the standard. Industry participants who have invested significant resources developing products and technologies that conform to the standard will find it prohibitively expensive to

Laches would deter such behavior, because it would prevent patentees from deliberately waiting for an industry to grow in order to acquire unfair bargaining power.

Third, § 286's longer limitations period (six years compared to three years in § 507(b)) gives plaintiffs significantly more time to bring suit after a single infringement event. The longer limitations period also allows plaintiffs to fully assess whether bringing an infringement litigation would be worth the candle. This allows plaintiffs to lie in wait, after they have finished their assessment and decided to pursue litigation, so that their potential damages can increase. Thus, a plaintiff's need to assess the worthiness of litigation is not an appropriate justification to deny the applications of laches in the patent law context.

The Court in *Petrella* stated that it is "hardly incumbent on copyright owners . . . to challenge each and every actionable infringement." Since litigation is expensive and the infringement harm may not be great, it may not be economical to pursue every instance of litigation. The Court rejected the application of laches within the copyright statutory period because copyright owners should be allowed to wait and see whether litigation is worth pursuing, especially since § 507(b) only provides a three-year limitations period.

However, this argument that claimants must wait and see is much weaker when applied to the patent realm, especially in light of unscrupulous patentees such as NPEs. Section 286 gives a limitations period for patentees that is double the limitations period given to copyright owners. In the fast-paced industry of electronics and software, six years should be more than enough time for a patent holder to determine whether an infringing company has significantly butted into the patent holder's market share so as to merit a lawsuit. Thus, laches in patent law should not be barred based upon the argument that the patentee must wait for the entire six-year period to elapse. The fact that § 286 provides a longer period than § 507(b) weakens the *SCA* Court's argument that *Petrella* precludes the defense of laches within patent law's statutory period.

5. *Equitable Estoppel*

In *SCA*, the Court attempted to quell policy arguments of "unscrupulous patentees inducing potential targets of infringement suits to invest in the production of arguably infringing products" by pointing to protection under

abandon their investment and switch to another standard. They will have become 'locked in' to the standard. In this unique position of bargaining power, the patent holder may be able to extract supracompetitive royalties from the industry participants.").

the doctrine of equitable estoppel.¹¹⁷ Equitable estoppel is a common law equitable defense that requires the defendant to show: (1) plaintiff patentee's misleading conduct; (2) the defendant relied on that conduct; and (3) the defendant was materially prejudiced as a result.¹¹⁸ In *SCA*, the defendant, First Quality, could have pointed to prior communications from SCA (or lack thereof) to show misleading conduct.¹¹⁹

However, defendants are not able to rely on equitable estoppel in all unfairly delayed suits. Unlike laches, the defense of equitable estoppel does not require the plaintiff's unreasonable delay. Instead, equitable estoppel focuses on plaintiffs' misleading conduct and whether defendants relied on that conduct to their detriment.¹²⁰ Thus, equitable estoppel is not available where the patent holder silently lies in wait without giving any notice to the innocent infringer because there is no misleading conduct.

SCA and *Petrella* are not good examples of unscrupulous plaintiffs who failed to put innocent infringers on notice. Cases like *Mosler* and *Universal Coin Lock* are much better examples. In both of those cases, the patent owner waited over eight years and twelve years, respectively, before notifying the defendant of infringement.¹²¹ In *Mosler*, the plaintiff was unaware of the infringement because the plaintiff failed to do any research even though the infringement was open and notorious. In *Universal Coin Lock*, it was unclear why the patentee failed to notify the infringer until after 12 years of open and notorious infringement.¹²²

117. *SCA Hygiene Prods. Aktiebolag v. First Quality Baby Prods., LLC*, 137 S. Ct. 954, 967 (2017) (“We note, however, as we did in *Petrella*, that the doctrine of equitable estoppel provides protection against some of the problems that First Quality highlights, namely, unscrupulous patentees inducing potential targets of infringement suits to invest in the production of arguably infringing products.”).

118. *See A.C. Aukerman Co. v. R.L. Chaides Const. Co.*, 960 F.2d 1020, 1028 (Fed. Cir. 1992) (setting forth the elements of the equitable estoppel defense against a patent infringement claim: misleading conduct of the patentee, reliance by the accused infringer, and material prejudice suffered by the accused infringer), *abrogated by SCA Hygiene Prod. Aktiebolag v. First Quality Baby Prod., LLC*, 137 S. Ct. 954 (2017).

119. After First Quality responded to and rebutted SCA's notice of infringement letter, SCA failed to notify First Quality of their reexamination proceedings of the relevant patent and failed to notify First Quality of their intentions to pursue a lawsuit. *See SCA Hygiene Prod. Aktiebolag v. First Quality Baby Prod., LLC*, No. 1:10CV-00122-JHM, 2013 WL 3776173, at *2 (W.D. Ky. July 16, 2013).

120. *See id.* at *8.

121. *See A.R. Mosler & Co. v. Lurie*, 209 F. 364, 369–70 (2d Cir. 1913); *Universal Coin Lock Co. v. Am. Sanitary Lock Co.*, 104 F.2d 781, 783 (7th Cir. 1939).

122. The patent infringer used infringing bathroom locks in public places throughout public bathrooms of hotels, railway stations, and department stores. *See Universal Coin Lock*, 104 F.2d at 782.

While *Mosler* and *Universal Coin Lock* may have been cases of negligent idleness, modern patent holders have strong motives to intentionally stay silent. With the prospect of patent hold-up scenarios, NPEs may be heavily incentivized to remain silent as an infringing but growing technology becomes established in an industry. When the NPEs do finally sue, equitable estoppel will not protect innocent infringer defendants.

C. THE FUTURE OF *SCA v. FIRST QUALITY* AND OTHER PATENT INFRINGEMENT CASES

It is likely that First Quality will seek to limit damages or dismiss all damages through an equitable estoppel defense. Since the Federal Circuit reversed the district court's grant of summary judgment on equitable estoppel due to an existing genuine issue of material fact, the parties will likely litigate the applicability of equitable estoppel in the district court.

Notably, the Supreme Court limited its holding to the remedy of damages when it stated, "[l]aches cannot be interposed as a defense against *damages* where the infringement occurred within the period prescribed by § 286."¹²³ Although the Court was silent on the application of laches to injunction, it is possible that the Court may be more comfortable applying laches to bar injunctions in light of their heavy repercussions. In *eBay*, Justice Kennedy warned that the threat of injunction allows NPEs to charge extremely high licensing fees in patent hold-up scenarios.¹²⁴ However, the *eBay* decision also instated a four-factor test to determine whether or not a court should grant a permanent injunction.¹²⁵ Instead of also applying laches in injunction cases, the Court may instead determine that the four-factor *eBay* test (especially the balance of hardship and public interest factors) adequately addresses policy arguments supporting the application of laches. If that is the case, then laches can only be available for patent claims if Congress amends § 286.

123. *SCA Hygiene Prods. Aktiebolag v. First Quality Baby Prods., LLC*, 137 S. Ct. 954, 967 (2017) (emphasis added).

124. *See eBay Inc. v. MercExchange, L.L.C.*, 547 U.S. 388, 396 (2006) ("For these firms, an injunction, and the potentially serious sanctions arising from its violation, can be employed as a bargaining tool to charge exorbitant fees to companies that seek to buy licenses to practice the patent.").

125. *See id.* at 391 ("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.").

D. A CALL TO CONGRESSIONAL ACTION

Post-*SCA*, it is up to Congress to amend the Patent Act to address current policy concerns. The problem of unscrupulous patent holders asserting delayed claims against innocent infringers can be solved by explicitly codifying the defense of laches. Alternatively, this problem can be cured by revising § 286 to be a count-forward statute of limitations in which the separate-accrual rule does not apply.¹²⁶ The statute could also be amended to provide treble damages and attorneys' fees to punish the repeat infringer defendant if the defendant continues to infringe the patent after a finding of infringement in the first suit. These amendments address the problem of plaintiffs having an unfairly long time to file suit without ever notifying innocent infringers, and yet also give patentees fair compensation for infringing actions.

Although less pressing, similar action should be taken in the copyright context. Both the separate-accrual rule in copyright law and its functionally equivalent count-backward statute of limitations in patent law are contrary to the purposes of statutes of limitations—reasonable repose, avoiding stale claims, and promoting the progress of science and useful arts. Thus, Congress should amend both § 286 and § 507(b).

V. CONCLUSION

The Supreme Court has held that laches may not be applied within the six-year limitations period set forth in 35 U.S.C. § 286. The Court relied heavily on its decision for copyright law in *Petrella* and accurately compared the similarities between statute of limitations provisions in patent and copyright law. However, § 286's count-backward statute of limitations allows patent holders to file suit long after first learning of infringement. This possibility runs counter to the fundamental statute of limitations policy rationales of providing reasonable repose and encouraging timely lawsuits. The danger of unscrupulous wait-and-see tactics also arises in copyright, but it raises greater concern in the patent context due to NPEs. The Court's reliance on *Petrella* may therefore be misplaced in light of key differences between patent and copyright law. Further, although the defense of equitable estoppel may be available to the defendants of *SCA*, sneaky NPEs may get around the defense by failing to notify innocent infringers.

Therefore, Congress should consider amending § 282 to codify the defense of laches or amending § 286 to become a count-forward statute of limitations

126. As discussed above in Section IV.A, the application of the separate-accrual rule to the traditional count-forward statute of limitations makes it functionally similar to § 286's count-backward statute of limitations.

without a separate-accrual rule. For the same reasons, Congress should consider amending § 507(b) as well. These changes would address both the policy rationales behind statutes of limitations and the fundamental purpose of IP law—to promote innovation.

AVOIDING PATENT EXHAUSTION AT HOME AND ABROAD: *IMPRESSION PRODUCTS V. LEXMARK INTERNATIONAL*

Hye Jin Kim[†]

I. INTRODUCTION

In *Impression Products v. Lexmark International, Inc.*,¹ the Supreme Court faced two issues regarding patent exhaustion. First, whether a use restriction imposed by a “conditional sale” of a patented article is enforceable under patent law or is instead unenforceable because the relevant patent rights are exhausted by the sale.² Second, whether a foreign sale of a patented article exhausts the U.S. patent rights or only a sale made in the U.S. exhausts the U.S. patent.³ The Supreme Court reversed the Federal Circuit and held against patent owners on both of these questions by holding that restrictions on conditional sales by a patentee are unenforceable and that U.S. patent rights are exhausted by sales abroad.⁴ The dissent disagreed on only the second issue: that foreign sales should not exhaust the U.S. patent rights.⁵

Before *Lexmark*, the two opinions addressing conditional sales and international exhaustion were *Quanta Computer, Inc. v. LG Electronics, Inc.*⁶ and *Kirtsaeng v. John Wiley & Sons, Inc.*⁷ clarified some unsettled issues of exhaustion,⁸ but did not rule on the permissibility of conditional sales, as the Court simply held there was no restriction on the sale.⁹ In *Kirtsaeng*, the Court

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1. 137 S. Ct. 1523 (2017).

2. *Id.* at 1529.

3. *Id.*

4. *Id.* at 1538.

5. *Id.* at 1539.

6. 553 U.S. 617 (2008).

7. 568 U.S. 519 (2013).

8. *Quanta*, 553 U.S. at 625–30 (reaffirming the concept of patent exhaustion and rejecting the argument that method claims are categorically never exhaustible).

9. *Id.* at 636 (holding that the license agreement between Intel and LGE does not restrict Intel’s right to sell its products to purchasers who intend to combine them with non-Intel parts).

applied international exhaustion in the copyright context,¹⁰ but was unclear whether that holding applied to patent exhaustion.¹¹ With regard to these unsettled issues, the Federal Circuit had strongly favored patent owners on both conditional sale and international exhaustion issues for decades. In *Lexmark*, the Supreme Court put an end to the Federal Circuit's patentee-empowering rules and made a new simple exhaustion rule—exhaustion occurs regardless of restrictions and location.¹² The Court rooted its decision on the common law principle against restraints on alienation of chattels¹³ and emphasized the importance of free flow of commerce.¹⁴ It is too early to know the consequences of the new exhaustion rule, but this Note argues that negative effects to patent owners may eventually hurt purchasers' interests and that unintended consequences may outweigh the value of free commerce. This Note also suggests an alternative framework for exhaustion that vindicates patent owners' interests and protects purchasers' interests.

Patent exhaustion has common law origins¹⁵ and statutory complications. Exhaustion also often implicates the doctrines of patent misuse and antitrust¹⁶ and can also be interpreted as creating implied licenses that render patent law irrelevant. Existing cases are not always clear about the doctrinal basis for their holdings, making it difficult to determine where patent exhaustion ends, and these other doctrines begin or overlap.

In addition, some decisions, including *Lexmark*, raise the possibility that restrictions that cannot be enforced via patent law can nonetheless be enforced via contract.¹⁷ Although it is impossible to address patent exhaustion in total

10. *Kirtsaeng*, 568 U.S. at 554 (holding that the first sale doctrine applies non-geographically).

11. Patent exhaustion is a purely common law doctrine, but copyright exhaustion is governed by a statutory provision, 17 U.S.C. § 109(a) (2012). For judicial development of patent exhaustion doctrine, see *Quanta*, 553 U.S. at 625–28.

12. *Impression Prods. v. Lexmark Int'l, Inc.*, 137 S. Ct. 1523, 1538 (2017).

13. *Id.* at 1527 (“Patent exhaustion, too, has its roots in the antipathy toward restraints on alienation.”).

14. *Id.* at 1532 (“That smooth flow of commerce would sputter if companies that make the thousands of parts that go into a vehicle could keep their patent rights after the first sale.”).

15. See *Kirtsaeng*, 568 U.S. at 538 (“The ‘first sale’ doctrine is a common-law doctrine with an impeccable historic pedigree.”).

16. For example, tying a patented article to a non-patented article can be a patent misuse. Price-fixing and vertical restraints may violate antitrust law. For more discussion regarding the application of patent exhaustion, antitrust and patent misuse on restrictions imposed on a sale of a product, see Herbert Hovenkamp, *Post-Sale Restraints and Competitive Harm: The First Sale Doctrine in Perspective*, 66 N.Y.U. ANN. SURV. AM. L. 487, 487–92 (2011).

17. See *Impression Prods.*, 137 S. Ct. at 1533 (“[W]hatever rights Lexmark retained are a matter of the contracts with its purchasers, not the patent law.”). In *Quanta*, the Court mentioned the possibility of an implied license defense and contractual remedies if those issues

isolation from these related doctrines and causes of action—the primary focus of this Note will be on the patent exhaustion doctrine. This Note disagrees with the *Lexmark* holding that all restrictions are unenforceable and cannot be imposed via a conditional sale of an article embodying a patented invention.¹⁸ This Note suggests that Congress should consider an alternative framework for exhaustion: restrictions are permissible if they have a justification grounded in patent law and consumers have actual knowledge of the restriction. This Note attempts to carefully limit the scope and condition of permissible restrictions so that the exhaustion rule can properly balance patentees' rights and purchasers' rights.

Permissible restrictions could include geographic restrictions that apply to articles first sold abroad. Therefore, this Note agrees with the *Lexmark* holding that unconditional foreign sales always exhaust U.S. patents.¹⁹ However, this Note suggests that some limited restrictions should be allowed for international sales.

Part II of this Note will introduce the concept of patent exhaustion and briefly recount the judicial development of the doctrine. Part III describes *Lexmark's* technology and summarizes the district court decision, the Federal Circuit decision, and the Supreme Court holding in the *Lexmark* case. Part IV argues that the Court's new exhaustion rule may not achieve its goal of free commerce due to developments in business and technology. It suggests an alternative framework for exhaustion that attempts to better serve patentees' rights and consumer rights without unduly sacrificing the importance of free commerce. This Note suggests that restrictions imposed via a conditional sale of an article embodying a patented invention²⁰ should be permissible if a purchaser has actual knowledge of the restriction and if the restriction has one of three justifications: (1) it is related to the subject matter of the patent, (2) it promotes patent policy, or (3) it remedies an inadequate reward from the market. Part IV also applies the framework to international exhaustion context and suggests that price discrimination is a justification for geographical restrictions on sales made abroad. Finally, Part V concludes that setting appropriate limits on the scope of permissible restrictions can balance the

were brought up during trial. *Quanta Comput., Inc. v. LG Elecs, Inc.*, 553 U.S. 617, 637 (2008) (“But the question whether third parties received implied licenses is irrelevant because Quanta asserts its right to practice the patents based not on implied license but on exhaustion.”).

18. *Id.* at 1535.

19. *Id.* at 1538.

20. Throughout this Note, “restrictions on sale” or “restrictions imposed via a conditional sale” refers to the restrictions on use of articles embodying patented inventions that are imposed via a conditional sale.

patentees' rights and the purchasers' rights in a way that is consistent with the spirit of the patent exhaustion doctrine.

II. LEGAL BACKGROUND

This Part discusses the patent exhaustion doctrine, the Federal Circuit decisions regarding conditional sales and the international exhaustion before *Lexmark*, and the Supreme Court decisions in *Quanta* and *Kirtsaeng*, to explore the landscape of exhaustion doctrine before the Supreme Court decision in *Lexmark*.

A. PATENT EXHAUSTION

The Patent Act gives a patentee the right to exclude others from making, selling, using, or importing into the United States a patented invention.²¹ But the Supreme Court has applied the doctrine of patent exhaustion to cut off some of the exclusive rights with regard to an article that was sold by or with the authorization of the patentee.²² Under patent exhaustion, the buyer and subsequent buyers of the article embodying a patent can freely use or sell that same article, but they cannot make a new article embodying the patent.²³ Patent exhaustion thus limits the patent holder's exclusive rights, protects the consumer's right to use the purchased product, and promotes the free and predictable flow of commerce.²⁴ However, limiting the patent holder's rights too much could reduce incentives in a way that threatens the progress of science and useful arts.²⁵ Patent exhaustion should therefore be applied carefully to balance the interests of patent holders, consumers, and the public.

1. *Licenses May Be Enforceable, Even Where There Are No Enforceable Patent-Based Restrictions*

Patentees have tried various methods to reserve their rights and avoid patent exhaustion by setting conditions on the sale of a patented article. The patent exhaustion doctrine has evolved by dictating whether those conditions

21. 35 U.S.C. § 271(a) (2012).

22. *See Quanta Comput., Inc. v. LG Elecs., Inc.*, 553 U.S. 617, 625 (2008) (“[T]he initial authorized sale of a patented item terminates all patent rights to that item.”).

23. *See Bowman v. Monsanto Co.*, 133 S. Ct. 1761, 1764 (2013) (“Such a sale, however, does not allow the purchaser to make new copies of the patented invention.”).

24. *See Quanta*, 553 U.S. at 630 (“[A]ny downstream purchasers of the system could nonetheless be liable for patent infringement. Such a result would violate the longstanding principle that, when a patented item is ‘once lawfully made and sold, there is no restriction on [its] use to be implied for the benefit of the patentee.’”).

25. The Constitutional objective of patent law is “to promote the progress of science and useful arts.” U.S. CONST. art. I, § 8, cl. 8.

or restrictions set by the patentee are enforceable under the patent law. In most cases, the restrictions on sale imposed by patentee were void.²⁶ For example, in *Adams v. Burke*,²⁷ one of the earliest Supreme Court cases considering patent exhaustion, the patentee divided his patent right territorially by assigning multiple assignees the right to make, use, and vend the coffin lids within their individual territories.²⁸ The defendant purchased the coffin lid from an assignee in one territory, but used the lid in the territory of another assignee.²⁹ The patentee alleged patent infringement for violating the territorial restriction.³⁰ The Court held that the restriction could not be applied to the purchaser who paid the full consideration for the use of the article.³¹ Similarly, in *Motion Picture Patents*, the patentee restricted the use of the patented machine only with the motion picture films leased by the patentee.³² The Supreme Court held that the restriction was invalid because the films were irrelevant to the machine patent used in the infringement suit.³³

In contrast to these cases refusing to enforce restrictions on the use of patented articles by purchasers from the patentee, the Supreme Court enforced a restriction imposed on an article manufactured and sold by a licensee in *General Talking Pictures*.³⁴ The patentee in *General Talking Pictures* imposed upon its licensee a restriction that the patented product should only be used for non-commercial, private use.³⁵ A purchaser violated the restriction by using the product commercially and both the purchaser and the licensee had actual knowledge of the restriction.³⁶ The Supreme Court held that patentees may restrict their licensees to certain uses of licensed technology as long as the restrictions do not extend the scope of the monopoly.³⁷ The non-commercial use restriction to the licensee was enforceable because it did not extend the

26. See, e.g., *Bobbs-Merrill Co. v. Straus*, 210 U.S. 339 (1908) (a price restriction on reselling the copyrighted book was void); *Keeler v. Standard Folding-Bed Co.*, 157 U.S. 659 (1895) (a geographical restriction to use and sell the product only in Massachusetts was void).

27. 84 U.S. 453 (1873).

28. *Id.* at 457.

29. *Id.* at 454.

30. *Id.*

31. *Id.* at 456 (“[H]e receives the consideration for its use and he parts with the right to restrict that use.”).

32. *Motion Picture Patents Co. v. Universal Film Mfg.*, 243 U.S. 502, 506–07 (1917).

33. *Id.* at 512.

34. *Gen. Talking Pictures Corp. v. Western Elec. Co.* 304 U.S. 175, 181 (1938), *aff’d on reh’g*, 305 U.S. 124 (1939).

35. *Id.* at 179.

36. *Id.* at 180 (“Nevertheless, [the licensee] knowingly did sell the amplifiers in controversy to petitioner for that use The petitioner, when purchasing from [the licensee] had actual knowledge that the latter had no license to make such a sale.”).

37. *Id.* at 181.

scope of patent monopoly and the purchaser knew about the restriction.³⁸ Put differently, the licensee's sale for commercial use was outside of the scope of the license, and thus infringed the patent.³⁹

2. *There Was No Universal Rule on the Exhaustion of a U.S. Patent by International Sales*

While some courts decided that sales made abroad by a U.S. patentee exhausts the U.S. patent right,⁴⁰ the Supreme Court had, prior to *Lexmark*, not ruled on the exact issue whether sales made abroad by U.S. patentee exhaust U.S. patent rights, nor on the issue of whether the restrictions imposed on a conditional sale made abroad by the U.S. patentee are enforceable.⁴¹ The only Supreme Court decision directly addressing the effect of a foreign sale on U.S. patent rights was *Boesch v. Graff*.⁴²

In *Boesch*, the patented article was purchased in Germany from a person having the right to sell them under German law, not from the U.S. patentee or the licensee authorized by the U.S. patentee.⁴³ The Supreme Court held that the sale of articles in the United States cannot be controlled by foreign laws, therefore the purchase in Germany could not exhaust the U.S. patent.⁴⁴ However, *Boesch* did not involve the U.S. patentee's sale. Therefore, it was unclear whether the U.S. patentee's sales abroad exhausted the U.S. patent

38. *Id.* (“There is here no attempt on the part of the patent owner to extend the scope of the monopoly beyond that contemplated by the patent statute.”).

39. *Id.* at 181–82, states:

There is no warrant for treating the sales of amplifiers to [the purchaser] as if made under the patents or the authority of their owner By knowingly making the sales to [the purchaser] outside the scope of its license, [the licensee] infringed the patents embodied in the amplifiers.

40. *See, e.g.*, *Curtiss Aeroplane & Motor Corp. v. United Aircraft Eng'g Corp.*, 266 F. 71 (2d Cir. 1920) (holding that the buyer who purchased the airplanes in Canada from a licensee of the U.S. patent with no restriction, then brought them back to the U.S., is not liable for infringement); *Holiday v. Mattheson*, 24 F. 185, 185 (C.C.S.D.N.Y. 1885) (holding that the U.S. patentee did not retain any patent right in the article after its foreign sale, when a patented article was sold in England without restriction).

41. In the copyright context, the Supreme Court held the importation banning restriction imposed on the sale of textbooks made abroad by the U.S. patentee was not enforceable. *See infra* Section III.C.2.

42. *Lexmark Int'l, Inc. v. Impression Prods., Inc.*, 816 F.3d 721, 762 (Fed. Cir. 2016); *Boesch v. Graff*, 133 U.S. 697 (1890).

43. *Boesch*, 133 U.S. at 699–701 (finding that the seller in Germany was not a licensee under the German patent but had the right to sell them under German law because he had already commenced using the invention in Germany before the patentee's application).

44. *Id.* at 702–03.

rights and whether the U.S. patentee could impose a restriction on sales abroad to avoid the exhaustion of U.S. patent rights.

Patent exhaustion doctrine had developed for more than 150 years, yet there remained uncertainty of its scope for both domestic sales and foreign sales. In recent decades, the Federal Circuit repeatedly grappled with these questions, with occasional intervention by the Supreme Court.⁴⁵ However, this judicial conversation only raised more questions until *Lexmark*.

B. THE FEDERAL CIRCUIT SIDED WITH PATENTEE IN ENFORCING RESTRICTIONS

The Federal Circuit long sided with patentees with respect to patent exhaustion issues.⁴⁶ This Section discusses how the Federal Circuit ruled on two questions of patent exhaustion: (1) whether a restriction imposed via a conditional sale is enforceable under patent law and (2) whether a foreign sale of a patented article exhausts the U.S. patent. In *Mallinckrodt, Inc. v. Medipart, Inc.*, the Federal Circuit allowed patentees to attach restrictions on their sale of patented articles.⁴⁷ In *Jazz Photo Corp. v. ITC*, the Federal Circuit held that U.S. patent rights are not exhausted by a foreign sale.⁴⁸ Most recently, in *Lexmark Int'l v. Impression Products, Inc.*, the en banc Federal Circuit reaffirmed *Mallinckrodt* and *Jazz Photo*, rejecting arguments that both had been undermined by the recent Supreme Court decisions in *Quanta* and *Kirtsaeng* on exhaustion and first sale.⁴⁹

1. *A Conditional Sale May Avoid Patent Exhaustion*

In *Mallinckrodt*, the patentee sold its patented device, a nebulizer including radioactive therapeutic material, to hospitals with a “single use only” restriction.⁵⁰ *Mallinckrodt* provided a lead-shielded container with the

45. See *infra* Sections III.B.1–III.B.2 for discussions in the Federal Circuit decisions in *Mallinckrodt, Inc. v. Medipart, Inc.*, 976 F.2d 700 (Fed. Cir. 1992) and *Jazz Photo Corp. v. ITC*, 264 F.3d 1094 (Fed. Cir. 2001); see also *infra* Sections III.C.1–III.C.2 for discussions in the Supreme Court decisions in *Quanta* and *Kirtsaeng*.

46. See *infra* Section III.C.1. Since the *Mallinckrodt* decision in 1992 and the *Jazz Photo* decision in 2001, the Federal Circuit favored patentee’s enforcement of restriction under the patent law. These pro-patentee holdings culminated in *Lexmark*; see also Harold C. Wegner, *Post Quanta, Post-Sale Patentee Controls*, 7 J. MARSHALL REV. INTELL. PROP. L. 682, 686–89 (2008) (describing the Federal Circuit’s pro-patentee holdings as “evisceration of patent exhaustion”).

47. *Mallinckrodt*, 976 F.2d 700 (Fed. Cir. 1992).

48. *Jazz Photo*, 264 F.3d 1094 (Fed. Cir. 2001).

49. See *Lexmark Int'l, Inc. v. Impression Prods., Inc.*, 816 F.3d 721, 726–27 (Fed. Cir. 2016).

50. *Mallinckrodt*, 976 F.2d at 701–02.

nebulizer for minimizing exposure to radiation and safe disposal after use.⁵¹ Mallinckrodt also provided instructions to hospitals about the disposal process using radiation-shield containers and the inherent single use limitation.⁵² Some hospitals did not follow the restrictions and shipped used nebulizers to Medipart—which processed and reassembled nebulizers and returned them to the hospitals for less than the price of a new nebulizer.⁵³ The district court applied the patent exhaustion doctrine to hold that a “single use only” restriction could not be enforced by a patent infringement suit.⁵⁴ The court reasoned that the interest of purchasers to use purchased products freely is stronger than the interest of patent owners to increase their monopoly.⁵⁵ On appeal, the Federal Circuit held that patent exhaustion did not apply and gave overall guidelines for when a conditional sale by a patentee does not exhaust the patent: “if the restriction on reuse was within the scope of the patent grant or otherwise justified, then violation of the restriction may be remedied by action for patent infringement.”⁵⁶ However, the court remanded without analyzing whether Mallinckrodt’s single use restriction was valid.⁵⁷ The court neither demonstrated nor explained how to determine whether a restriction is within the scope of the patent grant.⁵⁸

2. *A U.S. Patent Is Not Exhausted by a Foreign Sale*

In *Jazz Photo*, the Federal Circuit limited the application of the patent exhaustion doctrine to first sales occurring within the U.S.⁵⁹ The patentee, Fuji Photo Film Corp., was a manufacturer and seller of disposable single use

51. *Id.* at 702.

52. *Id.*

53. *Id.*

54. *Mallinckrodt, Inc. v. Medipart, Inc.*, 1990 U.S. Dist. LEXIS 1974 (N.D. Ill. Feb. 15, 1990).

55. *See id.* at *24–25 (suggesting policy rationales that “people both expect and should be able to use the goods they purchase without restraints from merchants and manufacturers” and “interest in preventing restraints on use is stronger than the opposing interest in permitting a patent owner to use his monopoly to increase sales of his invention”). *But see Mallinckrodt*, 976 F.2d at 708 (criticizing the district court’s policy rationale as based on the price-fixing and tying cases, where “no condition can be placed on the sale of patented goods, for any reason”).

56. *Mallinckrodt*, 976 F.2d at 708.

57. *Id.* at 709.

58. *Id.* After the Federal Circuit’s remand decision, *Mallinckrodt* and Medipart settled. 1992 U.S. Dist. LEXIS 22902 (N.D. Ill., Dec. 1, 1992).

59. *Jazz Photo Corp. v. ITC*, 264 F.3d 1094, 1105 (Fed. Cir. 2001) (“To invoke the protection of the first sale doctrine, the authorized first sale must have occurred under the United States patent.”).

cameras with numerous patents on that technology.⁶⁰ Fuji had both domestic sales and foreign sales.⁶¹ Jazz Photo collected used Fuji cameras, refurbished them in various overseas facilities, and then imported them into the United States.⁶² Fuji sought an injunction to stop the importation of the refurbished cameras into the United States.⁶³ The court, citing *Boesch v. Graff*,⁶⁴ distinguished foreign sales from domestic sales and ruled that “United States patent rights are not exhausted by products of foreign provenance.”⁶⁵ Although *Boesch* was a case where foreign sale of the patented product was not done by or authorized by the U.S. patentee,⁶⁶ the Federal Circuit interpreted *Boesch* broadly in that the U.S. patent rights were not exhausted even in a case where the foreign sale *was* authorized by the U.S. patentee.⁶⁷

C. THE SUPREME COURT SHEDS LIGHT ON SOME ASPECTS OF THE EXHAUSTION DOCTRINE BUT STILL LEAVES OPEN QUESTIONS

There were some criticisms and concerns about the Federal Circuit’s application of exhaustion doctrine favoring patentees in cases including *Mallinckrodt* and *Jazz Photo*.⁶⁸ Unfortunately, while the Supreme Court had addressed several questions about exhaustion in its recent decisions, it left unanswered two questions at the heart of recent critiques of the Federal Circuit’s approach: whether restrictions imposed via a conditional sale are enforceable and whether a foreign sale exhausts U.S. patent rights.

60. *Jazz Photo*, 264 F.3d at 1098; *Fuji Photo Film Co. v. Jazz Photo Corp.*, 394 F.3d 1368, 1370 (Fed. Cir. 2005).

61. *Jazz Photo*, 394 F.3d at 1372 (“[R]oughly 9.5%, or 3,809,442, of Jazz’s refurbished [cameras] derived from United States first sales . . .”).

62. *Jazz Photo*, 264 F.3d at 1098.

63. *Id.* (“Section 337 makes unlawful ‘[t]he importation into the United States . . . of articles that . . . infringe a valid and enforceable United States patent . . .’”) (quoting 19 U.S.C. § 1337(a)(1)(B) (2012)).

64. *Boesch v. Graff*, 133 U.S. 697, 701–03 (1890) (holding that the purchase in Germany from a person who had the right to sell the products in Germany but was not the U.S. patentee or authorized by the U.S. patentee, could not exhaust the U.S. patent).

65. *Jazz Photo*, 264 F.3d at 1105.

66. See *supra* Section III.A.2 for more detailed explanation of *Boesch*.

67. *Jazz Photo*, 394 F.3d at 1376 (“The patentee’s authorization of an international first sale does not affect exhaustion of that patentee’s rights in the United States.”).

68. See, e.g., Julie E. Cohen & Mark A. Lemley, *Patent Scope and Innovation in the Software Industry*, 89 CALIF. L. REV. 1, 33–34 (2001) (criticizing *Mallinckrodt* as “expanding the contractual exception to swallow the rule”); J. Erstling & F. Struve, *A Framework for Patent Exhaustion from Foreign Sales*, 25 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 499, 501–02 (2015) (criticizing *Jazz Photo*’s no-exhaustion rule for foreign sales); Andrew T. Dufresne, *The Exhaustion Doctrine Revived? Assessing the Scope and Possible Effects of The Supreme Court’s Quanta Decision*, 24 BERKELEY TECH. L.J. 11 (2009).

1. *Validity of Conditional Sale Not Decided in Quanta*

In *Quanta*, the patentee, LG Electronics (LGE), had a license agreement with Intel which authorized Intel to make, use, or sell the products which embodied LGE's patents.⁶⁹ But there was a separate master agreement which required Intel to provide notice to its customers that the license from LGE did not extend to an Intel product combined with a non-Intel product.⁷⁰ Quanta manufactured products by combining Intel products and non-Intel products despite knowledge of the notice restriction.⁷¹ LGE sued Quanta for patent infringement, arguing that the patent exhaustion doctrine did not apply because the sale of Intel's product to Quanta was not authorized by LGE.⁷² The Court examined the structure of the license agreement between LGE and Intel and held that the patent was exhausted after the sale from Intel to Quanta because the license agreement did not impose restrictions on the sale by licensee, Intel.⁷³ Although there was a provision in the master agreement requiring notice to purchasers like Quanta, the Court found that Intel's authority to sell its products was not conditioned on the notice.⁷⁴ But, the Court did not decide on the possibility of a breach of contract claim when patent infringement claims are defeated by exhaustion.⁷⁵ The Court also did not decide on the validity of restrictions imposed via conditional sales of articles embodying patented inventions.⁷⁶

2. *Kirtsaeng and International Exhaustion Applied to Patents*

Although the Supreme Court has not directly addressed the question on international patent exhaustion, it addressed an analogous question in the copyright context. In the recent *Kirtsaeng* decision, the Supreme Court applied copyright exhaustion (also called the first sale doctrine) to international sales even though there was a clear restriction from the copyright holder banning the importation of the books sold abroad into the United States.⁷⁷ Wiley is a

69. *Quanta Comput., Inc. v. LG Elecs, Inc.*, 553 U.S. 617, 617 (2008).

70. *Id.*

71. *Id.*

72. *Id.* at 636.

73. *Id.* ("Nothing in the License Agreement restricts Intel's right to sell its microprocessors and chipsets to purchasers who intend to combine them with non-Intel parts.").

74. *Id.* at 636–37.

75. *Id.* at 637 n.7 ("LGE's complaint does not include a breach-of-contract claim, and we express no opinion on whether contract damages might be available even though exhaustion operates to eliminate patent damages.").

76. *Id.* at 636–37.

77. *Kirtsaeng v. John Wiley & Sons, Inc.*, 568 U.S. 519, 554 (2013).

publisher of textbooks that published U.S. and international versions of the same text books.⁷⁸ The international versions had a restriction that the copy is to be sold only in a particular geographical region outside the United States.⁷⁹ However, Kirtsaeng imported the international versions of textbooks into the U.S. from Thailand, and resold them at a profit.⁸⁰ The District Court held and the Second Circuit affirmed that the first sale doctrine does not apply to copyrighted works manufactured abroad.⁸¹

In order to answer the question whether the first sale doctrine applies to copies of a copyrighted work manufactured abroad, the Supreme Court examined both the statutory language of the first sale doctrine in copyright law⁸² and the common law history of the doctrine, concluding that a non-geographical interpretation of the statute was a better reading of the statute.⁸³ The Court also addressed policy reasons for the decision: advantage to consumers when purchasing or reselling a product in a free market without restrictions from the owner of exclusive rights; freeing courts from the administrative burden of tracing goods to enforce restrictions; and freeing libraries, museums, used-book dealers and technology companies from copyright infringement risk, thereby furthering the constitutional copyright objective, “to promote the Progress of Science and useful Arts.”⁸⁴

After *Quanta* and *Kirtsaeng*, some commentators suggested that *Mallinckrodt* and *Jazz Photo* were undermined, if not overruled.⁸⁵ Some district courts declined to follow the *Mallinckrodt* and *Jazz Photo* rules on conditional sales and

78. *Id.* at 525–26.

79. *Id.* at 526 (“This book is authorized for sale in Europe, Asia, Africa, and the Middle East only and may be not exported out of these territories.”).

80. *Id.* at 527 (the international version of the textbook was sold at a lower price than U.S. version).

81. *See* John Wiley & Sons, Inc. v. Kirtsaeng, 2009 U.S. Dist. LEXIS 96520 (S.D.N.Y. Oct. 19, 2009); John Wiley & Sons, Inc., v. Kirtsaeng, 654 F.3d 210 (2d Cir. 2011) (awarding statutory damages to plaintiff publisher for copyright infringement).

82. Unlike patent law, where exhaustion doctrine is grounded in judicial precedent, copyright law has codified the exhaustion doctrine in the statute: 17 U.S.C. § 109(a) (2012) (“[T]he owner of a particular copy or phonorecord lawfully made under this title . . . is entitled, without the authority of the copyright owner, to sell or otherwise dispose of the possession of that copy or phonorecord.”).

83. *Kirtsaeng*, 568 U.S. at 530 (“The language of § 109(a) says nothing about geography.”).

84. *Id.* at 539–40; Justice Kagan’s concurring opinion also addressed that “geographical restriction . . . would deprive American consumers of important rights and encourage copyright holders to manufacture abroad.” *Id.* at 554.

85. *See, e.g.*, John F. Duffy & Richard Hynes, *Statutory Domain and the Commercial Law of Intellectual Property*, 102 VA. L. REV. 1, 57 (2016) (viewing the Supreme Court’s *Quanta* decision as overruling *Mallinckrodt*’s conditional sale doctrine.); *see also* Hovenkamp, *supra* note 16, at 528 (describing the *Mallinckrodt* decision overruled by the *Quanta*).

international exhaustion.⁸⁶ *Lexmark* gave the Federal Circuit an opportunity to assess whether *Mallinckrodt* and *Jazz Photo* rules were still applicable in light of *Quanta* and *Kirtsaeng*.

III. LEXMARK CASE SUMMARY

The Federal Circuit sua sponte took the *Lexmark* case en banc.⁸⁷ This might have suggested that the court had a dramatic reworking of its own jurisprudence in mind after *Quanta* and *Kirtsaeng*. But, in fact, the Federal Circuit insisted that nothing has changed. It held that the controversial rules in *Mallinckrodt* and *Jazz Photo* remain good law.⁸⁸ Ultimately, the Supreme Court reversed the Federal Circuit and made a seismic change to its exhaustion rule.⁸⁹

A. FACTUAL BACKGROUND

Lexmark manufactures printing and imaging products including ink cartridges and has numerous patents regarding printing technology.⁹⁰ Lexmark's Return Cartridge Program provides discounted cartridges to customers who agree to use the cartridge only once and return it to Lexmark for remanufacturing or recycling.⁹¹ A buyer can choose to purchase a regular cartridge at full price, which is not subject to the single use restriction.⁹² Lexmark sold cartridges to both domestic and foreign markets.

Adequacy of notice was undisputed.⁹³ The purchasers had actual knowledge of the single use restriction because they had to choose which price

86. See, e.g., *LG Elecs., Inc. v. Hitachi, Ltd.*, 655 F. Supp. 2d 1036, 1046–47 (“The Court therefore concludes that *Quanta*'s holding—that exhaustion is triggered by the authorized sale of an article that substantially embodies a patent—applies to authorized foreign sales as well as authorized sales in the United States.”); see also *supra* Section III.B (the district court in *Lexmark* held that *Quanta* overruled *Mallinckrodt*).

87. *Lexmark Int'l Inc. v. Impression Prods, Inc.*, 785 F.3d 565 (Fed. Cir. 2015).

88. *Lexmark Int'l, Inc. v. Impression Prods., Inc.*, 816 F.3d 721, 726–27 (Fed. Cir. 2016).

89. *Impression Prods. v. Lexmark Int'l, Inc.*, 137 S. Ct. 1523, 1529 (2017).

90. The patents Lexmark used in the infringement suit were U.S. Patent No. 5,337,032, U.S. Patent No. 5,634,169, U.S. Patent No. 5,758,231, U.S. Patent No. 5,758,233, U.S. Patent No. 5,768,661, U.S. Patent No. 5,802,432, U.S. Patent No. 5,875,378, U.S. Patent No. 5,995,772, U.S. Patent No. 6,009,291, U.S. Patent No. 6,078,771, U.S. Patent No. 6,397,015, U.S. Patent No. 6,459,876, and U.S. Patent No. 6,487,383. (For the complete patent list, see Complaint at 3-4, *Lexmark Int'l Inc. v. Ink Techs. Printer Supplies, LLC*, 9 F. Supp. 3d 830 (S. D. Oh. 2014) (No. 1:10-CV-564)).

91. *Lexmark Return Cartridges*, LEXMARK RETURN CARTRIDGES, http://www.lexmark.com/en_us/products/supplies-and-accessories/lexmark-return-cartridges.html [https://perma.cc/RXV5-9E4F] (last visited Feb. 20, 2019).

92. *Impression Prods., Inc.*, 816 F.3d at 727 (the discount rate for Return Program Cartridge was approximately 20 percent).

93. *Id.* at 728.

to pay depending on the type of cartridge they buy: a Return Program cartridge or a regular cartridge. Multiple companies, including Impression Products, acquired used Lexmark cartridges, remanufactured them abroad, and then sold the remanufactured cartridges to customers.⁹⁴ The remanufactured cartridges included Return Program cartridges.⁹⁵ The Return Program cartridges have a microchip inside which enables the cartridges to communicate with a printer to prevent the use of refilled ones.⁹⁶ The microchip was replaced to enable reuse, in violation of the single-use restriction.⁹⁷

B. DISTRICT COURT OPINION

Lexmark filed two patent infringement suits against multiple defendants, including Impression Products.⁹⁸ The first case concerned domestic sales of Return Program cartridges.⁹⁹ The second case concerned foreign sales of all cartridges, including both Return Program cartridges and regular cartridges.¹⁰⁰

In the domestic sale case, the District Court held that Lexmark's single use restriction does not preclude patent exhaustion because the return program cartridges were sold with Lexmark's authorization even though the cartridges had single use restrictions.¹⁰¹ Insofar as sales with such restriction attached could be described as conditional sales not subject to exhaustion under the rule in *Mallinckrodt*, the court held that rule had been silently overruled by *Quanta*.¹⁰²

In the foreign sale case, Lexmark alleged that defendants who imported the refurbished cartridges into the U.S. and sold them in the U.S. infringed their toner cartridge patents.¹⁰³ The refurbished cartridges were originally sold outside of the U.S. by Lexmark, but the defendants collected the used

94. *Id.*

95. *Id.* at 727.

96. *Id.* at 728.

97. *Id.*

98. *Id.* at 729–30 (Impression Products was the only defendant in the appealed case at Federal Circuit because all of the other parties settled with Lexmark).

99. *Lexmark Int'l Inc. v. Ink Techs. Printer Supplies, LLC.*, 2014 WL 1276133 (S.D. Ohio, March 27, 2014). Domestic sales of regular cartridges were not included, because the patent rights on those regular cartridges were unquestionably exhausted.

100. *Lexmark Int'l Inc. v. Ink Techs. Printer Supplies*, 9 F. Supp. 3d 830 (S.D. Ohio, 2014). For sales made abroad, even regular cartridges can be included under *Jazxon Photo*. See *supra* Section III.B.2.

101. *Lexmark*, 2014 WL 1276133, at *23–24.

102. *Id.* at *22 (the Federal Circuit in *Mallinckrodt* suggested that some restrictions are enforceable under patent law, but the District Court in *Lexmark* held “post-sale use restrictions do not prevent patent rights from being exhausted given that the initial sales were authorized and unrestricted”).

103. *Lexmark Int'l*, 9 F. Supp. 3d at 831–32.

cartridges and refilled them outside the U.S.¹⁰⁴ In this case, Lexmark not only included the cartridges sold in the Return Cartridge Program, but also regular cartridges because the *Jazz Photo* rule held that the U.S. patent was not exhausted by foreign sales regardless of whether those sales were conditional or unconditional.¹⁰⁵

The District Court considered whether the Supreme Court's *Kirtsaeng* decision overruled *Jazz Photo*. The court held that first sales made abroad did not exhaust the U.S. patent rights, because patent exhaustion is not identical to the first sale doctrine in copyright and the Supreme Court in *Kirtsaeng* did not explicitly consider the common law principles in patent exhaustion.¹⁰⁶

C. FEDERAL CIRCUIT OPINION

The Federal Circuit sua sponte took *Lexmark* en banc to consider whether *Mallinckrodt* and *Jazz Photo* remain good law in light of the Supreme Court's *Quanta* and *Kirtsaeng* decisions.¹⁰⁷ By a 10–2 decision, the Federal Circuit reaffirmed the *Mallinckrodt* and *Jazz Photo* holdings: a patentee's restrictions imposed via a conditional sale are enforceable under patent law and U.S. patent rights are not exhausted by foreign sales.¹⁰⁸

1. *The Majority Enforces Restrictions and Applies a No-Exhaustion Rule for Foreign Sales*

Regarding the restrictions prohibiting reuse of the Return Program cartridges, the Federal Circuit majority held that a patentee selling a patented article with a post-sale restriction that is lawful and clearly communicated to the purchaser does not, by that sale, give the buyer resale or reuse authority free of that restriction.¹⁰⁹ The court started by analyzing the statutory language defining infringement: “whoever without authority during the term of a patent commits certain acts—makes, uses, offer to sell, or sells any patented invention, within the United States or imports into the United States any patented invention—infringes the patent.”¹¹⁰ The court interpreted “without authority” to mean without consent or permission of the patentee.¹¹¹ So, if a patentee

104. *Id.* at 832.

105. *Id.* at 837 n.4 (“The Federal Circuit had relied upon *Jazz Photo* in holding that United States patent rights are not exhausted by products of foreign provenance.”) (citing *Ninestar Tech. Co. v. ITC*, 667 F.3d 1373, 1378 (Fed. Cir. 2012)).

106. *Id.* at 836–38.

107. *Lexmark Int'l, Inc. v. Impression Prods., Inc.*, 816 F.3d 721, 726–27 (Fed. Cir. 2016).

108. *Id.* at 721.

109. *Id.* at 726.

110. 35 U.S.C. § 271(a) (2012); *Lexmark*, 816 F.3d at 732 (internal quotations omitted).

111. *Lexmark*, 816 F.3d at 732–33.

imposed a single-use or no-resale restriction when selling the patented product, then the patentee did not give permission to the purchaser to reuse or resell the product, and such use can amount to infringement of those rights. The court also considered the potential unfairness to a patentee selling the product itself compared to a patentee licensing sales by a licensee.¹¹² The Court interpreted *General Talking Pictures* as establishing a general rule that use restrictions imposed on a licensee are enforceable against the licensee and subsequent purchasers.¹¹³ If Lexmark had granted a conditional license to a third party to make and sell Return Program cartridges, then the single use restriction would be enforceable according to the Federal Circuit's reading of *General Talking Pictures*.¹¹⁴ The court saw no reason to refuse to enforce conditions imposed directly by patentees while enforcing restrictions imposed via manufacturing licensees as in *General Talking Pictures*, which it explained would be an extraordinary doctrinal result¹¹⁵ and a formalistic distinction without economic consequence.¹¹⁶

The majority also noted that Lexmark has a plausible legitimate interest in not having strangers modify its products and introduce them into the market with the quality of modifications not subject to Lexmark's control: lower quality remanufactured cartridges could harm Lexmark's reputation.¹¹⁷ The court argued that a patentee's interests in quality control are related to the interests protected by patent law because patentees make risky investments to commercialize inventions and the public benefits from the invention.¹¹⁸

Regarding the international exhaustion issue, the court held that the foreign sale of a U.S. patented article, made or authorized by the U.S. patentee, does not confer on the buyer authority to import the article into the United States or to use or sell in the United States.¹¹⁹ The majority considered whether *Kirtsaeng* overruled the *Jazz Photo* rule of no-exhaustion for foreign sales and

112. *Id.* at 743 (“There is no good reason that a patentee that makes and sells the articles itself should be denied the ability that is guaranteed to a non-practicing-patent entity.”).

113. *Id.* at 744.

114. The majority opinion also raised the concerning issue of favoring non-practicing-entities over practicing-entities if manufacturing patentee cannot impose post-sale restrictions while licensing patentees can. *See id.* at 735.

115. *Id.* at 739.

116. *Id.* at 736.

117. *Id.* at 752.

118. *Id.*; *see also* Glen O. Robinson, *Personal Property Servitudes*, 71 U. CHI. L. REV. 1449, 1480–515 (2004) (discussing policy reasons for validating restrictions on alienability of goods embodying intellectual property).

119. *Lexmark*, 816 F.3d at 755. But, the majority suggested the possibility of an express or implied license as a defense. *See id.* at 756.

concluded that *Jazz Photo* is not undermined by *Kirtsaeng*.¹²⁰ The majority emphasized the distinctness of patent and copyright in statutes¹²¹ and common law,¹²² and recognized some of the precedents separating patent issues from copyright issues.¹²³

The court also considered a patentee's receipt of reward from the market as the basis for the exhaustion doctrine.¹²⁴ The majority argued that this rationale for the doctrine does not apply where rewards have only been received for foreign sales, because of the difference in national patent systems and government policies, as well as disparities in wealth between the countries.¹²⁵

2. *The Dissent Disagrees on Both Issues*

Judge Dyk presented a dissenting opinion on both issues: (1) no post-sale restrictions allowed for avoiding patent exhaustion and (2) international exhaustion of U.S. patents by foreign sales.¹²⁶

First, the dissent argued that patentees cannot enforce post-sale restrictions on buyers under the patent law.¹²⁷ The dissenting opinion interpreted *Quanta* as overruling *Mallinckrodt*,¹²⁸ therefore, the patentee's rights are exhausted after the authorized sale of a patented article, regardless of any accompanying restrictions.¹²⁹ According to the dissenting opinion, "[p]ost-sale restrictions were enforceable only as a matter of state contract law."¹³⁰

Second, for the foreign sales made by the patentee, the dissent argued that the patent exhaustion doctrine applies unless the U.S. patent rights are

120. *Id.* at 756.

121. *Id.* at 755–57. Unlike patent law, copyright law codified first sales doctrine in the statute, 17 U.S.C. § 109(a) (2012).

122. *Id.* at 756. This is the leading case on exhaustion and foreign sales in the patent area—*Boesch* does not have counterpart in the copyright area.

123. *Id.* at 757 (citing *Bobbs-Merrill Co. v. Straus*, 210 U.S. 339, 345–46 (1908) (“[C]opyright law does not automatically carry over to patent law.”); see *Sony Corp. Am. v. Universal City Studios*, 464 U.S. 417, 439 n.19 (1984) (“The two areas of the law, naturally, are not identical twins, and we exercise the caution which we have expressed in the past in applying doctrine formulated in one area to the other.”); see also *Eldred v. Ashcroft*, 537 U.S. 186, 216 (2003) (“[P]atents and copyrights do not entail the same exchange . . .”).

124. *Lexmark*, 816 F.3d at 761.

125. *Id.* Lastly, the majority suggested the availability of an implied license defense as a solution to the problem of unintended infringement by buyers of goods in foreign countries who bring them into the United States. See *id.* at 771.

126. *Id.* at 774 (Dyk, J., dissenting).

127. *Id.* at 775–76.

128. *Id.* at 774.

129. *Id.* at 776–77.

130. *Id.* at 776.

expressly reserved.¹³¹ The dissent criticized the majority’s reliance on *Boesch*—where the sale of a patented article in Germany was not made by or authorized by the U.S. patentee¹³²—because in this case the U.S. patentee, Lexmark, made foreign sales.¹³³ In order to protect foreign buyers from being potential infringers and to accommodate the interests of the U.S. patentee, the dissent suggested that patentees should be required “to provide notice of a reservation of U.S. rights to the purchaser.”¹³⁴ Additionally, the dissent criticized the majority’s solution to the unsuspecting purchaser problem because an express or implied license places the burden on the purchaser unduly, by requiring the purchaser to obtain a statement from a patentee that the purchaser has permission to import the product into the United States, or to prove in court that the circumstances of a patentee’s sale constituted an implied license to import into the United States.¹³⁵

D. SUPREME COURT DECISION

The Court held against Lexmark for both domestic sales and foreign sales by aligning patent exhaustion doctrine with an old common law rule—hostility against restraints on alienation.

1. *Settling the Patent Exhaustion Rule: Decision to Sell Triggers Patent Exhaustion*

The Court settled the two issues regarding conditional sales and international exhaustion with a bright line rule: a patentee’s decision to sell a product exhausts all of its patent rights, regardless of any restrictions the patentee purports to impose and regardless of the location where the sale was made.¹³⁶ The Court simplified the exhaustion rule by uniformly applying the common law principle against restraints on alienation to both domestic and international sales by a patentee.¹³⁷ The Court explained that the common law principle against restraints on alienation does not have any geographical distinction.¹³⁸ Therefore it was straightforward for the Court to conclude that a foreign sale by a patentee also exhausts all of its patent rights.¹³⁹ This resulted

131. *Id.* at 784.

132. *Boesch v. Graff*, 133 U.S. 697, 701 (1890); *see supra* Section III.A.2.

133. *Lexmark*, 816 F.3d at 784 (Dyk, J., dissenting).

134. *Id.* at 788.

135. *Id.*

136. *Impression Prods. v. Lexmark Int’l, Inc.*, 137 S. Ct. 1523, 1529 (2017).

137. *Id.* at 1526–27.

138. *Id.* at 1536.

139. *Id.*

in the same outcome as for the patent exhaustion and copyright first sale doctrine.¹⁴⁰

The Court explained the exhaustion doctrine as a limit on the scope of a patentee's exclusionary rights when a sale transfers the ownership of a patented item.¹⁴¹ The Court made a clear distinction between a purchaser having an ownership and a licensee having an authorized right to use or sell.¹⁴² The Court explained that a license is about exchanging rights and does not involve passing title of product.¹⁴³ Unlike a license, a sale involves a transfer of ownership. The Court held that exhaustion is about cutting off the exclusionary power when the ownership of a product transfers to a purchaser.¹⁴⁴

The Court made two interesting additional points regarding contract and license. First, the Court opened the possibility of enforcing the restrictions against customers under contract law, although the patent owner's power to enforce restriction to a third party who lacks privity would be limited.¹⁴⁵ Second, the Court contrasted this case with *General Talking Pictures* and acknowledged a possibility of enforcing restrictions when a patent owner has a manufacturing licensee.¹⁴⁶ The Court explained that in *General Talking Pictures*, the licensee's sale to a purchaser was made outside the scope of its license because the licensee violated the restriction and the purchaser knowingly participated in that violation.¹⁴⁷ In that case, the Court made it clear that the patent owner can sue both the licensee and the purchaser.¹⁴⁸ There was no patent exhaustion in *General Talking Pictures* because the sale made by the licensee did not come from the patent owner's decision to sell. The Court made a similar point in the international exhaustion context. While citing *Boesch*, the court held that when the U.S. patentee had nothing to do with a foreign sale, the U.S. patent right did not exhaust.¹⁴⁹ However, the Court warned that

140. *Id.* ("And differentiating the patent exhaustion and copyright first sale doctrines would make little theoretical or practical sense.").

141. *Id.* at 1534.

142. *Id.*

143. *Id.*

144. *Id.*

145. *Id.* at 1531. *But see* *Arizona Cartridge Remanufacturers Ass'n. v. Lexmark Int'l Inc.*, 421 F.3d 981 (9th Cir. 2005) (holding that the privity requirement was met even though there was no written agreement, because the contract was formed between the patent owner and the consumer when the consumer opened the cartridge box with notice of restriction on reuse).

146. *Id.* at 1535.

147. *Id.*

148. *Id.*

149. *Id.* at 1537.

using a license imposed on the purchasers to enforce post-sale restraints is not allowed.¹⁵⁰

2. *Dissent Opinion on International Exhaustion Issue*

Justice Ginsburg concurred with the holding on the conditional sale issue, but dissented on the international exhaustion issue.¹⁵¹ In the dissent's view, the foreign sale should not limit the protection of the U.S. patent owner in the United States because the U.S. patent cannot provide protection abroad.¹⁵² According to the dissent, a sale in one country should have no effect on patent law in other countries because each country has its own patent law. The dissent criticized the majority for applying the *Kirtsaeng* rule in the patent exhaustion context and argued that the exhaustion rules in patent law and copyright law do not have to be the same.¹⁵³

IV. DISCUSSION: A NEW STANDARD FOR CONDITIONAL SALES ON PATENT EXHAUSTION

The first Section of this Part considers the impact of the *Lexmark* decision on business strategies for patent owners and argues that the Court's concern regarding the free flow of commerce can hardly be realized. The second Section suggests an alternative exhaustion framework for conditional sales and international sales to better serve patent owners' interests and consumers' interests: a restriction is unenforceable through patent law unless it has a justification grounded in patent law policy. In addition, the second Section suggests three justifications for enforceable restrictions and further argues that the actual knowledge of a restriction must be a prerequisite for enforcement to protect innocent purchasers. Finally, the third Section analyzes the international exhaustion problem under the alternative suggested standard.

A. IS FREE FLOW OF COMMERCE ACHIEVABLE WITH THE NEW EXHAUSTION RULE?

Considering various strategies that businesses can adopt to control the downstream purchasers under *General Talking Pictures*, the Court's concern with free flow of commerce is not likely to be achieved. Moreover, business

150. *Id.* at 1535 (“General Talking Pictures involved a fundamentally different situation This does not mean that patentees can use licenses to impose post-sale restraints on purchasers.”).

151. *Id.* at 1538.

152. *Id.*

153. *Id.* at 1539 (“[T]he two [patent law and copyright law] ‘are not identical twins’ [C]opyright protections, unlike patent protections, are harmonized across countries.”).

strategies adopted after *Lexmark* might harm consumers with increased price and privacy concerns.

1. *Increase of Licensing May Cloud the Free Flow of Commerce*

The Court's exhaustion rule stemmed from the concern that the free flow of commerce would be clogged by restrictions imposed on sales by patent owners.¹⁵⁴ In particular, the Court raised concerns with products having thousands of parts, as there is no practical way to identify the existence of any restriction in all of the parts.¹⁵⁵ The threat of patent liability raises transaction costs which harms both consumers and the overall economy.¹⁵⁶ The Court's new exhaustion rule clears purchasers' concerns with potential patent infringement liability when they buy a product from a patentee.

However, the Court made an exception to the exhaustion rule for companies with a licensed manufacturer based on *General Talking Pictures*.¹⁵⁷ If a company has a manufacturing licensee and a restriction is imposed upon the licensee, then the company can pursue both purchasers and the licensee when the restriction is violated as long as the licensee and the purchasers have knowledge of the restriction.¹⁵⁸ The Court, in recognizing this problem, warned that licensing does not mean automatic avoidance of exhaustion,¹⁵⁹ and distinguished *General Talking Pictures* as an extraordinary situation.¹⁶⁰ But, the exception to cases similar to *General Talking Pictures* may not be rare, especially if patent owners are strategic. If a patent owner can show that a licensee and a purchaser had knowledge of the restriction, then the patent owner is able to enforce the restriction with a patent infringement suit for the violation of the restriction. This gives a big advantage to companies who operate based on licensing rather than selling the products themselves. Companies with traditional sales business will be incentivized to change their business model to licensing—either by having a manufacturer licensee to sell the patented product or licensing the patented product to consumers instead of selling.

154. *Id.* at 1532 (“[E]xtending the patent rights beyond the first sale would clog the channels of commerce, with little benefit from the extra control that the patentees retain.”).

155. *Id.* (“That smooth flow of commerce would sputter if companies that make the thousands of parts that go into a vehicle could keep their patent rights after the first sale.”).

156. *Id.* (“[T]he very threat of patent liability would force the shop to invest in efforts to protect itself from hidden lawsuits.”).

157. *Id.* at 1535.

158. *Id.* (“[T]he patentee could use both the licensee and the purchaser—who knew about the breach—for infringement.”).

159. *Id.* (“This does not mean that patentees can use licenses to impose post-sale restraints on purchasers.”).

160. *Id.* (“*General Talking Pictures* involved a fundamentally different situation: There a licensee ‘knowingly ma[de] . . . sales . . . outside the scope of its license.’”).

For example, Lexmark may consider dividing its ink cartridge business into two separate entities: a patent holding entity and a manufacturing entity.¹⁶¹ Or, Lexmark can transfer the ownership of the relevant patents to a third party and become a manufacturing licensee. Either way, the two parties could then enter into a license agreement with a single-use restriction. However, Lexmark must also take measures to ensure purchasers' knowledge of the single-use restriction. Lexmark could make a notice on the cartridges, such as "This cartridge is manufactured by a licensee of Lexmark patent and subject to single-use restriction. Violating the restriction is an infringement of Lexmark patent." However, as notice itself may not be enough to show the actual knowledge of purchasers, the Lexmark patent holder may require its manufacturing licensee to ask purchasers to sign an agreement that they are subject to the single-use restriction and understand their potential liabilities should they violate the restriction. In this way, Lexmark can create their business strategy similar to *General Talking Pictures*.

Alternatively, Lexmark can license ink cartridges to consumers, instead of selling them. However, Lexmark would have to design the license arrangement carefully because the Court warned that patentees cannot "use licenses to impose post-sale restraints on purchasers."¹⁶² But if the nature of transaction is fundamentally different from a sale, consumers are licensees and not "purchasers." In *UMG Recordings, Inc. v. Augusto*, the Ninth Circuit held that "mere labeling of an arrangement as a license rather than a sale" will not by itself transform a transaction as a license in the copyright context.¹⁶³ The Ninth Circuit reasoned that a copyright owner essentially transfers ownership of CDs when they have no bilateral license agreement with the recipient and no meaningful control or knowledge of the status of CDs after shipment.¹⁶⁴ In contrast, if Lexmark secures licensing agreements from customers and requires the customers to return cartridges or tracks the usage of cartridges, then Lexmark's license is not likely to be interpreted as a sale under *UMG*.

Alternatively, Lexmark may adopt a subscription model for distributing its ink cartridges. For example, Lexmark provides a cartridge management service to some of its customers. In this case, the customers are acquiring a service and use license for cartridges rather than purchasing ink cartridges. Lexmark tracks usage of cartridges and requires customers to return used cartridges; the

161. This assumes that the two entities are not in fact controlled by the same party. Otherwise, it would be a sham transaction.

162. *Id.*

163. *UMG Recordings, Inc v. Augusto*, 628 F.3d 1175, 1180 (9th Cir. 2011) (where there was free distribution of promotional CDs to recipients with notice of licensing restriction, but with no bilateral agreement and no meaningful control of the CDs, the distribution did not constitute a sale, so the first sale doctrine applied).

164. *Id.* at 1180–82.

permanent transfer of ownership is not occurring. Lexmark may create incentives to return used cartridges by providing discounts in price for the customers who return the used cartridges. As there is no sale, a violation of their restrictions can be enforced under patent law. In sum, various business reactions to the new exhaustion rule may lead to unintended consequences that can thwart free commerce and harm consumer interests.

2. *There Is Possible Harm to Consumers by Increased Price and Privacy Concerns*

To consider the impact of the *Lexmark* decision on price, it is helpful to look back into what happened to the price of textbooks after the *Kirtsaeng* decision in 2013. Before 2013, the price of US version textbooks was at least 50% to over 100% higher than that of the international student version textbooks.¹⁶⁵ *Kirtsaeng* changed the business strategy of publishers because importing the international student versions to the United States became lawful. In response, John Wiley & Sons raised the price of some international student version textbooks to match the U.S. price.¹⁶⁶

Lexmark may follow the footsteps of Wiley. Lexmark has two types of cartridges in the market: Return Program cartridges with 20% discounted price for a single-use restriction and regular cartridges with no restriction. One possible change to Lexmark's future business strategy is to stop selling Return Program cartridges and unify the price of all of cartridges.¹⁶⁷ This will lead to

165. See, e.g., Christos Cabolis et al., *A textbook example of international price discrimination*, 95 ECON. LETTERS 91 (2007) (suggesting the sources of price differentials of textbooks in the United States and the other foreign countries to strict copyright enforcement, existence of second-hand market, cost of education, and difference in college education culture, etc.).

166. For example, the price of the US edition of *Advanced Engineering Mathematics* by Erwin Kreszig is \$283.95 (hard cover) and the price of international student version of the same book in Asia-Pacific countries is \$276.95 (soft cover). Similarly, the price of the US edition of *Microeconomics*, 5th Edition by David Besanko and Ronald Braeutigam is \$242.95 (paperback) and the price of international student version of the same book in Asia-Pacific countries is \$236.95 (paperback). Prices for the textbooks are available at WILEY, <http://www.wiley.com> [<https://perma.cc/R9MR-6E3C>] (last visited Feb. 20, 2019) (input the title of the textbooks in the search box for the prices and then change to other countries to check the prices of the international student versions).

167. But interestingly, Bob Patton, senior VP and GC of Lexmark, said that Lexmark will continue its discounted Return Program in his interview after the Court decision. See Jess Bravin, *Supreme Court Rules Lexmark Can't Sue Toner-Cartridge Fillers for Patent Infringement*, WALL ST. J. (May 30, 2017, 5:09 PM), <https://www.wsj.com/articles/supreme-court-rules-lexmark-cant-sue-toner-cartridge-fillers-for-patent-infringement-1496178596> [<https://perma.cc/C9BT-L84B>] (“Lexmark customers always have a choice between a full-price unrestricted cartridge or a discounted Return Program cartridge, which can be used once and then returned to Lexmark to support our own environmentally-friendly remanufacturing program.”).

increase of price to loyal customers who usually purchase discounted Return Program cartridges.

Another possible change to Lexmark's business strategy is to rely on technology to self-enforce the restrictions. Digital content providers are already using DRM technologies to protect their products from unauthorized copying.¹⁶⁸ Lexmark printers have a microchip to monitor cartridges and deny functioning when a refilled cartridge is used.¹⁶⁹ The remanufacturing companies, such as Impression Products, designed their chips to circumvent the algorithm of Lexmark's microchip and successfully fooled Lexmark printers to allow refilled cartridges.¹⁷⁰ Lexmark may develop a more sophisticated microchip which is harder for remanufacturers to replicate. However, the development cost of this technology could eventually raise the cost of product. Additionally, these sophisticated chips may follow other technologies in the Internet of Things (IoT) and incorporate networking technology. These technological advances may result in the collection of information beyond the usage of cartridges, but also identifying information for customers, which may raise privacy concerns.¹⁷¹

These hypothetical scenarios for Lexmark's future business strategies highlight the problem that the Court was concerned with: clogging free flow of commerce. Moreover, increases in price and privacy concerns are against consumers' interests. In addition, the Court's exhaustion rule decreases the incentives for innovation because patent owners' rights are limited by the new exhaustion rule. To address these issues, Congress should take actions to amend the patent law to adopt a different exhaustion rule. The next Section suggests an alternative framework for exhaustion.

168. See Aaron Perzanowski & Jason Schultz, *Digital Exhaustion*, 58 UCLA L. REV. 889, 901–07 (2011).

169. *Lexmark Int'l, Inc. v. Impression Prods., Inc.*, 816 F.3d 721, 728 (Fed. Cir. 2016).

170. *Lexmark Int'l, Inc. v. Static Control Components, Inc.*, 387 F.3d 522, 532 (6th Cir. 2004). However, Lexmark's copyright action against a provider of the chip designed to fool the Lexmark printers was unsuccessful because the court held that Lexmark's software program in its microchip was un-copyrightable.

171. See Lesley Fair, *Internet of Things: FTC Staff Report and a New Publication for Businesses*, FTC BUSINESS BLOG (Jan. 27, 2015, 9:12 AM), <https://www.ftc.gov/news-events/blogs/business-blog/2015/01/Internet-things-ftc-staff-report-new-publication-businesses> [<https://perma.cc/FZ43-JGUY>].

B. ALTERNATE FRAMEWORK FOR EXHAUSTION: PERMISSIBLE
RESTRICTIONS UNDER PATENT LAW WITH ACTUAL KNOWLEDGE OF
CONSUMERS

To vindicate patent owners' interests, some restrictions should be enforceable under patent law. But the difficult question would be how to determine the boundaries of enforceable restrictions. Although the Federal Circuit has repeatedly ruled that post-sale restrictions are enforceable, it has also suggested that some restrictions are impermissibly outside of the bounds of patent law—without it making clear what those boundaries are.¹⁷² The rule proposed here would only enforce post-sale restrictions that are justified based on one or more of the following: (1) the subject matter of the patent at issue, (2) promotion of patent policy, or (3) incomplete reward from the market. Under this approach, the patent exhausts unless the patentee shows that the restriction is enforceable on one of these grounds and that the alleged infringer had actual knowledge of the restriction.

In contrast to this Note's approach, some scholars have suggested a "default-plus" rule, where a restriction on a sale of a patented product is enforceable unless the restriction violates public policy.¹⁷³ Under the default-plus rule, a restriction from an express condition of a sale is deemed enforceable because a purchaser considered the condition when buying a patented product.¹⁷⁴ The burden would be on the purchaser to show that the condition is unenforceable for violating public policy. However, this Note proposes that the purchasers should be protected by putting the burden on the patentee to show that the restrictions are enforceable rather than putting the burden on the purchaser to show that the restrictions are unenforceable.

172. See, e.g., *LifeScan Scot., Ltd. v. Shasta Techs.*, 734 F.3d 1361, 1365 (Fed. Cir. 2013) (holding that patent exhaustion applies to a freely distributed product with a notice to use the product with patentee's other product). The Federal Circuit in *LifeScan* discounted the validity of restriction by holding that the patentee distributed its product freely "in the expectation and intent that customers will use [its product] with [its other product]." See *id.*

173. See Wentong Zheng, *Exhausting Patents*, 63 UCLA L. REV. 122, 128 (2016) (suggesting a "default-plus" rule which combines a default exhaustion rule—which only applies exhaustion to unconditional sales—and a patent misuse test). Zheng's standard allows patentees to avoid exhaustion through restrictions, while patent misuse test ensures that restriction do not violate public policy. Zheng's approach does not provide what constitutes a valid condition on sale because it is still unclear what kinds of restrictions are permissible under patent law, even after filtering out the restrictions that violates public policy. Interpreting the valid condition as a notice on the product or by an express contract term does not protect the innocent purchasers.

174. *Id.* at 154 ("As long as the patent restriction is an express condition of the sale, the purchaser will take the restriction into account in arriving at the price it will be willing to pay for the patented article.").

Below, the proposed standard of this Note will be applied to the Federal Circuit cases and *Lexmark* to explore the boundaries of enforceable restriction.

1. *Restrictions Are Justified When They Relate to the Patented Subject Matter*

In *Mallinckrodt*, the Federal Circuit noted that restrictions within the scope of the patent grant, or otherwise justified, are valid and the violation of the restriction is patent infringement.¹⁷⁵ If, by contrast, the condition on the sale seeks to expand the monopoly of the patent or it violates antitrust law, then the restriction is unenforceable.¹⁷⁶ In other words, the patentee can have freedom to condition the sale if the condition is within the patent grant.

But the Federal Circuit did not go further to give an explanation about what it meant by restrictions “within the scope of patent grant” or restrictions “relates to the patented subject matter.”¹⁷⁷ It is unclear whether it means the restriction should be related to the invention itself. Alternatively, this can be broadly interpreted as a restriction within the scope of purpose of patent law generally.

The Federal Circuit mentioned *Mallinckrodt*’s patents briefly,¹⁷⁸ but did not assess whether the restriction imposed there was related to the subject matter of the patent. *Mallinckrodt*’s restriction was a single use restriction with specific disposal instructions imposed on the nebulizer with radioactive materials.¹⁷⁹ The claims of *Mallinckrodt*’s patents describe the structural aspect of the device, but are not directed to the purpose or method of disposing the used device.¹⁸⁰ However, *Mallinckrodt* explained the design aspect of the device related to the safe disposal of the nebulizer with radioactive material in the written description of its patents. For example, the ’828 patent describes how to use each part of the device to shield radiation material until it can be

175. *Mallinckrodt, Inc. v. Medipart, Inc.*, 976 F.2d 700, 709 (Fed. Cir. 1992).

176. *Id.* at 703–04.

177. *Id.* at 708 (“Should the restriction be found to be reasonably within the patent grant, i.e., that relates to subject matter within the scope of the patent claims, that ends the inquiry.”).

178. *Id.* at 702 n.2 (*Mallinckrodt* has five U.S. patents: U.S. Patent No. 4,782,828, which covers the overall combination of nebulizer with lead-shielded container; U.S. Patent No. 4,529,003, which covers the structure of the device; and U.S. Patent No. 4,456,170, U.S. Patent No. 4,251,033, and U.S. Patent No. 4,116,387, which cover various aspects of the nebulizer).

179. *Id.* at 702 (“The package . . . states ‘For Single Patient Use Only’ and instructs that the entire contaminated apparatus be disposed of in accordance with procedures for the disposal of biohazardous waste. The hospital is instructed to seal the used apparatus in the radiation-shielded container prior to proper disposal.”).

180. *See, e.g.*, U.S. Patent No. 4,782,828, claim 1 (“An apparatus comprising: a radioaerosol generating source and support means . . . transport means including a passage . . . and an outlet . . . ; and shielding means . . . for reducing the amount of radiation transmitted to the surrounding atmosphere . . .”).

appropriately disposed.¹⁸¹ The '003 patent describes how to remove the device after use without endangering the operator with radioactive contaminated components.¹⁸² The disposal instructions are in the written description of Mallinckrodt's patent and thus are broadly related to the subject matter of patent because they are explaining how to use the invention. Moreover, the court noted the restrictions that were "related to" the subject matter of patent, which suggests that the restriction does not necessarily have to be within the scope of the patent claim.¹⁸³

In *Jazz Photo*, where the patented device was a single use disposable camera, Fuji also had patents regarding disposable camera technology.¹⁸⁴ Fuji's '087 patent had explicit claim language supporting the single-use restriction: "a light-tight film casing which must be destroyed to open the same."¹⁸⁵ The disposable cameras were intended to be used only once because the film is removed by destroying the external cover. Jazz Photo and other defendants collected discarded cameras and refurbished them by applying a new cover and reassembling it.¹⁸⁶ The single use restriction in *Jazz Photo* was related to the patented subject matter because the single-use feature was directly related to the claim language. If the consumer bought the camera from Fuji or a licensee authorized by Fuji, the patent exhaustion will protect the consumer. On the other hand, purchasing a reassembled camera from a third party, who does not

181. U.S. Patent No. 4,782,828 col. 4, l. 62–68 & col. 5, l. 1–6 ("In the event it is not appropriate to dispose of the transport means and the nebulizer 82 immediately after use . . . the level of radioactivity has been reduced to a point that the disposal is appropriate.").

182. U.S. Patent No. 4,529,003, col. 4, l. 3–12 ("Thus, in removing that system as a unit from the shielding container, the operator still is protected by cover shield . . . and all of the contaminated components will be disposed of without unduly endangering an operator.").

183. See James B. Kobak, Jr., *Contracting Around Exhaustion: Some Thoughts About the CAFC's Mallinckrodt Decision*, 75 J. PAT & TRADEMARK OFF. SOC'Y 550, 561 (1993) (suggesting that the Federal Circuit's language that defines a restriction as "one which merely 'relates to' . . . the subject matter of the patent" seems broader than the claim scope because restrictions written in the claim would be infringement of the claim even absent a resale condition); see *infra* discussion in Section IV.A.1. In *Motion Picture Patents*, the Court held that restriction is invalid when it is not "any part of the invention" of the patent in suit, rather than limiting the scope of the restriction to the claim language. *Motion Picture Patents Co. v. Universal Film Mfg.*, 243 U.S. 502, 518 (1917).

184. *Jazz Photo Corp. v. ITC*, 264 F.3d 1094, 1098 n.2 (Fed. Cir. 2001). The patents Fuji used in the infringement suit were U.S. Patent No. 4,884,087, U.S. Patent No. 4,954,857, U.S. Patent No. 4,833,495, U.S. Patent No. 4,855,774, U.S. Patent No. 5,235,364, U.S. Patent No. 5,361,111, U.S. Patent No. 5,381,200, U.S. Patent No. 5,408,288, and U.S. Patent No. 5,436,685, covering LFFP (Lens-Fitted Film Package) camera, i.e., single-use disposable camera technology.

185. *Id.* at 1100.

186. *Id.* at 1101.

have a license from Fuji and violates the single-use restriction, does not exhaust Fuji's patent.¹⁸⁷

However, in *Motion Picture Patents*, the patentee's restriction was unenforceable partly because it was not related to the patented subject matter.¹⁸⁸ The patented device was a motion picture exhibiting machine for feeding a film through the machine with a desired movement.¹⁸⁹ The patentee had a license agreement with a licensee to manufacture and sell the patented machines.¹⁹⁰ By the patentee's restriction, the purchaser of the machine had to use the machine to play the motion picture films leased by the licensee.¹⁹¹ The court noted that restricting the use of the machine to the specific films "[had] nothing to do with the invention which is invented but relate wholly to the materials to be used with it."¹⁹²

Now turning to the *Lexmark* case, Lexmark had numerous patents regarding toner cartridge technology.¹⁹³ The single use restriction for the Return Program cartridge was coupled with a microchip embedded in the cartridge which enabled a printer to determine cartridge information and monitor the toner level of the cartridge.¹⁹⁴ In the written description of the '169 patent, Lexmark explained its technology allowing for the transmission of cartridge information to the printer, including toner levels.¹⁹⁵ The single use restriction can be implemented by monitoring toner levels and identifying information of a cartridge to prevent the use of a refilled cartridge. Therefore, Lexmark's single use restriction was related to the subject matter of one of its patents.

187. But patent exhaustion can be a defense if the purchaser did not know of the single-use restriction at the time of sale. *See infra* Section IV.A.3.

188. This case can be viewed as the patent misuse case adopted by the Supreme Court. ROBERT P. MERGES, PETER S. MENELL, MARK A. LEMLEY, *INTELLECTUAL PROPERTY IN THE NEW TECHNOLOGY AGE* 241 (2016).

189. *See Motion Picture Patents Co. v. Universal Film Mfg.*, 243 U.S. 502, 505 (1917). The patent of Motion Picture Patents used in the infringement suit was U.S. Patent No. 709,934.

190. *Id.* at 506.

191. *Id.*

192. *Id.* at 512.

193. The patents cover the structure of toner cartridges, encoder for reading information about toner cartridges, etc. For the complete patent list, see Complaint at 3-4, *Lexmark Int'l Inc. v. Ink Techs. Printer Supplies, LLC*, 9 F. Supp. 3d 830 (S. D. Oh. 2014) (No. 1:10-CV-564).

194. *Lexmark Int'l, Inc. v. Impression Prods., Inc.*, 816 F.3d 721, 728 (Fed. Cir. 2016).

195. U.S. Patent No. 5,634,169 col. 15, l. 1-6 ("[T]he present invention provides a simple . . . apparatus for transmitting to a machine of a type employing toner, information concerning the characteristics of an EP cartridge, but also combines with such information continuing data relating to the amount of toner left in the cartridge during machine operation.").

Applying this rule—justifying the use restriction on a sale of a product embodying a patent if the restriction comes from the patent itself—can protect the value of invention. If the restriction is based on one of technological characteristics of the invention described in the patent, then patent law is an appropriate tool for the protection. As patentees are allowed to enforce the restriction based on the description of the invention, this rule can encourage more disclosure of how best to use the invention. It is also consistent with maintaining quality control if the restriction relates to the best mode of the invention which describes the most optimal way to practice the invention.¹⁹⁶ Additionally, this rule is rather easy to apply and is narrow in scope, because permissible restrictions are limited to what is written in the patent claim or written description of the invention.

2. *Restrictions Are Justified When They Promote Patent Policy*

Another possible category of permissible restrictions under patent law are those promoting patent policy. More specifically, the restrictions which promote the core objective of patent law can be enforceable under patent law.¹⁹⁷ The Constitution states the objective of patent law is “[t]o promote the Progress of Science and useful Arts.”¹⁹⁸ A restriction on the sale of a patented product may further the purpose of patent law when the restriction preserves the value of invention and protects the expectations of consumers. In a seminal article about the enforceability of post-sale restrictions, Professor Zechariah Chafee suggested commercial purposes for restrictions on sales as to protect both manufacturers and consumers.¹⁹⁹ He also pointed out that disturbing the public with unauthorized products of irregular quality can deter subsequent purchases and thus harm the manufacturer.²⁰⁰ For example, maintaining the reputation of the product by having a uniform quality in the market can be a justification for the restriction.²⁰¹ However, this justification should not be read too broadly to endorse any restriction that increases profits

196. See *infra* Section IV.B.2 for the importance of quality control for justifying the restrictions on a sale of a product embodying a patent.

197. See Molly Shaffer Van Houweling, *Touching and Concerning Copyright*, 51 SANTA CLARA L. REV. 1063, 1084 (2011) (suggesting a nexus between the restriction and the purpose of the exclusive right as valid restrictions imposed on the sale of chattels).

198. U.S. CONST. art. I, § 8, cl. 8.

199. See Zechariah Chafee, *Equitable Servitudes on Chattels*, 41 HARV. L. REV. 945, 946–48 (1928).

200. *Id.* at 946–47.

201. *Id.* at 949–50. The concept of the protection of consumer and the reputation of a patentee can be also discussed under trademark law. But these concepts can also be related to a policy rationale of the patent law because the protection of consumer and patentee can be achieved by protecting the invention and the patent right.

for the patentee, because the constitutional object of patent law has been held to require balancing of the patentee's rights and the interest of the public.²⁰²

In *Jazz Photo*, the Federal Circuit noted the concern for the harm to the public by “evidence of imperfections and failures of some refurbished cameras.”²⁰³ Similarly, in *Lexmark*, the Federal Circuit also recognized that the patentee's interest in having control over the quality of products is related to the interests protected by patent law.²⁰⁴ The cartridges refurbished by unauthorized third parties can have lower quality than Lexmark's original cartridges. This can create uncertainty in the market as the quality of products may vary wildly. This can also harm Lexmark economically due to a reduction in market share and a risk of warranty related suits directed to Lexmark. These economic consequences could negatively affect the development of new products or technology, as inventors might be less motivated to take the risks of developing new technology if they could be undercut by low-quality copies.

In sum, applying this rule—justifying the restriction on a sale of a product embodying a patent if the restriction promotes patent policy—can further the policy goals of patent law by protecting both patentees and the public.

3. *Restrictions Are Justified When the Patentee Has Only Received a Partial Reward*

One approach to balance the interests of patent holders, consumers, and the public is to consider the market reward for the sale of a patented product as full consideration for the patentee's invention.²⁰⁵ After receiving full consideration from the market, the patentee may no longer have any right to the products that downstream purchasers own.²⁰⁶ In *Adams v. Burke*—where

202. See, e.g., U.S. CONST. art. I, § 8, cl. 8 (limiting the exclusive rights of patent for public interest “[b]y securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries . . .”).

203. *Jazz Photo Corp. v. ITC*, 264 F.3d 1094, 1105 (Fed. Cir. 2001)

204. See *Lexmark Int'l, Inc. v. Impression Prods., Inc.*, 816 F.3d 721, 752 (Fed. Cir. 2016) (“Such interests are hardly unrelated to the interests protected by the patent law—the interests both of those who benefit from inventions and of those who make risky investments to arrive at and commercialize inventions.”).

205. See *Dufresne*, *supra* note 68, at 12–14 (explaining exhaustion question based on full patentee compensation as a way to balance goals of the patent law, encouraging innovation and benefiting the society as a whole); see also *Robinson*, *supra* note 118, at 1496–97 (suggesting that patent owners can structure how to receive market reward unless other antitrust principles prohibit it).

206. The Supreme Court has addressed the basis of patent exhaustion doctrine from the market reward in other cases. See *Bowman v. Monsanto Co.*, 133 S. Ct. 1761, 1766 (2013) (quoting *United States v. Univis Lens Co.*, 316 U.S. 241, 251 (1942) (“We have explained the basis for the doctrine as follows: ‘[T]he purpose of the patent law is fulfilled with respect to any particular article when the patentee has received his reward [. . .] by the sale of the article’”);

the patentee divided the scope of license territorially by imposing a restriction not to sell, use, or make coffin lids outside the assigned region—the Supreme Court held that “the patentee . . . received all the royalty or consideration which he claims for the use of his invention . . . it is open to the use of the purchaser without further restriction on account of the monopoly of the patentees.”²⁰⁷ Although the rights of the licensee to manufacture and sell were limited territorially, the Court noted that the purchaser paid full consideration for the use of coffin lids to the licensee.²⁰⁸ Therefore, the territorial restriction was unenforceable to the purchaser.²⁰⁹ Conversely, if a patentee did not receive a full consideration for the product with a purpose of imposing a use or resell restriction on a sale of the product, then the restriction on sale can be justified and survive patent exhaustion.

In *Lexmark*, the Court held the patentee can have only one reward with “satisfactory compensation.”²¹⁰ However, the Court did not consider a case in which a patentee receives one reward which becomes a “satisfactory compensation” only when certain conditions are met. This Note proposes that a partial reward becomes a satisfactory compensation only when the condition is met: a voluntary exchange between a patentee and a purchaser. As the partial reward was a consideration for a purchaser agreeing to be subject to a restriction, it is also a justification for restrictions on sale. For example, Lexmark had a Return Cartridge Program which provided a 20% discount from the regular price for the customers who chose the Program.²¹¹ 20% of consideration was not received by Lexmark in exchange for the single-use restriction on the customers. If the single-use restriction is violated, then a 20% discounted price is not a “satisfactory compensation” to Lexmark. In other

once that ‘purpose is realized the patent law affords no basis for restraining the use and enjoyment of the thing sold.’”) (citation omitted).

207. *Adams v. Burke*, 84 U.S. 453, 456 (1873).

208. *Id.* (“It would be to engraft a limitation upon the right of use not contemplated by the statute nor within the reason of the contract to say that it could only be used within the ten-miles circle.”). The Court seems to weigh the purchaser’s freedom to use against the patentee’s interest when it is unclear from the fact whether the purchaser knew of the restriction. Even though the purchaser knew about that fact the seller (the licensee) is limited to manufacture and sell in a specific region, the purchaser might have thought that the restriction is only to the licensee and irrelevant to his use. *See id.*

209. *Id.* at 457 (“[W]hen [machines] are once lawfully made and sold, there is no restriction on their *use* to be implied for benefit of the patentee.”).

210. *Impression Prods. v. Lexmark Int’l, Inc.*, 137 S. Ct. 1523, 1537 (2017) (“[T]he patentee receives one reward—of whatever amount the patentee deems to be ‘satisfactory compensation’—for every item that passes outside the scope of the patent monopoly.”).

211. *See Lexmark Int’l, Inc. v. Impression Prods., Inc.*, 816 F.3d 721, 727 (Fed. Cir. 2016)

words, Lexmark’s restriction is valid because there was only a partial reward to the patentee.

Note that the rule proposed here presupposes that the purchaser selected a restricted-use product in a knowing exchange for a lower price. It thus avoids the objection that purchasers should not be burdened with the information costs of investigating whether there is a restriction attached to the use of the product.²¹² Furthermore, all of the proposed rules—justifying the restriction if it is related to the patented subject matter or promotes patent policy, or the patentee received incomplete rewards—require consumers to have actual knowledge of the restriction in order for it to be enforceable.²¹³ However, just having an adequate notice of restrictions on the product is not enough to enforce the restriction through patent law.²¹⁴ No matter how conspicuous the notice may be, there is always a possibility that the subsequent purchaser does not carefully read and does not actually know the restrictions.²¹⁵

In *Lexmark*, it was highly likely that the consumers had actual knowledge of the single-use restriction because they had to make a choice between a regular cartridge at a full price and a Return Program cartridge for a discounted price.²¹⁶ Actual knowledge of restriction can be presumed if there was adequate

212. Conditioning patent exhaustion on the purchaser’s actual knowledge of restriction by a knowing exchange for a lower price would help provide certainty in transactions that are subject to patent exhaustion. See *LifeScan Scot., Ltd. v. Shasta Techs.*, 734 F.3d 1361, 1377 (Fed. Cir. 2013) (“[C]onditioning patent exhaustion on the adequacy of the patentee’s reward ‘would cast a cloud of uncertainty’ over every transaction and every patented product.”).

213. Other possible solution can be requiring a contractual relationship between the patentee and the purchaser. See *id.* at 1376–77 (“Absent a valid contractual restriction, restraints upon the downstream use or sale of a patented product ‘offend against the ordinary and usual freedom of traffic in chattels’ . . .”). But requiring a contractual relationship in every transaction for commonly traded articles can have negative effects on free economy by increasing the cost of trade.

214. See *Straus v. Victor Talking Machine Co.*, 243 U.S. 490, 501 (1917) (“[I]t must be recognized that not one purchaser in many would read such a notice, and that not one in a much greater number, if he did read it, could understand its involved and intricate phraseology.”).

215. See Russell Korobkin, *Bounded Rationality, Standard Form Contracts, and Unconscionability*, 70 U. CHI. L. REV. 1203, 1233–34 (2003) (explaining the common observation that buyers rarely read the terms, even salient ones).

216. *Impression Prods.*, 816 F.3d at 728 (“There is no dispute about the adequacy of notice to resellers as well as end users.”); see also *Quanta Comput., Inc. v. LG Elects, Inc.*, 553 U.S. 617, 624 (2008) (“Quanta . . . received the notice required by the Master Agreement. Nonetheless, Quanta manufactured computers using Intel parts in combination with non-Intel parts.”).

notice and the purchaser chose the product in exchange for abiding by the restriction or when the purchaser violated the restriction for his own benefit.²¹⁷

Allowing restrictions on distribution of a product may seem to restrict the free flow of commerce more than the Court's new rule. However, the default positions of both frameworks are the same: a patent owner's sale exhausts the patent. But the framework suggested by this Note simply adds a narrow exception: a patent owner's sale presumptively exhausts the patent, unless the restrictions have at least one of the three justifications proposed, and a purchaser has knowledge of the restrictions. These exceptions do not additionally burden the free flow of commerce because the restrictions are void to innocent purchasers. Shutting down the patent enforcement possibility for patentees can result in unintended consequences.²¹⁸ By providing a narrow exception to the exhaustion rule, patent owners' interests can be vindicated, and consumers' interests are better served without overly burdening the free flow of commerce.

C. INTERNATIONAL EXHAUSTION AS A PERMISSIBLE GEOGRAPHICAL RESTRICTION

In *Lexmark*, the Court held that U.S. patents are absolutely exhausted by foreign sales.²¹⁹ This Section applies the standard discussed in the Section IIV.B to analyze whether foreign sales exhaust U.S. patents (1) when there is no restriction on foreign sales, and (2) when a patentee imposed a restriction on the foreign sale.

1. *Unconditional Sales Abroad Exhaust U.S. Patent Rights*

Where a sale is made without any express restrictions, enforcing the U.S. patent can interfere with the absolute property right of the customer who bought the product abroad and create uncertainty in downstream commerce. For this reason, the Court held that location is irrelevant to patent exhaustion.²²⁰ The dissent argued that the U.S. patents are enforceable even when no restriction was imposed on sales abroad because the U.S. patent does not provide the same level of protection in other countries.²²¹ In the dissent's

217. In *Kirtsaeng v. John Wiley & Sons, Inc.*, Kirtsaeng made profit by violating the geographical restriction because the textbooks were sold at a higher price in the U.S. than in Thailand. See *Kirtsaeng v. John Wiley & Sons, Inc.*, 568 U.S.519, 527 (2013). At trial, the jury found that Kirtsaeng had willfully infringed Wiley's copyrights. See *John Wiley & Sons, Inc. v. Kirtsaeng*, 654 F.3d 210, 215 (2d Cir. 2011).

218. See *supra* Section IV.A.

219. *Impression Prods. v. Lexmark Int'l, Inc.*, 137 S. Ct. 1523, 1535 (2017).

220. *Id.* at 1538.

221. *Id.* at 1538–39.

view, the cartridges refurbished from cartridges sold abroad (without single-use restrictions) infringed the U.S. patent when they were imported into the United States.²²²

A rule without international exhaustion creates two problems. First, it creates an innocent infringer problem, which creates uncertainty for purchasers who buy a U.S. patentee's product abroad.²²³ Even if a foreign purchaser moves into the U.S. with a product purchased abroad from the U.S. patentee, it may infringe the U.S. patent because the foreign sale does not exhaust the U.S. patent rights. This problem clashes with the property right of the purchaser. While it is highly unlikely that a U.S. patentee will sue a foreign customer for infringement in the United States,²²⁴ it still leaves a doctrinal hole to this problem and exposes potential infringement issues to the innocent purchasers.²²⁵

Second, it results in double compensation for the products without restrictions because the patentee already received a full reward from the foreign market, yet the patentee is allowed to also claim patent infringement in the United States. Moreover, determining patent exhaustion depending on whether the sale was made at home or abroad can result in a complex factual dispute on the location of the transaction.²²⁶

Applying the standard discussed in the Section IV.B, foreign sales should exhaust the U.S. patent rights unless the patentee imposed a justifiable restriction and the actual knowledge of purchasers is proven. This can solve the innocent infringer problem and protect the property rights of foreign purchasers. This also does not unduly limit the patent right because the patentee already received his or her reward for that particular product from the foreign market.

222. *Id.*

223. The Federal Circuit discounts the innocent infringer problem, for there were no practical problems. *Lexmark Int'l, Inc. v. Impression Prods., Inc.*, 816 F.3d 721, 771 (Fed. Cir. 2016) (“[W]e simply have no reliable evidence that the possibility of unintended infringement in that scenario is actually a significant issue in practice.”).

224. Going after each individual user is a highly unlikely enforcement strategy for the manufacturers. But, if a foreign purchaser is actively reselling foreign purchased products in the U.S. for arbitrage purpose, then it is not an innocent infringer problem anymore. See *infra* Section IV.C.2 for more discussion on international exhaustion in arbitrage cases.

225. See *Lexmark*, 816 F.3d at 788 (Dyk, J., dissenting) (arguing that implied license defense does not adequately protect the innocent purchasers).

226. See, e.g., *Core Wireless Licensing S.A.R.L. v. LG Elec. Inc.*, 2016 U.S. Dist. LEXIS 119472 (E.D. Tex. Sept. 3, 2016) (recognizing the ambiguity as to the nature of the transaction between Qualcomm and LG entities depending on the specific facts, such as which LG entities (foreign or domestic) involved in the transaction, where the agreements were negotiated or executed, or where LG took possession of the Qualcomm products).

2. *Price Discrimination as a Justification for a Geographical Restriction with Actual Knowledge of Purchasers*

In *Lexmark*, the Court applied the *Kirtsaeng* rule for international exhaustion—which allowed importation of products that originally contained a restriction on importation from foreign countries in exchange for a lower price. The Court acknowledged the price difference in the U.S. market and foreign market but held that a particular price cannot be guaranteed under patent law.²²⁷ However, this Section suggests that price discrimination has benefits to both patentees and consumers and it can be a justification for restrictions on sales abroad.

Products sold abroad may have a restriction banning importation into the United States or using or reselling the foreign purchased products in the United States.²²⁸ These restrictions separate the global market into geographical segments. Patentees often want to practice price discrimination with geographical restrictions to maximize profit by dividing up the markets with different consuming powers.²²⁹ If price discrimination is not allowed, then some patentees might withdraw from sales in markets with low consuming powers.²³⁰ Price discrimination can promote consumer welfare by increasing the availability of products for consumers in underdeveloped countries.²³¹

227. *Impression Prods. v. Lexmark Int'l, Inc.*, 137 S. Ct. 1523, 1537 (2017) (“The patentee may not be able to command the same amount for its products abroad as it does in the United States. But the Patent Act does not guarantee a particular price, much less the price from selling to American consumers.”).

228. *See, e.g., Kirtsaeng v. John Wiley & Sons, Inc.*, 568 U.S. 519, 526 (2013).

229. *See* Ariel Katz, *The First Sale Doctrine and the Economics of Post-Sale Restraints*, 2014 BYU L. REV. 55, 77 (2014) (“[P]roducers may charge a higher price where demand (or ability to pay) is higher and a lower price where demand (or ability to pay) is lower.”); *see also* Robinson, *supra* note 118, at 1506 (“[S]ystematic price discrimination can be efficient or inefficient depending on whether it increases total output . . .”).

230. This can be a serious problem if the patented product is a pharmaceutical or a medical product. Price discrimination can also benefit consumers in foreign countries in copyright context. *See Kirtsaeng*, 568 U.S. at 586 n.27 (Ginsburg, J., dissenting) (“It should not be overlooked that the ability to prevent importation of foreign-made copies encourages copyright owners . . . to offer their works at reduced prices to consumers in less developed countries who might otherwise be unable to afford them.”); *see also* Daniel J. Hemel & Lisa Larrimore Ouellette, *Trade and Tradeoffs: The Case of International Patent Exhaustion*, 116 COLUM. L. REV. SIDEBAR 17, 20–27 (2016) (explaining that a shift to mandatory international exhaustion will result in the increase of prices of patented products in the developing world, but a lower profit for patentees).

231. *See* Katz, *supra* note 229, at 77 (“[P]rice discrimination promotes consumer welfare.”); *see also* Vincent Chiappetta, *The Desirability of Agreeing to Disagree: The WTO, TRIPS, International IPR Exhaustion and a Few Other Things*, 21 MICH. J. INT’L L. 333, 357-58 (2000) (“[G]lobal market segmentation can have positive economic effects . . . a non-exhaustion rule encourages

Price discrimination can also provide incentives to patentees to open new markets and encourage development of new technologies.²³²

Applying the standard discussed in the Section IV.B.3, geographical restrictions coupled with price discrimination are justified with a partial reward to the patentee.²³³ If a patentee sold the patented product in a foreign country at a lower price than in the United States with a restriction that it can be only used in that foreign country, knowingly violating the restriction would be an infringement of the U.S. patent, as the restriction is justified with a partial reward from the foreign market.

Price discrimination can be a justification for geographical restriction, but it should be applied narrowly only when the purchaser has actual knowledge of the restriction. Actual knowledge can be shown when the lower price was in exchange for the restriction. In other words, an importation-banning restriction can reserve the U.S. patent right when foreign customers know their choice to purchase the product also includes the importation-banning restriction.²³⁴

By examining the international exhaustion problem as a geographical restriction and analyzing the justifications for the restriction, domestic exhaustion and international exhaustion can be analyzed coherently under the

entry and participation in developing markets at lower, locally more affordable prices by eliminating them as risky sources of cheaper parallel imports back into premium markets.”); Kenneth A. Bamberger & Orly Lobel, *Platform Market Power*, 32 *BERKELEY TECH. L.J.* 1051 (2017) (suggesting that algorithms that engage in digital price discrimination “could enhance consumer welfare by causing competitive price reductions at a faster rate . . . ”); Sarah R. Wasserman Rajec, *Free Trade in Patented Goods: International Exhaustion for Patents*, 29 *BERKELEY TECH. L.J.* 317 (2014) (suggesting consumers in low-income countries benefit from geographic price discrimination).

232. See generally Jerry A. Hausman & Jeffrey K. MacKie-Mason, *Price Discrimination and Patent Policy*, 19 *RAND J. ECON.* 253, 253–65 (1988) (suggesting that price discrimination may allow the opening of new markets and the achievement of economies of scale, which will increase social welfare).

233. Justifications related to patented subject matter or patent policy are unrealistic for the geographical restrictions. It is hard to imagine that geographical restrictions that are related to the subject matter of patent. Hypothetically, if the patented product has features that can be only used in Europe, not in the U.S. and that feature is claimed in the U.S. patent, then the geographical restriction could be enforceable. But under the global economic environment where manufacturers produce identical products massively, it is unlikely that the geographical restriction coming from patented subject matter is implemented to the product. Similarly, the geographical restriction is not likely to be related to the purpose of patent law because the progress of science is a universal virtue that is not confined only to the United States.

234. Lexmark had Return Program Cartridges at a discounted price and regular cartridges at a full price. Customers choosing Regular Program Cartridges had actual knowledge of the single use restriction.

same standard. Also, by requiring the actual knowledge of purchasers, it is possible to limit the scope of a patent's monopoly while reserving the rights of patentees.²³⁵

V. CONCLUSION

The Supreme Court made a simple and straightforward exhaustion rule. The new rule generally favors the public interest by having clear ownership of a purchased item. However, developments in technology and new business strategies may thwart the Court's goal. This Note suggests that the patent exhaustion doctrine should consider the values of patent rights and consumer rights. One possible solution would be to amend the patent statute to allow restrictions on sales by patentee with limited scope. Patent exhaustion should be avoided in narrow, exceptional cases, where two criteria are met. First, the restrictions on sales are permissible with justifications. Second, actual knowledge of purchaser must be coupled with the justifications. By narrowly accepting the possibility for avoiding exhaustion both at home and abroad, patent owners' rights and customers' rights can be vindicated.

235. This yields a different result from the *Kirtsaeng* decision. In *Kirtsaeng*, although there was a geographical restriction to International version of textbooks and the purchaser had actual knowledge of the restriction, the Supreme Court nevertheless held that the copyright was exhausted. *See Kirtsaeng*, 568 U.S. at 525. This difference can be partly explained by the statutory language in § 109(a) of Copyright Act which states the copyright exhaustion, but patent exhaustion is judicially made. Justice Kagan's concurring opinion in *Kirtsaeng* suggests a desirability of restrictions in a price discrimination case, but recognizing statutory limits, did not apply these restrictions to copyright exhaustion. *See id.* at 554–57.

***TC HEARTLAND V. KRAFT* AND THE RESURRECTION OF THE PLACE OF INCORPORATION OR “REGULAR AND ESTABLISHED PLACE OF BUSINESS” TEST FOR PATENT VENUE**

Melissa Wee[†]

I. INTRODUCTION

A “plague,”¹ “rampant,”² “unseemly”³—these are words critics used to describe recent forum shopping in patent infringement cases. Such forum shopping was also, perhaps, the motivating force behind the Supreme Court case *TC Heartland v. Kraft*, where the petitioner, Heartland, argued that the Federal Circuit and lower courts had—for almost three decades—incorrectly interpreted the patent venue statute to give patentees a virtually limitless choice of venue.⁴ The Supreme Court agreed.⁵

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1. Petition for Writ of Certiorari at 8, *TC Heartland LLC v. Kraft Foods Grp. Brands LLC*, 137 S. Ct. 1514 (2017) (No. 16-341) [hereinafter Petition for Writ of Certiorari] (“[T]he Federal Circuit’s departure from this Court’s holding in *Fourco* has dramatically expanded venue in patent cases, producing a plague of forum shopping . . .”).

2. Brief of Amici Curiae Electronic Frontier Foundation, Public Knowledge, and Engine Advocacy in Support of Petitioner at 1, *In re TC Heartland LLC*, 821 F.3d 1338 (Fed. Cir. 2016) (No. 16-105) [hereinafter Brief of Electronic Frontier Foundation] (describing “[t]he rampant forum shopping seen in patent litigation, and the attendant negative incentives that forum shopping creates”); Brief of Amici Curiae of 32 Internet Companies, Retailers, and Associations in Support of Petition for Writ of Certiorari at 4, *TC Heartland*, 137 S. Ct. 1514 (No. 16-341) [hereinafter Brief of 32 Internet Companies] (“[T]he Federal Circuit’s approach has resulted in rampant forum shopping.”); Brief of Amici Curiae 56 Professors of Law and Economics in Support of Petition for Writ of Certiorari at 1, *TC Heartland*, 137 S. Ct. 1514 (No. 16-341) [hereinafter Brief of 56 Professors] (describing “rampant forum shopping, particularly by patent trolls”).

3. Brief of Dell Inc. and the Software & Information Industry Association as Amici Curiae in Support of Petitioner at 3, *TC Heartland*, 137 S. Ct. 1514 (No. 16-341) [Brief of Dell] (“The present regime, characterized by its rampant and unseemly forum shopping, stems from an easy-to-correct misinterpretation of the patent venue statute.”).

4. *See TC Heartland LLC v. Kraft Foods Grp. Brands LLC*, 137 S. Ct. 1514 (2017).

5. *See id.*

Section 1400(b) is a special venue statute determining venue for patent cases, providing that “[a]ny civil action for patent infringement may be brought in the judicial district where the defendant resides, or where the defendant has committed acts of infringement and has a regular and established place of business.”⁶ However, in its 1990 *VE Holding* decision, the Federal Circuit interpreted “resides” under the patent venue statute broadly, giving patentees a virtually limitless choice of venue.⁷ Many say that the *VE Holding* decision caused the “plague” of forum shopping in patent cases,⁸ which grew until, in 2015, nearly 44% of patent cases were brought in the Eastern District of Texas.⁹ Such forum shopping is problematic to the extent that it permits patentees who file frivolous lawsuits—sometimes called “patent trolls”—to file in inconvenient and plaintiff-friendly forums to gain larger or faster settlements.

In May 2017, the Supreme Court reversed the Federal Circuit’s interpretation, returning the meaning of “resides” in the patent venue statute to its narrower meaning before the infamous *VE Holding* decision.¹⁰ Now, where a defendant “resides” is where a defendant is incorporated,¹¹ leading to increased filings in Delaware.¹² Plaintiffs wishing to file outside the defendant’s state of incorporation must rely on the second prong of the patent venue statute: “where the defendant has committed acts of infringement and has a regular and established place of business.”¹³

This Note argues that while the Supreme Court’s decision in *TC Heartland* helps to limit forum shopping, further tailoring of patent venue rules would better advance the policies at the intersection of venue and patent law. Part II frames the background of *TC Heartland* by giving an overview of the general venue statute, the special patent venue statute, the historical changes in their

6. 28 U.S.C. § 1400(b) (2012).

7. *VE Holding Corp. v. Johnson Gas Appliance Co.*, 917 F.2d 1574, 1584 (Fed. Cir. 1990) (holding that “the first test for venue under § 1400(b) with respect to a defendant that is a corporation, in light of the 1988 amendment to § 1391(c), is whether the defendant was subject to personal jurisdiction in the district of suit at the time the action was commenced”) (citing 28 U.S.C. §§ 1391(c) & 1400(b) (1988)).

8. *See, e.g.*, Petition for Writ of Certiorari, *supra* note 1, at 18 (“[R]ampant forum shopping is directly traceable to the Federal Circuit’s decision in *VE Holding*.”).

9. Brian Howard, *Announcing the Patent Litigation Year in Review 2015*, LEX MACHINA (Mar. 16, 2016), <https://lexmachina.com/14318/> [<https://perma.cc/9PGK-EWK3>].

10. *TC Heartland*, 137 S. Ct. at 1516.

11. *Id.* at 1517 (holding that “a domestic corporation ‘resides’ only in its State of incorporation for purposes of the patent venue statute”).

12. Brian Howard, *Patent Litigation Trends in the Three Months After T.C. Heartland*, LEX MACHINA (Oct. 18, 2017), <https://lexmachina.com/patent-litigation-trends-in-the-three-months-after-t-c-heartland/> [<https://perma.cc/TYQ6-WW3X>].

13. 28 U.S.C. § 1400(b) (2012).

exclusivity, and the recent forum shopping due to broad patent venue rules. Part III summarizes the Supreme Court's decision in *TC Heartland*. Part IV summarizes the aftermath of the Supreme Court's decision, including changes in where patent suits are filed and recent interpretations of the second prong of the patent venue statute. Part V considers how different solutions might serve patent venue policies, including different judicial interpretations of the second prong of patent venue, venue reform by Congress linking venue to the underlying technology at issue, and reform directly aimed at tilting the playing field against patent assertion entities.

II. BACKGROUND

This Part provides background on general venue rules, patent venue rules, and the changes in their exclusivity. The Section also describes the forum shopping trends and the statutory change in the general venue statute that lead to the Supreme Court's decision in *TC Heartland*.

A. VENUE IN CIVIL ACTIONS GENERALLY

Venue is “the geographic specification of the proper court or courts for the litigation of a civil action.”¹⁴ Courts have observed that venue is “primarily a matter of choosing a convenient forum.”¹⁵ The main focus of venue is the “convenience of litigants and witnesses,”¹⁶ in particular the litigant who has not chosen the forum.¹⁷

Although the concept of venue is distinct from personal jurisdiction,¹⁸ Congress has “liberalized” general venue provisions to the point that some question whether venue provides any protection to defendants beyond that

14. 28 U.S.C. § 1390(a) (2012).

15. 14D CHARLES ALAN WRIGHT & ARTHUR R. MILLER, FEDERAL PRACTICE AND PROCEDURE § 3801 (4th ed. 2017) (citing *Leroy v. Great Western United Corp.*, 443 U.S. 173, 180 (1979)).

16. *Id.* (quoting *Denver & R. G. W. R. Co. v. Brotherhood of R. R. Trainmen*, 387 U.S. 556, 560 (1967)).

17. *Id.* Generally, “the purpose of statutorily specified venue is to protect the defendant against the risk that a plaintiff will select an unfair or inconvenient place of trial.” *Id.* (quoting *Leroy*, 443 U.S. at 183–84).

18. While venue and personal jurisdiction both relate to the “territorial reach” of a court, they are distinct concepts: personal jurisdiction focuses primarily “on the defendant’s activities to avail itself of the forum,” whereas venue also looks at the “location of other parties and their activities.” *Id.* Another distinction made between personal jurisdiction and venue is that personal jurisdiction is “sovereign-constraining” whereas venue is “litigant-protective” by “guard[ing] against an uneven playing field between parties.” Peter L. Markowitz & Lindsay C. Nash, *Constitutional Venue*, 66 FLA. L. REV. 1153, 1160 (2014).

provided by personal jurisdiction.¹⁹ Indeed, Congress's amendments to the general venue statute in 1966, 1988, 1990 and 2011 are said to have completed a "four-stage/four-decade process of eliminating venue as a significant constraint on choice of federal forum."²⁰

The general venue statute, § 1391, governs venue for federal civil actions.²¹ Section 1391(a) defines the applicability of the section, indicating "Except as otherwise provided by law," the section governs venue for all civil actions.²² Section 1391(b) provides the rules governing venue in general.²³ Venue is proper in judicial districts where (1) the defendant resides²⁴ or (2) where a substantial part of the events giving rise to the claim occurred.²⁵ If there is no judicial district that satisfies the first two options, then the "fallback" provision provides that venue is proper where the defendant is subject to personal jurisdiction with respect to the particular action.²⁶ Section 1391(c) is the general venue statute's "Residency" provision, and specifies: "[f]or all venue purposes" where a natural person, a defendant entity, and a plaintiff entity are "deemed to reside"—respectively: the judicial district in which the person is domiciled, any district in which the entity is subject to personal jurisdiction for the particular action, and the judicial district in which the entity maintains its principal place of business.²⁷

Beyond the general venue statute, there are hundreds of special venue provisions governing venue for particular actions.²⁸ Congress rarely indicates whether these special venue statutes are exclusive or operate together with the general venue statute, leaving the task of determining Congress's intent to the

19. *Id.*

20. 17 GEORGENE M. VAIRO, MOORE'S FEDERAL PRACTICE - CIVIL § 110.01 (2018).

21. *See* 28 U.S.C. § 1391 (2012).

22. § 1391(a).

23. *See* § 1391(b).

24. *Id.* ("A civil action may be brought in . . . (1) a judicial district in which any defendant resides, if all defendants are residents of the State in which the district is located . . .").

25. *Id.* ("A civil action may be brought in . . . (2) a judicial district in which a substantial part of the events or omissions giving rise to the claim occurred, or a substantial part of property that is the subject of the action is situated . . .").

26. *Id.* ("A civil action may be brought in . . . (3) if there is no district in which an action may otherwise be brought as provided in this section, any judicial district in which any defendant is subject to the court's personal jurisdiction with respect to such action."); *see* Wright, *supra* note 15, at § 3804 ("Section 1391(b)(3), the fallback venue provision . . . is very narrow in that it applies only if there is no district anywhere in the federal court system in which venue can be laid under Section 1391(b)(1) or Section 1391(b)(2).").

27. *See* 28 U.S.C. § 1391(c).

28. *See* WRIGHT, *supra* note 15, at § 3803.

courts.²⁹ Courts occasionally find that the special venue statutes are exclusive but more often find that they are non-exclusive.³⁰

B. VENUE IN PATENT INFRINGEMENT ACTIONS

Section 1400(b), the patent venue statute, is one of the special venue statutes for which Congress failed to say whether it is exclusive or supplemented by the general venue statute. Therefore, the history of venue in patent infringement actions and its relation to the general venue provision provides important background to understanding the Supreme Court's decision in *TC Heartland*. Under the patent venue statute, § 1400(b), venue is proper for patent infringement actions “in the judicial district where the defendant resides, or where the defendant has committed acts of infringement and has a regular and established place of business.”³¹

1. *Creation of the Patent Venue Statute and Its Historical Exclusivity*

Congress enacted the patent venue statute in 1897³² in order to eliminate confusion among the lower courts regarding the applicability of general venue rules to patent infringement actions.³³ Under the Act of 1887, with narrower general venue rules than those that exist today, venue for federal question suits was proper only where a defendant was an inhabitant.³⁴ Courts generally understood this general venue rule to govern venue in patent infringement

29. *Id.*

30. *Id.*

31. 28 U.S.C. § 1400(b) (2012).

32. *See* Act of Mar. 3, 1897, ch. 395, 29 Stat. 695 (1897).

33. *See* *Stonite Prod. Co. v. Melvin Lloyd Co.*, 315 U.S. 561, 565 (1942) (“The Act of 1897 was adopted to define the exact jurisdiction of the federal courts in actions to enforce patent rights, and thus eliminate the uncertainty produced by the conflicting decisions on the applicability of the Act of 1887, as amended, to such litigation.”); *see also* Richard C. Wydick, *Venue in Actions for Patent Infringement*, 25 STAN. L. REV. 551, 554 (1973) (identifying two purposes based on legislative history: (1) “clear up the uncertainty created by the split among federal courts respecting the applicability of the 1887 Act, the general venue statute, to patent infringement actions;” and (2) “give plaintiffs in patent infringement actions a broader choice of forums than was available in ordinary federal question cases under the general venue statute as it had existed since 1887”).

34. The eleventh section of the Judiciary Act of 1789 provided that “no civil suit shall be brought before either of said courts against an inhabitant of the United States, by any original process in any other district than that whereof he is an inhabitant, or in which he shall be found at the time of serving the writ.” Judiciary Act of 1789, ch. 20, § 11, 1 Stat. 73, 78–79 (1789). Following “abuses engendered by this extensive venue,” *Stonite*, 315 U.S. at 563, Congress narrowed the venue provision in the Act of 1887 to provide that “no civil suit shall be brought before either of said courts against any person by any original process of proceeding in any other district than that whereof he is an inhabitant.” Act of Mar. 3, 1887, ch. 373, 24 Stat. 552 (1887).

actions.³⁵ However, a Supreme Court decision destabilized this understanding and caused uncertainty among lower courts.³⁶ As a result, many lower courts took the stance that general venue limitations did not apply to patent cases and patent infringers could, more broadly, be sued “wherever they could be found.”³⁷

To eliminate this uncertainty, Congress created a “special new venue statute”³⁸ through the 1897 Act, which limited patent infringement claims to districts where the defendant was an inhabitant or “committed acts of infringement and [had] a regular and established place of business.”³⁹

In its 1942 decision in *Stonite v. Melvin*, the Supreme Court held that the patent venue statute was the “exclusive provision controlling venue in patent infringement proceedings,” and was not supplemented by the general venue statute.⁴⁰ Specifically, the patent venue statute was not supplemented by a general provision related to the venue of multiple defendants.⁴¹ The Court determined that application of the general venue law to patent suits did not

35. In 1857, the Supreme Court held that the Judiciary Act of 1789’s general venue provision applied to patent infringement suits. *See Chaffee v. Hayward*, 61 U.S. 208, 216 (1857) (“The eleventh section . . . is as applicable in this case as it was to those where jurisdiction depended on citizenship. It applies in its terms to all civil suits; it makes no exception, nor can the courts of justice make any.”); *see also* VE Holding Corp. v. Johnson Gas Appliance Co., 917 F.2d 1574, 1576 (Fed. Cir. 1990) (“[The Judiciary Act of 1789] was held applicable to patent infringement suits in *Chaffee v. Hayward* . . .”). After the Act of 1887, the lower federal courts unanimously assumed that that Act, which limited venue for suits other than diversity cases to the district in which the defendant was an inhabitant, governed patent infringement litigation as well. *See Stonite*, 315 U.S. at 564, 567 n.3 (citing cases assuming general venue provision applied to patent infringement cases).

36. In 1893, in *In re Hohorst*, the Supreme Court—in a case holding the venue limitation inapplicable to foreign defendants—also suggested that venue limitations were only intended to apply to diversity jurisdiction cases. *See In re Hohorst*, 150 U.S. 653, 661–62 (1893). Therefore, the Court suggested, the venue limitations did not apply to suits with exclusive federal court jurisdiction, including patent suits like the one at issue. *See id.* The dicta led to uncertainty among the lower courts as to whether the Act of 1887 applied to patent infringement cases. *See Stonite*, 315 U.S. at 564, 567 n.3 (citing conflicting cases).

37. *Stonite*, 315 U.S. at 564–65.

38. *Brunette Mach. Works, Ltd. v. Kockum Indus., Inc.*, 406 U.S. 706, 712 (1972).

39. Act of Mar. 3, 1897, ch. 395, 29 Stat. 695 (1897) (providing that “in suits brought for the infringement of letters patent the circuit courts of the United States shall have jurisdiction, in law or in equity, in the district of which the defendant is an inhabitant, or in any district in which the defendant, whether a person, partnership, or corporation, shall have committed acts of infringement and have a regular and established place of business”).

40. *See Stonite*, 315 U.S. at 562, 567 (“Section 51 is, of course, not applicable to patent infringement proceedings. Since § 48 is wholly independent of § 51, there is an element of incongruity in attempting to supplement § 48 by resort to § 52, an exception to the provisions of § 51.”) (citations omitted).

41. *See Stonite*, 315 U.S. at 563.

survive the creation of the patent venue statute, “which was intended to define the exact limits of venue in patent infringement suits.”⁴²

In the 1948 revision and recodification of the Judicial Code, Congress placed the venue provisions⁴³ in 28 U.S.C. § 1400(b) and revised the language of the provisions.⁴⁴ In particular, Congress replaced the phrase “of which the defendant is an inhabitant” in the prior patent venue statute with “where the defendant resides.”⁴⁵ 28 U.S.C. § 1400(b) provides: “[a]ny civil action for patent infringement may be brought in the judicial district where the defendant resides, or where the defendant has committed acts of infringement and has a regular and established place of business.”⁴⁶

Despite the Supreme Court’s holding in *Stonite*, a split among the circuits developed as to whether § 1391(c), the general venue statute, supplemented the patent venue statute and therefore “a corporation may be sued for patent infringement in any district where it merely ‘is doing business.’”⁴⁷ In its 1957 *Fourco* decision, the Supreme Court held that § 1400(b) was “the sole and exclusive provision controlling venue in patent infringement actions,” and was “not to be supplemented by the provisions of 28 U.S.C. § 1391(c).”⁴⁸ Section 1391(c), at that time, provided venue rules for corporations and also defined a corporation’s residence as “any judicial district in which it is incorporated or licensed to do business or is doing business . . . for venue purposes.”⁴⁹

Rather than looking to Congress’s intent in creating § 1391(c), the Court focused on whether the patent venue statute had changed since it was last considered in *Stonite*.⁵⁰ The Court found no substantive change in the

42. *See id.* at 566.

43. Before the 1948 revision and recodification, the patent venue statute was in § 48 of the 1911 Judicial Code and 28 U.S.C. § 109 (1940). *See Fourco Glass Co. v. Transmirra Prod. Corp.*, 353 U.S. 222, 225–26 (1957).

44. *See Fourco*, 353 U.S. at 226.

45. *See id.* (citing the Revisers’ Notes on § 1400(b)).

46. Notably, § 1400(b) only applies to patent infringement action, and thus does not cover venue for other actions under patent laws such as interference actions and actions for declaratory judgment. *See* WRIGHT, *supra* note 15, at § 3823.

47. *Fourco*, 353 U.S. at 224 n.3.

48. *Id.* at 229.

49. Section 1391(c) at that time read: “(c) A corporation may be sued in any judicial district in which it is incorporated or licensed to do business or is doing business, and such judicial district shall be regarded as the residence of such corporation for venue purposes.” *See Fourco*, 353 U.S. at 223.

50. *See id.* at 225. The Court reasoned:

[U]nless there has been a substantive change in what was § 48 of the Judicial Code at the time the *Stonite* case was decided, on March 9, 1942, it is evident that that statute would still constitute “the exclusive provision controlling venue in patent infringement proceedings.” The question here, then, is

intervening 1948 recodification.⁵¹ Congress had explained that replacement of the phrase “of which the defendant is an inhabitant” with “where the defendant resides” was because “inhabitant” and “resident” were synonymous.⁵² The Court reasoned that because “inhabitant” and “resident” meant domicile, and therefore, with respect to corporations, the state of incorporation only, Congress’s explanation “negative[d] any intention to make corporations suable, in patent infringement cases, where they are merely ‘doing business.’”⁵³ Moreover, the Court reasoned that because § 1391(c) was the general corporation venue statute and § 1400(b) was the special venue statute governing patent infringement actions, § 1391(c) did not apply to patent infringement actions because of the principle that “[s]pecific terms prevail over the general.”⁵⁴

In 1972, the Supreme Court went against its trend of finding the patent venue statute exclusive in *Brunette v. Kockum*, holding that the patent venue statute was supplemented by the general venue statute’s provision of venue for foreign defendants.⁵⁵ While reiterating that residence in § 1400(b) for a corporation is its place of incorporation, the Court held that § 1391(d), which provided that a foreign defendant could be sued in any district, was distinguishable from the provisions considered in *Stonite* and *Fourco* because in § 1391(d), “Congress was stating a principle of broad and overriding application.”⁵⁶ The Court reasoned that § 1391(d) could not be “confined in its application to cases that would otherwise fall under the general venue statutes” because it was “properly regarded, not as a venue restriction at all, but rather as a declaration of the long-established rule.”⁵⁷

simply whether there has been a substantive change in that statute since the *Stonite* case. If there has been such change, it occurred in the 1948 revision and recodification of the Judicial Code.

Id.

51. *Id.* at 227–28.

52. *Id.* at 226.

53. *See id.*

54. *See id.* at 228–29 (“However inclusive may be the general language of a statute, it will not be held to apply to a matter specifically dealt with in another part of the same enactment . . .”) (quoting *Clifford F. MacEvoy Co. v. United States*, 322 U.S. 102, 107 (1944)) (internal quotations omitted).

55. *See Brunette Mach. Works, Ltd. v. Kockum Indus., Inc.*, 406 U.S. 706, 707 (1972).

56. *See id.* at 714.

57. *See id.*

2. VE Holding: *After 1988 Amendment, General Venue Statute's Corporate Residence Definition Supplements the Patent Venue Statute*

In 1988, Congress amended the general venue statute and adopted the new definition of a corporation's residence as any "judicial district in which it is subject to personal jurisdiction at the time the action is commenced."⁵⁸ In addition, the 1988 amendment added the phrase: "[f]or purposes of venue under this chapter" to the beginning of § 1391(c).⁵⁹

In *VE Holding v. Johnson Gas*, the Federal Circuit considered whether Congress meant to apply the new definition of "resides" in § 1391(c) to § 1400(b) and thereby change the "long-standing interpretation of the patent venue statute."⁶⁰ The court reasoned that "this chapter" in § 1391(c)'s new phrase "[f]or purposes of venue under this chapter" referred to chapter 87 of title 28 and thus encompassed §§ 1391–1412, including § 1400(b).⁶¹ Thus, the court held, "[o]n its face, § 1391(c) clearly applies to § 1400(b), and thus redefines the meaning of the term 'resides' in that section."⁶²

The court acknowledged that one "may be tempted to disregard the clear language of § 1391(c)" based on the historical independence of § 1400(b) as established in *Fourco* and lack of express legislative history in the 1988 amendment indicating any intent to change venue in patent infringement cases.⁶³ However, the court reasoned, "Section 1391(c) as it was in *Fourco* is no longer."⁶⁴ The court reasoned that the general rule that specific statutes, like § 1400(b), are not controlled by general ones, like § 1391(c), was not applicable here because § 1391(c) expressly read itself into § 1400(b).⁶⁵ Moreover, § 1391(c) did not govern § 1400(b), but, rather, simply defined a term in § 1400(b).⁶⁶

58. See Judicial Improvements and Access to Justice Act, Pub. L. No. 100-702, tit. X, § 1013(a), 102 Stat. 4642, 4669 (1988); 28 U.S.C. 1391(c) (1988). The legislative history indicates that this definition for corporate residence would ensure the venue determination is made with reference to the *particular judicial district* in which a corporation is sued, rather than "make venue proper in *any district* in a multidistrict state in which a corporation is incorporated, licensed to do business, or doing business." H.R. REP. 100-889, at 70 (1988), as reprinted in 1988 U.S.C.C.A.N. 5982, 6031 (emphasis added).

59. See Judicial Improvements and Access to Justice Act, Pub. L. No. 100-702, tit. X, § 1013(a), 102 Stat. 4642, 4669 (1988); 28 U.S.C. 1391(c) (1988).

60. *VE Holding Corp. v. Johnson Gas Appliance Co.*, 917 F.2d 1574, 1575 (Fed. Cir. 1990).

61. See *id.* at 1578.

62. See *id.*

63. See *id.*

64. See *id.* at 1579.

65. See *id.* at 1580.

66. See *id.*

C. FORUM SHOPPING IN THE AFTERMATH OF *VE HOLDING*

In the years following *VE Holding*'s expansion of venue in patent infringement cases, forum shopping in patent infringement increased. Many scholars trace the forum-shopping trend to *VE Holding*.⁶⁷ One of the first papers documenting forum shopping in patent cases after *VE Holding* is the 2001 paper by Kimberly A. Moore.⁶⁸ The paper found forum shopping was “alive and well in patent litigation” because “[b]orderless commerce and lax jurisdiction and venue requirements g[a]ve plaintiffs in patent cases an unfettered choice of where to bring suit.”⁶⁹

In *Of Fire Ants and Claim Construction*, Yan Leychkis documented the emergence of the Eastern District of Texas as “the new superstar of patent litigation districts.”⁷⁰ The Eastern District of Texas rose from “almost complete judicial obscurity” in 2001 to second place in the rankings of districts ranked by number of new patent cases filed in 2006, “ahead of all the perennial favorites except the Central District of California.”⁷¹ The Eastern District of Texas continued to attract more patent cases, such that in 2015, nearly 44% of patent cases were brought in the Eastern District of Texas.⁷²

Commenters have attributed the Eastern District of Texas's popularity to its fast adjudication of patent cases as the “rocket docket,”⁷³ its local procedural rules—including a preference for trial over summary judgment⁷⁴ and its patentee-friendly juries.⁷⁵ Some scholars suggest that the liberal venue rules have enabled judges in the Eastern District of Texas to engage in “forum

67. See, e.g., Petition for Writ of Certiorari, *supra* note 1, at 18.

68. Kimberly A. Moore, *Forum Shopping in Patent Cases: Does Geographic Choice Affect Innovation?*, 79 N.C. L. REV. 889 (2001). Judge Moore authored the Federal Circuit's decision in *In re TC Heartland*, 821 F.3d 1338 (Fed. Cir. 2016).

69. See *id.* at 937.

70. Yan Leychkis, *Of Fire Ants and Claim Construction: An Empirical Study of the Meteoric Rise of the Eastern District of Texas As A Preeminent Forum for Patent Litigation*, 9 YALE J. L. & TECH. 193, 204 (2007).

71. *Id.*

72. Brian Howard, *Announcing the Patent Litigation Year in Review 2015*, LEX MACHINA (Mar. 16, 2016), <https://lexmachina.com/14318/> [<https://perma.cc/V2NM-87MF>].

73. See Daniel Klerman & Greg Reilly, *Forum Selling*, 89 S. CAL. L. REV. 241 at 266 (2016) (“During the Eastern District's rise in popularity from 2000 to 2007, the median time to trial in the Eastern District was only 1.8 years. This was the fastest among the five busiest patent districts . . .”).

74. See *id.* at 251 (finding “judges in the Eastern District of Texas grant summary judgment at less than one-quarter the rate of judges in other districts”).

75. See Leychkis, *supra* note 70, at 210 (“To say that juries in the Eastern District of Texas favor patent holders is something of an understatement—quite plainly, an Eastern District jury is the patentee plaintiff's best friend.”).

selling,” that is, compete for patent cases through patentee-friendly procedures.⁷⁶ Forum shopping in patent actions increased to the point that critics called it a “plague,”⁷⁷ “rampant,”⁷⁸ and “unseemly.”⁷⁹

D. STATUTORY BASIS FOR CHALLENGE TO *VE HOLDING*: 2011 AMENDMENTS TO THE GENERAL VENUE STATUTE

This “plague” of forum shopping perhaps motivated the petitioners in *TC Heartland v. Kraft Foods* to find a cure in Congress’s 2011 amendments to the general venue statute, arguing that such amendments repealed the broad patent venue rules created by the Federal Circuit’s *VE Holding* decision. In the Federal Courts Jurisdiction and Clarification Act of 2011, Congress amended the general venue statute, providing a statutory hook for the challenge to the *VE Holding* decision.⁸⁰ The 2011 amendment made two important changes to the statutory language of § 1391. First, § 1391(a), the “Applicability” provision, now provides that “Except as otherwise provided by law,” the section governs all civil actions.⁸¹ Second, Congress changed § 1391(c) by replacing the 1988 phrase “[f]or purposes of venue under this chapter,” which the *VE Holding* decision relied on, with the phrase “[f]or all venue purposes.”⁸²

III. *TC HEARTLAND V. KRAFT FOODS*

This Part summarizes the facts and procedural history of *TC Heartland*, the Federal Circuit decision, the parties’ arguments before the Supreme Court, and, finally, the Supreme Court’s decision.

76. See Klerman, *supra* note 73, at 250 (“[J]udges in the Eastern District have consciously sought to attract patentees and have done so by departing from mainstream doctrine in a variety of procedural areas in a pro-patentee (pro-plaintiff) way.”).

77. Petition for Writ of Certiorari, *supra* note 1, at 8.

78. Brief of Electronic Frontier Foundation, *supra* note 2, at 1; Brief of 32 Internet Companies, *supra* note 2, at 4; Brief of 56 Professors, *supra* note 2 at 1.

79. Brief of Dell, *supra* note 3 at 3.

80. See Federal Courts Jurisdiction and Clarification Act of 2011, Pub. L. No. 112-63, § 202, 125 Stat. 763 (2011).

81. See 28 U.S.C. § 1391(a) (2012).

82. Compare § 1391(c) (2012) (“For all venue purposes”), with § 1391(c) (1988) (“For purposes of venue under this chapter); see *VE Holding Corp. v. Johnson Gas Appliance Co.*, 917 F.2d 1574, 1578 (Fed. Cir. 1990) (“The phrase ‘this chapter’ refers to chapter 87 of title 28, which encompasses §§ 1391–1412, and thus includes § 1400(b). On its face, § 1391(c) clearly applies to § 1400(b), and thus redefines the meaning of the term ‘resides’ in that section.”).

A. FACTS AND PROCEDURAL HISTORY

Kraft Food Groups Brands, LLC filed a complaint against TC Heartland, LLC in the United States District Court for the District of Delaware alleging Heartland's liquid water enhancer products infringed three of Kraft's patents.⁸³

Kraft is a corporation organized and existing under the laws of the State of Delaware, with its principal place of business in Illinois.⁸⁴ Heartland is a limited liability company organized and existing under Indiana law, with headquarters in Indiana.⁸⁵

Heartland moved to dismiss Kraft's complaint to the extent that it sought relief for alleged acts of patent infringement occurring outside of Delaware, and also moved to transfer venue to the Southern District of Indiana pursuant to 28 U.S.C. §§ 1404(a) and 1406(a).⁸⁶ Heartland alleged that "it is not registered to do business in Delaware, has no local presence in Delaware, has not entered into any supply contracts in Delaware or called on any accounts there to solicit sales."⁸⁷ However, Heartland admitted that pursuant to contracts with two national customers, Heartland did ship some of the accused products, about two percent of Heartland's total 2013 sales of the accused products, into Delaware.⁸⁸

The district court denied Heartland's motion.⁸⁹ The district court agreed with the magistrate judge's conclusions that: (1) Under *Beverly Hills Fan*, "personal jurisdiction exists *in patent cases* where, as here, the 'defendants purposefully shipped the accused [product] into [the forum state] through an established distribution channel,'"⁹⁰ and (2) the 2011 amendments to § 1391 "did not undo the Federal Circuit's decision in *VE Holding*" and, therefore "venue is appropriate for a defendant in a patent infringement case where personal jurisdiction exists."⁹¹

83. *In re TC Heartland LLC*, 821 F.3d 1338, 1340 (Fed. Cir. 2016).

84. *Id.*

85. *Id.*

86. Motion to Dismiss Claims for Lack of Personal Jurisdiction and for Transfer of Venue to the Southern District of Indiana, *Kraft Foods Grp. Brands LLC v. TC Heartland, LLC*, No. CV 14-28-LPS, 2015 WL 5613160 (D. Del. Sept. 24, 2015) (1:14-cv-00028-LPS Dkt. No. 7).

87. *TC Heartland LLC*, 821 F.3d at 1340.

88. *Id.*

89. *Kraft Foods Grp. Brands LLC v. TC Heartland, LLC*, No. CV 14-28-LPS, 2015 WL 5613160, at *1 (D. Del. Sept. 24, 2015).

90. *Id.* (citing *Beverly Hills Fan Co. v. Royal Sovereign Corp.*, 21 F.3d 1558, 1571 (Fed. Cir. 1994)).

91. *Id.* at *2.

Heartland filed a petition with the Federal Circuit for a writ of mandamus to direct the district court to dismiss the action or transfer the action to the Southern District of Indiana under 28 U.S.C. § 1406(a).⁹²

B. THE FEDERAL CIRCUIT'S DECISION

The Federal Circuit denied Heartland's petition.⁹³ The court held that Heartland failed to show its right to mandamus was "clear and indisputable"⁹⁴ because Heartland's legal theory regarding venue was foreclosed by the Federal Circuit's precedent, *VE Holding*.⁹⁵ In addition, Heartland's legal theory regarding personal jurisdiction was foreclosed by *Beverly Hills Fan*.⁹⁶

The Federal Circuit rejected Heartland's argument that Heartland does not "reside" in Delaware for purposes of venue under § 1400(b).⁹⁷ The court was not persuaded by Heartland's argument that Congress's 2011 amendments to § 1391 nullified *VE Holding*'s holding that the definition of corporate residence in § 1391 applies to § 1400(b).⁹⁸

First, the court reasoned, the 2011 amendment to § 1391 actually broadened the applicability of corporate residence by changing the language preceding the definition of corporate residence from "[f]or the purposes of venue under this chapter" to "[f]or all venue purposes."⁹⁹ Such a broadening of § 1391's applicability does not support Heartland's arguments that the 2011 amendments narrowed the applicability of § 1391.¹⁰⁰

Second, the court was not persuaded by Heartland's argument that the 2011 amendment's addition of "Applicability of section. —Except as otherwise provided by law" to § 1391(a) displaced § 1391(c)'s definition of

92. Petition for Writ of Mandamus, *In re TC Heartland LLC*, 821 F.3d 1338 (Fed. Cir. 2016) (Docket No. 16-00105).

93. *In re TC Heartland LLC*, 821 F.3d 1338, 1340 (Fed. Cir. 2016).

94. *Id.* at 1341 (citing *Cheney v. U.S. Dist. Court for the Dist. of Columbia*, 542 U.S. 367, 381 (2004)).

95. *Id.* at 1341, 1345.

96. Citing its precedent in *Beverly Hills Fan*, the Federal Circuit rejected Heartland's arguments that the case should be dismissed for lack of personal jurisdiction. *Id.* at 1344–45 (citing *Beverly Hills Fan Co. v. Royal Sovereign Corp.*, 21 F.3d 1558 (Fed. Cir. 1994)). The Federal Circuit rejected Heartland's argument that there was no specific personal jurisdiction for Heartland's activities within Delaware, concluding that Heartland's activities in Delaware were sufficient for minimum contacts. *Id.* Moreover, the Federal Circuit rejected Heartland's argument that the Delaware district court only had specific jurisdiction over the allegedly infringing acts occurring within Delaware and not those occurring outside of Delaware. *Id.*

97. *Id.* at 1341.

98. *Id.* at 1341–42.

99. *Id.* at 1341 (citing 28 U.S.C. § 1391(c) (1988) and 28 U.S.C. § 1391(c) (2011)).

100. *Id.*

corporate residence with one otherwise provided by law for patent cases.¹⁰¹ First, the patent venue statute § 1400(b) does not itself define corporate residence and so cannot be the “law” otherwise provided that would displace § 1391’s definition.¹⁰² And, even assuming that Congress intended “law” to be federal common law, Heartland’s argument that Congress intended to codify federal common law as defined by the Supreme Court’s 1957 decision in *Fourco* is “without merit or logic” because the Federal Circuit held in *VE Holding* that *Fourco* no longer applied after the 1988 amendments to § 1391.¹⁰³ Indeed, Congressional reports recognized that *VE Holding* was the prevailing law both before and after the 2011 amendments to § 1391 and Heartland failed to provide any evidence that Congress otherwise intended to codify *Fourco*.¹⁰⁴

Following the Federal Circuit’s decision, Heartland filed a petition for writ of certiorari, asking the Supreme Court to answer “[w]hether 28 U.S.C. § 1400(b) is the sole and exclusive provision governing venue in patent infringement actions and is not to be supplemented by 28 U.S.C. § 1391(c),”¹⁰⁵ and the Supreme Court granted certiorari.¹⁰⁶

C. ARGUMENTS TO THE SUPREME COURT

The parties’ arguments to the Supreme Court focused on the statutory interpretation question as well as the policy implications. The petitioner Heartland argued that even under the 1988 language of the general venue statute, the Federal Circuit in *VE Holding* erred in its rejection of the Supreme Court’s interpretation of the patent venue statute in *Fourco*.¹⁰⁷ In the alternative, Heartland argued, if the Federal Circuit’s interpretation of the 1988 general venue statute was correct, such an interpretation could no longer hold because the 2011 amendment to the general venue statute “repealed” the statutory language *VE Holding* relied on¹⁰⁸ and also added a proviso.¹⁰⁹ In addition,

101. *Id.* at 1341–42.

102. *Id.* at 1342.

103. *Id.* (citing *Fourco v. Transmirra*, 353 U.S. 222 (1957)).

104. *Id.* at 1343.

105. Petition for Writ of Certiorari, *supra* note 1, at i.

106. *TC Heartland LLC v. Kraft Food Brands Grp. LLC*, 137 S. Ct. 614 (2016).

107. *See* Brief for Petitioner at 24–36, *TC Heartland LLC v. Kraft Foods Grp. Brands LLC*, 137 S. Ct. 1514 (2017) (No. 16-341).

108. *Id.* at 39 (“In 2011, Congress rewrote § 1391 and repealed the statutory language in the 1988 version of § 1391(c) that *VE Holding* and the decision below treated as having changed the meaning of 28 U.S.C. § 1400(b).”).

109. *Id.* (“The 2011 Act also created a new 28 U.S.C. § 1391(a), titled ‘Applicability of Section,’ which reads in pertinent part: ‘*Except as otherwise provided by law*—(1) this section shall govern the venue of all civil actions brought in district courts of the United States.’”).

Heartland emphasized the effects of the broad venue rules under *VE Holding*, including forum shopping by plaintiffs into patentee-favorable venues.¹¹⁰

The respondent, Kraft, argued that the Supreme Court’s interpretation in *Fourco* does not govern because it was of an earlier statute which has since been substantively revised.¹¹¹ In the 2011 amendment to the general venue statute, Congress expressly defined where a defendant “resides” for *all* venue purposes.¹¹² The definition of residence was an “all-purpose” definition that was meant to apply globally to specialized venue statutes.¹¹³ Finally, Kraft argued, Heartland’s policy arguments could not justify departing from the statute’s plain text.¹¹⁴ In addition, Heartland’s policy arguments fail on their own terms because Heartland’s definition of residence as the state of incorporation would heighten the concentration of patent cases in select districts like the District of Delaware.¹¹⁵

D. THE SUPREME COURT’S DECISION

In a ten-page opinion authored by Justice Thomas and joined by all members of the Court (except Justice Gorsuch, who took no part in the consideration or the decision), the Court reversed the Federal Circuit.¹¹⁶ The Court concluded that the amendments to the general venue statute did not change the meaning of “resides” in the patent venue statute under *Fourco*.¹¹⁷ Therefore, the Court held, for the purpose of the patent venue statute, “a

110. *Id.* at 14–16 (describing high rate of patent litigation in the Eastern District of Texas and the District of Delaware and describing these courts as “not better in any value-neutral sense” but “simply better for patent plaintiffs and worse for patent defendants” (quoting Matthew Sag, *IP Litigation in U.S. District Courts: 1999–2014*, 101 IOWA L. REV. 1065 (2016))).

111. *See* Brief for the Respondent at 13–14, *TC Heartland LLC v. Kraft Foods Grp. Brands LLC*, 137 S. Ct. 1514 (2017) (No. 16-341) [hereinafter *Brief for Respondent*] (“Congress was not required to state expressly that it was abrogating *Fourco* when it adopted new statutory language that unambiguously does exactly that.”).

112. *Id.* at 16 (“The text clearly establishes that Section 1391(c)’s definition of ‘residence’ applies ‘[f]or all venue purposes.’ And a separate definition confirms what is already self-evident—that ‘all venue purposes’ include *patent*-venue purposes.”).

113. *Id.* at 19 (explaining that an all-purpose definition enabled Congress to “clarify venue law without undertaking the ‘challenging, delicate, and indeed agonizing’ process of amending or repealing more than 200 specialized venue statutes” (quoting AM. LAW INSTITUTE, FEDERAL JUDICIAL CODE REVISION PROJECT 168 (2003))).

114. *Id.* at 14.

115. *Id.* (“Heartland’s definition would deem each corporation to reside in only *one* jurisdiction, the state of incorporation. That would heighten, not reduce, the concentration of patent-infringement cases in a handful of judicial districts—primarily the districts where most companies are incorporated, such as the District of Delaware.”).

116. *TC Heartland LLC v. Kraft Foods Grp. Brands LLC*, 137 S. Ct. 1514, 1521 (2017).

117. *Id.* at 1517.

domestic corporation ‘resides’ only in its State of incorporation.”¹¹⁸ The Court’s analysis relies on its premise that if Congress intended to change the meaning of the patent venue statute under *Fourco* through Congress’s amendment the general venue statute, Congress would have provided “a relatively clear indication of its intent in the text of the amended provision.”¹¹⁹ Comparing the current version of the general venue statute with the version of the general venue statute as it existed when it was interpreted in *Fourco*, the Court concluded that “[t]he current version of § 1391 does not contain any indication that Congress intended to alter the meaning of § 1400(b) as interpreted in *Fourco*.”¹²⁰

The Court framed the issue in *TC Heartland* as “whether Congress changed the meaning of § 1400(b) when it amended § 1391.”¹²¹ The Court emphasized it had “definitively and unambiguously” held in *Fourco* that the word “resides” in § 1400(b) means only the State of incorporation for domestic corporations.¹²² Because the parties did not challenge *Fourco*, and there were no amendments to § 1400(b) following *Fourco*, the Court’s analysis focused on the effect of amendments to § 1391 to the meaning of § 1400(b).¹²³ The Court examined two amendments to § 1391: (1) the new “[f]or all venue purposes” language in § 1391(c); and (2) the addition of “[e]xcept as otherwise provided by law” in § 1391(a).

In evaluating the effect of the amendments to § 1391, the Court evoked a rule disfavoring implied modification of a statute’s settled construction.¹²⁴ Specifically, the Court stated, “[w]hen Congress intends to effect a change of that kind,”—“that kind” presumably referred to changes by one statute to the Court’s “definite[] and unambiguous[]” construction of another statute—“it ordinarily provides a relatively clear indication of its intent in the text of the amended provision.”¹²⁵

118. *Id.*

119. *See id.* at 1520.

120. *Id.*

121. *Id.*

122. *TC Heartland LLC v. Kraft Foods Grp. Brands LLC*, 137 S. Ct. 1514, 1520 (2017).

123. *Id.*

124. *Id.*

125. *Id.* (first citing *United States v. Madigan*, 300 U.S. 500, 506 (1937) (“[T]he modification by implication of the settled construction of an earlier and different section is not favored”); and then citing A. SCALIA & B. GARNER, *READING LAW: THE INTERPRETATION OF LEGAL TEXTS* 331 (2012) (“A clear, authoritative judicial holding on the meaning of a particular provision should not be cast in doubt and subjected to challenge whenever a related though not utterly inconsistent provision is adopted in the same statute or even in an affiliated statute.”)).

Applying this rule to the statutes at issue in *TC Heartland*, the Court found no indication in the current version of § 1391 that “Congress intended to alter the meaning of § 1400(b) as interpreted in *Fourco*.”¹²⁶ The Court rejected each of Kraft’s arguments regarding the meaning of “[f]or all venue purposes” in § 1391(c) and “[e]xcept as otherwise provided by law” in § 1391(a), and, finally, found no indication that “Congress in 2011 ratified the Federal Circuit’s decision in *VE Holding*.”¹²⁷

First, the Court concluded that “[f]or all venue purposes” in the current version of § 1391(c) was not materially different from “for venue purposes” in *Fourco*.¹²⁸ Both versions provide a default rule for venue purposes.¹²⁹ The Court rejected Kraft’s argument that “all venue purposes” does not mean “all venue purposes *except* for patent venue” because the “same argument” was rejected in *Fourco*.¹³⁰ The Court reasoned that “the addition of the word ‘all’ to the already comprehensive provision does not suggest that Congress intended for us to reconsider that conclusion.”¹³¹

Second, the Court reasoned that the addition of “[e]xcept as otherwise provided by law” in the current § 1391(a) is a saving clause that “expressly contemplates that certain venue statutes may retain definitions of ‘resides’ that conflict with its default definition.”¹³² No such saving clause existed in § 1391 when the Court decided *Fourco* but, there, the Court nonetheless held that “‘resides’ in § 1400(b) retained its original meaning contrary to § 1391(c)’s default definition.”¹³³ Thus, the clause “makes explicit the qualification that this Court previously found implicit in the statute.”¹³⁴ The Court rejected Kraft’s argument that the saving clause in § 1391(a) does not apply to the definitions in § 1391(c) because the text of § 1391(a) “makes clear that the saving clause applies to the entire ‘section.’”¹³⁵

126. *Id.*

127. *Id.* at 1520–21.

128. *TC Heartland LLC v. Kraft Foods Grp. Brands LLC*, 137 S. Ct. 1514, 1520 (2017). The Court cited *Pure Oil Co. v. Suarez*, 384 U.S. 202, 204–05 (1966), for the Court’s prior construction of “for venue purposes” as covering “all venue statutes.”

129. *TC Heartland LLC v. Kraft Foods Grp. Brands LLC*, 137 S. Ct. 1514, 1520 (2017). (“Although the current version of § 1391(c) provides a default rule that applies ‘[f]or all venue purposes,’ the version at issue in *Fourco* similarly provided a default rule that applied ‘for venue purposes.’”).

130. *See id.* at 1520–21 (citing Brief for the Respondent, *supra* note 111, at 21).

131. *Id.* at 1521.

132. *Id.*

133. *Id.*

134. *Id.*

135. *TC Heartland LLC v. Kraft Foods Grp. Brands LLC*, 137 S. Ct. 1514, 1521 (2017).

Lastly, the Court found no indication in the 2011 amendments that Congress intended to ratify the interpretation of § 1391 in *VE Holding*.¹³⁶ Rather, Congress's deletion of "under this chapter" in 2011 from the phrase interpreted in *VE Holding* "[f]or purposes of venue under this chapter" undermines the rationale of *VE Holding*, which relied heavily on the "under this chapter" language.¹³⁷ Thus, Congress "worded the current version of § 1391(c) almost identically to the original version of the statute."¹³⁸

In sum, the Court's decision in *TC Heartland* undid the Federal Circuit's decision in *VE Holding* and held that, for the purpose of the patent venue statute, "a domestic corporation 'resides' only in its State of incorporation."¹³⁹ Two footnotes in the opinion emphasized that the holding is limited to patent venue for *domestic corporations*. First, though the parties' briefs to the Supreme Court suggested that petitioner is not a corporation, but an unincorporated entity,¹⁴⁰ the Court "confine[d] [its] analysis to the proper venue for corporations" because the case was litigated based on the understanding that petitioner was a corporation.¹⁴¹ Second, the Court expressly limited its decision to *domestic* corporate defendants and expressed no opinion on its holding in *Brunette*.¹⁴² Thus the general venue statute still applies to foreign defendants sued for patent infringement, and they may be sued wherever there is personal jurisdiction.

IV. AFTERMATH OF *TC HEARTLAND*

TC Heartland dramatically narrowed the first prong of the patent venue statute. Before *TC Heartland*, "resides" was interpreted to mean any place the defendant was subject to personal jurisdiction.¹⁴³ Now, for corporate

136. *Id.*

137. *Id.*

138. *Id.* ("Compare § 1391(c) (2012 ed.) ('[f]or all venue purposes') with § 1391(c) (1952 ed.) ('for venue purposes').").

139. *Id.* at 1517.

140. Brief for the Respondent, *supra* note 111, at 9 n.4; Reply Brief at 4, *TC Heartland LLC v. Kraft Foods Grp. Brands LLC*, 137 S. Ct. 1514 (2017) (No. 16-341).

141. *TC Heartland LLC*, 137 S. Ct. at 1517 n.1.

142.

The parties dispute the implications of petitioner's argument for foreign corporations. We do not here address that question, nor do we express any opinion on this Court's holding in *Brunette Machine Works, Ltd. v. Kockum Industries, Inc.*, 406 U.S. 706, 92 S. Ct. 1936 n.2 (1972) (determining proper venue for foreign corporation under then existing statutory regime).

Id. at 1520 n.2.

143. *VE Holding Corp. v. Johnson Gas Appliance Co.*, 917 F.2d 1574, 1584 (Fed. Cir. 1990).

defendants, it is limited to districts in the state of the defendant's place of incorporation.¹⁴⁴ Thus, after *TC Heartland*, plaintiffs suing corporate defendants must choose to sue in the state where the defendant is incorporated¹⁴⁵ or establish venue under the second prong of the patent venue statute: "where the defendant has committed acts of infringement and has a regular and established place of business."¹⁴⁶

The decision has attracted scholarly attention, with articles analyzing the Court's statutory interpretation¹⁴⁷ and the decision's implications on access to the courts.¹⁴⁸

A. TRENDS IN PATENT FILINGS

Since the *TC Heartland* decision, there has been a shift in patent filings from the Eastern District of Texas to the District of Delaware. According to analysis by Lex Machina, patent cases filed in the Eastern District of Texas dropped from 33% of all patent case in the 180 days before *TC Heartland* to only 14% in the 180 days after.¹⁴⁹ Meanwhile, cases filed in the District of Delaware increased from 13% to 24% during that period.¹⁵⁰ Finally, cases filed in all other districts increased from 54% to 62%.¹⁵¹ In addition, the grant rate of

144. *TC Heartland LLC*, 137 S. Ct. at 1517.

145. *See id.*

146. 28 U.S.C. § 1400(b) (2012).

147. *See* Robert G. Bone, *Forum Shopping and Patent Law—A Comment on TC Heartland*, 96 TEX. L. REV. 141, 153 (2017) (arguing that the Court offered "remarkably thin support for its conclusion" and that the Federal Circuit's contrary interpretation "is at least as reasonable as *TC Heartland's* on textualist grounds"); Case Note, *Venue Statutes—Patent Suits—Definition of Corporate Residence—TC Heartland LLC v. Kraft Foods Group Brands LLC*, 131 HARV. L. REV. 393 (2017) ("An instructive irony underlies *TC Heartland*: a text-focused clear statement rule led the Court to uphold a purposivist construction of a statutory scheme.")

148. *See* Jesse Snyder, *TC Heartland LLC v. Kraft Foods Group Brands and the Big Debate About East Texas: How A Delaware Case Leaves Patent Venue Unsettled and Presages as Applied Challenges to the Constitutionality of Narrow Venue Interpretations*, 17 J. MARSHALL REV. INTELL. PROP. L. 232, 256 (2017) ("No doubt *TC Heartland* could shield small businesses from defending against lawsuits in hostile courts, but the case might presage an unconstitutional burden on their right to access to courts.")

149. *Lex Machina's Fifth Annual Patent Litigation Year in Review Report Quantifies the Impact of the Landmark TC Heartland v. Kraft Supreme Court Case*, LEX MACHINA (Feb. 7, 2018), <https://lexmachina.com/media/press/lex-machinas-fifth-annual-patent-litigation-year-review-report-quantifies-impact-landmark-tc-heartland-v-kraft-supreme-court-case/> [<https://perma.cc/MF6X-KKJK>].

150. *Id.*

151. *Id.*

motions to transfer venue in the Eastern District of Texas and in other districts increased after *TC Heartland*.¹⁵²

B. RESURRECTION OF “REGULAR AND ESTABLISHED PLACE OF BUSINESS”

Now that “resides” in the patent venue statute is only the place of incorporation for corporate domestic defendants, plaintiffs seeking to sue elsewhere must look to the second prong of the venue statute: “where the defendant has committed acts of infringement and has a regular and established place of business.”¹⁵³

The first part, “where the defendant has committed acts of infringement,” is satisfied by an allegation of an act of infringement in the district, including, under 35 U.S.C. § 271, allegations of a defendant’s making, using, offering to sell, or selling a patented invention, or inducing that conduct.¹⁵⁴

What constitutes a “regular and established place of business” is less straightforward. In renewing a patentee’s reliance on the second prong of the patent venue statute, *TC Heartland* has resurrected the pre-*VE Holding*, fact-intensive inquiry regarding what constitutes the defendant’s “regular and established place of business.”

Just four months after the Supreme Court’s holding in *TC Heartland*, the Federal Circuit provided guidance on where a defendant has a “regular and established place of business” in *In re Cray*,¹⁵⁵ reversing a flexible, totality of the circumstances test developed by the lower court in the Eastern District of Texas.¹⁵⁶

In *Raytheon v. Cray*, the District Court for the Eastern District of Texas held that venue was proper in the Eastern District of Texas when the defendant’s

152. BRIAN C. HOWARD, LEX MACHINA—PATENT LITIGATION YEAR IN REVIEW 2017 9 (Feb. 2018). The grant rate of motions to transfer in the Eastern District of Texas increased from 51% in the 180 days before *TC Heartland* to 75% in the 180 days after *TC Heartland*. *Id.*

153. 28 U.S.C. § 1400(b) (2012).

154. *Raytheon Co. v. Cray, Inc.*, 258 F. Supp. 3d 781, 788 (E.D. Tex.), *vacated*, *In re Cray Inc.*, 871 F.3d 1355 (Fed. Cir. 2017) (“Although the statute uses the phrase ‘act of infringement,’ courts have ‘consistently held that an *allegation* of infringement is itself sufficient to establish venue and [the] plaintiff is not required to demonstrate actual infringement by [the] defendant[.]’”) (quoting *Funnelcap, Inc. v. Orion Indus., Inc.*, 392 F. Supp. 938, 943 (D. Del. 1975)); *see also* ROBERT A. MATTHEWS, 5 ANNOTATED PATENT DIGEST § 36:153.80 (2018) (“The Federal Circuit has expressly instructed that ‘[t]he issue of infringement is not reached on the merits in considering venue requirements.’”) (quoting *In re Cordis Corp.*, 769 F.2d 733, 737 (Fed. Cir. 1985)).

155. *In re Cray Inc.*, 871 F.3d 1355, 1360 (Fed. Cir. 2017).

156. *Raytheon Co. v. Cray, Inc.*, 258 F. Supp. 3d 781 (E.D. Tex.), *vacated*, *In re Cray*, 871 F.3d at 1367.

only contacts with the Eastern District of Texas was its employees working from their homes in the district.¹⁵⁷ The opinion, authored by Judge Gilstrap, also articulated a “totality of the circumstances test” involving four factors: physical presence, defendant’s representations, benefits received, and targeted interactions with the district.¹⁵⁸ These factors were “gleaned from prior courts and adapted to apply in the modern era.”¹⁵⁹ The factors, the court explained, serve two purposes: (1) focus the analysis on “only the relevant facts of the case and avoid costly and far-flung venue discovery”¹⁶⁰ and (2) “encompass the flexibility earlier courts found appropriate when interpreting the statutory text in light of diverse business structures and practices which evolve with advances in technology.”¹⁶¹

On a writ of mandamus, the Federal Circuit vacated the district court’s opinion and clarified that where the defendant has a “regular and established place of business” under § 1400(b) must meet “three general requirements . . . (1) there must be a physical place in the district; (2) it must be a regular and established place of business; and (3) it must be the place of the defendant.”¹⁶² The court rejected the District Court’s “four-factor test” because it was “not sufficiently tethered to [§ 1400(b)’s] statutory language and thus it fail[ed] to inform each of the necessary requirements of the statute.”¹⁶³

In explaining the three requirements, the court stressed that “the analysis must be closely tied to the language of the statute,” and analyzed the statutory requirements using dictionaries from 1891 and 1911 as well as precedent predating *VE Holding*.¹⁶⁴ Applied to the facts of the case, most important was the third requirement that the “regular and established place of business must be ‘the place of the defendant.’”¹⁶⁵ The Court concluded that the defendant’s employee’s home was not a regular and established place of business

157. *See id.* at 799; *In re Cray Inc.*, 871 F.3d at 1357.

158. *Raytheon*, 258 F. Supp. at 796–98.

159. *Id.* at 796.

160. *Id.* The opinion describes how the venue inquiry “often evolved into an exploratory examination of a defendant’s behavior,” in which courts would “delve into minute details,” thus encouraging gamesmanship and “costly venue discovery” that “ultimately amounts to a distraction from the merits of the case.” *Id.* at 795.

161. *Id.* at 796. The opinion describes how “[t]echnology has revolutionized the way businesses operate and the way consumers interact with those businesses” and how many courts have recognized this shift by interpreting law, including statutes, “in light of changing technology.” *Id.* (citing cases considering technological changes in context of personal jurisdiction, patentable subject matter, and § 1404 motions to transfer venue).

162. *In re Cray*, 871 F.3d at 1360.

163. *Id.* at 1362.

164. *Id.* at 1362–63.

165. *Id.* at 1364.

maintained by the defendant, but only a “physical location” where an employee worked.¹⁶⁶ In particular, the defendant did not select the location in the Eastern District of Texas or believe such a location was important to the business.¹⁶⁷

V. ANALYSIS

Though the Supreme Court’s decision in *TC Heartland* has helped to solve earlier problems with patent venue, the current patent venue rule is a poor fit for modern patent cases. This Part of the paper first identifies policies at the intersection of venue and patent law and explains why the current rule is not tailored to advance those policies. Then, the paper evaluates solutions to the patent venue problems.

A. PATENT VENUE POLICIES

This Section identifies general venue policies, discusses how forum shopping can be problematic, and illustrates how broad venue rules in the context of patent litigation do not serve patent venue policies.

1. *Venue Policies Generally*

Venue serves two primary functions, with a third “[j]urking in the background.”¹⁶⁸ One of the primary functions is “personal to affected parties, whose convenience may be affected and whose rights may be waived.”¹⁶⁹ The other function is “institutional, and serves the interest of the court system in allocating cases efficiently among the various available venues.”¹⁷⁰ Finally, the third function that venue serves “indirectly if not intrinsically,” accounting for “the great importance that parties attach to their venue options quite apart from any genuine inconvenience” is its control of the substantive law to applied,¹⁷¹ and many other considerations relevant to litigants.¹⁷² These considerations motivate forum shopping.

166. *Id.* at 1365–66.

167. *Id.* at 1365.

168. AM. LAW INSTITUTE, FEDERAL JUDICIAL CODE REVISION PROJECT 138 (2004).

169. *Id.* at 137–38 (“The place of suit should not be unduly inconvenient, either to the involuntary parties or to the involuntary agents of adjudication—judges, courts more generally, jurors, witnesses.”).

170. *Id.*

171. *Id.*

172. Note, *Forum Shopping Reconsidered*, 103 HARV. L. REV. 1677 at 1678 (1990). The note identifies “considerations that may motivate a forum shopper”:

[T]he convenience or expense of litigating in the forum, the inconvenience to one’s adversary, the probable or expected sympathies of a potential jury pool, the nature and availability of appellate review, judicial calendars and

Although courts and the legislature generally disfavor forum shopping, it “cannot be dismissed merely as an evil to be avoided.”¹⁷³ Forum shopping can be good when, for instance, it helps the legal system provide remedies: forum-shopping plaintiffs filing in a forum with socially beneficial rules enables greater enforcement of those rules.¹⁷⁴ That said, there are many reasons behind the general distaste for forum shopping. Forum shopping is problematic when it “overburdens certain courts and creates unnecessary expenses as litigants pursue the most favorable, rather than the simplest or closest, forum.”¹⁷⁵ Further, forum shopping “may create a negative popular perception about the equity of the legal system,”¹⁷⁶ as it suggests that legal outcomes are due to differences between courts and not the underlying merits of the case.

2. Venue Policies in the Context of Patent Infringement

Looking at venue policies and forum shopping in the context of patent infringement actions, the broad venue rules before *TC Heartland* did a poor job of serving those policies. While the Supreme Court’s decision created a better venue rule, many of the problems predating *TC Heartland* still exist.

a) Allocation of Patent Cases

Though broad venue rules could in theory lead to an efficient allocation of patent cases because of widely available forums, in practice, plaintiffs have chosen to forum shop into select districts, leading to a concentration of patent cases.

One potential benefit of such concentration is court expertise and specialization. Patent law presents unique challenges to judges due to its “complex and dynamic nature” and “the increasing sophistication of technologies.”¹⁷⁷ Recognizing the unique challenges of patent law, Congress established the patent pilot program, a program in which district judges could request to hear patent cases, in order to “encourage enhancement of expertise in patent cases among district judges”¹⁷⁸ and to make adjudication of patent

backlogs, local rules, permissibility of fee-splitting arrangements, and virtually any other interjurisdictional difference.

Id.

173. *Id.* at 1695.

174. *Id.* at 1692–93 (“Assuming that forum-shopping plaintiffs invoke substantive rules that are socially beneficial, the net effect of forum shopping is greater enforcement of the law and protection of plaintiffs’ legitimate interests.”).

175. *Id.* at 1684.

176. *Id.*

177. H.R. REP. NO. 109-673, at 3 (2006).

178. Patent Cases Pilot Program, Pub. L. No. 111-349, 124 Stat. 3674 (2011).

cases at the trial court level “more efficient, predictable, and reliable.”¹⁷⁹ The concentration of patent cases in certain districts can further the same policies at the heart of the patent pilot program by enhancing those districts’ patent expertise.

However, there is probably a point when the benefit of court expertise is outweighed by the inefficiencies of too high a concentration of patent cases. Under the patent venue rule before *TC Heartland*, a single judge in the Eastern District of Texas was assigned one-fourth of all patent case filings nationwide for cases filed between 2014 and 2016.¹⁸⁰ The new rule under *TC Heartland* has helped but has not solved the uneven allocation of patent cases. It appears the effect of the new rule is more case filings in Delaware instead of the Eastern District of Texas.¹⁸¹ One problem with the concentration under the current rules is inefficiency: having 263 cases, or 26% of all patent cases in a 90-day period¹⁸² filed in one district is not ideal from a work-allocation perspective.¹⁸³

b) Forum Shopping

Although forum shopping is not bad in itself, it is particularly problematic in the context of patent law because of Congress’s explicit policy against forum shopping in patent law, problematic procedural rules in the Eastern District of Texas, and patent assertion entities.

In creating the Federal Circuit, Congress recognized an explicit policy against forum shopping in patent actions and advanced a uniform system of patent law.¹⁸⁴ The legislative history for the creation of the Federal Circuit shows Congress’s concern that forum shopping in patent law increases litigation costs and “demeans the entire judicial process and the patent system

179. H.R. REP. NO. 109-673, at 3 (2006).

180. Love & Yoon, *supra* note 192, at 6 n. 21 (“According to Lex Machina, between 2014 and mid-2016 Judge Gilstrap saw 3,166 new patent suits, more than the combined total of all district courts in California, Florida, and New York: 2,656.”).

181. In the 90 days before *TC Heartland*, 33% of cases were filed in the Eastern District of Texas, 13% of cases were filed in the District of Delaware, and 54% of cases were filed in all other districts. In the 90 days after *TC Heartland*, 13% of cases were filed in the Eastern District of Texas, 26% of cases were filed in the District of Delaware, and 61% of cases were filed in all other districts. See Brian Howard, *Patent Litigation Trends in the Three Months after T.C. Heartland* (October 18, 2017) <https://lexmachina.com/patent-litigation-trends-in-the-three-months-after-t-c-heartland/> [<https://perma.cc/TYQ6-WW3X>].

182. *See id.*

183. *See* Announcement, Assignment of Cases to Visiting Judges – Update, U.S. Dist. Court for the Dist. of Del. (Sept. 22, 2017).

184. *See* S. REP. NO. 97-275, 5, 1982 U.S.C.C.A.N. 11, 15 (“The creation of the Court of Appeals for the Federal Circuit will produce desirable uniformity . . . such uniformity will reduce the forum-shopping that is common to patent litigation.”).

as well.”¹⁸⁵ Uniformity in substantive law would remove the incentive to forum-shop while easing business planning and investment in innovation through “more stable and predictable law.”¹⁸⁶

The primary concern with forum shopping in patent cases is specific to the Eastern District of Texas and thus is somewhat less prevalent in the wake of *TC Heartland* and the shift of cases to Delaware. The worry is that patent assertion entities file in the Eastern District of Texas to extort larger or faster settlements in frivolous suits, leveraging the Eastern District of Texas’s patentee-friendly procedural rules. One scholar observed that “judges in the Eastern District of Texas tend to exercise their discretion in ways that dampen the effect of prior legislative and judicial reforms that were aimed (at least in part) at deterring abusive patent suits.”¹⁸⁷ For example, at one point, the Eastern District of Texas was 4.65 times less likely than the national average to stay a patent case to pending Patent Office review,¹⁸⁸ and about seven times less likely to reach judgment—be it through motion before trial, by jury verdict, or by court trial—than other courts in the Patent Pilot Program.¹⁸⁹ Amici in *TC Heartland* argued that forum shopping in the forum least likely to provide a low-cost determination of invalidity or non-infringement causes “patents that should promptly be invalidated or declared inapplicable to modern technology” to instead “survive to tax or cloud what ought to be in the public domain.”¹⁹⁰ The worry is that the Eastern District of Texas’s differences permit frivolous suits to go forward, thus increasing the “nuisance” value of litigation¹⁹¹ and allowing patent assertion entities to obtain higher settlements than they would in most other districts. Between January 2014 and

185. *See id.*

186. *See id.* at 5–6.

187. Brian J. Love & James C. Yoon, *Predictably Expensive: A Critical Look at Patent Litigation in the Eastern District of Texas*, 20 STAN. TECH. L. REV. 1, 1 (2017).

188. Douglas B. Wentzel, *Stays Pending Inter Partes Review: Not in The Eastern District Of Texas*, 98 J. PAT. & TRADEMARK OFF. SOC’Y 120, 137 (2016).

189. MARGARET S. WILLIAMS ET AL., FEDERAL JUDICIAL CENTER, PATENT PILOT PROGRAM: FIVE-YEAR REPORT 33–34 (April 2016) (finding “in the Eastern District of Texas a mere 1% of cases are terminated by judgment, whereas overall, cases resulting in judgment represent 7% of all terminations”).

190. *See* Brief of American Bankers Association, the Clearing House Payments Company LLC, Financial Services Roundtable and Consumer Bankers Association as Amici Curiae in Support of Petitioner, at 10–11, *TC Heartland LLC v. Kraft Foods Grp. Brands LLC*, 137 S. Ct. 1514 (2017) (No. 16-341).

191. *See* FEDERAL TRADE COMMISSION, PATENT ASSERTION ENTITY ACTIVITY: AN FTC STUDY 4 (October 2016) (finding activity of “Litigation PAEs” is “consistent with nuisance litigation,” as they typically sued and settled by entering licensing agreements with defendants that typically yielded less than \$300,000, a number which approximates the low end of early-stage costs of defending a patent infringement suit).

June 2016, more than 90% of patent suits brought in the Eastern District of Texas were filed by patent assertion entities.¹⁹² This forum-shopping trend in patent cases has contributed to a negative perception of the patent system.¹⁹³

B. LOOKING FORWARD: TAILORING RULES TO MODERN PATENT
VENUE POLICIES

The Supreme Court's decision in *TC Heartland* helps to limit forum shopping in patent infringement actions but does not end it. Plaintiffs suing defendants with nationwide retail stores have a wide choice of judicial districts with proper venue, where the defendants have "a regular and established place of business." Whether the patent venue statute will be able to meaningfully limit forum shopping in a way that furthers the policies at the core of patent law and venue will depend on how courts interpret the second prong of the patent venue statute: where the defendant has committed an act of infringement and has a regular and established place of business. Outside of judicial solutions to venue is a possible legislative solution through venue reform. And, outside of tweaks to venue, Congress could better reduce the problems of forum shopping and nuisance suits through uniform procedural rules directly aimed at hindering frivolous suits.

1. Tailoring "Regular and Established Place of Business" to Modern Patent
Venue Policies

In the aftermath of *TC Heartland*, different theories have floated as to how to satisfy the second prong, but ultimately it is not possible to advance appropriate patent venue policies while being faithful to the original statutory language because of its focus on physical presence. The arbitrariness of the "regular and established place of business" test is especially unfortunate given its fact intensive nature. Richard C. Wydick described the problem with the "regular and established place of business" in his article published in 1973: "Since the shards of evidence can be arrayed in an endless variety of patterns, the law in this area tends to grow in bulk but not in substance."¹⁹⁴ Courts would "list, dissect, and weigh many small shards of evidence, each supposedly

192. Love and Yoon's study found 93.9% of the patent cases filed in the Eastern District of Texas between January 2014 and June 2016 were by patent assertion entities. Love & Yoon, *supra* note 187, at 9. Their definition of patent assertion entity "excludes universities, IP holding subsidiaries of operating companies, and start-ups working toward commercialization of the patented technology." *Id.* at 9, n. 33.

193. See Colleen V. Chien & Michael Risch, *Recalibrating Patent Venue*, 77 MD. L. REV. 47, 50 (2017) ("The sense that filing in Texas provides advantages to plaintiffs in outcomes and procedures—for better or worse—has harmed the reputation of the patent system.").

194. See Richard C. Wydick, *Venue in Actions for Patent Infringement*, 25 STAN. L. REV. 551, 574 (1973).

helpful in determining whether the defendant is present and active in the district.”¹⁹⁵

a) Rules v. Standards

For the purposes of efficiency and predictability, patent venue rules should be rule-based, not standard-based. Judge Gilstrap proposed a four-factor totality of circumstances test to determine what is a “regular and established place of business.”¹⁹⁶ Though Judge Gilstrap indicated that the test would help focus the analysis on “only the relevant facts of the case and avoid costly and far-flung venue discovery,”¹⁹⁷ it seems that having no single factor dispositive of venue could lead to discovery on any one of the factors, as opposed to being able to stop the inquiry once it is clear that a single requirement cannot be met.

In addition, flexibility is not necessarily a virtue when it comes to venue rules. On one hand, a flexible venue test may enable courts to reach more fair, tailored results than under a rigid rule. As Judge Gilstrap emphasized, such flexibility may be especially “appropriate when interpreting the statutory text in light of diverse business structures and practices which evolve with advances in technology.”¹⁹⁸ But, flexibility gives judges discretion. Discretion in finding venue proper or improper might be unnecessary given the ability of judges to transfer a case upon a § 1404(a) motion.¹⁹⁹ Such discretion might be especially problematic given the threat of “forum-selling” by judges.²⁰⁰

Further, a totality-of-the-circumstances approach is more likely to lead to the “endless variety of patterns”²⁰¹ of evidence making venue difficult to predict. Patentees might be hesitant to even use the second prong of the patent venue statute if it risks a transfer to the defendant’s preferred forum, and instead fall back on the first prong of the patent venue statute. Defendants who are uncertain of their ability to win a motion to transfer based on

195. *See id.*

196. *Raytheon Co. v. Cray, Inc.*, 258 F. Supp. 3d 781, 796–98 (E.D. Tex. 2017), *vacated*, *In re Cray Inc.*, 871 F.3d 1355 (Fed. Cir. 2017).

197. *Id.* at 796.

198. *See id.*

199. *See* 28 U.S.C. § 1404(a) (2012) (“For the convenience of parties and witnesses, in the interest of justice, a district court may transfer any civil action to any other district or division where it might have been brought or to any district or division to which all parties have consented.”).

200. *See* Klerman, *supra* note 74, at 250 (2016) (“[J]udges in the Eastern District have consciously sought to attract patentees and have done so by departing from mainstream doctrine in a variety of procedural areas in a pro-patentee (pro-plaintiff) way.”).

201. *See* Richard C. Wydick, *Venue in Actions for Patent Infringement*, 25 STAN. L. REV. 551, 574 (1973).

improper venue²⁰² might choose to settle early instead of pouring resources into a costly motion to transfer they might not win.

b) Physical Presence Requirement

The Federal Circuit and Judge Gilstrap also diverged on the question of whether the defendant must have a physical place in the district. In Judge Gilstrap's totality-of-the-circumstances test, the defendant's physical presence in a district was a factor, but not a requirement.²⁰³ Meanwhile, the Federal Circuit held that physical presence was a requirement, grounded in the statutory language "place."²⁰⁴

The Federal Circuit's physical presence requirement is faithful to the statute and helps to limit a plaintiff's choice of forum—and thus forum-shopping—but it is somewhat arbitrary. In particular, brick-and-mortar businesses are exposed to a much wider expanse of venues than companies that operate through the Internet, lack storefronts, or outsource physical aspects of their businesses. This seems unfair because venue, then, is linked to how a business is structured and not necessarily the convenience of the defendant or the availability of evidence. Arguably, a defendant with a physical presence in a district should find itself traveling to that district and thus find it less inconvenient as compared to a defendant with no physical presence in the district at all. But should defendants who operate exclusively through the Internet necessarily always get the home court advantage?

Further, mere physical presence seems arbitrary because it does not advance venue policies by, for example, making venue proper where the evidence or witnesses are located. It seems much more likely that evidence relevant to a patent case would be located where a company's major decisions occur, or where research and development of the allegedly infringing products takes place, not places where the product is merely used or sold.

202. See 28 U.S.C. § 1406(a) (2012) ("The district court of a district in which is filed a case laying venue in the wrong division or district shall dismiss, or if it be in the interest of justice, transfer such case to any district or division in which it could have been brought.").

203. *Raytheon Co. v. Cray, Inc.*, 258 F. Supp. 3d 781, 796–97 (E.D. Tex. June 29, 2017), *mandamus granted, order vacated sub nom. In re Cray Inc.*, 871 F.3d 1355 (Fed. Cir. 2017) ("[T]his Court is persuaded that a fixed physical location in the district is not a prerequisite to proper venue. However, such a presence is a persuasive factor for courts to consider.").

204. *In re Cray Inc.*, 871 F.3d 1355, 1362 (Fed. Cir. 2017) (finding "there must still be a physical, geographical location in the district from which the business of the defendant is carried out").

c) Nexus Between Defendant's Place of Business and Act of Infringement

There is some ambiguity as to whether, under the second prong of the patent venue statute, the defendant's act of infringement must be related to the defendant's regular and established place of business.²⁰⁵ The plain text of the patent venue statute does not clearly require there be a nexus between the act of infringement and the place of business.²⁰⁶ However, there may be support for such a nexus in the legislative history and policies surrounding the patent venue statute.²⁰⁷

A nexus requirement might be beneficial because it would reduce asymmetry between the venue rules' applicability to companies with brick-and-mortar physical presence and companies without retail locations. Venue for brick-and-mortar businesses would be narrowed because a mere alleged act of infringement and a physical place of business in a judicial district would not suffice; there would need to be a causal connection between the two. However, proving a nexus between a place and the patent infringement might make the venue analysis more fact intensive, thus increasing litigation costs at a preliminary stage.

Though different interpretations of the second prong of the venue statute will have different effects on the scope of venue, it seems inevitable that revival of the prong adds to litigation costs as courts engage in the fact-specific question of whether the defendant has a "regular and established place of business." It seems unlikely that courts will settle on a bright line test, as it is hard to imagine a "regular and established" meaning of "regular and established."

2. *Venue Equity and Non-Uniformity Elimination Act of 2016*

Because of the problems with the "regular and established place of business" test, Congress should enact a new patent venue statute. Congress has already considered such venue reform. In March 2016, a bill was introduced in the Senate for an act titled the "Venue Equity and

205. See *Raytheon Co. v. Cray, Inc.*, 258 F. Supp. 3d 781, 791 (E.D. Tex. 2017), *vacated*, *In re Cray Inc.*, 871 F.3d 1355 (Fed. Cir. 2017) (finding unanswered "whether the patent venue statute requires a defendant's 'acts of infringement' to be related to the defendant's regular and established place of business" and summarizing case law diverging on the issue).

206. See 28 U.S.C. § 1400(b); see also *Plexxikon Inc. v. Novartis Pharm. Corp.*, No. 17-CV-04405-HSG, 2017 WL 6389674, at *2 (N.D. Cal. Dec. 7, 2017) (finding "the plain language of the statute does not include a nexus requirement").

207. See Defendant's Notice of Motion and Motion to Dismiss or Transfer, *Plexxikon Inc. v. Novartis Pharm. Corp.*, No. 17-CV-04405-HSG, 2017 WL 6389674 (N.D. Cal. Dec. 7, 2017).

Non-Uniformity Elimination Act of 2016.”²⁰⁸ The act would amend § 1400 by striking the entirety of subsection (b) and providing six new provisions defining venue for both patent infringement actions and declaratory judgment actions.²⁰⁹

Under the proposed statute, venue is proper, “(1) where the defendant has its principal place of business or is incorporated.”²¹⁰ Thus, this differs from the current § 1400(b) by eliminating the “resides” language and expanding the scope beyond the defendant’s place of incorporation to, also, the defendant’s principal place of business.²¹¹

208. Venue Equity and Non-Uniformity Elimination Act of 2016, S. 2733, 114th Cong. (2016).

209. The text of the bill provides:

(b) Notwithstanding subsections (b) and (c) of section 1391, any civil action for patent infringement or any action for a declaratory judgment that a patent is invalid or not infringed may be brought only in a judicial district-

(1) where the defendant has its principal place of business or is incorporated;

(2) where the defendant has committed an act of infringement of a patent in suit and has a regular and established physical facility that gives rise to the act of infringement;

(3) where the defendant has agreed or consented to be sued in the instant action;

(4) where an inventor named on the patent in suit conducted research or development that led to the application for the patent in suit;

(5) where a party has a regular and established physical facility that such party controls and operates, not primarily for the purpose of creating venue, and has-

(A) engaged in management of significant research and development of an invention claimed in a patent in suit prior to the effective filing date of the patent;

(B) manufactured a tangible product that is alleged to embody an invention claimed in a patent in suit; or

(C) implemented a manufacturing process for a tangible good in which the process is alleged to embody an invention claimed in a patent in suit; or

(6) in the case of a foreign defendant that does not meet the requirements of paragraph (1) or (2), in accordance with section 1391(c)(3).

S. 2733, 114th Cong. § 2(a) (2016).

210. S. 2733, 114th Cong. § 2(b)(1) (2016).

211. *Compare* S. 2733, 114th Cong. § 2(b)(1) (2016) (venue proper “where the defendant has its principal place of business or is incorporated”) *with*, 28 U.S.C. § 1400(b) (2012) (venue proper “in the judicial district where the defendant resides”); *see* TC Heartland LLC v. Kraft Foods Grp. Brands LLC, 137 S. Ct. 1514, 1517 (2017) (finding that for purposes of patent venue statute, “a domestic corporation ‘resides’ only in its State of incorporation”).

The proposed statute also expands upon the “regular and established place of business” language in the current § 1400(b) by providing that venue is proper “(2) where the defendant has committed an act of infringement of a patent in suit and has a regular and established physical facility that gives rise to the act of infringement.”²¹² This proposed language emphasizes that the facility be physical and have a nexus to the act of infringement.²¹³ As described above, such a nexus would reduce the proper venues for brick-and-mortar businesses otherwise disproportionately exposed due to their business structures. However, subsection (2) largely keeps intact the current patent venue statute’s “regular and established” place of business test, and, thus, the accompanying problems described earlier.

In addition, the proposed statute provides that venue is proper in places where certain research, development, or manufacture related to the patented invention or alleged infringement occurred, under subsections (4)²¹⁴ and (5).²¹⁵ These subsections thus tie venue to locations where the patent’s underlying technology was developed. This constrains choice of venue and, therefore, forum shopping. In particular, the rules likely constrain non-practicing entity (NPE) plaintiffs’ choice of venue more so than operating company plaintiffs,²¹⁶ thus combating the use of forum shopping as leverage in nuisance suits. In addition, the tie between venue and the underlying technology may encourage

212. See S. 2733, 114th Cong. § 2(b)(2) (2016).

213. See *id.* The statute does not define what it means for a facility to “give rise” to an act of infringement, thus leaving some uncertainty as to whether facility must itself infringe the patent by itself making, using, offering to sell, or selling, the patented technology, 35 U.S.C. § 271(a) (2012), or may simply be causally linked to the act of infringement.

214. S. 2733, 114th Cong. § 2(b)(4) (2016) (“(4) where an inventor named on the patent in suit conducted research or development that led to the application for the patent in suit.”).

215. S. 2733, 114th Cong. (2016) § 2(b)(5) (2016) provides:

(5) where a party has a regular and established physical facility that such party controls and operates, not primarily for the purpose of creating venue, and has-

(A) engaged in management of significant research and development of an invention claimed in a patent in suit prior to the effective filing date of the patent;

(B) manufactured a tangible product that is alleged to embody an invention claimed in a patent in suit; or

(C) implemented a manufacturing process for a tangible good in which the process is alleged to embody an invention claimed in a patent in suit[.]

216. Chien and Risch estimated that 54% of NPE plaintiffs would have had to move their cases in 2015 under the VENUE Act’s proposed venue rules, whereas only 18% of operating company plaintiff would have had to move their cases. Chien & Risch, *supra* note 193, at 89. Of the NPEs, “university, small company, and individual NPE plaintiffs would experience less dislocation than would PAEs.” See *id.* at 97.

further clustering of patent cases into technology clusters, as envisioned by Jeanne Fromer, along with the accompanying industry-specific expertise across judges and juries and better legal determinations.²¹⁷ Concentration of cases in forums based on industry and technology—rather than a forum’s plaintiff-friendly procedural rules, as in the Eastern District of Texas, or the defendant’s place of incorporation, as in Delaware—better connects those cases to the merits of patent cases. However, this test might require discovery and lead to higher litigation costs.

3. *Solutions Other Than Tailoring Venue*

As much as the courts or Congress attempt to tailor venue rules to venue policies, parties will inevitably file in forums that favor their side. So long as there is some choice of venue, forum shopping is inevitable. Though forum shopping is not evil in itself, it does, however, seem unfair when NPEs or patent assertion entities (PAEs) forum shop into far-away, plaintiff-friendly forums to extort higher settlements for frivolous claims. Thus, since the problem with forum shopping is not forum shopping itself but its use in the context of frivolous claims, it might make more sense to combat those frivolous claims head on, rather than attempt to shape venue rules that constrain where those claims can be filed.

Solutions outside of venue rules include creating uniform procedural rules for patent actions. Creating a Federal Rules of Patent Litigation Procedure²¹⁸ would eliminate procedural differences between districts and, accordingly, some of plaintiffs’ motivations for forum shopping. At the same time, it would ensure the procedures of different districts uniformly favor patent policies. Another solution is the proposed Innovation Act, which seeks to solve the

217. Jeanne C. Fromer, *Patentography*, 85 N.Y.U. L. REV. 1444, 1444 (2010). Fromer describes the advantages of technology clusters that would arise under her proposal to limit venue to a defendant’s principal place of business:

Clustering together large numbers of an industry’s patent cases in a limited number of district courts will develop those courts’ proficiencies in patent law and in the underlying industry-specific facts critical to sound legal determinations. Under my proposal, this clustering will occur in districts in which judges and juries already tend to have background industry knowledge, given the associated industry cluster.

Id.

218. See Megan Woodhouse, Note, *Shop ‘til You Drop: Implementing Federal Rules of Patent Litigation Procedure*, 99 GEO. L.J. 227, 250 (2010) (“Adopting local patent rules on a federal level would extend the benefits of efficiency and consistency to all district courts, thus eliminating some of the incentives for forum shopping.”). Woodhouse suggests that elements of local patents rules, including “case management conferences, patent initial disclosures, and claim construction proceedings” should be incorporated into a Federal Rules of Patent Litigation Procedure. *Id.* at 246.

problems associated with PAEs by providing, for example, heightened pleading requirements, limitations on discovery, and shifting of attorney fees.²¹⁹ The Innovation Act would, consequently, address the problems of extortionate nuisance suits more directly. However, these changes would not eliminate other factors that might be used to extort higher settlements, such as inconvenient locations or plaintiff-friendly juries, suggesting that these solutions combined with one narrowing venue options may be ideal.

VI. CONCLUSION

In sum, though the Supreme Court has narrowed patent venue rules and, in doing so, helped to curb forum shopping, current patent venue rules still do not adequately advance patent venue policies. Congress should enact venue rules like the Venue Equity and Non-Uniformity Elimination Act of 2016 to limit venue options for NPEs while encouraging clustering of suits in districts with experience in the underlying technology. Congress should abandon the “regular and established” place of business test, which is a poor fit for modern patent venue policies and causes “preliminary jousts”²²⁰ in patent litigation. Outside of venue reform, solutions like the Innovation Act would also help solve problems associated with forum shopping by more directly lowering the value of frivolous suits. Ideally, rules tying venue to the location of evidence and the underlying technology combined with other reform aimed at curbing frivolous suits would help ensure patent cases are decided by their merits, not their location.

219. See H.R. 9, 114th Cong. §§ 3(a), 3(b), 3(d) (2015); BRIAN T. YEH & EMILY M. LANZA, PATENT LITIGATION REFORM LEGISLATION IN THE 114TH CONGRESS 6–18 (July 29, 2015).

220. See Richard C. Wydick, *Venue in Actions for Patent Infringement*, 25 STAN. L. REV. 551, 551 (1973).

MAVRIX V. LIVEJOURNAL: UNSAFE HARBORS IN THE AGE OF SOCIAL MEDIA

Katherine Burkhart[†]

I. INTRODUCTION

In recent decades, the reach and influence of social media providers have transformed online communication. With this development, however, the sheer amount of user-submitted content on these platforms has also grown, along with questions about liability for that content. When users break the law by, among other things, infringing copyrights, to what extent should the Internet service providers (ISPs) hosting that content be held liable for that infringement? In the Digital Millennium Copyright Act (DMCA), a statute that largely predates the rise of social media, Congress attempted to insulate ISPs from liability for content hosted “at the direction” of their users via “safe harbor” provisions.¹ Contemporary social media practices, however, often make it difficult to articulate and differentiate the roles of users and hosts.

In *Mavrix v. LiveJournal*, the Ninth Circuit reasoned that the central inquiry for safe harbor analysis was the nature of the relationship between a social media network and the individuals screening that network’s content.² If moderators work on a social media network’s behalf, the Ninth Circuit contended, that network may incur liability for infringing material that is ultimately published.

This Note asserts that the Ninth Circuit’s approach in *LiveJournal* presents multiple problems. First and foremost, this approach is not supported by the statutory text. What is more, it provides incentives for social media providers to loosen their moderation practices, in conflict with the doctrine’s statutory rationale and at odds with current Congressional conceptions of responsible social media oversight. In the age of online harassment and fake news, an ISP’s incentive to take a “hands-off” approach can be a dangerous one.

Part II of this Note provides a foundation for understanding the relevant “safe harbor” provision offered to protect ISPs from liability for copyright infringement. Part III summarizes the district and circuit court’s competing

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1. 17 U.S.C. § 512 (2012).

2. *Mavrix Photographs, LLC v. LiveJournal, Inc.*, 873 F.3d 1045 (9th Cir. 2017).

approaches to assessing eligibility for these provisions in *Mavrix v. LiveJournal*. Part IV argues that the Ninth Circuit's understanding of ISP eligibility for safe harbor protection is fundamentally at odds with the underlying statutory text and the incentives that text was intended to create.

II. BACKGROUND

A. THE DIGITAL MILLENNIUM COPYRIGHT ACT

In 1998, Congress enacted the DMCA to “update domestic copyright law for the digital age.”³ To ensure “that the efficiency of the Internet will continue to improve and that the variety and quality of services on the Internet will expand,” Title II of the Act reshaped the liability landscape for ISPs whose platforms might publish infringing material.⁴ Specifically, the DMCA instituted four “safe harbors” to limit ISP liability for such infringement.⁵

In providing safe harbors, the DMCA sought to balance the interests of ISPs, copyright holders, and platform users.⁶ The advent of the Internet, Congress recognized, made copying and disseminating digital content easier than ever before, leaving copyright owners more vulnerable to infringement.⁷ Congress sought to protect copyright owners. At the same time, Congress also sought to avoid a chilling effect on ISP innovation. Congress recognized that such entities are necessarily exposed to the danger of copyright infringement liability “in the ordinary course of their operations.”⁸

With the balancing it provided, Congress intended for the DMCA to preserve “strong incentives for service providers and copyright owners to cooperate” in identifying and addressing online infringements.⁹ Each of the DMCA's safe harbors, for example, is only available to ISPs that implement a protocol for removing users who repeatedly infringe, inform users of this protocol, and accommodate “standard technical measures” copyright holders use to guard their work.¹⁰

3. *Viacom Int'l, Inc. v. YouTube, Inc.*, 676 F.3d 19, 26 (2d Cir. 2012).

4. S. REP. NO. 105-190, at 2 (1998).

5. 17 U.S.C. § 512 (2012).

6. H. R. REP. NO. 105-551, pt. II, at 21 (1998).

7. S. REP. NO. 105-190, at 8 (1998).

8. *Id.*

9. *Id.* at 20.

10. 17 U.S.C. § 512(i) (2012).

B. “AT THE DIRECTION OF USERS” SAFE HARBOR

While the DMCA provides four safe harbors¹¹ for ISPs, only the third—the provision for infringing content “residing on systems or networks at the direction of the [ISP’s] users”¹²—is relevant here. Section 512(c) provides that an ISP “shall not be liable . . . for infringement of copyright by reason of storage at the direction of a user of material” if the ISP meets three criteria.¹³ Specifically, to be eligible for this safe harbor, an ISP must: have no knowledge of the infringing content,¹⁴ gain no direct financial benefit from infringement¹⁵ it had the right and ability to control,¹⁶ and act “expeditiously to remove or disable access to”¹⁷ infringing material upon learning of its presence.¹⁸ The knowledge provision applies to both “actual knowledge,” in which an ISP knows of a particular instance of infringement, as well as “red flag knowledge,” in which an ISP is aware of conditions “that would have made the specific infringement ‘obvious’ to a reasonable person.”¹⁹ ISPs must additionally adopt “notice and takedown” procedures for removing infringing material after notification by a rights holder.²⁰

The threshold question for this safe harbor’s applicability is whether infringing material on an ISP ended up there at the direction of the *user*, as opposed to the direction of the ISP *itself*.²¹ While the statute does not define

11. 17 U.S.C. § 512(a) (2012) (“[t]ransitory digital network communications”); *id.* § 512(b) (“system caching”); *id.* § 512(c) (“information residing on systems or networks at direction of users”); *id.* § 512(d) (“information location tools”).

12. *Id.* § 512(c).

13. *Id.*

14. *See id.*

15. *See id.*

16. *See Viacom Int’l, Inc. v. YouTube, Inc.*, 676 F.3d 19, 38 (2d Cir. 2012) (holding that the “right and ability to control” infringing activity “requires something more than the ability to remove or block access to materials posted on [an ISP’s] website”). *But see* *A&M Records, Inc. v. Napster, Inc.*, 239 F.3d 1004, 1023 (9th Cir. 2001), *as amended* (Apr. 3, 2001), *aff’d sub nom.* *A&M Records, Inc. v. Napster, Inc.*, 284 F.3d 1091 (9th Cir. 2002) (“The ability to block infringers’ access to a particular environment for any reason whatsoever is evidence of the right and ability to supervise.”).

17. S. REP. NO. 105-190, at 44 (1998).

18. *See* 17 U.S.C. § 512(c)(1)(C) (2012).

19. *Columbia Pictures Indus., Inc. v. Fung*, 710 F.3d 1020, 1043 (9th Cir. 2013); *see also Viacom*, 676 F.3d at 31 (“The difference between actual and red flag knowledge is [] not between specific and generalized knowledge, but instead between a subjective and an objective standard Both provisions do independent work, and both apply only to specific instances of infringement.”).

20. *See* S. REP. NO. 105-190, at 45 (1998) (“This ‘notice and takedown’ procedure is a formalization and refinement of a cooperative process that has been employed to deal efficiently with network-based copyright infringement.”).

21. *See Mavrix Photographs, LLC v. LiveJournal, Inc.*, 873 F.3d 1045, 1048 (9th Cir.

the concept of storing infringing information “at the direction of the user,” legislative history and case law provide some guidance for determining whether information was stored at the direction of a user or the ISP. The DMCA’s legislative history suggests that content “resid[ing] on [the ISP’s] system or network . . . through [the ISP’s] own acts or decisions” falls outside of § 512(c)’s liability protection.²²

Courts have accordingly held that content is kept at the direction of a user if the ISP was entirely uninvolved with infringing material being made accessible on its platform.²³ But courts have not disqualified ISPs from safe harbor protection on the basis of their involvement in uploading content, so long as the ISP’s actions were “narrowly directed” at enhancing a post’s accessibility.²⁴ Accessibility-enhancing actions identified thus far are largely automated processes,²⁵ but the Ninth Circuit has held that “some manual service provider activities that screen for infringement” may also be within § 512(c)’s purview as “accessibility-enhancing” actions.²⁶

ISP screening for copyright infringement is not required, and the DMCA makes clear that an ISP will not be held liable for failing to monitor “its service or affirmatively seek[] facts indicating infringing activity.”²⁷ The question is whether such screening can trigger ISP liability by removing material from the § 512(c) safe harbor on the basis that it is not stored at the direction of the user, but rather by the ISP itself. In *Mavrix v. LiveJournal*, the Ninth Circuit considered the extent of an ISP’s ability to screen for infringement within § 512(c) immunity.²⁸

III. CASE SUMMARY

A. FACTS

LiveJournal is an online platform “willfully blurring the lines between blogging and social networking.”²⁹ LiveJournal users can operate free online

2017).

22. H. R. REP. NO. 105-551, at 43 (1998).

23. *See* *UMG Recordings, Inc. v. Veoh Networks, Inc.*, 620 F. Supp. 2d 1081, 1092 (C.D. Cal. 2008).

24. *See id.*

25. *See Mavrix*, 873 F.3d at 1056; *see also UMG Recordings*, 718 F.3d at 1020 (describing accessibility-enhancing processes as those in which the ISP “does not actively participate in or supervise uploading, [or] preview or select the files before the upload is completed”).

26. *Mavrix*, 873 F.3d at 1056.

27. 17 U.S.C. § 512(m)(1) (2012).

28. *See Mavrix*, 873 F.3d at 1056.

29. *Our Company*, LIVEJOURNAL, <https://www.livejournal.com/about> [<https://perma.cc/5GCU-FK8K>].

journals and join “communities” to share themed content with other users.³⁰ Some LiveJournal communities elect to be moderated groups, in which moderators (users who volunteer for the role) accept or reject content submitted by the community’s general membership.³¹ When a user submits a post to a moderated group, it is uploaded to LiveJournal’s servers and placed in a queue to be inspected by a moderator.³² Moderators cannot edit a post; they can only reject or accept a user’s submission wholesale.³³

“Oh No They Didn’t!” (ONTD) is a moderated LiveJournal community focused on pop culture and celebrity gossip.³⁴ It is the most popular community on LiveJournal, with nearly 100,000 members in 2017.³⁵ Due to the community’s popularity, LiveJournal hired one of ONTD’s volunteer moderators to work as “the community’s full time ‘primary leader’ ” in 2010.³⁶ Other moderators, however, remained active on a volunteer basis.³⁷

Mavrix Photographs, LLC (Mavrix) is a “premier entertainment industry image source.”³⁸ Mavrix’s business model largely consists of licensing “breaking” photos to celebrity magazines.³⁹ The dispute in this case concerned seven ONTD posts featuring Mavrix’s photos between 2010 and 2014.⁴⁰

Some of these posted photos were watermarked, either with the URL for Mavrix’s website or a generic watermark.⁴¹ LiveJournal’s technological limits made it impossible to determine which moderator approved any of these posts.⁴² Mavrix did not notify LiveJournal of the infringements via the website’s notice and takedown procedure.⁴³ LiveJournal was notified of—and removed—the infringing images when Mavrix filed suit.⁴⁴

30. See *Mavrix Photographs LLC v. LiveJournal, Inc.*, No. SACV 13-00517-CJC, 2014 WL 6450094, at *1 (C.D. Cal. Sept. 19, 2014), *rev’d*, 853 F.3d 1020 (9th Cir. 2017), *opinion amended and superseded*, 873 F.3d 1045 (9th Cir. 2017), and *rev’d*, 873 F.3d 1045 (9th Cir. 2017).

31. *See id.*

32. *See id.*

33. *See id.*

34. See *Oh No They Didn’t!*, LIVEJOURNAL, <http://ohnotheydidnt.livejournal.com> [<https://perma.cc/EL6C-CNL5>].

35. See *Mavrix Photographs, LLC v. LiveJournal, Inc.*, 873 F.3d 1045, 1050 (9th Cir. 2017).

36. *Id.*

37. *See id.*

38. MAVRIX ONLINE, <http://www.mavrixonline.com> [<https://perma.cc/E6GY-2RFT>] (last visited Dec. 21, 2018).

39. *Mavrix*, 873 F.3d at 1050.

40. See *Mavrix*, 2014 WL 6450094, at *2.

41. See *Mavrix*, 873 F.3d at 1050.

42. *See id.*

43. *See id.*

44. *See id.*

B. PROCEDURAL HISTORY

Mavrix brought an infringement action against LiveJournal in the United States District Court for the Central District of California.⁴⁵ Mavrix argued that the storage of its photos was not done at the direction of a *user*, but at the direction of LiveJournal itself.⁴⁶ Citing *Capitol Records, LLC v. Vimeo*,⁴⁷ Mavrix argued that each of ONTD's moderators was an agent of LiveJournal "for purposes of their work on ONTD."⁴⁸ That is, when a moderator "approved" the infringing posts for publication on ONTD, he or she did so on LiveJournal's behalf, precluding LiveJournal from § 512(c)'s safe harbor protection.⁴⁹ The district court, however, rejected this "agency" argument, reasoning that § 512(c)'s "at the direction of the user" was "clearly meant to cover more than mere electronic storage lockers."⁵⁰ The fact that all ONTD posts were subject to moderation before publication did not make those posts less at the direction of users "under the 'broad' statutory language of the DMCA."⁵¹ Moreover, in the absence of DMCA notice, the court noted, LiveJournal would have no actual *or* red flag knowledge that candid "paparazzi"-style photos were infringing without lengthy investigation.⁵² The district court granted LiveJournal's motion for summary judgment, and Mavrix appealed the decision.⁵³

On appeal, the Ninth Circuit reversed the district court's summary judgment, concluding that agency principles *did* apply to this dispute, and could thus expose LiveJournal to liability. In doing so, the court reasoned that the *posting* of infringing content is the "critical inquiry," not the *submission* of that

45. *See Mavrix*, 2014 WL 6450094, at *1.

46. Plaintiff Mavrix Photographs LLC's Memorandum in Opposition to Defendant LiveJournal Inc.'s Motion for Summary Judgment at 2, *Mavrix Photographs LLC v. LiveJournal, Inc.*, No. SACV 13-00517-CJC, 2014 WL 6450094 (C.D. Cal. Sept. 19, 2014), 2014 WL 10209534, at *2 [hereinafter *Mavrix Memorandum*].

47. 972 F. Supp. 2d 500, *amended on reconsideration in part*, 972 F. Supp. 2d 537 (S.D.N.Y. 2013) ("To determine whether these employee-uploaded videos may be deemed to have been stored 'at the direction of a user,' the Court must determine whether, under traditional principles of agency law, Vimeo's employees stored their videos as independent users or rather on behalf of the company as Vimeo staff.>").

48. *Mavrix Memorandum*, *supra* note 46, at 8.

49. *Id.* at 7 ("An agency relationship may be informally created. No particular words are necessary, nor need there be consideration. All that is required is conduct by each party manifesting acceptance of the relationship whereby one of them is to perform work for the other under the latter's direction.>").

50. *Mavrix*, 2014 WL 6450094, at *5 (quoting *UMG Recordings, Inc. v. Shelter Capital Partners LLC*, 718 F.3d 1006, 1016 (9th Cir. 2013)).

51. *Id.*

52. *Id.* at *6.

53. *See id.* at *9.

content.⁵⁴

In order to determine whether LiveJournal (as opposed to its users) facilitated this “posting,” the court applied the common law of agency. In doing so, the court reasoned that the DMCA may shield ISPs from liability “for the passive role they play when users submit to them” under § 512(a)⁵⁵— a different safe harbor. Conversely, the DMCA protects service providers that play a role in making users’ material publicly accessible on its site under § 512(c).⁵⁶ The court reversed the district court’s summary judgment and remanded the case for trial, concluding that agency principles *did* apply to this dispute and could expose LiveJournal to liability for posts moderated by its agents.⁵⁷ The court additionally instructed that, on remand, the district court must determine “whether the moderators’ acts were merely accessibility-enhancing activities or whether instead their extensive, manual, and substantive activities went beyond the automatic and limited manual activities we have approved as accessibility-enhancing.”⁵⁸

The court went on to explain that an agency relationship is created “when one person (a ‘principal’) manifests assent to another person (an ‘agent’) that the agent shall act on the principal’s behalf . . . and the agent manifests assent or otherwise consents so to act.”⁵⁹ This can occur with the delegation of “actual authority” to an agent, in which the principal affirmatively agrees to allow the agent to act on his behalf.⁶⁰ This relationship is also created by delegation of “apparent authority,” in which the principal never outright *says* that his agent has authority to act on his behalf, but makes some other manifestation that a third party would reasonably understand as authorization

54. *Mavrix Photographs, LLC v. LiveJournal, Inc.*, 873 F.3d 1045, 1053 (9th Cir. 2017) (“[This central inquiry] turns on the role of the moderators in screening and posting users’ submissions and whether their acts may be attributed to LiveJournal.”).

55. *Id.* Section 512(a) of the DMCA, however, provides no such distinction between submission and posting. Additionally, “[o]n the face of the statute and in the legislative history, it’s quite clear that section 512(a) is meant to cover user-initiated, end-to-end routing of information across a provider’s network. A residential broadband access provider [for example] is the paradigmatic section 512(a) provider.” Annemarie Bridy, *Is Bad News for LiveJournal Bad News for the DMCA Safe Harbors?* (Post 1 of 3), STAN. L. SCH. CTR. FOR INTERNET & SOC’Y (Apr. 9, 2017), <http://cyberlaw.stanford.edu/blog/2017/04/bad-news-livejournal-bad-news-dmca-safe-harbors-post-1-3> [<https://perma.cc/5AFW-DDUK>].

56. *See Mavrix Photographs LLC v. LiveJournal, Inc.*, No. SACV 13-00517-CJC, 2014 WL 6450094, at *5 (C.D. Cal. Sept. 19, 2014).

57. *See Mavrix*, 873 F.3d at 1049.

58. *Id.*

59. *Id.* at 1054 (quoting RESTATEMENT (THIRD) OF AGENCY § 3.01 (AM. LAW INST. 2006)).

60. RESTATEMENT (THIRD) OF AGENCY § 3.01 (AM. LAW INST. 2006).

of the agent.⁶¹

Regardless of how authority was delegated, however, a principal fundamentally enjoys some level of control over his agent in an agency relationship.⁶² For purposes of the *Mavrix* dispute in particular, the Ninth Circuit explained, the record suggested that LiveJournal “maintains significant control over ONTD and its moderators,”⁶³ providing substantive instruction and even removing moderators through the community’s paid “primary leader.”⁶⁴ On the other hand, the court noted, moderators are “free to leave and go” as they wish, and individual moderators are able to reject user post submissions for a number of reasons not including those in LiveJournal or ONTD’s rules, “call[ing] into question the level of control LiveJournal exercised over the moderators.”⁶⁵ The Ninth Circuit made this very uncertainty the basis of its “agency” approach to safe harbor analysis, instructing an articulation of this relationship on remand.

IV. ANALYSIS

Not only does the Ninth Circuit’s application of “agency” law in this manner run afoul of existing case law on the matter, but it is inconsistent with Congressional intent in multiple contexts as well.

A. CASE LAW DOES NOT SUPPORT THE NINTH CIRCUIT’S “AGENCY” APPLICATION

While agency has come into play in federal copyright cases before, the rare instances in which it has been applied to determine whether content was stored “at the direction of the user” bear little resemblance to the facts of *Mavrix v. LiveJournal*.

In asserting its agency argument, *Mavrix* relied heavily on *Capitol Records, LLC v. Vimeo, LLC*.⁶⁶ In that case, the District Court for the Southern District

61. *Id.* at § 3.03; *see also* Hawaiian Paradise Park Corp. v. Friendly Broad. Co., 414 F.2d 750, 756 (9th Cir. 1969) (“The principal’s manifestations giving rise to apparent authority may consist of direct statements to the third person, directions to the agent to tell something to the third person, or the granting of permission to the agent to perform acts and conduct negotiations under circumstances which create in him a reputation of authority in the area in which the agent acts and negotiates.”).

62. *See* Hollingsworth v. Perry, 133 S. Ct. 2652, 2657 (2013) (discussing a principal’s control over an agent as the “basic feature[] of an agency relationship”); United States v. Bonds, 608 F.3d 495, 505 (9th Cir. 2010) (describing “the extent of control exercised” by the principal as the “essential ingredient” of an agency relationship).

63. *Mavrix*, 873 F.3d at 1055.

64. *Id.*

65. *Id.*

66. 972 F. Supp. 2d 500 (S.D.N.Y. 2013).

of New York applied agency law to demystify § 512(c)'s "at the direction of a user" language where moderators were involved with the publishing of infringing content.⁶⁷ But *Capitol Records* addressed drastically different facts than *Mavrix*. In *Capitol Records*, ten infringing videos were published on Vimeo (an online video-sharing platform) by Vimeo employees⁶⁸ who, much like LiveJournal's moderators, had access to "Moderator Tools" to monitor and restrict prohibited content.⁶⁹ The infringing material in that case, however, unlike the infringing photos in *Mavrix*, was indisputably uploaded directly by the employee-moderators *themselves*. The only question of "agency" at issue in *Capitol Records* was whether the same set of individuals were acting on behalf of their employer or on their own behalf when uploading the infringing videos.⁷⁰ Their moderating authorities were incidental to their act of infringement, while LiveJournal's moderators, if "agents" of the ISP, are liable as conduits for someone else's infringement. While the facts of *Mavrix* and *Capitol Records* are similar at first blush, the application of agency law in each is meaningfully different.

The Ninth Circuit also pointed to *Columbia Pictures Industries, Inc. v. Fung*,⁷¹ a similarly distinguishable case, as precedent for applying common law agency principles to questions of ISP liability for moderators' actions.⁷² The defendant in *Fung* operated a "torrent" website, through which users could freely and illegally download copyrighted material.⁷³ The nature of such "peer-to-peer" sharing sites, however, is such that these files are stored on individual users' computers instead of the site's central servers.⁷⁴ In *Fung*, the defendant's website did not store or offer for download any content.⁷⁵ Instead, users could only download files that served as "call numbers" of sorts to locate the actual

67. *Id.* at 518.

68. *See id.* ("It is undisputed that ten of the [videos in suit] were uploaded by users who were at the time, or later became, Vimeo employees.").

69. *See id.* at 528.

70. *See id.* at 518 ("[T]he court must determine whether, under traditional principles of agency law, Vimeo's employees stored their videos as independent 'users' or rather on behalf of the company as Vimeo staff.").

71. No. CV 06-5578 SVW(JCX), 2009 WL 6355911 (C.D. Cal. Dec. 21, 2009), *aff'd in part as modified*, 710 F.3d 1020 (9th Cir. 2013).

72. *See Mavrix Photographs, LLC v. LiveJournal, Inc.*, 873 F.3d 1045, 1053 (9th Cir. 2017).

73. *See Fung*, 2009 WL 6355911, at *1.

74. *Id.*

75. *See Columbia Pictures Indus., Inc. v. Fung*, 710 F.3d 1020, 1025–26 (9th Cir. 2013) ("Although a centralized [peer-to-peer] network has similarities with a client-server network, the key difference is that the indexing server does not store or transfer the content. It just tells users which other peers have the content they seek. In other words, searching is centralized, but file transfers are peer-to-peer.").

content to be exchanged.⁷⁶ These files allowed a locally stored application to locate content on other computers in the network, beginning the illegal download.⁷⁷ The District Court for the Central District of California held that this technology was categorically ineligible for § 512(c)'s safe harbor, as the infringing content did "not pass through or reside on Defendants' system."⁷⁸

In *Fung*, agency principles were not used to make determinations about DMCA safe harbor eligibility. Rather, agency analysis was solely used to determine if the defendant was liable for contributory infringement by moderators. The torrent site in that case offered forums for users seeking specific files.⁷⁹ These forums were managed by moderators who "assisted users seeking to download files or provided links to other websites containing the requested items."⁸⁰ Thus, agency principles were applied only to analysis of moderators' roles in actively assisting with forum users' infringement,⁸¹ not to analysis of whether posting was done at the users' direction for purposes of the § 512(c) safe harbor. The court held that the moderators were the defendant's agents and granted summary judgment against the defendant on the issue of inducement liability for copyright infringement.⁸²

The Ninth Circuit's *Fung* decision does little to bolster its opinion in *Mavrix*. Unlike the district court, the Ninth Circuit in *Fung* found that "sometimes . . . torrents [were] uploaded by users of [defendant's] sites, while other torrents [were] collected for storage by [defendant's] websites themselves. *The former situation would be at least facially eligible for the [§ 512(c)] safe harbor, assuming the other criteria are met.*"⁸³ Accepting the lower court's classification of moderators as the defendant's "agents," the Ninth Circuit signaled that such a relationship did not outright preclude § 512(c) protection for lack of storage "at the direction of the user."⁸⁴ The *Fung* defendant was ineligible for the safe harbor not because infringing content was made available at the direction of anyone other than users, but because inducement of others' infringement suggested red flag knowledge that the content was itself

76. *See Fung*, 2009 WL 6355911, at *2.

77. *See id.*

78. *Id.* at *16.

79. *See id.* at *13.

80. *Id.* ("All of these statements demonstrate that there was an active role played by the [moderators] of the websites within the forum, encouraging and providing technical assistance for users seeking to engage in infringing activities.")

81. This was alleged to be inducement of infringement outside of any statutory safe harbor. *See id.*

82. *See id.* at *19.

83. *Columbia Pictures Indus., Inc. v. Fung*, 710 F.3d 1020, 1042–43 (9th Cir. 2013) (emphasis added).

84. *Id.* at 1043.

infringing.⁸⁵ Moreover, even if this were not the case, the DMCA's legislative history expressly excluded ISPs like the torrent sites in *Fung* from § 512(c) protection.⁸⁶ To characterize *Fung* as analogous to *Mavrix* is to misapply both the facts of *Fung* and Congress' intent behind the DMCA.

As *Mavrix* conceded in its opening brief, only one case in the Ninth Circuit, *UMG Recordings, Inc. v. Shelter Capital Partners LLC*,⁸⁷ has assessed the meaning of § 512(c)'s "at the direction of users" language.⁸⁸ In *UMG*, the Ninth Circuit held that *automatic* access-facilitating activities—in which ISPs do not "actively participate in or supervise file uploading"—allow infringement to remain at users' direction.⁸⁹ However, the court's reasoning did not preclude manual processes like moderation from this categorization.⁹⁰ Elsewhere in the court's *UMG* opinion, it opted for a broad interpretation of § 512(c) that would impose "no limitation on [an ISP's] ability to modify user-submitted material to facilitate storage and access."⁹¹ "If Congress had intended a narrower scope," the court noted, "it would have said so expressly and unambiguously, as it did in the narrower definition of 'service provider.'"⁹²

Moreover, § 512(c) details an extensive notice and takedown procedure for copyright owners to inform ISPs of infringement on their platforms, through which ISPs are prompted to remove access to infringing content.⁹³ Against a

85. *See id.*

[T]he record is replete with instances of *Fung* actively encouraging infringement, by urging his users to both upload and download particular copyrighted works, providing assistance to those seeking to watch copyrighted films, and helping his users burn copyrighted materials onto DVDs. The material in question was sufficiently current and well-known that it would have been objectively obvious to a reasonable person that the material solicited and assisted was both copyrighted and not licensed to random members of the public.

86. *See* S. REP. NO. 105-190, at 48–49 (1998) (explaining that "pirate directories" are outside scope of safe harbor "because the infringing nature of such sites would be apparent from even a brief and casual viewing [and such sites] do not follow the routine business practices of legitimate service providers").

87. 718 F.3d 1006 (9th Cir. 2013).

88. Appellant's Opening Brief at 31, *Mavrix Photographs, LLC v. LiveJournal, Inc.*, 873 F.3d 1045, 1053 (9th Cir. 2017), 2015 WL 13236719, at *31 [hereinafter Appellant's Opening Brief].

89. *UMG Recordings*, 718 F.3d at 1020.

90. *See id.* at 119 (holding defendant ISP's encoding process within the §512(c) safe harbor when such processes "are used to facilitate access to content submitted to [the ISP's] website").

91. *Id.*; *see also* *Io Grp., Inc. v. Veoh Networks, Inc.*, 586 F. Supp. 2d 1132, 1147 (N.D. Cal. 2008) (holding defendant ISP's encoding process within the § 512(c) safe harbor when such processes "are used to facilitate access to content submitted to [the ISP's] website").

92. *UMG Recordings*, 718 F.3d at 1020.

93. *Id.* at 1018.

narrow interpretation of § 512(c), the court in *UMG* reasoned that this “carefully considered . . . protocol, and [§ 512(c)’s] attendant references to ‘disabl[ing] access’ to infringing materials would be superfluous⁹⁴ if we accepted [a] constrained reading of the statute.”⁹⁵ That is, these provisions are predicated on the understanding that ISPs will provide (and sometimes disable) access to users’ (potentially infringing) material. It cannot, then, be the case that control over access alone precludes safe harbor protection.⁹⁶

The only Ninth Circuit case evaluating § 512(c)’s threshold language points to a scope broad enough to contain an agency relationship because an ISP’s power to disable access would include the power to moderate content on its own platform. Indeed, compliance with notice and take-down procedures would require that ISPs exercise this power. Most tellingly, at no point in *UMG* is “agency” mentioned as a mechanism for determining if content was stored at the direction of users. Thus, there is no precedent for applying agency law as the Ninth Circuit did in *Mavrix*.

B. THE NINTH CIRCUIT’S APPROACH IS AT ODDS WITH CONGRESSIONAL INTENT IN ENACTING THE DMCA

With the DMCA’s construction and policy goals in mind, agency law maps poorly onto ISP liability analysis and directs courts to the wrong inquiry. First, the Ninth Circuit’s focus immediately diverged from the statutory language: while § 512(c) focuses specifically on actions of ISP *users*,⁹⁷ the Ninth Circuit opted instead to prioritize the *ISP’s* role in infringing content.⁹⁸ Second, the DMCA’s legislative history explicitly anticipates ISP use of “human editors and reviewers” to monitor content on their platforms,⁹⁹ indicating that such monitoring does not disqualify ISPs from the § 512(c) safe harbor.

The Ninth Circuit’s application of agency principles would incentivize ISPs to cut back on—or even eliminate—content moderation. This conflicts not only with the DMCA’s stated goal of promoting cooperation between

94. *See Greenwood v. CompuCredit Corp.*, 615 F.3d 1204, 1209 (9th Cir. 2010), *rev’d and remanded*, 565 U.S. 95 (2012) (“We must, if possible, interpret a statute such that all its language is given effect, and none of it is rendered superfluous.”).

95. *UMG Recordings*, 718 F.3d at 1018 (emphasis added).

96. *See id.* (“Indeed, it is not clear how copyright holders could even discover infringing materials on service providers’ sites to notify them as the protocol dictates if § 512(c) did not contemplate that there would be access to the materials.”).

97. *See* 17 U.S.C. § 512(c)(1) (2012) (providing that ISPs are not liable “for infringement of copyright by reason of the storage at the direction of a user of material that resides on a system or network controlled or operated by or for the ISP.”).

98. *See Mavrix Photographs, LLC v. LiveJournal, Inc.*, 873 F.3d 1045, 1053 (9th Cir. 2017) (“[The critical inquiry] turns on the role of the moderators in screening and posting users’ submissions and whether their acts may be attributed to LiveJournal.”).

99. S. REP. NO. 105-190, at 48–49 (1998).

copyright owners and ISPs,¹⁰⁰ but also with the DMCA's knowledge standard. This standard, the legislative history explains, "should not be applied in a manner which would create a disincentive to the development of directories which involve human intervention."¹⁰¹

In the absence of actual knowledge of infringement, Congress envisioned that an ISP should be assumed aware of infringement "only with respect to pirate sites or in similarly obvious and conspicuous circumstances, and not simply because the [ISP] viewed an infringing site during the course of assembling the directory."¹⁰² To proceed otherwise is to undermine the statute's structure as applying to content published at the direction of users. Discouraging ISPs from moderating content on their platforms serves the interest of neither ISPs nor copyright holders. If agency law is applied to ISP moderators as the Ninth Circuit suggests, courts risk undermining the DMCA's fundamental framework and undercutting the very "certainty" the DMCA's safe harbors were adopted to establish for ISPs in the first place.

Though the technology available to ISPs has improved drastically since 1998, the need for ISPs to be able to monitor their platforms remains. Copyright holders like Mavrix could certainly argue that Congress could not have fully appreciated the technological capabilities today's ISPs would have for purposes of filtering content. Passage of the DMCA in the first place was largely predicated on the assumption that ISPs could not realistically screen *everything* with absolute precision;¹⁰³ this assumption remains true today. Regardless of whether this is due to a lack of automated monitoring technology (as was the case in 1998) or the resources and time required to make complete human monitoring sustainable (which many ISPs lack today), some semblance of immunity is required to avoid chilling ISP operation and innovation.

If Congress indeed deemed mere moderation enough to preclude safe harbor protection, other statutory provisions in the DMCA would be rendered irrelevant. Copyright holders could argue further that an ISP in LiveJournal's position would *have* to have some knowledge of infringement, given that every user submission was manually approved or rejected by a moderator.¹⁰⁴ However, the presence of § 512(c)'s notice and takedown provisions indicate that Congress did not envision mere moderation triggering infringement

100. *See id.* at 20 ("Title II [of the DMCA] preserves strong incentives for service providers and copyright owners to cooperate to detect and deal with copyright infringements that take place in the digital networked environment.").

101. *Id.* at 49.

102. *Id.*

103. *See id.*

104. *See Mavrix Photographs, LLC v. LiveJournal, Inc.*, 873 F.3d 1045, 1058 (9th Cir. 2017).

liability for ISPs. An ISP might still lack the information necessary to discern¹⁰⁵ if an image was in the public domain or still under copyright protection, or whether the image's use was licensed or permitted under fair use.¹⁰⁶ Conversely, copyright owners "know precisely what materials they own, and are thus better able to efficiently identify infringing copies than service providers."¹⁰⁷ Moreover, the DMCA's legislative history, coupled with other court decisions in this realm, seems to attempt to avoid imposing liability on ISPs where such platforms are merely trying their best to curate content in keeping with their usual practices, even where those attempts may extend beyond the most fundamental accessibility-enhancing acts.¹⁰⁸

C. THE NINTH CIRCUIT'S APPROACH IS AT ODDS WITH
CONGRESSIONAL INTENT IN SIMILAR POLICY REALMS

ISPs have interests in monitoring the user-submitted content on their platforms for purposes beyond identifying instances of copyright infringement. Indeed, many ISPs "generally can't determine whether [user-submitted] content violates its policies" without at least looking at that content,¹⁰⁹ and that interaction with user-submitted content is often part and

105. See Brief of Online Service Providers Etsy, Kickstarter, Pinterest, and Tumblr in Support of Appellee at 13, *Mavrix Photographs, LLC v. LiveJournal, Inc.*, 873 F.3d 1045, 1053 (9th Cir. 2017), 2015 WL 3970267, at *13 [hereinafter Brief of Online Service Providers].

106. See S. REP. NO. 105-190, at 48 (1998).

107. *UMG Recordings, Inc. v. Shelter Capital Partners LLC*, 718 F.3d 1006, 1022 (9th Cir. 2013).

108. See *Viacom Int'l, Inc. v. YouTube, Inc.*, 676 F.3d 19, 41 (2d Cir. 2012) ("Refusing to accommodate or implement a 'standard technical measure' exposes a service provider to liability; refusing to provide access to mechanisms by which a service provider affirmatively monitors its own network has no such result. In this case, the class plaintiffs make no argument that the content identification tools implemented by YouTube constitute 'standard technical measures,' such that YouTube would be exposed to liability under § 512(i). For that reason, YouTube cannot be excluded from the safe harbor by dint of a decision to restrict access to its proprietary search mechanisms."); see also *CoStar Grp., Inc. v. LoopNet, Inc.*, 373 F.3d 544, 556 (4th Cir. 2004) ("To the extent that LoopNet's intervention in screening photographs goes further than the simple gatekeeping function described above, it is because of CoStar's complaints about copyright violations . . . CoStar can hardly request LoopNet to prevent its users from infringing upon particular unmarked photographs and then subsequently seek to hold LoopNet liable as a direct infringer when LoopNet complies with CoStar's request. In short, we do not conclude that LoopNet's perfunctory gatekeeping process, which furthers the goals of the Copyright Act, can be taken to create liability for LoopNet as a direct infringer when its conduct otherwise does not amount to direct infringement.").

109. Brief of Online Service Providers, *supra* note 105, at 25.

parcel with being a successful ISP. As ISP *amici* Etsy,¹¹⁰ Kickstarter,¹¹¹ Pinterest,¹¹² and Tumblr¹¹³ argued in their brief supporting LiveJournal, ISPs' efforts to "facilitate [user] access . . . to a massive amount of content, with new material pouring in constantly" often requires "engagement with users' material."¹¹⁴ In some cases, as Congress mentioned in the DMCA's legislative history, "[i]t is precisely the human judgment and editorial discretion" that makes ISP tools valuable to users.¹¹⁵ The value of engaging with users' content is not limited to modern social media practices, however. Rather, it has existed since the days of the early World Wide Web.

Shortly before enacting the DMCA in 1998, Congress enacted the Communications Decency Act (CDA) as part of the Telecommunications Act of 1996.¹¹⁶ Section 230 of the CDA¹¹⁷ generally protects¹¹⁸ ISPs from liability for third-party actions on their platforms,¹¹⁹ as well as liability for electing to screen or remove certain content.¹²⁰ Unlike the DMCA's focus on copyright infringement, however, § 230 was aimed at addressing "offensive material," such as pornography, submitted by ISP users.¹²¹ In doing so, the statute provides that an ISP shall not assume the role of "publisher or speaker of any information" provided by another party.¹²²

110. An e-commerce platform for user-to-user sale of handmade or vintage items. *See* ETSY, <https://www.etsy.com/about> [<https://perma.cc/UH7M-DZXY>] (last visited Dec. 21, 2018).

111. A crowdfunding platform that allows users to create and donate to projects and initiatives. *See* KICKSTARTER, <https://www.kickstarter.com/about> [<https://perma.cc/5CLE-XW3Q>] (last visited Dec. 21, 2018).

112. A social networking platform centering collection of image-based material online. *See* PINTEREST, <https://about.pinterest.com/en> [<https://perma.cc/75PK-5FTT>] (last visited Dec. 21, 2018).

113. A microblogging platform; similar to LiveJournal in functionality, but users are only able to create and interact with individual accounts. *See* TUMBLR, <https://www.tumblr.com/about> [<https://perma.cc/Q7P7-PU6G>] (last visited Dec. 21, 2018).

114. Brief of Online Service Providers, *supra* note 105, at 24–26.

115. S. REP. NO. 105-190, at 49 (1998).

116. The Communications Decency Act of 1996, Pub. L. No. 104-104, 110 Stat. 56. Section 230 was codified as § 509 of the Telecommunications Act of 1996.

117. 47 U.S.C. § 230 (2012).

118. Section 230 contains exclusions for violations of federal criminal statutes, intellectual property claims, and enforcement of the Electronic Communications Privacy Act of 1996 or similar state laws. *See* § 230(e).

119. *See* § 230(c)(1).

120. *See* § 230(c)(2).

121. § 230(c)(2)(A) (providing that ISPs removing what they believe to be "obscene, lewd, lascivious, filthy, excessively violent, harassing, or otherwise objectionable" in good faith shall not be held liable on account of interaction with that material).

122. § 230(c)(1).

While § 230 has no bearing—and, in fact, explicitly should not “be construed to limit or expand any law pertaining to intellectual property,”¹²³ the provision’s implementation nonetheless sheds light on the Congressional intent behind the DMCA. Both schemes establish partial protection for online providers, balancing ISP interests with the public’s interest in keeping offensive or otherwise harmful material offline. Additionally, though the § 230 rules are not entirely analogous to § 512, defendant ISPs must meet similar requirements to take advantage of this “safe harbor” of sorts.¹²⁴ Most telling, however, is the CDA’s principal goal, which it shares with the DMCA: to “promote the continued development of the Internet and other interactive computer services and other interactive media.”¹²⁵

Ironically, the CDA was initially enacted to remedy the same uncertainty among ISPs that the Ninth Circuit’s *Mavrix* decision has created. In the days of the early Internet, ISPs faced unpredictable liability risks for offensive material others posted to their platforms. In *Cubby, Inc. v. CompuServe, Inc.*,¹²⁶ for example, the defendant ISP offered a subscription-based news archive.¹²⁷ A news aggregator claimed that a competitor published defamatory remarks about their service and the individuals involved via the defendant ISP’s service.¹²⁸ The District Court for the Southern District of New York found no liability on the ISP’s part, likening its relationship with the defamatory content to a brick-and-mortar library’s relationship with the content of the books it carries.¹²⁹ Other courts, like the New York Supreme Court in *Stratton Oakmont, Inc. v. Prodigy Services Co.*,¹³⁰ however, put ISPs in a more difficult position. In that case, the defendant ISP was an online bulletin board community for

123. § 230(e)(2).

124. *See Stoner v. eBay, Inc.*, No. 305666, 2000 WL 1705637, at *1 (Cal. Super. Ct. Nov. 1, 2000) (“Immunity under the CDA requires proof of three elements. Defendant [ISP] must establish (1) that [it] is an interactive computer services provider; (2) that [it] is not an information content provider with respect to the disputed activity; and (3) that plaintiff seeks to hold [defendant] liable for information originating with a third-party user of its service.”); *See* § 230(c)(1)–(2).

125. § 230(b)(1); *see also Stoner*, 2000 WL 1705637, at *3 (“A principal objective of the immunity provision is to encourage commerce over the Internet by ensuring that interactive computer service providers are not held responsible for how third parties use their services.”); Paul Ehrlich, *Communications Decency Act 230*, 17 BERKELEY TECH. L.J. 401, 404 (2002).

126. 776 F. Supp. 135 (S.D.N.Y. 1991).

127. *See id.* at 137.

128. *See id.*

129. *See id.* at 140 (“[The defendant ISP] has no more editorial control over such a publication than does a public library, book store, or newsstand, and it would be no more feasible for [the ISP] to examine every publication it carries for potentially defamatory statements than it would be for any other distributor to do so.”).

130. No. 31063/94, 1995 WL 323710 (N.Y. Sup. Ct. May 24, 1995).

finance discussions.¹³¹ Leaders of this community could use an “emergency delete” functionality for removal of user notes that were insulting, off-topic, bad advice, or in poor taste.¹³² Despite the board’s receipt of more than 60,000 messages daily—making manual review of each message infeasible—the court held that by electing to moderate *some* user posts, the ISP became liable for *all* unlawful posts on the platform.¹³³ This decisional inconsistency incentivized ISPs to take a “hands-off” approach to maintaining their platforms, lest they incur greater liability for trying to keep them clear of obscene or harmful material.¹³⁴

With the enactment of § 230, ISPs gained the certainty necessary to operate their platforms in an informed way. In this sense, Congress’s rationale for implementing § 230 appears similar to its motivation for enacting the DMCA: when ISPs are free to interact with material on their platforms without fear of incurring liability for their users’ activity, they are then also free to innovate and improve their services.¹³⁵ If Congress meant—as the Ninth Circuit’s approach would dictate—to withhold protection for ISPs voluntarily moderating material within their services, it could have explicitly articulated this to distinguish the DMCA from the CDA. However, it did not, and Congress, in fact, *endorsed* such acts¹³⁶ with its explicit contemplation of “human editors and reviewers” within its DMCA framework.¹³⁷

Of course, while similar, CDA § 230 and the DMCA address categorically different kinds of online material. Admittedly, offensive material and infringing material are harmful in different ways. And, while their goals are indeed similar, Congress enacted the CDA with the more specific twin goals of removing “disincentives for the development and utilization of blocking and filtering technologies,”¹³⁸ and preserving “the vibrant and competitive free

131. *See id.* at *1.

132. *Id.* at *3.

133. *See id.* at *5 (“[The ISP’s] conscious choice, to gain the benefits of editorial control, has opened it up to a greater liability . . . to the extent computer networks provide such services, they must also accept the concomitant legal consequences.”).

134. *See Ehrlich, supra* note 125, at 404.

135. *See* Sophia Cope, *Stop SESTA: Section 230 Is Not Broken*, ELECTRONIC FRONTIER FOUND.: DEEPLINKS BLOG (Sept. 6, 2017), <https://www.eff.org/deeplinks/2017/09/stop-sesta-section-230-not-broken> [<https://perma.cc/Q4GA-RRZN>] (“Section 230 reflects a purposeful balance that permits Internet intermediaries to be on the hook for their users’ content in certain carefully considered circumstances, and the courts have expanded upon these rules.”).

136. *See* Brief of Online Service Providers, *supra* note 105, at 9 (“It would make no sense to interpret the DMCA to withhold protection from services engaging in the very kind of voluntary moderation that Congress expressly endorsed.”).

137. S. REP. NO. 105-190, at 48–49 (1998).

138. 47 U.S.C. § 230(b) (2012).

market that presently exists for the Internet.”¹³⁹ Thus, § 230 was partially predicated on the idea that the Internet as a marketplace would help weed out offensive material as ISP users sought out providers with better-filtered content.¹⁴⁰ Market forces, however, would do little to curb online copyright infringement, since everyday ISP users are unlikely to even recognize infringing material as such (and, even if they do, they may be attracted to it). Second, the harm incurred by offensive material online arguably affects the broader community of Internet users, while copyright infringement results in individual harm to the copyright holder. Moreover, for copyright holders like Mavrix, the harm sustained—for example, lost licensing deals once their photos have been scooped—can be complete and irrevocable the moment infringing content is published by an ISP.¹⁴¹ Conversely, early removal of obscene content may mitigate harm to the public by minimizing its exposure.

Despite these differences, however, the underlying goals for ISP development are meaningfully the same between the DMCA and § 230. Both were enacted with the understanding that ISPs are discouraged from innovating and exploring new services for their users when they are vulnerable to liability for content those users publish. Further, such widespread liability would, as previously discussed, create a disincentive¹⁴² for ISPs to interact with user-created content altogether,¹⁴³ and undermine the business models of ISPs

139. *Id.*

140. See Ehrlich, *supra* note 125, at 412 (“[T]he market will still encourage internet service providers to filter where appropriate. There are several reasons to believe this to be true. First, the bright-line rule of immunity will remove uncertainty and thereby stimulate innovation. Second, the unique characteristics of Internet speech and mobility will quickly guide the market toward equilibrium. The net result will be a general level of filtering consistent with Internet community norms.”).

141. See Appellant’s Opening Brief, *supra* note 88, at 6 (“When Mavrix secures valuable exclusive photos of celebrities, often before it can even monetize the photos, those photos are stolen and leaked to the internet, which in turn eliminates the full value Mavrix can secure by license deals with its clients.”).

142. See Corynne McSherry, *Ninth Circuit Sends a Message to Platforms: Use a Moderator, Go to Trial*, ELECTRONIC FRONTIER FOUND.: DEEPLINKS BLOG (Apr. 8, 2017), <https://www.eff.org/deeplinks/2017/04/ninth-circuit-sends-message-platforms-use-moderator-go-trial> [<https://perma.cc/E5NX-UCZY>] (“The irony here is that copyright owners are constantly pressuring service providers to monitor and moderate the content on their services more actively. [The *Mavrix v. LiveJournal*] decision just gave them a powerful incentive to refuse.”).

143. See Guinevere Jobson, Armen N. Necessian, “*Oh No They Didn’t!*”—*Ninth Circuit Throws DMCA Safe Harbors for Moderated Content into Disarray*, LEXOLOGY (Apr. 12, 2017), <https://www.lexology.com/library/detail.aspx?g=845462af-ee94-46de-86ba-8342c6a303a3> [<https://perma.cc/2U9T-2E7V>]

Even where a website, like LiveJournal [in *Mavrix v. LiveJournal*], has procedures for expeditiously removing allegedly infringing user-generated materials identified on takedown notices, *Mavrix* teaches that a service

previously operating without the constant threat of liability for the actions of their users.¹⁴⁴ The Ninth Circuit’s characterization of the relationship between an ISP and its moderating staff as the threshold inquiry for § 512(c) protection raises the same troubles Congress faced in 1996 with the CDA, and again in 1998 with the DMCA. Specifically, its decision revives the same uncertainty and risk these doctrines were enacted to combat in the first place.¹⁴⁵

D. THE NINTH CIRCUIT’S APPROACH IS AT ODDS WITH PRESSURE
CONGRESS IS CURRENTLY PLACING ON ISPS

The Ninth Circuit’s implicit message that an ISP’s engagement with user-submitted content imperils its safe harbor protection¹⁴⁶ is not only at odds with Congressional intent in enacting the DMCA and statutes in similar policy realms, but it is at odds with *current* Congressional conceptions of proper ISP oversight as well. As ISPs—particularly social media ISPs—have increasingly become intertwined with day to day life in the years since the DMCA was enacted, the new threat of “fake news” has highlighted the perils of ISPs taking a “hands-off” approach to monitoring what their users publish to their

provider may still lose safe harbor protection based on its efforts to curate materials available on its platform. This ruling incentivizes platforms seeking to avail themselves of the safe harbor to exercise less oversight of materials that users submit for posting. That is particularly true in light of the impracticability of having a platform, which lacks both information about the ownership of posted materials and competence to make judgments about their legal status, to screen materials based on infringement.

144. Jeremy Goldman & Andrew Ungberg, *Federal Appeals Court Weakens DMCA Safe Harbor Protection for Moderated Online Content*, FRANKFURT KURNIT KLEIN & SELZ PC (May 3, 2017), <https://www.focusonthedata.com/2017/05/federal-appeals-court-weakens-dmca-safe-harbor-protection-moderated-online-content> [<https://perma.cc/R62H-D58E>] (“Although *Mavrix* suggests that the surest way to qualify for DMCA safe harbor status is to refrain from moderating, many ISPs cannot risk leaving their brands exposed in a moderator-free Wild West bonanza.”); *see also* Cope, *supra* note 135 (“[I]f Internet intermediaries are not largely shielded from liability for content their users create or post—particularly given their huge numbers of users—existing companies risk being prosecuted or sued out of existence, and potential new companies may not even enter the marketplace for fear of being prosecuted for sued out of existence (or because venture capitalists fear this).”).

145. *See* Brianna Dahlberg, *Ninth Circuit Ruling Raises New Legal Risks for Websites That Use Moderators to Screen User-Submitted Content* (*Mavrix v. LiveJournal*), COWAN DEBAETS ABRAHAMS & SHEPPARD LLP (Apr. 17, 2017), <http://cdas.com/nnew-legal-risks-websites-use-moderators> [<https://perma.cc/9TZR-37L4>] (“While copyright owners will be pleased with the [*Mavrix v. LiveJournal*] decision because it makes it easier to enforce against online infringement, the decision creates new uncertainty and risk for social media websites, digital publishers, and other internet platforms which allow user-submitted content.”).

146. *See* Goldman & Ungberg, *supra* note 144 (“The takeaway from *Mavrix* is clear—an ISP can no longer take its DMCA safe harbor status for granted if it engages with user-submitted content beyond merely performing ‘accessibility-enhancing activities.’”).

platforms. Indeed, “[s]ome of the biggest companies in the world—Google, Apple, Facebook, Amazon and Alibaba among them—are finding they need to play by an entirely new set of rules on the once-anarchic internet.”¹⁴⁷

Nearly twenty years after the DMCA was enacted, the rise of fake news has proven to be the latest manifestation of the perennial problem facing ISPs: for better or worse, user-submitted content on their platforms is becoming increasingly impactful in shaping other users’ views, beliefs, and behaviors on and offline. False news stories tied to Russian originators, for example, reached 126 million people via Facebook during the United States’ 2016 presidential election, and similar instances of false propaganda successfully using popular ISPs as conduits have cropped up globally.¹⁴⁸ In the United States, individual members of Congress have already begun demanding increased ISP accountability for the consequences of such events,¹⁴⁹ signaling a growing desire for *more* ISP supervision of user-generated content on their platforms.¹⁵⁰

If the Ninth Circuit’s de facto narrowing of safe harbor eligibility for ISPs is to become the status quo, ISPs will be forced into a catch-22. On the one

147. Mike Isaac, Paul Mozur & Mark Scott, *Facebook Faces a New World as Officials Rein in a Wild Web*, N.Y. TIMES (Sept. 17, 2017), <https://www.nytimes.com/2017/09/17/technology/facebook-government-regulations.html> [<https://perma.cc/Y2VY-57HM>].

148. See James Temperton, *As Congress Circles, Facebook and Google Scramble for Transparency*, WIRED UK (Oct. 31, 2017), <http://www.wired.co.uk/article/facebook-russia-election-adverts-congress-twitter-google> [<https://perma.cc/5ZBB-A642>]

In the UK, investigations are underway into suspected links between Russian-backed social media propaganda campaigns and the Brexit vote. In Germany, the far-right AfD had great success with divisive advertising on Facebook and Twitter in the run-up to the recent elections. And from India to Tanzania, political WhatsApp [a messenger service owned by Facebook] groups with thousands of members have become powerful propaganda tools.

149. See Mathew Ingram, *For Facebook, the Political Reckoning Has Begun*, COLUM. JOURNALISM REV. (Oct. 30, 2017), https://www.cjr.org/covering_trump/facebook-congress-russia.php [<https://perma.cc/595N-KHX7>] (“Among the questions Congress will have to confront: How much of this is Facebook’s fault? Did it knowingly permit Russian agents to influence American voters, or was it just an unfortunate outcome of how the network functions?”).

150. See *id.* (“If [Congress’ proposed plan] becomes a reality, Facebook . . . could be required to be a lot more hands on in monitoring what it runs and where.”); see also Mike Isaac, *At Facebook, Hand-Wringing over a Fix for Fake Content*, N.Y. TIMES (Oct. 27, 2017), <https://www.nytimes.com/2017/10/27/technology/facebook-fake-content-employees.html> [<https://perma.cc/RN7Z-NQL4>] (“On one side are employees who idealize Facebook’s lofty goals of unfettered speech and do not think the company should be in the business of censoring what its users have to say. On the other side are workers who worry that the company’s hands-off approach has already caused problems—ones that will grow worse if nothing is done.”).

hand, the looming danger of liability for user infringement incentivizes ISPs to cut back on (if not abolish entirely) moderation practices, while pressure from angry lawmakers provides motivation to implement more editorial safeguards than ever before. This harkens back to the DMCA's balancing of interests and again calls into question the degree to which ISPs should be held responsible for the content their users generate.¹⁵¹

Interestingly, the manual screening activities the Ninth Circuit found so problematic within LiveJournal and ONTD's internal procedures in *Mavrix* are the same protocols lawmakers are currently pressuring similar ISPs to adopt to mitigate fake news.¹⁵² In fact, fully automated processes, which the Ninth Circuit contended should be the only basis for ISP protection under § 512(c),¹⁵³ have exacerbated ISP-based propaganda and harassment problems.¹⁵⁴ Despite automated systems' and engines' status as an essential component of the service itself for many ISPs, technology giants like Google and Facebook have nonetheless promised to "add more human oversight" to avoid future instances of offensive or bogus content.¹⁵⁵ In this sense, Facebook's tricky position is very much like LiveJournal's: both ISPs strive to serve as neutral platforms through which users can "freely post, read and view

151. See Kevin Roose, *Forget Washington. Facebook's Problems Abroad Are Far More Disturbing*, N.Y. TIMES (Oct. 29, 2017), <https://www.nytimes.com/2017/10/29/business/facebook-misinformation-abroad.html> [<https://perma.cc/EG2J-MT8X>]

Facebook is not directly responsible for violent conflict, of course, and viral misinformation is hardly unique to its services. Before social media, there were email hoaxes and urban legends passed from person to person. But the speed of Facebook's growth in the developing world has made it an especially potent force among first-time internet users, who may not be appropriately skeptical of what they see online Correcting misinformation is a thorny philosophical problem for Facebook, which imagines itself as a neutral platform that avoids making editorial decisions.

152. See Jennifer Golbeck & Andrea Matwyshyn, *Fake News, Hate Speech and Social Media Abuse: What's the Solution?*, KNOWLEDGE@WHARTON (Nov. 21, 2016), <http://knowledge.wharton.upenn.edu/article/whats-the-solution-to-fake-news> [<https://perma.cc/AR5M-4Y8D>] ("Addressing fake news and other forms of gaming social media platforms will be a multi-faceted process Doing more will likely require a combination of human oversight, algorithms designed to weed out falsehood or abuse, and tools to further empower users.")

153. See There is, however, a narrow exception for manual activities specifically directed at improving accessibility. *Id.*

154. See Ingram, *supra* note 149 ("Without automation there would be no way for [ISPs like Facebook] to achieve the kind of scale necessary to reach more than two billion people per day. The downside of this kind of automation extends beyond just potential Russian involvement—in several cases, Facebook has accepted advertising that was directed at offensive categories such as 'Jew haters.'").

155. See *id.*

content.”¹⁵⁶ Practically speaking, however, as social media’s “reach and influence have grown,” these ISPs must face growing questions of responsibility for what exists on their networks.¹⁵⁷ To curb fake news, for example, Facebook has begun implementing technological measures to make flagging improper content easier for users within moderated groups, ultimately sending disputed content further down users’ news feeds within the platform.¹⁵⁸ Such initiatives, however, under the Ninth Circuit’s misguided “agency” approach to liability shields for ISPs, would bar companies like Facebook from taking such actions and remain protected from liability for their users’ bad behavior. This, too, is at odds with the DMCA’s central tenet of balancing the interests of the ISPs with the interests of their users and backs ISPs into a corner. Despite the quandary the Ninth Circuit would place them in, “social media networks do not have the option of doing nothing in preventing fake news.”¹⁵⁹

V. CONCLUSION

In an increasingly complex environment for ISPs, the Ninth Circuit’s unprecedented insistence that agency is an appropriate approach for discerning ISP safe harbor protection ignores Congressional goals in enacting the DMCA as well as current Congressional concerns centering ISPs and the information they transport. Given this practical break with the legislative history and goals of the DMCA doctrine, as well as the present era of rampant fake news and online harassment, it seems particularly imprudent for the Ninth Circuit to interpret the DMCA’s safe harbors in a way that might discourage human interaction with user-submitted content. Such an approach threatens to undercut the very purpose of the DMCA, and should be reconsidered in future safe harbor analysis.

156. Mike Isaac, *Facebook Mounts Effort to Limit Tide of Fake News*, N.Y. TIMES (Dec. 15, 2016), <https://www.nytimes.com/2016/12/15/technology/facebook-fake-news.html> [<https://perma.cc/M4VF-EM82>].

157. *Id.*

158. See Isaac, *supra* note 156; see also Saqib Shah, *Facebook Reports Success in Removing Fake News for Germany’s Election*, DIGITAL TRENDS (Sept. 28, 2016), <https://www.digitaltrends.com/social-media/facebook-fake-news-germany> [<https://perma.cc/5WUT-H523>] (“While Facebook admitted that [its] efforts did not ultimately eliminate all fake news, initiatives did make the proliferation of faulty information less rampant.”).

159. Golbeck & Matwyshyn, *supra* note 152.

***FOX TELEVISION STATIONS, INC. V.
AEREOKILLER, LLC: HOW THE NARROW
FRAMEWORK OF THE 1976 COPYRIGHT ACT CUT
THE CORD ON INTERNET TELEVISION
RETRANSMISSIONS***

Dina Ljekperic[†]

I. INTRODUCTION

The shift from broadcast and cable to the digital television model has transformed the communications industry. Consumers want on-demand programming accessible on their computers and mobile devices. While cable and broadcast companies have steadily adapted to consumer demand by making some programming available online by subscription, new market entrants also continue to push the envelope on the distribution of video programming.

This industry innovation has forced regulators to revisit the careful balance of interests steadied by communications regulation. Implicating the policy interests of copyright holders and consumers alike, the intersection of telecommunications and copyright law has been carved by courts, Congress, and federal agencies. It is no surprise, then, that this complex regulatory framework has resulted in inconsistent court rulings over emerging technology in the television industry. A recent and important chapter in this ongoing saga is *Fox v. Aereokiller*.¹ After the Central District of California gave Internet retransmitters their first legal victory against copyright owners, the Ninth Circuit reversed on appeal.² The Ninth Circuit's *Aereokiller* opinion cuts short independent judicial analysis to instead rely on the Copyright Office's position that Internet retransmitters are not eligible for the Copyright Act's section 111 compulsory license, under which cable systems may make secondary retransmissions of copyrighted content.³

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1. *Fox Television Stations, Inc. v. Aereokiller LLC*, 851 F.3d 1002 (9th Cir. 2017).

2. *Id.*; see *Fox Television Stations, Inc. v. AereoKiller*, 115 F. Supp. 3d 1152 (C.D. Cal. 2015).

3. *Aereokiller*, 851 F.3d at 1008–15.

Aereokiller and its companion cases regarding over-the-Internet retransmissions are the latest in a long line of jurisprudence at the intersection of copyright and telecommunications that implicate the complex regulatory relationship between courts, Congress, the Copyright Office, and the Federal Communications Commission in setting the balance of copyright protection and emerging technologies.

This Note will examine how the Copyright Act's broad definition of the exclusive right of public performance and narrow reading of the section 111 compulsory license has resulted in court decisions that leave Internet retransmissions services hanging in legal limbo. These services bear the burden of cable system designation, but do not reap the benefits of any statutory license. Part II will introduce over-the-Internet broadcast retransmission technology. Part III will discuss the development of copyright law in television programming distribution and regulation, ending with the U.S. Supreme Court's 2014 decision in *American Broadcasting Cos. v. Aereo, Inc.* Part IV will discuss the Ninth Circuit's recent decision in *Aereokiller*. Part V will identify the legal incongruence formed by *Aereo* and *Aereokiller*, the parallel public interests in cable retransmissions and over-the-Internet retransmissions; and the significance of *Aereokiller* in a policy playground currently being shaped by other actors, namely the Copyright Office and the Federal Communications Commission. Part VI concludes.

II. TECHNOLOGY BACKGROUND

Traditional broadcast systems transmit programming by radio waves; cable systems use central antennas to receive programming signals, amplify them, and transmit them through a network of cables.⁴ Internet retransmitters also use central antennas to capture television signals, but then translate those signals into data that can be sent over the Internet.⁵ The service creates subscriber-specific copies of content, which users can access by logging onto the service's website.⁶ Users can watch programming only a few seconds behind the over-the-air broadcasting, or at any other time they choose, as well as access local programming online.⁷

Aereo was among the first companies to capitalize on this Internet retransmission technology, with Film On X (Film On) following shortly thereafter. At the height of its success, Aereo was well-reviewed by users, and

4. *Am. Broad. Cos. v. Aereo, Inc.*, 134 S. Ct. 2498, 2504 (2014).

5. *Id.* at 2503.

6. *Id.*

7. *Id.*

saw its popularity grow outside its origin in the Northeast. At the end of 2013, six months before the service shut down, Aereo had about 78,000 subscribers including 27,000 located in the New York City area, 12,000 in the Boston area, and 10,000 in the Atlanta area.⁸ As of May 2013, the service offered 28 channels, including all major broadcast channels.⁹ Monthly plans started at eight dollars for 20 hours of DVR storage, which allowed users to access recorded programming.¹⁰ Users called the service “brilliantly simple” and claimed it “work[ed] exceptionally well.”¹¹ They deemed Aereo “a hassle-free way [for users] to add live local programming” to their online streaming.¹²

While Aereo technology grew popular among users, the service created a challenge for the television industry and copyright policy that regulates the distribution of copyrighted programming. It is no wonder the same consumers correctly predicted that the service would be “so sued.”¹³ This was not the first time, however, that new technology that provided access to broadcast programming challenged the Copyright Act’s *status quo*.

III. LEGAL BACKGROUND

Long before over-the-Internet retransmitters like Aereo and Film On, it was the now-powerful cable systems that disrupted the traditional broadcasting model by retransmitting broadcast programming to viewers. They, too, were once “so sued.”

A. COPYRIGHT LAW AND THE PERFORMANCE RIGHT

The Copyright Clause of U.S. Constitution grants Congress the power “[t]o promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries.”¹⁴

8. Peter Kafka, *Here’s How Many Subscribers Aereo Had Last Year*, RECODE (July 21, 2014), <https://www.recode.net/2014/7/21/11629036/heres-how-many-subscribers-aereo-had-last-year> [<https://perma.cc/RA9T-V4TF>].

9. Jordan Cook, *Aereo Switches Up Pricing: \$8/Month for 20 Hours of DVR, \$12/Month For 60 Hours Starting May 15*, TECHCRUNCH (May 13, 2013), <https://techcrunch.com/2013/05/13/aereo-switches-up-pricing-8month-for-20-hours-of-dvr-12month-for-60-hours-starting-may-15/> [<https://perma.cc/QN2L-478G>].

10. *Id.*

11. Christina Warren, *Aereo Gives New Yorkers Online Access to Live TV [HANDS ON]*, MASHABLE (Feb. 28, 2012), <http://mashable.com/2012/02/28/aereo-hands-on/#kOKjZ4LjVlqu> [<https://perma.cc/T6W3-N4VE>].

12. *Id.*

13. *Id.*

14. U.S. CONST. art. I, § 8, cl. 8.

The Copyright Act of 1790 was the first U.S. federal copyright law. The Act has been updated since, most comprehensively by sweeping changes in 1976, which still govern copyright law in the United States today. According to its Constitutional purpose, copyright regulation seeks to balance the interests of copyright holders with the interests of the public in having access to creative works.¹⁵

Copyright protects six basic rights of copyright holders, including the right to “publicly perform” a copyrighted work.¹⁶ The public performance right covers literary, musical, dramatic, and choreographic works, as well as pantomimes, motion pictures, and other audiovisual works—which include television programming.¹⁷

In the 1960s and early 1970s when cable was first deployed, the legal status of the cable retransmissions of broadcast television was unclear. But after two landmark Supreme Court cases and several years of legislative drafting, the Congress amended the “public performance” right specifically to bring the activity of cable systems within the scope of the Copyright Act.

B. THE RISE OF CABLE TELEVISION

Traditional cable television systems use central antennas to receive television broadcasting signals, amplify them, and then transmit those signals by cable or microwave to their paying customers.¹⁸ At its inception, the vast majority of cable television programming was not original content created by cable companies, but, rather, consisted of the “secondary transmission” of signals broadcast by others.¹⁹ Cable companies argued that they did not need

15. *See id.*; *see also* *Mazer v. Stein*, 347 U.S. 201, 219 (1954) (quoting *United States v. Paramount Pictures, Inc.*, 334 U.S. 131, 158 (1948), and U.S. CONST. art. I, § 8, cl. 8) (“The economic philosophy behind the clause empowering Congress to grant patents and copyrights is the conviction that encouragement of individual effort by personal gain is the best way to advance public welfare through the talents of authors and inventors in ‘Science and useful Arts.’”); Mark A. Lemley, *The Economics of Improvement in Intellectual Property Law*, 75 TEX. L. REV. 989, 993–1000 (1997) (discussing the balance of access and incentives in copyright law); Viva R. Moffat, *Mutant Copyrights and Backdoor Patents: The Problem of Overlapping Intellectual Property Protection*, 19 BERKELEY TECH. L.J. 1473 (2004) (suggesting that more regulation is needed when too many intellectual property protections disrupt the balance between the interest of right holders and the public’s access to creative works).

16. The five other basic rights are the right to reproduce works, the right to prepare derivative works, the right to distribute copies of works, the right to publicly display the work, and the right to digitally transmit sound recordings. 17 U.S.C. § 106 (2012).

17. *Id.*

18. 2 MELVILLE B. NIMMER & DAVID NIMMER, NIMMER ON COPYRIGHT § 8.18[A] (2017).

19. *Id.*

to obtain licenses from the copyright owners of the material because they did not “perform” the material within the meaning of the Copyright Act.²⁰

The U.S. Supreme Court addressed cable technology in two landmark cases: *Fortnightly Corp. v. United Artists Television, Inc.*²¹ and *Teleprompter Corp. v. Columbia Broadcasting*.²²

In *Fortnightly*, the Court was asked whether cable systems “performed” the broadcasted program, under the Copyright Act’s meaning of “perform.”²³ It ruled that cable television systems did no more than enhance their viewers’ capacity to receive the broadcast signals, and, thus, did not “perform” the programs that their systems received and carried.²⁴ Importantly, the Court explicitly refused to serve as the gatekeeper of new technology:

We have been invited . . . to render a compromise decision in this case that would, it is said, accommodate various competing considerations of copyright, communications, and antitrust policy. We decline the invitation. That job is for Congress. We take the Copyright Act of 1909 as we find it.²⁵

When Congress did not act on the Court’s prompt in *Fortnightly*, the Court amplified their call for congressional action in the next big cable systems case that reached their docket. Eight years later, in *Teleprompter*, the Court was asked whether the development of cable retransmissions of “distant signals” now created copyright liability for cable systems.²⁶

Again, the Court chose not to create liability and extended their *Fortnightly* decision.²⁷ It held that the development and implementation of new functions of cable systems did not convert the entire systems, regardless of distance from the broadcasting station, into a “broadcast function.”²⁸ Thus, despite developments in program origination, sale of commercials, and interconnection with other cable systems, cable television operators were still not liable for copyright infringement.²⁹ The Supreme Court also found that the importation of “distant” signals from one community into another did not

20. *Id.*

21. 392 U.S. 390 (1968).

22. 415 U.S. 394 (1974).

23. *Fortnightly*, 392 U.S. at 390.

24. *Id.*

25. *Id.* at 401–02.

26. *Teleprompter*, 415 U.S. 394.

27. *Id.* at 414–15.

28. *Id.* at 404–05; *see also* 1 WILLIAM F. PATRY, PATRY ON COPYRIGHT § 1:80 (2017).

29. *Teleprompter*, 415 U.S. at 405.

constitute a “performance” under the Copyright Act,³⁰ explaining that reception of signals was still a “viewer function, irrespective of the distance between the broadcasting station and the ultimate viewer.”³¹

Once again, the Court highlighted its inadequacy as a forum for weighing the costs and benefits of emerging technologies. The Court wrote that it was severely handicapped by the limits of the outdated Copyright Act to which it was bound. The industry had outgrown the “copyright legislation enacted more than half a century ago, when neither broadcast television nor CATV was yet conceived.”³² The Court repeated that regulation of this field should be left to Congress.³³

Where the *Fortnightly* court gave Congress a wink, the *Teleprompter* court was not afraid to shout. The decision spurred congressional action³⁴ and soon after Congress amended the Copyright Act to explicitly cover the act of cable retransmissions.

C. THE 1976 COPYRIGHT ACT, THE PUBLIC PERFORMANCE RIGHT AND SECTION 111 COMPULSORY LICENSING

In 1961, Congress set out to comprehensively update the Copyright Act to adapt to new technologies and international standards.³⁵ The revision process was slowed until 1972, in part, by the substantial complications arising from emerging cable technology.³⁶

Congress finally acted after the *Teleprompter* decision in 1976. Congress found that the basic operations of cable providers are based on the distribution of copyrighted material, and, thus, copyright royalties should be paid by cable operators to copyright holders.³⁷

To codify this conclusion, Congress first asserted a broad definition of the Act’s meaning of performance. Under the Act, to “perform” means “to recite, render, play, dance, or act [a work], either directly or by means of any device or process or, in the case of a motion picture or other audiovisual work, to show its images in any sequence or to make the sounds accompanying it

30. *Id.* at 394.

31. *Id.* at 408.

32. *Id.* at 414. CATV stands for community antenna television systems, the first moniker for cable.

33. *Teleprompter*, 415 U.S. at 414.

34. 1 PATRY, *supra* note 28, § 1:80.

35. *Id.* § 1:46.

36. PETER MENELL, MARK A. LEMLEY, ROBERT P. MERGES, INTELLECTUAL PROPERTY IN THE NEW TECHNOLOGY AGE: 2017, VOLUME II: COPYRIGHTS, TRADEMARK AND STATE IP PROTECTIONS 706 (2017).

37. H.R. REP. No. 94-1475, at 89 (1976).

audible.”³⁸ Congress added that a performance may be achieved “‘either directly or by means of any device or process,’ including all kinds of equipment for reproducing or amplifying sounds or visual images, any sort of transmitting apparatus, any type of electronic retrieval system, and any other techniques and systems not yet in use or even invented.”³⁹

Then, Congress amended the Act to include the Transmit Clause to broaden the definition of what it meant to “publicly” perform a work.⁴⁰ According to the Transmit Clause, a work is performed “publicly” when the performance is transmitted to the public “by means of any device or process, whether the members of the public capable of receiving the performance or display receive it in the same place or in separate places and at the same time or at different times.”⁴¹ Congress did not mask their intent behind these changes. The House Report explicitly declared: “a cable television system is performing when it retransmits the broadcast to its subscribers” and such retransmissions are “public” even when the potential recipients are limited to “the subscribers of a cable television service.”⁴²

Yet, Congress valued the public benefit of wider dissemination of television programming provided by cable.⁴³ So, once Congress concluded that cable systems were liable for copyright infringement, it sought a solution to keep the technology alive. Congress noted that it would be “impractical and unduly burdensome” to require all cable systems to negotiate with every copyright owner whose work was retransmitted by a cable system.⁴⁴ As a result, Congress developed a compromise in the form of compulsory licensing of broadcasting signals for cable systems—section 111 of the Copyright Act.⁴⁵

Section 111’s compulsory license enabled cable systems to bypass the transaction costs and impracticalities of negotiating individual licenses with dozens of copyright owners, while simultaneously ensuring that copyright owners were compensated.⁴⁶

38. 17 U.S.C. § 101 (2012).

39. H.R. REP. No. 94-1475, at 63 (1976).

40. 17 U.S.C. § 101 (2012).

41. *Id.*

42. H.R. REP. No. 94-1476, at 63, 65 (1976).

43. *Id.* at 89.

44. *Id.*

45. *Id.* at 88–101; *see also* 1 PATRY, *supra* note 28, § 1:78; Peter Menell & David Nimmer, *Aereo, Disruptive Technology, and Statutory Interpretation*, SCOTUSBLOG (June 26, 2014), <http://www.scotusblog.com/2014/06/symposium-aereo-disruptive-technology-and-statutory-interpretation/> [<https://perma.cc/6HM5-J2FH>].

46. *See* WPIX, Inc. v. ivi, Inc., 691 F.3d 275, 281 (2d Cir. 2012).

Section 111 applies to a “cable system” as defined as “a facility” in the United States that “receives signals transmitted or programs” by television broadcast stations and makes “secondary transmissions of such signals or programs by wires, cables, microwave or other communications channels to subscribing members of the public who pay for such service.”⁴⁷

D. *AMERICAN BROADCASTING COMPANIES V. AEREO INC.*

Fast forward almost forty years later: the interests of broadcasters and television innovators were unbalanced yet again by the invention of over-the-Internet retransmission systems. Indeed, this constant battle between industry stakeholders and new market entrants is a defining theme of copyright jurisprudence:

We can predict that conflicts between incumbent and challenger disseminators will arise so long as two things are true: first, that more efficient technologies of dissemination will be invented and second, that there exists the possibility, but not the certainty, of convincing government to provide laws that can be used against a competitor.⁴⁸

The new challenger here was Aereo.⁴⁹ American Broadcasting Companies (ABC) claimed Aereo violated their rights under the Copyright Act by selling a service that allowed subscribers to watch television programs over the Internet almost simultaneously while they were broadcast over the air.⁵⁰ ABC argued that Aereo was infringing their right to “perform” their works “publicly,” as defined by the Transmit Clause of the Copyright Act.⁵¹

Aereo argued that because users themselves selected which programs they wanted to watch and receive, only Aereo’s users “performed” the works and Aereo itself served only as an equipment supplier.⁵² The Supreme Court rejected this argument, finding that by adding the Transmit Clause, Congress clearly intended to bring exactly this type of activity within the scope of the Copyright Act. Aereo’s services, the Court wrote, were “substantially similar” to the very cable operations Congress amended the Act to cover.⁵³

The Court found the text of the Transmit Clause made clear that a system that “acts like a [cable] system itself *performs*, even if when doing so, it simply

47. 17 U.S.C. § 111 (f)(3) (2012).

48. Timothy Wu, *Copyright’s Communications Policy*, 103 MICH. L. REV. 278, 292 (2004); see also MENELL ET AL., *supra* note 36, at 725.

49. *Am. Broad. Cos. v. Aereo, Inc.*, 134 S. Ct. 2498, 2498 (2014).

50. *Id.* at 2499.

51. *Id.* at 2503–04.

52. *Id.*

53. *Id.* at 2506.

enhances viewers' ability to receive broadcast television signals."⁵⁴ Based on the substantial similarity of the activities, rather than the specifics of each technology, the Court concluded that "*Congress would as much have intended to protect a copyright holder from the unlicensed activities of Aereo as from those of cable companies.*"⁵⁵

Having settled the performance issue, the Court then rejected Aereo's claim that the works were not performed "publicly" because they were each received by only one subscriber.⁵⁶ The Transmit Clause broadly defines the right to transmit a performance of protected content "to the public, by means of any device or process" whether members of the public "receive it in the same place or in separate places and at the same time or at different times."⁵⁷ The Court found that Aereo's subscribers collectively constituted "the public" because they were a "large number of people who are unrelated and unknown to each other," even if programs were received by different people at different times and locations.⁵⁸ The Court stated that these "behind-the-scenes technological differences" did not distinguish Aereo from cable television, given Congress's regulatory objectives.⁵⁹

In his dissent, Justice Scalia maintained that Aereo did not "perform" the works at all because it was the viewers who "performed" the work when they selected the content.⁶⁰ Focusing on the technology distinctions between Aereo and cable, Justice Scalia argued that, unlike the cable systems Congress targeted with the 1976 Amendments, Aereo did not capture and transmit a range of broadcast signals for subscribers at all times, but rather only transmitted the specific programs at specific times, both selected by the user.⁶¹ Justice Scalia wrote that the majority "disregard[ed] widely accepted rules for service-provider liability and adopt[ed] in their place an improvised standard ('looks-like-cable-TV') that will sow confusion for years to come."⁶²

Justice Scalia was right in predicting the confusion the "results-driven" opinion would cause, which was squarely manifested in the paradoxical holding in *Aereokiller*.

54. *Id.* (emphasis added).

55. *Id.* at 2501 (emphasis added).

56. *Id.* at 2508–10.

57. 17 U.S.C. § 101 (2012).

58. *Aereo*, 134 S. Ct. at 2509.

59. *Id.* at 2501, 2508.

60. *Id.* at 2515.

61. *Id.*

62. *Id.* at 2512.

E. AFTER *Aereo*: “TURN[ING] LEMONS INTO LEMONADE”⁶³

Aereo ceased operations soon after losing in the Supreme Court, but other Internet retransmitters continued providing their services, armed with a new argument for the courts. Faced with copyright infringement suits yet again, Internet retransmitters, including Film On, argued that since *Aereo* concluded that online retransmitters publicly performed the works “like cable systems,” their activities should be eligible for section 111’s compulsory license, and attempted to comply with the license’s requirements. Most courts, however, did not buy the argument,⁶⁴ deferring instead Copyright Office’s opinion that Internet retransmissions should not be eligible for compulsory licensing.⁶⁵

Under doctrines of judicial deference, courts defer to an agency interpretation that is reasonable—the *Chevron* test—or persuasive—the *Skidmore* test—depending on which test applies.⁶⁶

The Copyright Office has historically opposed all statutory licensing for copyrighted works, preferring that licensing be determined in the market by copyright owners through the exercise of their exclusive rights.⁶⁷ The Office opposes section 111 on policy grounds, but recognizes that the permanence

63. *Am. Broad. Cos. v. Aereo, Inc.*, No. 12-CV-1540, 2014 WL 5393867, at *1 (S.D.N.Y. Oct. 23, 2014).

64. Seven federal courts weighed in on whether Internet-based retransmission services count as “cable systems” under section 111. All but one said no. *See* *WPIX, Inc. v. ivi, Inc.*, 691 F.3d 275, 276 (2d Cir. 2012), *WPIX, Inc. v. ivi, Inc.*, 765 F. Supp. 2d 594, 600 (S.D.N.Y. 2011), *Fox Television Stations, Inc. v. Film On X LLC*, 150 F. Supp. 3d 1, 7 (D.D.C. 2015); *Film On X, LLC v. Window to the World Commc’ns, Inc.*, No. 13 C 8451, 2016 WL 1161276, at *7 (N.D. Ill. Mar. 23, 2016), *CBS Broad. Inc. v. Film On.com, Inc.*, No. 10 CIV. 7532 NRB, 2014 WL 3702568, at *4 (S.D.N.Y. July 24, 2014), *Am. Broad. Cos., Inc. v. Aereo, Inc.*, No. 12-CV-1540, 2014 WL 5393867, at *3 (S.D.N.Y. Oct. 23, 2014).

65. *See* *WPIX*, 691 F.3d, at 275, 276; U.S. COPYRIGHT OFFICE, A REVIEW OF THE COPYRIGHT LICENSING REGIMES COVERING RETRANSMISSION OF BROADCAST SIGNALS 97–98 (Aug 1, 1997); *see also* *Copyright Broadcast Programming on the Internet: Hearing Before the Subcomm. on Courts and Intellectual Property of the Comm. on the Judiciary*, 106th Cong. 26 (2000) (statement of Marybeth Peters, The Register of Copyrights) [hereinafter 2000 Register of Copyrights Statement to Congress].

66. *See* *Chevron U.S.A., Inc. v. NRDC, Inc.*, 467 U.S. 837 (1984); *Skidmore v. Swift & Co.*, 323 U.S. 134 (1944). For further discussion, see Eskridge, William N. Jr. & Baer, Lauren E., *The Continuum of Deference: Supreme Court Treatment of Agency Statutory Interpretations from Chevron to Hamdan*, 96 GEO. L.J. 1083 (2008) (tracking the application of the doctrine of judicial deference since *Chevron*).

67. 2000 Register of Copyrights Statement to Congress, *supra* note 65; *Statement of Marybeth Peters, The Register of Copyrights, before the Subcommittee on Courts, The Internet and Intellectual Property of the House Committee on the Judiciary* 108th Cong. (Feb. 24, 2004).

of cable (and later satellite) licenses has created expectations for both copyright holders and consumers, making elimination of the license difficult.⁶⁸

The Copyright Office first published their opposition to granting compulsory licenses to Internet retransmitters in a 1997 report.⁶⁹ Early Internet retransmission innovators argued that they faced the same economic and logistical difficulties that early cable companies faced in negotiating individual licenses.⁷⁰ But convinced by testimony from copyright owners, broadcasters, and cable interests, the Office concluded that it would be inappropriate to extend the existing scheme or create a new compulsory license scheme for Internet retransmitters, an industry “so vastly different” from other retransmission services.⁷¹ The Office reasoned that unlike satellite and cable, Internet retransmitters were not subject to FCC regulation, had no geographic limitations, and were more likely to be subject to unauthorized copying and dissemination.⁷² Moreover, the Office adopted the FCC’s “wait and see” approach for the burgeoning industry: not interfering with the development of the Internet was best practice. At this time, the FCC recognized that the Internet’s growth would shift the communications industry from “regulated monopolies to a world of overlapping competitive firms.”⁷³ The government’s only responsibility was to open doors. As such, the Office thought that a compulsory license scheme would go against this spirit, creating a competitive disadvantage for content providers to directly make their content available on the Internet.⁷⁴

Early online video providers argued that streaming audiovisual media was extremely expensive and logistically challenging: new services faced a disadvantage trying to negotiate with large content providers who could withhold rights to prevent new competition in the market.⁷⁵ To those innovators, setting geographic limitations were plausible technological adaptations, but ones that would undermine the potential of the technology

68. See U.S. COPYRIGHT OFFICE, THE CABLE AND SATELLITE CARRIER COMPULSORY LICENSES: AN OVERVIEW AND ANALYSIS 81 (1992); U.S. COPYRIGHT OFFICE, A REVIEW OF COMPULSORY LICENSING REGIMES COVERING RETRANSMISSION OF BROADCAST SIGNALS, at 32–33 (1997) [hereinafter 1997 COMPULSORY LICENSING REPORT]; see also 2000 Register of Copyrights Statement to Congress, *supra* note 65.

69. 1997 COMPULSORY LICENSING REPORT, *supra* note 68.

70. *Id.* at 93.

71. *Id.* at 97.

72. *Id.* at 97–99.

73. *Id.* at 98; see INFORMATION INFRASTRUCTURE TASK FORCE, INTELLECTUAL PROPERTY AND THE NATIONAL INFORMATION 109 INFRASTRUCTURE: THE REPORT OF THE WORKING GROUP ON INTELLECTUAL PROPERTY RIGHTS 53 (Sept. 1995).

74. 1997 COMPULSORY LICENSING REPORT, *supra* note 68, at 99.

75. *Id.* at 93.

entirely: the Internet was exciting *because* it was an unparalleled global communications medium.⁷⁶ While the Office reasoned that a deregulatory approach would ensure market competitiveness, innovators argued just the opposite: an administrative scheme was necessary to buoy the experimental nature of Internet retransmitters.

In 2000, the Office restated its earlier conclusion that a compulsory licensing scheme for Internet retransmissions would be inappropriate.⁷⁷ The Office reiterated that the Internet's unregulated nature—making content “instantaneously worldwide” and vulnerable to improper copying—made it a “poor candidate” for a compulsory license.⁷⁸ The Office expanded on two points: (1) a licensing scheme would create a competitive disadvantage to content providers and (2) raise international concerns.⁷⁹

On the first point, the Office highlighted that Internet retransmitters do not build delivery platforms like cable and satellite systems but use an existing platform broadcasters can exploit on their own.⁸⁰ As such, copyright owners should decide for themselves if they want to distribute content online, and not be dictated by a government system. Internet streaming, the Office continued, is inherently vulnerable to illegal downloading and dissemination.⁸¹ And the decision to assume that risk should be left to copyright holders.⁸²

Secondly, the Office worried that a scheme would violate international copyright obligations.⁸³ Under the Berne Convention, the retransmission of work by any means must be subject to the author's exclusive rights.⁸⁴ While exceptions exist for compulsory licensing schemes, those exceptions are limited by territorial restrictions.⁸⁵ To coexist with Berne obligations, the Office concluded that a compulsory license for Internet retransmissions could only permit retransmissions in the United States.⁸⁶ At that time, the Office found no technology one hundred percent capable of preventing reception outside the United States.⁸⁷

76. *Id.* at 93–94.

77. *See* 2000 Register of Copyrights Statement to Congress, *supra* note 65.

78. *Id.*

79. *Id.*

80. *Id.*

81. *Id.*

82. *Id.*

83. *Id.*

84. *Id.*

85. *Id.*

86. *Id.*

87. *Id.*

Nearly a decade later, in 2009, the Office maintained this position, reiterating concerns about geographical limitations and piracy, but added a new argument: The Internet has flourished as a platform for video programming without help from any statutory scheme.⁸⁸

IV. CASE SUMMARY

Nearly all courts relied on this Copyright Office position rejecting Internet retransmitters' request to be included under section 111—all but one. The first, and only, court to rule in favor of Internet retransmitters was the Central District of California in *Fox v. AereoKiller* in 2015.⁸⁹

A. FACTS

A group of broadcasting and cable industry giants,⁹⁰ collectively “Fox,” brought suit in the U.S. District Court for the Central District of California against Internet retransmitter Film On for copyright infringement.⁹¹ The plaintiffs moved for summary judgment to find that Film On was not entitled to the section 111 compulsory license.⁹²

Like Aereo, Film On captured over-the-air broadcast programming and retransmitted select programming to its paying customers through the Film On website.⁹³ The service allowed subscribers to access nearly simultaneous live streams of broadcast television over the Internet on their personal electronic devices.⁹⁴

88. *Statement of Marybeth Peters, The Register of Copyrights, before the Subcommittee on Courts, The Internet and Intellectual Property of the House Committee on the Judiciary* 111th Cong. (Feb. 25, 2009) [hereinafter 2009 Register of Copyright Statement to Congress]; U.S. COPYRIGHT OFFICE, SATELLITE HOME VIEWER EXTENSION AND REAUTHORIZATION ACT SECTION 109 REPORT 23–33, 85, 87 (June 30, 2008) [hereinafter SHVERA REPORT].

89. *Fox Television Stations, Inc. v. AereoKiller*, 115 F. Supp. 3d 1152, 1167 (C.D. Cal. 2015).

90. The plaintiffs were: Fox Television Stations, Inc., Twentieth Century Fox Film Corp., Fox Broadcasting Co., Inc., NBCUniversal Media LLC, Universal Network Television LLC, Open 4 Business Productions LLC, NBC Subsidiary (KNBC-TV) LLC, Telemundo Network Group LLC, WNJU-TV Broadcasting LLC, American Broadcasting Companies, Inc., ABC Holding Company Inc., Disney Enterprises, Inc., CBS Broadcasting Inc., CBS Studios Inc., and Big Ticket Television, Inc. *Id.* at 1154.

91. *Fox Television Stations, Inc. v. Film On X, LLC consolidated with NBCUniversal Media, LLC v. Film On X, LLC* for rulings on cross-motions for summary judgment as to compulsory license eligibility under 17 U.S.C. § 111 (2012). *Id.*

92. *Id.*

93. *Id.* at 1156.

94. *Id.*

Film On operated facilities in certain regional markets, housing antennas and other electronic equipment to capture programming transmissions.⁹⁵ That captured programming was then transmitted to specific paying customers over the Internet.⁹⁶ When users accessed the Film On website, the Film On server provided a list of available programming.⁹⁷ Users then picked a broadcast channel, and the request was directed to a local Film On facility.⁹⁸ Users could watch programs almost simultaneously or at any other time.⁹⁹ Film On omitted all closed captioning, played an advertisement before users could view the selected programming, and added the Film On logo.¹⁰⁰ Otherwise, Film On did not alter the programming.¹⁰¹

In October 2014, after *Aereo*, Film On mailed approximately 130 letters to broadcasters informing them of their intent to restart operations as a multichannel video programming distributor (MVPD) in certain markets, and attempted to comply with other cable regulations.¹⁰² Attempting to comply with section 111, Film On also submitted Statements of Account to the Copyright Office for each six-month period between August 2012 and July 2014, and paid the corresponding fees.¹⁰³

With hopes of restarting their business after *Aereo*, Film On modified their service by adding further protections for content.¹⁰⁴ The service claimed to restrict user access to programming based on the user location, and used an encryption key to ensure that only the user with the authorized IP address was able to view the stream, and only for a limited time.¹⁰⁵ Ostensibly, Film On's updated geolocation system sought to deny access to any broadcast channel unless the user's credit card address was within the relevant designated market

95. Appellees' Consolidated Opposition Brief at 11–12, *Fox Television Stations, Inc. v. AereoKiller, LLC*, No. 15-56420 (9th Cir. Mar. 28, 2016).

96. *Id.*

97. *AereoKiller*, 115 F. Supp. 3d at 1156.

98. *Id.*

99. *Id.*

100. *Id.*

101. *Id.*

102. *Id.* at 1159. Film On requested local broadcasters to inform them if they elected “must-carry status. “Must-carry” regulation states that locally licensed television stations may require a cable operator that serves the same market to carry its signal. *See Cable Carriage of Broadcast Stations*, FED. COMM. COMMISSION (Dec. 9, 2015), <https://www.fcc.gov/media/cable-carriage-broadcast-stations> [<https://perma.cc/B2EK-H7A7>].

103. Unsurprisingly, however, Film On did not pay the required royalties for the networks with whom they were then in litigation. *See AereoKiller*, 115 F. Supp. 3d at 1158.

104. *See id.* at 1156–59.

105. *Id.* at 1157–58.

area.¹⁰⁶ Additionally, the new system required mobile viewing devices to be located within the market area at the time of transmission.¹⁰⁷ Film On also hired a third-party service to prevent users from other markets from using proxy servers to access market-specific content.¹⁰⁸ Evidence presented at trial, however, suggested that Film On's new software was not fully developed and vulnerable to manipulation.¹⁰⁹

Plaintiff Fox argued that (1) Film On did not meet section 111's definition of a "cable system;" (2) *Aereo* did not support the conclusion that Film On is a "cable system;" and, (3) section 111 should be construed narrowly.¹¹⁰ In addition, Fox pointed to the unanimity of court decisions across the country in its favor. But Fox also urged that if the statutory language was found unclear, the court should defer to the Copyright Office's position that Internet retransmitters are not "cable systems" that qualify for the Act's compulsory license.¹¹¹ Drawing attention to the Copyright Office's view was a strategic move by the appellants. Fox repeatedly highlighted the Copyright Office's responsibility of administering the Act, subtly giving weight to its favorable opinion.¹¹² They called it a "textbook" case for administrative deference.¹¹³

Film On, on the other hand, defended the singular opinion of the lower court, maintaining that (1) section 111 was "technology agnostic," consistent with both the 1976 Act and *Aereo*; (2) Film On was a cable system eligible for the section 111 license; and, (3) the district court correctly declined to defer to the view of the Copyright Office.¹¹⁴

Moreover, the two sides held different interpretations of Congress's intent regarding the Act's 1976 amendments. Film On argued that Congress crafted the language of the Act to expand public access to over-the-air programming, and to stand the test of time.¹¹⁵ Film On argued that Congress drafted the amendments to anticipate the future technological advances in television retransmission, "not to technologically handcuff an industry for almost half a

106. *Id.* at 1157.

107. *Id.* at 1157–58.

108. *Id.*

109. *Id.* at 1158.

110. Brief of Petitioner-Appellant at 25–60, *Fox Television Stations, Inc. v. AereoKiller*, No. 15-56420 (9th Cir. Jan. 27, 2016) [hereinafter Brief of Petitioner-Appellant].

111. *Id.* at 3.

112. *Id.* at 3, 10, 46.

113. *Id.* at 3.

114. Appellees' Consolidated Opposition Brief at 25–62, *Fox Television Stations, Inc. v. AereoKiller, LLC*, No. 15-56420 (9th Cir. March 28, 2016).

115. *Id.* at 2.

century.”¹¹⁶ Deference to the Copyright Office was not warranted, Film On concluded, because the statute “unambiguously encompass[ed]” their service.¹¹⁷ Fox, on the other hand, argued that Film On’s argument “ignore[s] the canon of construction that compulsory licenses . . . are to be narrowly construed.”¹¹⁸

B. PROCEDURAL HISTORY

1. *The California District Court’s Break from National Pattern*

Among all the infringement cases brought against Internet retransmitters across the country in the wake of *Aereo*, the California District Court was the only court that agreed with retransmitters.¹¹⁹

The district court noted that plaintiffs, much like the defendants, had dramatically flipped from their position in *Aereo* deemphasizing technological differences. Now, plaintiffs highlighted the technological differences between a cable company and Film On as “exceedingly meaningful.”¹²⁰ While the *Aereo* court did not consider the same section 111 question, Judge Wu of the Central District of California wrote that *Aereo* was “about as close a statement directly in Defendants’ favor as could be made[.]”¹²¹

Furthermore, the court wrote that its holding followed the judicial trajectory that began in *Fortnighly*, where the Supreme Court refused to pull cable television technology within the Copyright Act’s meaning of performance despite its vast innovation: “[C]ourts consistently reject the argument that technological changes affect the balance of rights as between broadcasters and retransmitters in the wake of technological innovation” and that such rebalancing must be left to Congress.¹²²

Judge Wu wrote that the Copyright Office’s opinions, while influential, certainly did not control, as they did not control in *Fortnighly* and *Teleprompter*.

Given that the Office disagrees with Congress [against the very existence of section 111], *it is no surprise that it seeks to cabin the statute whenever possible*. However, this administrative opposition to Congressional text requires a particularly close look at any assertion that courts should defer to the agency’s interpretation.¹²³

116. *Id.*

117. *Id.*

118. Brief of Petitioner-Appellant, *supra* note 110, at 22.

119. *See supra* note 64 and accompanying text.

120. *AereoKiller*, 115 F. Supp. 3d 1152, 1163 (C.D. Cal. 2015).

121. *Id.* at 1163.

122. *Id.*

123. *Id.* at 1164 (emphasis added).

The court, further challenging deference to the Office, emphasized that copyright law does not exist in a vacuum, but is instead “intertwined with equally complex provisions of communications law and policy—the implications of which are outside the expertise of the Copyright Office and require further consideration by Congress.”¹²⁴

Ultimately, the court found the statute clear and unambiguous, and, thus, did not warrant a discussion of legislative history or administrative interpretation.¹²⁵ Relying on the plain meaning of the statute, the court held that Film On should be eligible for the section 111 license.¹²⁶

The district court’s opinion kept with the *Fortnightly* model of strict statutory interpretation of the Copyright Act’s plain meaning (and rejected the *Aereo* “would have intended” model), irrespective of the policy arguments against the result.¹²⁷ In light of the far-reaching implications, however, the court recommended immediate appeal.¹²⁸

2. Ninth Circuit Reversal

Unlike the district court below it, a Ninth Circuit panel found the plain meaning of section 111 to be inconclusive, and subsequently deferred to the Copyright Office’s sufficiently persuasive opinion that Internet retransmitters are not “cable systems” under section 111.¹²⁹

The court found the language of section 111 to be ambiguous as to whether, to qualify as a “cable system,” a retransmission service must have control over the means it uses to transmit material (plaintiffs urged it did),¹³⁰ or whether the Internet fell within the Act’s meaning of “other communications channels” that can be used by cable systems to make secondary transmissions (as defendants urged).¹³¹

Turning to legislative intent, the court called Film On’s interpretation of the statute as technology agnostic “a poor fit” with section 111’s text.¹³² The

124. *Id.*

125. *Id.* at 1168.

126. *Id.* at 1171.

127. *Id.* at 1168.

128. *Id.* at 1171.

129. *Fox Television Stations, Inc. v. Aereokiller LLC*, 851 F.3d 1002 (9th Cir. 2017).

130. *Id.* at 1008. Plaintiffs argued that section 111’s definition of a “cable system” as a “facility” mandated that Film On be excluded from the definition because it did not own or control the retransmissions service it used (the Internet) as a traditional cable system facility would. *Id.*; 17 U.S.C. § 111(f)(3) (2012).

131. *Aereokiller*, 851 F.3d at 1008–11; *see also* 17 U.S.C. § 111(f)(3) (2012). “Communications channels” had been elsewhere narrowly defined as “bandwidth noise and throughput.” *See Aereokiller*, 851 F.3d at 1009–10.

132. *Id.* at 1009.

court admitted that the definition of cable system was “ambiguous,” but not completely without detail.¹³³ It found that Congress’s decision to apply section 111 only to “cable systems” revealed that it sought to exclude all other types of retransmitters.¹³⁴ It was also convinced by Congress’s later additions of sections 119 and 122, establishing compulsory licensing schemes for satellite providers that granted them similar rights to cable providers.¹³⁵ To the court, this revealed that Congress made a specific choice to create a new scheme rather than expand section 111 to encompass new technology.

Moreover, the imbalance of interests solved by the creation of section 111, according to the court, did not exist here.¹³⁶ In creating section 111, Congress sought to “restore a measure of protection to copyright owners,” while simultaneously supporting the important public good served by cable systems.¹³⁷ That public good was transmitting broadcasting to geographically distant and isolated American communities that did not receive over-the-air signals.¹³⁸ The statutory scheme helped an early cable industry with little market power overcome the transaction costs of negotiating individual licenses with all copyright holders.¹³⁹ The solution also prevented cable companies from losing all the infrastructure investments they had already made and would even benefit copyright holders by exposing new audiences to their content.¹⁴⁰

Comparing these climates, the court found that the benefits of Internet retransmissions did not equate. Internet retransmissions did not hold the same public interest value because they were not reaching otherwise unserved communities, there was no evidence that such services lacked the market power needed to negotiate licenses individually, and the content providers could just use the platforms themselves.¹⁴¹ Furthermore, the court stressed that because Internet retransmissions had no geographic boundaries and were much more vulnerable to piracy than cable retransmissions, they posed “a more serious threat to the value and integrity of copyrighted works.”¹⁴²

The court thus believed the appellants’ argument to be significantly stronger based on the statutory text and legislative history, but still reasoned that a plain reading of the Act did not explicitly exclude Film On from the

133. *Id.*

134. *Id.*

135. *Id.* at 1009.

136. *Id.*

137. *Id.* at 1010.

138. *Id.*

139. *Id.*

140. *Id.*

141. *Id.* at 1011.

142. *Id.*

license. As such, the court turned to the Copyright Office.¹⁴³ The court highlighted four instances, in official reports and testimony before Congress, in which the Office “specifically and unequivocally” said that Internet-based retransmission services are not cable systems under section 111.¹⁴⁴

The court chose to apply the *Skidmore* standard, a somewhat less deferential standard, to the Office’s opinion.¹⁴⁵ Under *Skidmore*, the court concluded that the Office’s position was “persuasive and reasonable,” and, thus, owed deference.¹⁴⁶ The court reached this conclusion based on support from the statutory text, the Office’s consistent position on the matter since it first expressed its views, and congressional inaction on the issue, despite knowledge of the Office’s position.¹⁴⁷ The court concluded that the decision did not conflict with *Aereo*, which dealt with a completely different provision, the Transmit Clause, with far broader terms.¹⁴⁸

In sum, the Ninth Circuit ruled that section 111, as drafted in 1976, did not make clear whether Internet retransmitters would be eligible for the compulsory license for cable systems, and, as such, relied on the Copyright Office’s sufficiently persuasive and reasonable opinion that they were not eligible for the license.¹⁴⁹

V. ANALYSIS

The holdings in *Aereo* and *Aereokiller* combine to cut the cord on Internet television retransmission services like Aereo and Film On. Despite parallels with cable systems, their fates did not play out the same: doors were opened for cable innovators; they’ve been shut for Internet innovators.

Though legally plausible, the result of *Aereo-Aereokiller* reflects an awkward union of a narrow reading of section 111 with a broad reading of the Transmit Clause. The Ninth Circuit gives unjustifiable weight to the Copyright Office’s opinion that is actually in tension with both historical policy concerns over market access for new technology, and with modern FCC policy goals to make technology neutral video programming regulation more inclusive of over-the-Internet retransmissions.

143. *Id.* at 1011–12.

144. *Id.* at 1012.

145. *See* *Skidmore v. Swift & Co.*, 323 U.S. 134, 140 (1944); *see also* 4 CHARLES H. KOCH, JR. & RICHARD MURPHY, ADMIN. L. & PRAC. § 11:32 (3d ed. 2018).

146. *Aereokiller*, 851 F.3d at 1012–13.

147. *Id.*

148. *Id.* at 1009.

149. *Id.* at 1015.

A. THE *AEREO-AEREOKILLER* OUTCOME RESULTED FROM DIFFERENT MODELS OF STATUTORY INTERPRETATION OF THE PUBLIC PERFORMANCE RIGHT AND THE COMPULSORY LICENSE

Though the Supreme Court avoided creating liability in *Teleprompter* and *Fortnightly*, it did just that in *Aereo*. In ruling that Aereo “publicly performed” under the meaning of the Copyright Act, the Supreme Court found that Congress *would have intended* to include the activities of Aereo in its definition and held Aereo liable for copyright infringement.¹⁵⁰

This contrasts with Judge Wu’s opinion in the U.S. District Court for the Central District of California. Judge Wu explicitly sought to follow in the tradition of *Teleprompter* and *Fortnightly* by refraining from creating new communications regulation and instead read the Act as written.¹⁵¹

The Ninth Circuit diverged from both *Teleprompter* and *Fortnightly* and disagreed with Judge Wu. According to the Ninth Circuit, the statute did not contain enough explicit language to tell them “what the law is.” Unlike the Supreme Court in *Aereo*, it did not decide the case by interpreting what Congress “would have intended:” the Ninth Circuit called the well-documented legislative history of section 111 “a wash” (and concluded that the Copyright Office would have a better picture of that history anyway).¹⁵²

The result is an *Aereo* decision that gives Internet transmissions the burden of cable system liability, but an *Aereokiller* decision that denies them the benefit of cable system compulsory licensing, excluding Internet retransmitters from a pathway into the industry.

The two opinions can plausibly coexist. The *Aereo* and *Aereokiller* courts interpreted two separate provisions of the Act: the public performance right found in section 101, and the compulsory license found in section 111. The Ninth Circuit reasoned that the addition of the Transmit Clause to the public performance right sought to include general retransmissions within the scope of the Copyright Act, while section 111 is a narrow statutory license meant to bolster cable systems technology.¹⁵³

The Ninth Circuit distinguished the language and legislative intent behind the two provisions. In confirming that cable systems “performed” the

150. *Am. Broad. Cos. v. Aereo, Inc.*, 134 S. Ct. 2498, 2501 (2014).

151. *Fox Television Stations, Inc. v. AereoKiller, LLC*, 115 F. Supp. 3d 1152, 1171 (C.D. Cal. 2015) (“Plaintiffs’ policy may be the better one, but this Court does not presume to make policy. With apologies to John Marshall, who said it in a much stronger sense, the Court’s role here is merely ‘to say what the law is.’”).

152. *Fox Television Stations, Inc v. Aereokiller, LLC*, 851 F.3d 1002, 1011 (9th Cir. 2017).

153. *Id.* at 1009.

retransmitted programming under the Act, Congress sought to broadly include “all kinds of equipment . . . any sort of transmitting apparatus . . . and *any other techniques and systems not yet in use or even invented*.”¹⁵⁴ Congress’s focus was not on the technology, but the activity itself—balancing the interests of the stakeholders in the distribution of copyrighted works. The House Report states that the definition of “transmit”—“to communicate a performance or display by any device or process whereby images or sound are received beyond the place from which they are sent”—is purposefully “broad enough to include all conceivable forms and combinations of wires and wireless communications media, including but by no means limited to radio and television broadcasting as we know them.”¹⁵⁵ *Aereo* relied on this legislative history when it declared the public performance right technologically agnostic, minimizing the technology distinctions and maximizing the essential purpose of the activity.¹⁵⁶

This same technology-agnostic intent does not exist for the section 111 compulsory license. Section 111 specifically defines a “cable system” as “a facility . . . that receives signals transmitted or programs” broadcasted by broadcast television stations “and makes secondary transmissions of such signals or programs by wires, cables, microwave, or other communications channels to subscribing members of the public who pay for such service.”¹⁵⁷ A plain reading of this text could conclude that the Internet does not qualify as a facility under the control of Film On, nor did “other communications channels” conceive of Internet technology. Moreover, one could reasonably argue that legislative history reveals that Congress did not seek to expand the license beyond cable systems.

Distinguishing the legislative intent behind the two provisions so drastically, however, ignores their concurrent histories. The updated public performance right and the compulsory license are not provisions separated by different time periods or political atmospheres. They were created in the same set of amendments in 1976, by the same individuals who worked almost two decades to pair the provisions to create a compromise between broadcasting and copyright stakeholders and cable television upstarts. The two provisions served as essential weights on the teetering scales Congress attempted to settle with the 1976 Copyright Act. Interpreting one provision as narrow and the other as broad is defensible, but deeming the legislative intent behind one as conclusive, as the *Aereo* court did, and the other as “a wash,” as the *Aereokiller*

154. 17 U.S.C. § 106 (2012); 2 NIMMER & NIMMER, *supra* note 18, § 8.14[B][1] (citing H.R. REP. 94-1476, at 63 (1976)) (emphasis added).

155. H.R. REP. 94-1476, at 64 (1976).

156. *See* Am. Broad. Cos. v. Aereo, Inc., 134 S. Ct. 2498, 2509 (2014).

157. 17 U.S.C. § 111(f)(3) (2012).

court did, is to come to markedly different conclusions about the same legislative history.

B. LIKE CABLE, THERE IS A PUBLIC INTEREST IN INTERNET
RETRANSMISSIONS

Because of the public benefits of cable retransmission, Congress created a statutory licensing scheme to ensure their survival. With Internet retransmissions, neither courts nor the Copyright Office have identified the public benefits of enabling Internet retransmissions, but innovators and other policymakers disagree. If Internet retransmitters warrant a compulsory license scheme, it is critical to ask why, beyond an examination of outdated statutory language.

In order to answer whether the social benefits of Internet retransmission warrant a compulsory licensing scheme, it is essential to identify the social benefits of cable that drove Congress to set up a compulsory scheme in cable's favor. If those same benefits of cable persist for modern over-the-Internet retransmissions, then there is a robust policy argument to include Internet retransmitters within a compulsory license. The public's interest in cable is the very purpose of the creation of section 111. On the Copyright Act, Congress said "the bill reflects our belief that authors' rights should be stated in the statute in broad terms and that the specific limitations on them should not go any further than is shown to be necessary in the public interest."¹⁵⁸

"Necessary in the public interest" is a broad phrase, but certainly not one without direction. When section 111 was created, there were particularly high hopes for the benefits of cable. Cable was described as "having near-utopian promise for social liberation" that would bring unlimited and diverse channels of information into American homes.¹⁵⁹

Internet retransmitters, opponents argue, do not elicit this same utopian good. To opponents, they do not provide, nor do they seek to provide, newfound access to content in areas of geographic isolation; they provide a geographically limitless, rather than local, service.¹⁶⁰ Moreover, the Copyright Office maintains that Internet distribution makes copyrighted works vulnerable to digital theft and dissemination in a way cable did not.¹⁶¹ In

158. *Copyright Law Revision: Hearings on H.R. 4347 Before the Subcomm. on Courts, Civil Liberties and the Administration of Justice of the House Comm. on the Judiciary*, 89th Cong., 1st Sess. 31–33 (1965) (prepared testimony of George Cary, Deputy Register of Copyrights).

159. TIM WU, *THE MASTER SWITCH: THE RISE AND FALL OF INFORMATION EMPIRES* 176 (2010).

160. *See* *WPIX, Inc. v. ivi, Inc.*, 691 F.3d 275, 282 (2d Cir. 2012).

161. 2000 Register of Copyrights Statement to Congress, *supra* note 65.

addition, both the Office and the *Aereokiller* court found no evidence that Internet retransmitters lacked the market power needed to negotiate licenses individually. For cable upstarts, Congress implicitly assumed the obvious transactions costs of rag-tag inventors negotiating with broadcasting powerhouses.¹⁶² Now, the Copyright Office points to the success of online video platforms as proof that a statutory licensing scheme is not needed to keep them competitive.¹⁶³

This is not the first time, however, that Congress has been asked to consider expanding this license to cover a new technology. Satellite technology challenged the balance of the Act as well. In 1991, the Eleventh Circuit held that a satellite carrier was a cable system covered by section 111's compulsory licensing scheme.¹⁶⁴ Seven years later, in 1998, Congress responded by codifying a separate statutory license for satellite carriers under section 119 of the Copyright Act.¹⁶⁵ Once again, Congress determined that it was in the public interest to maintain the increased access to broadcasting content created by a new transmissions technology.¹⁶⁶

Congress intended section 119 to be only a temporary license set to expire after five years. The statute, however, has been repeatedly reauthorized since.¹⁶⁷ The creation of this additional provision, on an interim basis, has been interpreted as a warning to courts that section 111 should not be read to include any new technologically-distinct retransmissions systems.¹⁶⁸ It could also show, however, that the continued renewal of this initially temporary solution proves just the opposite—it works. The continued existence of statutory licenses despite opposition from the Copyright Office may be evidence itself that such schemes are the optimal market solution, and, excluding new retransmissions systems from this model puts them at a disadvantage.

In its amicus brief for Film On, the Electronic Frontier Foundation (EFF) urged that a technological-neutral interpretation of section 111 better serves copyright's constitutional purpose by reserving some value of copyrighted works to the public. The transaction costs of negotiating licenses, they urged,

162. WU, *supra* note 159, at 178–79 (“In the late 1960s, cable had a distinctive identity. It was scrappy industry of small-town entrepreneurs in perpetual trouble with the law.”); *Id.* at 178.

163. 2000 Register of Copyrights Statement to Congress, *supra* note 65.

164. *Nat'l Broad. Co., Inc., v. Satellite Broad. Networks, Inc.*, 940 F.2d 1467, 1471 (11th Cir. 1991).

165. Satellite Home Viewer Act of 1988, 17 U.S.C. § 119 (2012).

166. *See* 2 NIMMER & NIMMER, *supra* note 18, § 8.18.

167. *See* 2009 Register of Copyright Statement to Congress, *supra* note 88.

168. *See* WPIX, Inc. v. *ivi*, Inc., 691 F.3d 275, 282 (2d Cir. 2012).

remained “insurmountably high” for new competitors.¹⁶⁹ Television retransmission technology need not invoke “near utopian promise” to prove its public good. Statutory licenses, the EFF argued, are meant to give new competitors like Film On the constitutionally-prescribed “breathing room” needed, give viewers more choices, incentivize market innovation, and increase access to creative works in the long term.¹⁷⁰

C. IN ITS DEFERENCE TO THE COPYRIGHT OFFICE, THE NINTH CIRCUIT’S *AEREOKILLER* OPINION PAINTS AN INCOMPLETE PICTURE OF BROADCASTING REGULATION

Courts defer to the Copyright Office when application or interpretation of Office regulations or longstanding practice is implicated.¹⁷¹ The U.S. Copyright Office, part of the Library of Congress (thus, an arm of the legislative branch of the federal government) supervises copyright registration and deposit, recordation of transfers, payment of fees, and other related functions.¹⁷² Congress relies on the Office to provide its technical expertise in the legislative process, often in the form of studies.¹⁷³ The Ninth Circuit has previously awarded deference to the Copyright Office in interpreting copyright law, relying on *Cablevision Sys. Dev. Co. v. Motion Picture Ass’n of Am., Inc.*,¹⁷⁴ in fact, deferred to the Office specifically on a section 111 issue.¹⁷⁵

In *Aereokiller*, the court begins its analysis: “It is crucial to point out that we do not confront [section] 111’s compulsory licensing scheme on a blank slate, because there is an agency interpretation in the background.”¹⁷⁶ This statement is a startling admission by the court on the influence of the Copyright Office’s opinion in its decision even before it independently worked

169. Brief for the Electronic Frontier Foundation and Public Knowledge as Amici Curiae Supporting Respondents, at 2, *Fox Television Stations, Inc. v. AereoKiller*, 115 F. Supp. 3d 1152, 1167 (C.D. Cal. 2015) (No. 15-56420), 2016 WL 1451913, at *2.

170. *Id.*

171. 2 NIMMER & NIMMER, *supra* note 18, § 7.26. *But see id.* (“Though courts frequently invoke their willingness to defer to Copyright Office practices, one gathers the impression that their deference ends as soon as their disagreement with the Office’s position begins.”).

172. *Id.*

173. *Id.*

174. 836 F.2d 599, 609–10 & n.16 (D.C. Cir. 1988); *see also* *Marascalco v. Fantasy, Inc.*, 953 F.2d 469, 473 (9th Cir. 1991) (holding Copyright Office’s statutory interpretations are entitled to deference “if reasonable” while the Office’s opinion letters are only entitled to deference if “persuasive”).

175. *Id.* at 608 (holding that the Copyright Office is due judicial deference because otherwise every dispute over the meaning of the statute could rise to an infringement action, a policy result that would be “antithetical to Congress’s concern of providing a low cost transfer of copyrighted materials”).

176. *Fox Television Stations, Inc v. Aereokiller, LLC*, 851 F.3d 1002, 1007 (9th Cir. 2017).

to declare the provision ambiguous. Procedure requires that a court find a statute to be ambiguous before deferring to agency opinion. A court must, in fact, confront a statute as “a blank slate” to identify its plain meaning. Only if the meaning is ambiguous should a court look outside of its independent analysis for the opinion of an outside agency. A *Skidmore* level of judicial deference requires a court to evaluate the Office’s opinion for persuasiveness and reasonability. However, before even doing so, the court aligned its own analysis of section 111 with the Copyright Office’s opinion in mind, and prepared to come to the same conclusion.¹⁷⁷

Furthermore, unlike Judge Wu in the district court, the Ninth Circuit chose to ignore the complex interplay between copyright and communications law, and to ignore the other actors involved—including those that may be better-equipped to regulate the communications industry than the Copyright Office altogether, like the FCC.

The Copyright Office itself has stated their opinion is, in part, dependent on FCC regulation.¹⁷⁸ Internet retransmissions services do not qualify for section 111, the Office has said, partly because they are not regulated as cable systems by the FCC.¹⁷⁹ If, then, the FCC were to regulate Internet retransmitters as cable systems, the Office may rethink its opinion. And the FCC may currently be doing just that.¹⁸⁰

In 2014, after *Aereo*, the FCC released a Notice of Proposed Rulemaking (NPRM), updating FCC rules to modernize its interpretation of the term “multichannel video programming distributor” (MVPD) to include services that make available for purchase, by subscribers or customers, multiple linear streams of video programming, regardless of the technology used to distribute the programming.¹⁸¹ In sharp contrast with the narrow construction of section 111’s definition of a cable system, the FCC proposes that MVPD be defined “in a broad and technology-neutral way to ensure that it would not only cover video providers using technologies that existed in 1992, but rather be sufficiently flexible to cover providers using new technologies such as Internet

177. *Id.* at 1007.

178. Letter from Jacqueline C. Charlesworth, Gen. Counsel & Assoc. Register of Copyrights, U.S. Copyright Office, to Matthew Calabro, Dir. of Fin. Planning & Analysis & Revenue, Aereo, Inc. (July 16, 2014).

179. *See also* 57 Fed. Reg. 3284, 3292 (Jan. 29, 1992).

180. FED. COMM’NS COMM’N, FCC 14-210, NOTICE OF PROPOSED RULEMAKING IN THE MATTER OF PROMOTING INNOVATION AND COMPETITION IN THE PROVISION OF MULTICHANNEL VIDEO PROGRAMMING DISTRIBUTION SERVICES (Dec. 19, 2014) [hereinafter FCC NPRM].

181. FCC NPRM, *supra* note 180, at 11.

delivery.”¹⁸² Creating industry access for Internet retransmitters, the FCC wrote, aligns with the Commission’s pro-consumer values in MVPD regulation.¹⁸³

Promoting the broad distribution of communications services is an essential purpose of the FCC. The Communications Act of 1934 authorized the FCC “to make available, so far as possible, to all the people of the United States, without discrimination on the basis of race, color, religion, national origin, or sex, a rapid, efficient, Nation-wide, and world-wide wire and radio communication service with adequate facilities at reasonable charges.”¹⁸⁴ Following *Aereo*, former FCC Chairman Tom Wheeler declared that technology-neutral rules spur competition. “[T]he definition of MVPD,” he urged, “should turn on the services that a provider offers, not on how those services reach viewers.”¹⁸⁵ Wheeler said that making rules technology-neutral allows both new and incumbent television transmitters to take advantage of online transmission. Regulations should allow for new business models to bring new choices to customers.¹⁸⁶

This, however, stands in contrast to the positions of the courts and Copyright Office regarding Internet retransmissions. As such, the FCC sought commentary on the interplay between communications and copyright law.¹⁸⁷ The FCC intended to explore how this technology-neutral interpretation would affect license negotiation between broadcasters and Internet-based retransmitters, especially if the Copyright Office does not grant statutory licenses to Internet retransmitters. The FCC also asked if this updated definition of Internet-based television programming distributors as MVPD’s and the Copyright’s Office position that Internet-based distributors do not

182. *Id.* at 11–12.

183. *Id.* at 12.

184. 47 U.S.C. § 151 (2012).

185. Tom Wheeler, *Tech Transitions, Video, and the Future*, FED. COMM. COMMISSION (Oct. 28, 2014), <https://www.fcc.gov/news-events/blog/2014/10/28/tech-transitions-video-and-future> [<https://perma.cc/V7TV-7W2J>] (“Such benefits follow from innovation. Taking advantage of this rule, new [over-the-Internet television providers] may offer smaller or specialized packages of video programming, so consumers will be able to mix-and-match to suit their tastes And perhaps consumers will not be forced to pay for channels they never watch.”).

186. *Id.*

187. *See also* FED. COMM’NS COMM’N, DA 18-53, COMMENT DEADLINES SET FOR NOTICE OF PROPOSED RULEMAKING TO UPDATE MVPD SUBSCRIBER NOTIFICATION RULES AND BROADCASTER CARRIAGE ELECTION PROCEDURES (Jan. 18, 2018) (setting comment deadlines for March 2, 2018).

qualify for the compulsory license would even create a workable regulatory scheme.¹⁸⁸

Once again, the copyright's communications policy may play out in several regulatory arenas. The answer may lie within the Copyright Office's response to the proposal. Others say courts could play a role, as well. In support, the EFF has said that although the Copyright Act and the Communications Act are separate bodies of law, the broadcasting compulsory licenses in the Copyright Act were written with MVPDs in mind.¹⁸⁹ The EFF contends that awarding Internet-based retransmitters MVPD status, giving them regulatory parity with incumbent services for purposes of the Communications Act, may encourage courts to treat such services as cable systems for Copyright Act purposes, establishing regulatory parity and technological neutrality across statutes.¹⁹⁰

FCC regulation could also be an answer to some of the policy concerns driving the Copyright Office's position: Internet retransmitters' lack of geographical limitations, and lack of technological prevention against copying and dissemination.

First, the Copyright Office has stated that: "A compulsory licensing regime that required retransmissions to be encrypted, and prohibited foreign distribution of the decoding technology, could satisfy the territorial limitations of Berne" so long as the technology could effectively prevent reception of the retransmitted signals outside the United States.¹⁹¹ Essentially, a service that developed solid geographic limitations could change its position on the appropriateness of a compulsory license scheme.

Moreover, the Copyright Office has focused on ineffective technology protections from copying and dissemination as a reason to refuse to grant compulsory licenses to Internet retransmitters. This suggests then that effective technological protection measures (TPMs) could be a possible solution for Internet retransmissions services. Effective TPMs could prevent the infringing uses imagined by broadcasters and copyright holders, while allowing Internet retransmitters the benefits of compulsory licensing. While the enforcement of TPMs is mostly left up to the market, (through contract law, for example) copyright scholars suggest that the FCC could play a larger

188. FCC NPRM, *supra* note 180, at 55.

189. *Comments of the Electronic Frontier Foundation before the Federal Communications Commission, In the Matter of Promoting Innovation and Competition in the Provision of Multichannel Video Programming Distribution Services*, MB Docket No. 14-261, at 4.

190. *Id.*

191. 2000 Register of Copyrights Statement to Congress, *supra* note 65.

role.¹⁹² With its deep knowledge of the industry, the FCC may be best equipped to establish a standard of TPMs that is “less restrictive, more consistent with the intentionally limited protections granted by copyright law, and also closer to consumer preferences than the market-regulated alternatives would have been.”¹⁹³ Compared to the Copyright Office, the FCC is more accustomed to assessing and reassessing data about industry conditions and practices and competitive conditions; has better experience in the specialized treatment of television industry; and has held a role in promoting Copyright’s goals of promoting creativity, production, and access to communications services.¹⁹⁴ Certainly, with any discussion of increased government regulation come concerns about bureaucratic inefficiency, but uniformity may be better than the unregulated alternative. The FCC may be the only agency that has demonstrated an understanding of the intersection of copyright and communications policy.¹⁹⁵

VI. CONCLUSION

Aereo-Aereo-killer reflects the legal roadblock created by Congress when it drafted a Copyright Act that includes broad copyrights and limited exceptions. By creating a narrow compulsory license for cable systems, Congress sought to protect the rights of copyright holders while expanding access to programming, but it simultaneously created an Act that would be rapidly outpaced by technology. Indeed, section 111 is not the result of regulatory foresight, but an exhausted compromise after two decades of negotiation.¹⁹⁶

Copyright scholar Jessica Litman identified this problem early on: “[t]he definition of performance was designed to encompass future technological developments; the privileges and limitations were not.”¹⁹⁷ Internet retransmission has become the poster child for this dichotomy. The Supreme Court was able to interpret the Transmit Clause to encompass the activities brought about by technological advances, but the Ninth Circuit could not simultaneously interpret the license to keep up with those same advances. Litman wrote: “[d]efining very broad rights subject to very specific exceptions

192. Molly Van Houweling, *Communications Copyright Policy*, 4 J. TELECOMM. & HIGH TECH. L. 97 (2005).

193. *Id.* at 112–13, 114–18.

194. *Id.* at 114–18.

195. *Id.* at 117–18.

196. Jessica D. Litman, *Copyright Legislation and Technological Change*, 68 OR. L. REV. 275, 361 (1989).

197. *Id.* at 345.

creates a systemic bias: the exceptions will quickly grow obsolete, while the increasingly less qualified rights will endure.”¹⁹⁸

With over-the-Internet retransmissions technology, this has unfolded as predicted. The solution, then, may be for the Copyright Office to update its interpretation of the Act, in line with the FCC’s attempts to be technology-neutral, and match the flexible rights of copyright holders with equally flexible limitations.¹⁹⁹

Despite the Copyright Office and the Ninth Circuit’s conclusions that Internet retransmissions do not have the same public benefits of cable, there is consumer interest in promoting broadcast retransmissions. This matches the policy goals otherwise held by the Copyright Office and FCC, as well as Congress’s intent in creating section 111. This was also the interest the Supreme Court had in mind in both *Fortnightly* and *Teleprompter* when it decided against creating copyright infringement liability in order to maintain the increased access to broadcast content through cable retransmissions. The Court broke from this tradition in *Aereo*, but it certainly did not reject copyright’s Constitutional purpose to promote innovation in science and the arts.

Compulsory licensing is, of course, not the only way to remain competitive. The Copyright Office has actually highlighted Netflix and other thriving online content providers as examples of industry newcomers that have broken into the market without the help of compulsory licensing. Other scholars share the Office’s opinion and argue against the use of compulsory licensing in general.²⁰⁰

Despite some success among Internet retransmitters, *Aereo-Aereokiller* discourages a much broader, essential pathway for technological innovation—the savvy exploitation of legal loopholes. Communications law and policy scholar Tim Wu wrote that the very evolution of information technology “is powered by disruptive innovations that upend once thriving industries,

198. *Id.* at 346.

199. *See id.* at 361.

200. *See* Robert P. Merges, *Contracting into Liability Rules: Intellectual Property Rights and Collective Rights Organizations*, 84 CALIF. L. REV. 1293, 1294 (1996) (arguing that, in place of “one-size-fits-all” compulsory licensing, intellectual property rights will “force industry participants to invest in institutions to conduct transactions”); Jiarui Liu, *Copyright Reform and Copyright Market, A Cross-Pacific Perspective*, 31 BERKELEY TECH. L.J. 1461 (2016) (listing several drawbacks of compulsory licensing, including “divesting authors of exclusive rights in copyrighted works, resulting in wasteful rent seeking, and setting arbitrary prices for copyright royalties”).

bankrupt the dominant powers, and change the world.”²⁰¹ Disruptive innovations, in turn, are powered by the creative legal and technological exploitation of loopholes. Indeed, Netflix itself started out by legal maneuvering to exploit the first-sale doctrine to rent out DVDs through the mail. It identified an underserved consumer interest, disrupted the market’s status quo, and forced the existing industry stakeholders to create more online access to on-demand content in order to remain competitive. Justice Scalia identified this issue in his passionate *Aereo* dissent:

[W]hat we have before us must be considered a “loophole” in the law. It is not the role of this Court to identify and plug loopholes. It is the role of good lawyers to identify and exploit them, and the role of Congress to eliminate them if it wishes.²⁰²

Courts should hesitate to drop roadblocks on this essential pathway to market growth. By doing so here, they have placed Internet retransmitters at a distinct disadvantage.²⁰³ Even worse, they may have discouraged other technology innovators from looking for new legal loopholes to do the same.

While the *Aereo-Aereo* web has trapped Internet retransmitters for now, its hold may be short-lived. Considering the general success of online video programming distribution and the trajectory of the FCC’s regulatory path, it is likely the market will only become friendlier to online retransmissions.

201. WU, *supra* note 159, at 20; *see also* Nilay Patel, *Can the Supreme Court Ever Get Technology Decisions Right*, VOX (June 26, 2014), <https://www.vox.com/2014/6/26/5842876/can-the-supreme-court-ever-get-technology-decisions-right> [<https://perma.cc/36SG-GARS>] (arguing that the Supreme Court missed the ingenuity of Aereo technology by declaring the issue technology agnostic).

202. *Am. Broad. Cos. v. Aereo, Inc.*, 134 S. Ct. 2498, 2517 (2014).

203. *See* Letter from Seth Greenstein, Counsel to Aereo, to Marlene H. Dortch, Sec’y, Fed. Comm’n Comm’n, MB Docket No. 12-83, at 2 (filed Oct. 10, 2014) (“Particularly in the wake of adverse judicial and agency decisions over the last several years, linear online streaming services likely cannot attract the level of investment necessary to create meaningful competition to incumbent business models without a clear path of regulatory certainty.”).

MORE BREAKING, LESS RULEMAKING: WHY CONGRESS SHOULD GO BEYOND THE COPYRIGHT OFFICE’S 1201 REPORT AND AMEND THE DMCA TO REQUIRE A NEXUS TO INFRINGEMENT

Derek Russell Chipman[†]

I. INTRODUCTION

Access. A word at the heart of the digital world, fueling debates about how to reconcile education, historical preservation, and personal autonomy with intellectual property protections of copyrighted works. “Freedom or ability to obtain or make use of something” is one definition of access.¹ It demonstrates the importance and power of this six-letter word. Much like super computer HAL 9000’s refusal to open the pod bay doors for astronaut David Bowman,² we now live in a world where the products we buy deny us full access. Our long-held collective assumption that we can tinker with our property is under assault.³ The reason for this loss of access? Section 1201, the anti-circumvention provision of a flawed piece of legislation passed by Congress in 1998, named the Digital Millennium Copyright Act.⁴ These flaws harm the public in many ways and include the erosion of fair use, unfairly allowing companies to restrict the repair market, chilling free speech, and bottlenecking of innovation.

These harms prompted the Copyright Office to conduct two studies published within the last year. One is a comprehensive review of § 1201 requested by Representative John Conyers, Jr.,⁵ and the other a report on

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1. *Access*, MERRIAM-WEBSTER’S COLLEGIATE DICTIONARY 7 (11th ed. 2009).

2. *See* 2001: A SPACE ODYSSEY (MGM 1968).

3. *See* Pamela Samuelson, *Freedom to Tinker*, 17 THEORETICAL INQUIRIES LAW 563, 566 (2016) (“Freedom to tinker has existed for millennia . . . [as] an unregulated zone within which people were at liberty to act unobstructed . . . so long as they did not harm others.”).

4. Digital Millennium Copyright Act of 1998, Pub. L. No. 105-304, 112 Stat. 2860 (codified as amended in scattered sections of Title 17 of the U.S. Code, and 28 U.S.C. § 4001).

5. Representative Conyers requested the report during the Register of Copyright’s testimony at a hearing on § 1201. *See Register’s Perspective on Copyright Review: Hearing Before the H.*

software-enabled consumer products requested by Senators Chuck Grassley and Patrick Leahy.⁶ This Note focuses on the Copyright Office's § 1201 report and argues that the recommendations for reform reached by the Copyright Office in their report on § 1201 are insufficient to curb the harms to the public caused by the anti-circumvention prohibition. By exploring the history of the DMCA to determine Congress's intent and comparing this to the present application of § 1201 by copyright holders, this Note concludes that the Copyright Office's proposed reforms offer only incremental band-aids to remedy these harms. Instead, Congress should amend § 1201 to require a nexus to copyright infringement for liability, which means that circumventing an access control must be linked to copyright infringement. This simple solution is rejected in the Office's Report. By linking § 1201 to copyright infringement, Congress can correct these unintended harms in a very simple way.. Such an amendment would clear the confusion caused by a split among the circuits on this issue. The DMCA "arguably represents the most dramatic change in the history of U.S. copyright law."⁷ It was enacted in 1998 with the hope of "bringing U.S. Copyright law squarely into the digital age," to balance the emerging power of the Internet as a global digital marketplace with the protection of copyrighted works in the face of unparalleled access and distribution.⁸ Congress hoped § 1201 of the DMCA would alleviate copyright holders' piracy concerns about putting their works online.⁹ The basis of these fears was the power to instantaneously copy and transmit files that the information age had recently given to the public. Congress wanted § 1201 to not only protect copyright holders, but also foster a digital marketplace for a variety of digital formats available for consumers.¹⁰

Section 1201 states that "[n]o person shall circumvent a technological measure that effectively controls access to a work protected under this title."¹¹

Comm. on the Judiciary, 114th Cong. 49 (2015); U.S. COPYRIGHT OFFICE, SECTION 1201 OF TITLE 17: A REPORT OF THE REGISTER OF COPYRIGHTS 3 & n.23 (2017), <https://www.copyright.gov/policy/1201/section-1201-full-report.pdf> [<https://perma.cc/57NP-E9MS>] [hereinafter SECTION 1201 REPORT].

6. U.S. COPYRIGHT OFFICE, SOFTWARE-ENABLED CONSUMER PRODUCTS: A REPORT OF THE REGISTER OF COPYRIGHTS i & n.2 (2016), <https://www.copyright.gov/policy/software/software-full-report.pdf> [<https://perma.cc/G59U-AUC5>] [hereinafter SOFTWARE REPORT]. This report does not directly deal with the DMCA, but instead analyzes the problems of software-enabled products under the Copyright Act.

7. TARLETON GILLESPIE, WIRED SHUT: COPYRIGHT AND THE SHAPE OF DIGITAL CULTURE 177 (2007).

8. S. REP. NO. 105-190, at 2 (1998).

9. See SECTION 1201 REPORT, *supra* note 5, at i.

10. See *id.*

11. 17 U.S.C. § 1201(a)(1)(A) (2012).

Technological Protection Measures (TPMs) can be thought of as digital locks and include, for example, the use of encryption to protect a digital work.¹² Content producers encrypted their digital offerings prior to the passage of the DMCA, but this protection was a “speed bump” rather than a true obstacle because many users possessed the expertise to decrypt and thus copy freely without repercussion.¹³ This decryption led media companies to lobby for the inclusion of an anti-circumvention provision that made the act of accessing a protected work, without the permission of the copyright holder, illegal.¹⁴

The anti-circumvention provision found in § 1201 goes beyond the historical scope of copyright law,¹⁵ which grants copyright holders specific rights such as the exclusive right to reproduce and distribute their works.¹⁶ The Copyright Office credits § 1201 as “[having] played a pivotal role in the development of the modern digital economy,”¹⁷ but leading copyright scholars have been less enthusiastic in their assessments. For example, David Nimmer states that “nothing compares for sheer formal defects to the [DMCA].”¹⁸ Not to be outdone, William Patry says the DMCA has caused “the copyright market . . . to resemble the planned Soviet economies of the early twentieth century, but the market planning is done by corporations. . . .”¹⁹ Finally, Paul Goldstein writes that “the anti-circumvention proposals might more accurately be called anti-copyright law, for they challeng[e] the principle that has been at the center of copyright from its beginning—that the rule of law is a fairer and more efficient means for protecting literary and artistic works than are physical

12. See 17 U.S.C. § 1201(a)(3)(A) (2012) (defining circumvention as “decrypt[ing] an encrypted work”).

13. PAUL GOLDSTEIN, *INTELLECTUAL PROPERTY* 157 (2007).

14. See *id.*

15. See Peter S. Menell, *Envisioning Copyright's Digital Future*, 46 N.Y.L. SCHL. L. REV. 63, 135 (2003) (“[T]he DMCA goes beyond traditional Copyright approaches in order to address the threat of unauthorized reproduction and distribution . . . in the Digital Age.”).

16. These rights are codified in the Copyright Act of 1976, 17 U.S.C. § 106 (2012), and include the exclusive rights of reproduction, the preparation of derivative works, distribution, public performance, and the right to perform sound recordings publicly via digital audio transmission.

17. SECTION 1201 REPORT, *supra* note 5, at 1.

18. DAVID NIMMER, *COPYRIGHT ILLUMINATED: REFOCUSING THE DIFFUSE U.S. STATUTE* 114 (2008).

19. WILLIAM PATRY, *MORAL PANICS AND THE COPYRIGHT WARS* 164 (2009). A leading copyright scholar and treatise author, Patry is also a Senior Copyright Counsel to Google which makes his colorful opinions all the more enjoyable. See *id.* at xii. This background adds a layer of irony when reading quotes like “Corporatism was previously thought to have reached its zenith during Mussolini’s Fascist Italy, but with the DMCA it is enjoying a healthy resurgence.” *Id.* at 164.

barriers.”²⁰

Despite these poor reviews, the DMCA has had no substantive revisions since its enactment.²¹ TPMs are now used by companies in a variety of consumer products beyond what Congress could have envisioned twenty years ago. More and more consumer products contain software and are often networked together, forming an Internet of Things (IoT) that permeates everyday life. From coffee makers to printers, to tractors, a growing number of consumer products have embedded software.²² This embedded software often functions as a TPM, restricting user access in order for the manufacturer to dictate the terms of the product’s use.²³ These products are thus brought within the reach of the DMCA, something Congress did not intend. This allows manufacturers to sue when TPMs are circumvented, even for diagnosis or repair, allowing companies to limit consumer access to repair options.

This Note is organized into four parts. Part II discusses the key elements of § 1201, then goes on to describe an early attempt at codifying anti-circumvention laws in the early 1990s. The Section continues by detailing the DMCA’s legislative history before ending with a brief summary of the rulemaking process. Part III provides an overview of harms and concerns raised following § 1201’s enactment and the rise of Napster. Part IV critiques the report, focusing on why a statutory nexus is needed, and considers the harms faced by the public due to the DMCA. Part V concludes this Note with a call for Congress to act now and amend the DMCA to require a nexus to copyright infringement for anti-circumvention liability under § 1201.

II. BACKGROUND

The DMCA has a colorful history, from its origins in an influential task force, to the hard-fought lobbying efforts and compromises of its passage. It came into existence at a time when technological revolution made both copying and distribution infinitely easier, disrupting the intellectual property landscape. This Part begins with a statutory breakdown of 1201. It then

20. PAUL GOLDSTEIN, *COPYRIGHT’S HIGHWAY: FROM GUTENBERG TO THE CELESTIAL JUKEBOX* 175 (rev. ed. 2003).

21. See SECTION 1201 REPORT, *supra* note 5, at 6.

22. See SOFTWARE REPORT, *supra* note 6, at i (“One result of the spread of software is that consumers now routinely use software-enabled products for everything from adjusting the thermostats in their homes, to driving to work, to getting a midnight snack from the fridge.”).

23. See Cory Doctorow, *A Clinton-era Tech Law Has Quietly, Profoundly Redefined the Very Nature of Property in the IoT Age*, BOING BOING (Feb. 21, 2017), <https://boingboing.net/2017/02/21/a-clinton-era-tech-law-has-qui.html> [<https://perma.cc/6NXE-8GC6>].

explores its early origins as part of the National Information Infrastructure initiative; discusses the DMCA's legislative history; and traces § 1201's impact from its passage to the present. Far from being "a well-balanced package of proposals that address the needs of creators, consumers, and commerce in the digital age and well into the next century,"²⁴ the DMCA has proven to be unfairly biased in favor of content owners, at the expense of the public.

A. STATUTORY BREAKDOWN OF § 1201

Section 1201 is dense and jargon-heavy. But understanding some of its intricacies is necessary to comprehend the breadth of its reach. This Section focuses on three areas of § 1201: (1) the "tri-partite" anti-circumvention ban,²⁵ (2) the permanent exemptions, and (3) the rulemaking process for temporary exemptions. These three components help to illuminate the underlying policy goals of the DMCA and Congress's intent in passing the law.

1. *The Tripartite Anti-Circumvention Ban*

The tripartite anti-circumvention ban prohibits the unauthorized access of a copyrighted work by bypassing a TPM or providing assistance to others who do so. The first of § 1201's three prohibitions states that, "[n]o person shall circumvent a technological measure that effectively controls access to a work protected under this title."²⁶ As Nimmer explains, "[t]he statute bars one whom technology 'locks out' of a copyrighted work from 'breaking into' it."²⁷ Access controls are like digital locks: TPMs designed to control access to copyrighted works, for example, a paywall requiring a password on a news website or an authentication code in a video game console to prevent the use of pirated software.²⁸ Circumvention is the act of breaking or bypassing these digital locks, with the important limitation that the lock be "effective." Effective does not mean infallible. Simply because a digital lock can be broken does not render it outside the scope of protection.²⁹

The second and third prohibitions within the tripartite anti-circumvention ban are known as the anti-trafficking provisions and apply to third parties who assist the act of circumvention. Section 1201(a)(2) bans the manufacture and trafficking of devices, services, and other similar technology for which the

24. S. REP. NO. 105-190, at 69 (1998).

25. I borrow this term from DAVID NIMMER, COPYRIGHT ILLUMINATED: REFOCUSING THE DIFFUSE U.S. STATUTE 321 (2008).

26. 17 U.S.C. § 1201(a)(1)(A) (2012).

27. MELVILLE B. NIMMER & DAVID NIMMER, NIMMER ON COPYRIGHT § 12A.03[1][A] (2017).

28. See, e.g., SECTION 1201 REPORT, *supra* note 5, at 6.

29. See NIMMER & NIMMER, *supra* note 27, at § 12A.03[1][A] (2017).

primary purpose is to bypass access controls.³⁰ Similarly, § 1201(b)(1) bans the manufacture and trafficking of devices and technologies that circumvent a TPM that “effectively protects a right of a copyright owner under this title.”³¹ The rights this section refers to are the rights traditionally granted to copyright holders, such as the exclusive right to reproduce copies of the copyrighted work.³² Thus, both sections have become known as the anti-trafficking provisions.³³

2. *Permanent Exemptions*

The DMCA contains seven permanent exemptions from § 1201 liability as codified in §§ 1201(d)–(j).³⁴ These cover non-profit libraries, archives, and educational institutions,³⁵ law enforcement, intelligence, and other government activities.³⁶ Congress also included exemptions for reverse engineering,³⁷ encryption research,³⁸ minors,³⁹ the protection of personal information,⁴⁰ and security testing⁴¹ due to concerns about fair use, privacy, security, etc.

3. *Rulemaking*

The DMCA also sets forth a triennial rulemaking proceeding in § 1201(a)(1)(c) that allows the public to petition the Copyright Office for three-year temporary exemptions from liability. However, this rulemaking proceeding only grants temporary exemptions from the anti-circumvention provision and does not cover the anti-trafficking provisions.⁴² The Librarian

30. This is interesting because this shifted “the focus of the Copyright Act . . . from its traditional role regulating conduct into a stance that . . . control[s] the manufacture of devices.” *Id.* § 12A.03; see also PATRY, *supra* note 19, at 161–62 (noting that § 1201 upset the former technological neutrality of copyright law in favor of copyright holders, equating the DMCA’s passage to Caesar’s crossing of the Rubicon and colorfully calling the DMCA “the twenty first century equivalent of letting copyright owners put a chastity belt on someone else’s wife”).

31. 17 U.S.C. § 1201 (b)(1) (2012).

32. See 17 U.S.C. § 106(1) (2012).

33. See SECTION 1201 REPORT, *supra* note 5, at 10–14.

34. For an overview of these exemptions, see the table titled “§ 1201 Permanent Exemptions” in SECTION 1201 REPORT, *supra* note 5, at 7.

35. See 17 U.S.C. § 1201(d) (2012).

36. See § 1201(e).

37. See § 1201(f).

38. See § 1201(g).

39. See § 1201(h).

40. See § 1201(i).

41. See § 1201(j).

42. See § 1201(a)(1)(E) (“Neither the exception under subparagraph (B) from the applicability of the prohibition contained in subparagraph (A), nor any determination made in a rulemaking conducted under subparagraph (C), may be used as a defense in any action to

of Congress may grant the temporary exemptions after the Register of Copyrights makes recommendations based on public petitions. This process begins with an announcement published in the Federal Register welcoming petitions.⁴³ Once the petitions are submitted, they are reviewed and posted for public comment. The Copyright Office then groups selected petitions into proposed classes that undergo three rounds of public comments: (1) proponents' public comments in support of petition, (2) opponents' comments in opposition, and (3) a reply comment by proponents.⁴⁴

B. ORIGINS: THE NII COPYRIGHT PROTECTION ACT & WIPO

To understand the reasoning behind the DMCA, it helps to understand how it came about. We must first travel to that distant time before Facebook, before Google, even before Tom Hank's star turn in *Sleepless in Seattle*, to 1992 when the "Information Superhighway" was still used to discuss the world wide web. Promised by the Clinton campaign as a job creator ushering in a new era of American economic competitiveness,⁴⁵ the Information Superhighway also fit the long-held agenda of information infrastructure improvements advanced by Vice President Al Gore during his tenure as a Senator.⁴⁶ After winning the Presidential election, the Clinton administration moved quickly to make good on its promise with enthusiastic Congressional support. The creatively titled "Information Infrastructure Taskforce" (IITF)⁴⁷ was established to formulate and implement policies for the development of the necessary information infrastructure, in order to make the concept of a digital marketplace a reality.⁴⁸

The Information Policy Committee was tasked to formulate policy regarding copyrighted content and housed within the IITF. Bruce Lehman, a

enforce any provision of this title other than this paragraph."); SECTION 1201 REPORT, *supra* note 5, at 20–21.

43. For the current rulemaking announcement, see Exemptions to Permit Circumvention of Access Controls on Copyrighted Works, 82 Fed Reg. 49,550 (Oct. 26, 2017) (to be codified at 37 C.F.R. pt. 201).

44. See SECTION 1201 REPORT, *supra* note 5, at 24–25. See also *Rulemaking Proceedings Under Section 1201 of Title 17*, U.S. COPYRIGHT OFFICE, <https://www.copyright.gov/1201> [<https://perma.cc/WK32-T646>].

45. JESSICA LITMAN, DIGITAL COPYRIGHT 89 (2006); William J. Broad, *Clinton to Promote High Technology, with Gore in Charge*, N.Y. TIMES (Nov. 10, 1992), <https://www.nytimes.com/1992/11/10/science/clinton-to-promote-high-technology-with-gore-in-charge.html> [<https://perma.cc/2KT9-PMTG>].

46. Thomas C. Greene, *Net Builders Khan, Cerf Recognize Al Gore: Grateful for the Inventor's Genius*, REGISTER (Oct. 2, 2000, 4:19 PM), https://www.theregister.co.uk/2000/10/02/net_builders_kahn_cerf_recognise [<https://perma.cc/LF4F-VFUR>].

47. For more information about the group, see generally RONALD H. BROWN ET AL., THE NATIONAL INFORMATION INFRASTRUCTURE: AGENDA FOR ACTION (1993).

48. See LITMAN, *supra* note 45, at 89–90.

former media industry lobbyist and then Commissioner of Patents and Trademarks, led the Committee.⁴⁹ While composed of governmental officials from a variety of executive agencies, Lehman's senior staff consisted of former copyright lobbyists from the computer and music industry with close contacts to private sector lobbyists. Members of the Committee complained in private that they were merely figureheads while Lehman and his senior staff truly called the shots.⁵⁰

In 1995 the Lehman Group delivered their report to Congress, which served as the basis for the National Information Infrastructure (NII) Copyright Protection Act.⁵¹ The proposed Act contained similar bans on trafficking to the current provisions found in the DMCA, but was much broader with no permanent exemptions.⁵² However, the effort stalled in both houses of Congress due to concerns about fair use from a coalition of law professors, technologists, and libraries.⁵³ The software industry and Online Service Providers (OSPs) also opposed the bill due to fears of vicarious liability from users' activities.⁵⁴

Undeterred, Lehman instead used the World Intellectual Property Organization (WIPO) negotiations to force Congress to enact the provisions

49. *See id.* at 90–91; Pamela Samuelson, *The U.S. Digital Agenda at WIPO*, 37 VA. J. INT'L L. 369, 379 (1997).

50. *See* LITMAN, *supra* note 30, at 90. The story of the Lehman Group's influence and pro-industry stance has been detailed in various works and often criticized. For more detail on the Lehman group's influence on the DMCA, *see id.* at 89–102, 122–28; GILLESPIE, *supra* note 7, at 36–40, 174–76; BILL D. HERMAN, *THE FIGHT OVER DIGITAL RIGHTS: THE POLITICS OF COPYRIGHT AND TECHNOLOGY* 38–43 (2013); PATRICIA AUFDERHEIDE & PETER JASZI, *RECLAIMING FAIR USE: HOW TO PUT BALANCE BACK IN COPYRIGHT* 43–44 (2011); Samuelson, *supra* note 49, at 379–80. As these sources discuss, the Lehman Group produced a controversial preliminary report, known as “the White Paper” and a final report advocating strong anti-circumvention provisions that became the basis for § 1201 of the DMCA.

51. *See* GILLESPIE, *supra* note 7, at 175; *see also* NII Copyright Protection Act of 1995, S. 1284, 104th Cong. (Senate bill); NII Copyright Protection Act of 1995, H.R. 2441, 104th Cong. (House bill). As both bills are identical, I will cite only to the Senate bill. *See generally* RONALD H. BROWN ET AL., *INFO. INFRASTRUCTURE TASK FORCE, INTELLECTUAL PROPERTY AND THE NATIONAL INFORMATION INFRASTRUCTURE: A PRELIMINARY DRAFT OF THE REPORT OF THE WORKING GROUP ON INTELLECTUAL PROPERTY RIGHTS* (1994) [hereinafter *THE GREEN PAPER*]; RONALD H. BROWN ET AL., *INFO. INFRASTRUCTURE TASK FORCE, INTELLECTUAL PROPERTY AND THE NATIONAL INFORMATION INFRASTRUCTURE: THE REPORT OF THE WORKING GROUP ON INTELLECTUAL PROPERTY RIGHTS* (1995) [hereinafter *THE WHITE PAPER*].

52. *See* NII Copyright Protection Act of 1995, S. 1284, 104th Cong. §§ 1201–1202.

53. *See* LITMAN, *supra* note 45, at 122–28; GILLESPIE, *supra* note 7, at 175–76; AUFDERHEIDE & JASZI, *supra* note 50, at 43–44; HERMAN, *supra* note 50, at 41–42.

54. *See* LITMAN, *supra* note 45, at 127–28.

of the failed bill.⁵⁵ However, Lehman only succeeded in enacting a watered-down version of his proposals, including a weak anti-circumvention provision, through WIPO.⁵⁶ Equipped with the WIPO treaty, Lehman returned to Congress stating that the weak WIPO anti-circumvention proposals exemplified the need for the United States to take the lead in combating digital piracy.⁵⁷ On Lehman's third try, he successfully managed to get his proposals submitted as part of the WIPO implementation bill in the Senate that would eventually become the DMCA.⁵⁸

C. PASSING THE DMCA

The DMCA was introduced in the Senate in May of 1997, voted out of committee within the day, and passed a week later 99–0.⁵⁹ Why did this Senate bill move through so quickly while Lehman's prior bill had died in committee? One major reason was the fact that OSPs, critical opponents of the prior NII Copyright Act, came to a compromise with copyright holders to mitigate potential vicarious liability for their users' infringing acts.⁶⁰ Undeterred, the existing coalition of consumer electronic makers, law professors, consumer groups, libraries, and other opponents who had not cut a deal took the battle to the House.⁶¹ This coalition found Congressional allies, such as Representative Rick Boucher, who introduced a more consumer-friendly

55. *See id.* at 129 (“Opponents of the White Paper legislation perceived [this] effort . . . as a sneaky trick.”). For a detailed overview of the United States’ goals and agenda at the WIPO treaty, see Samuelson, *supra* note 49. For the specifics of Lehman’s plan at WIPO regarding his NII Copyright policy see *id.* at 427–34. Regarding the NII Copyright Act’s stalling in Congress, Samuelson notes that “[Lehman’s] response was to redouble [his] efforts . . . [p]erhaps [because] he could get in Geneva an implementation of the digital agenda that he had [been unable] to get from Congress. This, then, became Lehman’s second order strategy for accomplishing [his] digital agenda.” *Id.* at 429.

56. *See* LITMAN, *supra* note 45, at 129–30 (“[T]he treaty . . . incorporated few of Lehman’s ambitious proposals, and even those were substantially diluted.”); Samuelson, *supra* note 49, at 414 (“Facing the prospect of little support for the . . . [anti-circumvention proposal], the U.S. delegation was [forced] to find a national delegation willing to introduce a compromise provision brokered by U.S. industry groups that . . . simply require[d] states to have adequate . . . legal protection against circumvention . . . a delegation was found, and the final treaty embodied this provision . . .”).

57. *See* LITMAN, *supra* note 45, at 134. Professor Litman notes that “Representatives of the motion picture and recording industries backed up [Lehman’s] arguments with prophecies of widespread international piracy unless Congress acted quickly.” *Id.*

58. *See id.* at 135–36; Digital Millennium Copyright Act of 1998, S. 2037, 105th Cong. (1997).

59. *See* LITMAN, *supra* note 45, at 136–37.

60. *Id.* at 127–29, 135–37.

61. *Id.* at 137.

version of the WIPO implementation bill than the one in the Senate.⁶² Despite opposition by industry proponents of the Senate bill, the Commerce Committee held a hearing on the bill.⁶³ In the hearing, opponents raised their concerns regarding fair use,⁶⁴ and industry proponents countered with claims of unchecked piracy.⁶⁵ The committee assured the content industry that they understood the need to pass the bill.⁶⁶ But the Committee also stated that the coalition raised valid concerns about the version passed in the Senate, which contained an absolute ban on circumvention with no exceptions for fair use.⁶⁷ The Committee indicated that the proponents of the bill were being unreasonable and urged further negotiation between the two sides, angering the content industry who expected the bill to pass quickly.⁶⁸

62. *Id.* at 137–38. See Digital Era Copyright Act, H.R. 3048, 105th Cong. (1997). It is important to note that this bill’s version of § 1201 textually required the nexus to infringement requirement that was later read into the present version of the DMCA by the Federal Circuit’s *Chamberlain* decision, which this Note discusses *infra* in Section III.D. “No person, *for the purpose of facilitating or engaging in an act of infringement*, shall engage in conduct so as knowingly to remove, deactivate or otherwise circumvent the application or operation of any effective technological measure used by a copyright owner to preclude or limit reproduction of a work[.]” *Id.* § 1201(a) (emphasis added). For the House bill that would later become the DMCA, see Digital Millennium Copyright Act, H.R. 2281, 105th Cong. (1997).

63. See LITMAN, *supra* note 45, at 137–38.

64. See, e.g., *Copyright Treaties Implementation Act: Hearing Before the Subcommittee on Telecommunications, Trade, and Consumer Protection of the House Committee on Commerce*, 105th Cong. 71 (1998) (“[The first issue with the bill] is it creates the right of new access that includes none of the limitations or exceptions that are applied to proprietary rights and current law. This unconstrained new right would sharply limit the ability of faculty and students to use information services.”) (statement of Charles E. Phelps speaking on behalf of the Association of American Universities).

65. The arguments by the bill’s proponents mainly relied on stoking fears of digital piracy and WIPO non-compliance. See, e.g., *id.* at 57 (“[The proposals by the opponents] serv[e] mainly to provide a roadmap to keep the purveyors of ‘black boxes’ and other circumvention devices and services in business . . . [t]heir adoption will reduce the legal protection for these . . . technologies to an inadequate and ineffective level, thus falling short of the WIPO treaties’ minimum standards.”) (statement of Steven J. Metaltiz representing the Motion Picture Association of America).

66. An example of the subcommittee’s sympathetic views to the content industry is the following:

[T]he digital environment poses a unique threat to the rights of copyright owners, and . . . necessitates protection against devices that undermine copyright interests. [Unlike] the analog experience, digital technology enables pirates to reproduce and distribute perfect copies . . . at virtually no cost . . . to the pirate. As technology advances, so must our laws.

H.R. REP. NO. 105-551, pt. 2, at 25 (1997).

67. See Digital Millennium Copyright Act of 1998, S. 2037, 105th Cong. (1997) (no exemptions listed).

68. See LITMAN, *supra* note 45, at 137–40.

These compromises included the current DMCA's exceptions for libraries and encryption research to appease software industry demands. However, the House was persuaded by the coalition's concerns to insert both a two-year moratorium period for anti-circumvention violations and to require an impact study on the potential effects of the circumvention ban.⁶⁹

The Senate, however, refused to pass the House bill, insisting on its own version with the current Congress ending in only a few weeks. This led to a series of last-minute deals, and the final version was a Frankenstein's Monster of different bits and pieces of both the House and Senate bills frantically stitched together. Both sides of the aisle wanted to get the bill passed before the election recess, and they succeeded.⁷⁰ President Clinton signed the DMCA into law on October 28, 1998, which had ballooned into a nearly thirty-thousand-word document across fifty pages.⁷¹

III. CONCERNS RAISED BY § 1201

The concerns that were raised by both the media industry and the public interest groups during § 1201's passage happened to be prescient. The meteoric rise of Napster all but confirmed the industry's fears, with its user base gleefully sharing music and other copyrighted materials. On the other hand, the fears of public harm and erosion of fair use raised by § 1201's opponents would also come to this pass. This Part highlights these concerns and reveals the public's antipathy to § 1201 as well as the harms, through chilled or outright prohibition of traditional fair uses, faced by the public. Rejecting a nexus requirement between § 1201 liability and copyright infringement is the primary cause of both the public's antipathy towards copyright generally and this erosion of traditional fair uses.

A. THE SUM OF ALL FEARS NAPSTER & THE RISE OF FILE SHARING

The content industry's fears about digital piracy may have seemed overblown, but in 1999, shortly after the DMCA's passage, Napster, a peer-to-peer file-sharing network, launched.⁷² It was the sum of all the content industry's fears and an enormously popular hit with the nation's youth, despite

69. See Pamela Samuelson, *Intellectual Property and the Digital Economy: Why the Anti-Circumvention Regulations Need to Be Revised*, 14 BERKELEY TECH. L.J. 1, 41 (1999); LITMAN, *supra* note 45, at 141.

70. See LITMAN, *supra* note 45, at 143.

71. See *id.*

72. See Richard Nieva, *Ashes to Ashes, Peer to Peer: An Oral History of Napster*, FORTUNE (Sept. 5, 2013), <http://fortune.com/2013/09/05/ashes-to-ashes-peer-to-peer-an-oral-history-of-napster> [<https://perma.cc/A69M-AT2M>].

being sued out of existence in 2001.⁷³ Napster connected users to each other, allowing them to swap files, mostly music. At its peak, it had 70 million users.⁷⁴ Napster seemed to cement the need for the DMCA in Congress's eyes as numerous hearings were held and fears of the death of the music industry were used to push for even more restrictive measures.⁷⁵

While this seemed to justify the DMCA to content owners and most policy makers, as the Internet grew to everyday ubiquity, the public became increasingly active in protecting it from content industry restrictions. Compared to the original enactment of § 1201, new attempts of heavy industry lobbying to restrict user's rights were met with much more public attention and activism. Perhaps Napster was the "crack-cocaine" of internet growth,⁷⁶ and the public's illicit addiction to Napster and subsequent withdrawal caused it to view the Internet as a commons in need of protection. Perhaps it was the growing Internet's ability to connect specialized news sources and advocacy groups to more people. Or perhaps it was simply the epiphany of the convenience of downloading the one song you wanted instead of paying \$15 for the whole CD.⁷⁷ Regardless, despite the content industries pumping out millions in Public Service Announcements, the public began to view copyright law and the DMCA with increasing distaste and with a growing appetite for online content.⁷⁸

73. *See id.*

74. *See id.*

75. *See, e.g.*, Protecting Intellectual Rights Against Theft and Expropriation Act of 2004 (Pirate Act), S. 2237, 108th Cong. (2004); Stop Online Piracy Act (SOPA), H.R. 3261, 112th Cong. (2011); PROTECT IP Act (PIPA), S. 968, 112th Cong. (2011). The content industry faced significant opposition, particularly as the following bills remain unenacted with SOPA being the focus of much public attention and protest. *See*, Chenda Ngak, *SOPA and PIPA Internet Blackout Aftermath, Staggering Numbers*, CBS NEWS (Dec. 19, 2012), <https://www.cbsnews.com/news/sopa-and-pipa-internet-blackout-aftermath-staggering-numbers> [<https://perma.cc/Q75B-ZCA8>].

76. *See* LAWRENCE LESSIG, *FREE CULTURE: HOW BIG DATA USES TECHNOLOGY AND THE LAW TO LOCK DOWN CULTURE AND CONTROL CREATIVITY* 296 (2004).

77. *See* Laura Sydell, *Napster: The File Sharing Service That Started It All?*, NPR (Dec. 21, 2009), <https://www.npr.org/2009/12/21/121690908/napster-the-file-sharing-service-that-started-it-all> [<https://perma.cc/JXJ9-JND7>].

78. For a discussion of copyright's low approval rating and possible solution, see Peter S. Menell, *This American Copyright Life: Reflections on Re-equilibrating Copyright for the Digital Age*, 61 J. COPYRIGHT SOC'Y U.S.A. 235, 240–44, 250–69 (2014). In fact, one study found that increasing the severity of punishment against file-shares brings about not only stronger anti-copyright views but an increase in infringement as well. *See* Ben Depoorter, Alain Van Hiel, & Sven Vanneste, *Copyright Backlash*, 84 S. CAL. L. REV. 1251, 1280 (2011).

B. HOW § 1201 HARMS THE PUBLIC

The DMCA was lobbied for heavily by Hollywood for the introduction of its DVD TPM.⁷⁹ Films are traditionally the kind of material protected by copyright, and the kind of material Congress considered when drafting the DMCA.⁸⁰ It cannot be said, however, that Congress meant for auto owners to be considered mere licensees unable to repair their own vehicles,⁸¹ for John Deere to gain a monopoly on the repair of its tractors by embedding software in its products,⁸² or for consumers to be forced to buy one brand of coffee pod because of the software in their coffee makers.⁸³

These harms can be broadly broken into two categories: the rise of software products in everyday consumer goods interfering with traditional rights of ownership⁸⁴ and the evisceration of traditional fair uses in copyright law,⁸⁵ such as scholarship, research, and preservation, due to a work being digital and therefore containing TPMs.⁸⁶ While these harms are referenced and

79. See PETER DECHERNEY, *HOLLYWOOD'S COPYRIGHT WARS: FROM EDISON TO THE INTERNET* 209–11 (2012).

80. See *WIPO Copyright Treaties Implementation Act; and Online Copyright Liability Limitation Act: Hearing Before the Subcom. on Courts and Intellectual Property of the Comm. of the Judiciary*, 105th Cong. (1998) at 79 (“This Committee understands with appreciative clarity the ascending curve of global revenues produced by American copyright industries who deal in intellectual property: revenues emerging from an international appetite for American computer software, videogames, movies, television programs, home videos, books, [and] musical recordings.”) (statement of Jack Valenti, President and CEO of the Motion Picture Association of America).

81. See Cory Doctorow, *GM Says You Don't Own Your Car, You Just License It*, BOING BOING (May 21, 2015), <https://boingboing.net/2015/05/21/gm-says-you-dont-own-your-ca.html> [<https://perma.cc/6NNJ-ZRVD>] (“GM has joined with John Deere in asking the government to confirm that you literally cannot own your car because of the software in its engine.”).

82. See Kyle Wiens, *We Can't Let John Deere Destroy the Idea of Ownership*, WIRED (Apr. 21, 2015), <https://www.wired.com/2015/04/dmca-ownership-john-deere> [<https://perma.cc/5LVB-TB7Y>].

83. See John Dzieza, *Keurig's Attempt to 'DRM' Its Coffee Cups Totally Backfired*, VERGE (Feb. 5, 2015), <https://www.theverge.com/2015/2/5/7986327/keurigs-attempt-to-drm-its-coffee-cups-totally-backfired> [<https://perma.cc/8HM9-B2VH>].

84. These traditional rights include the right to repair, modify, sell, and dispose of property. For a good summary of how the DMCA interacts with these rights, see Samuelson, *supra* note 3, at 589–97.

85. Fair use is codified at 17 U.S.C. § 106 (2015). For a discussion of how the DMCA harms fair use, see generally Katherine Sender & Peter Dechery, *Defending Fair Use in the Age of the Digital Millennium Copyright Act*, 1 INT'L J. COMM. 136 (2007).

86. See Cory Doctorow, *EFF vs IoT DRM, OMG!*, ELECTRONIC FRONTIER FOUND.: DEEPLINKS BLOG (Feb. 7, 2018), <https://www.eff.org/deeplinks/2018/02/eff-vs-iot-drm-omg> [<https://perma.cc/S6YJ-ZJFV>] (stating that “[t]oday, [TPMs] have proliferated to every device with embedded software: cars, tractors, pacemakers, voting machines, phones, tablets, and, of course, ‘smart speakers’ used to interface with voice assistants”).

used throughout this Note, the purpose of this Part is to merely introduce them to the reader. Those wishing to dive deeper into these specific harms have a wealth of literature to explore and this Note contains many citations for the reader to explore more. These harms show why the Copyright Office's recommendations are insufficient; rather than accept these recommendations, Congress should amend the DMCA with a statutory amendment requiring a nexus between circumvention and copyright infringement.⁸⁷

IV. GRAPPLING WITH § 1201

The toxic effects of the DMCA on consumer goods and traditional fair uses, such as research and criticism, have not only created a push for exemptions and state-level bills granting consumers a right to repair,⁸⁸ but also limited legislative action by Congress.⁸⁹ These efforts show that there is some interest among lawmakers to remedy the harms created by the DMCA and that they understand that the erosion of ownership and consumer choice by software-embedded products needs to end. Both public outcry⁹⁰ and the inherent need to resolve the aging circuit split⁹¹ may be pushing these members of Congress to seek reform. It is important to note that, as a national law that regulates and impacts commerce, the DMCA should be uniformly applied. Congress, not the Courts, are in the best position to clarify their intent behind the DMCA.

87. See *infra* Section IV.B.

88. See SECTION 1201 REPORT, *supra* note 5, at 88 (noting that “[t]he Copyright Office received numerous comments advocating for statutory exemptions to . . . fix obsolete, damaged, or malfunctioning TPMs” and that “[g]rowing public interest in repair activities is further reflected by the right-to-repair bills currently pending in several states”).

89. See, e.g., Unlocking Consumer Choice Act, Pub. L. No. 113-144, 128 Stat. 1751 (2014) (passed to allow consumers to “unlock” their phones from a carrier’s network). This was passed due to a temporary exemption which allowed this activity to unexpectedly not be renewed by the Copyright Office despite successful passage in two prior Rulemakings. See SECTION 1201 REPORT, *supra* note 5, at 34. For a more comprehensive, unenacted bill that would have codified a nexus requirement, see Unlocking Technology Act of 2015, H.R. 1587, 114th Cong. § 2(a)(1)(A)–(B). This bill was also introduced in 2013 but has yet to make it out of committee. See SECTION 1201 REPORT, *supra* note 5, at 42. A more limited legislative reform bill aimed at the rulemaking process has also been introduced, see Breaking Down Barriers to Innovation Act of 2015, H.R. 1883, 114th Cong. For a helpful overview of this act, see Mitch Stoltz, *New “Breaking Down Barriers to Innovation Act” Targets Many of DMCA Section 1201’s Problems*, ELECTRONIC FRONTIER FOUND.: DEEPLINKS BLOG (Apr. 20, 2015), <https://www.eff.org/deeplinks/2015/04/new-breaking-down-barriers-innovation-act-targets-many-dmca-section-1201s-problems> [<https://perma.cc/KS9Z-TSXL>].

90. See *supra* note 78.

91. See *infra* Section IV.A.

A. THE COURTS

Copyright specialists eagerly awaited a court's interpretation of § 1201 following the initial two-year moratorium on the anti-circumvention provisions. However, the courts came out with incongruous rulings regarding § 1201. In 2001, the Second Circuit was the first circuit court to interpret 1201 and gave an expansive interpretation of the circumvention and trafficking prohibitions in *Corley*.⁹² Three years later, the Federal Circuit held in *Chamberlain*, which concerned garage door opener software, that a nexus to infringement was required for liability under § 1201.⁹³ Also in 2004, the Sixth Circuit seemed to agree with the Federal Circuit in dicta in a dispute over circumvention of a TPM involving ink cartridges.⁹⁴ While DVDs and video games were foreseeable at the time of the DMCA's passage, the court correctly found it doubtful that Congress foresaw the DMCA being litigated over consumer goods like ink cartridges.⁹⁵ The case law over § 1201 was complicated further in 2010, when the Ninth circuit openly and vehemently split with the Federal Circuit's interpretation of § 1201 in a case involving circumvention of a cheat detection system in an online video game.⁹⁶ The Ninth circuit rejected the Federal and Sixth's nexus requirement, stating that § 1201 created a new property right independent of copyright. As the above

92. *Universal City Studios, Inc. v. Corley*, 273 F.3d 429, 453–58 (2d Cir. 2001) (upholding the trial court's injunction of posting and linking to the circumvention program DeCSS). This was especially troubling given that Corley was a journalist, making Patry's commentary, *supra* note 19, all the more accurate.

93.

Chamberlain . . . has failed to show. . . the critical nexus between access and protection. Chamberlain neither alleged copyright infringement nor explained how the access provided by the [defendant's] transmitter facilitates . . . infringement . . . There can therefore be no reasonable relationship between the access . . . gain[ed] to Chamberlain's copyrighted software when using Skylink's . . . transmitter and the protections [of] the Copyright Act.

See Chamberlain Grp., Inc. v. Skylink Tech., Inc. 381 F.3d 1178, 1204 (Fed. Cir. 2004).

94. *See Lexmark Int'l, Inc. v. Static Control Comps., Inc.*, 387 F.3d 522, 549 (6th Cir. 2004) ("Nowhere in its deliberations over the DMCA did Congress express an interest in creating liability for the circumvention of technological measures designed to prevent consumers from using consumer goods while leaving the copyrightable content of a work unprotected. In fact, Congress added the interoperability provision in part to ensure that the DMCA would not diminish the benefit to consumers of interoperable devices 'in the consumer electronics environment.'" (citations omitted)).

95. *See id.* at 548.

96. *See MDY Indus., LLC v. Blizzard Entm't, Inc.*, 629 F.3d 928, 950 (2010) ("While we appreciate the policy considerations expressed by the Federal Circuit in *Chamberlain*, we are unable to follow its approach because it is contrary to the plain language of the statute . . . its approach is based on policy concerns that are best directed to Congress[.]").

cases demonstrate, TPMs are showing up in a variety of unexpected places. This has led to a circuit split over whether a nexus to copyright infringement is required or if Congress meant to create an entirely separate right protecting against circumvention.⁹⁷

B. THE COPYRIGHT OFFICE'S 1201 REPORT

The Copyright Office's Section 1201 Report, released in June 2017, gives an overview of the current legal framework, an analysis of proposed statutory reforms for § 1201, and proposed reforms to the rulemaking process.⁹⁸ The Copyright Office takes a very modest approach to reform of § 1201, to the disappointment of some critics.⁹⁹ There are hints of status quo bias throughout the report, for instance, the Copyright Office heaps praise upon § 1201 as the law that made the Internet the ubiquitous success it is today.¹⁰⁰ However, the Copyright Office is willing to break from the established framework on a few issues, such as the Right to Repair, and to call for a few new permanent exemptions, to the delight of some commentators.¹⁰¹ Despite

97. *Compare Chamberlain*, 381 F.3d at 1192 (“The essence of the DMCA’s anticircumvention provisions is that §§ 1201(a), (b) establish causes of action for liability. They do not establish a new property right.”), *with MDY*, 629 F.3d at 950 (“The *Chamberlain* court reasoned that if § 1201(a) creates liability for access without [a nexus to the] Copyright Act, it ‘would clearly affect rights and limitations . . .’ This perceived tension is relieved by our recognition that § 1201(a) creates a new anti-circumvention right distinct from the . . . rights of a copyright owner.” (internal citations omitted)).

98. See SECTION 1201 REPORT, *supra* note 5.

99. See, e.g., Mitch Stoltz, *Copyright Office Proposes Modest Fixes to DMCA 1201, Leaves Fundamental Flaws Untouched*, ELECTRONIC FRONTIER FOUND.: DEEPLINKS BLOG (June 28, 2017), <https://www.eff.org/deeplinks/2017/06/copyright-office-proposes-modest-fixes-dmca-1201-leaves-fundamental-flaws?fdesktop=true&page=28> [https://perma.cc/J2D8-8GWW]; Cory Doctorow, *US Copyright Office Recommends Sweeping, Welcome Changes to America’s DRM Law*, BOING BOING, (June 23, 2017), <https://boingboing.net/2017/06/23/us-copyright-office-recommends.html> [https://perma.cc/ZHW9-N3TH] (“This is all great stuff, but it stop[s] pretty far short of the mark.”).

100. The Report’s very first line claims that “The Digital Millennium Copyright Act (‘DMCA’) has played a pivotal role in the development of the modern digital economy.” SECTION 1201 REPORT, *supra* note 5, at 1. As Stoltz, *supra* note 99, points out, the Copyright Office provides no evidence to support this claim besides statements from the content industry. See SECTION 1201 REPORT, *supra* note 5, at 36 (“Commenters representing creative industries argued that section 1201 has contributed significantly to the explosive growth in legitimate digital content delivery services.”).

101. See, e.g., Ali Breland, *Copyright Office Voices Support for Giving Consumers the ‘Right to Repair’*, HILL (June 23, 2017), <http://thehill.com/policy/technology/339147-copyright-office-voices-support-for-legalizing-consumers-right-to-repair> [https://perma.cc/JA2X-SPGH]; Jason Koebler, *The US Government Wants to Permanently Legalize the Right to Repair*, MOTHERBOARD (June 22, 2017), https://motherboard.vice.com/en_us/article/d3zbnz/the-government-wants-to-permanently-legalize-the-right-to-repair [https://perma.cc/9FPP-

recommendations for modest changes, these deviations do not go far enough.

The Copyright Office's Report, while mainly advocating for the status quo, does offer some exciting proposals for modifying § 1201. These recommendations include a statutory amendment allowing third-party assistance in circumvention to "exemption beneficiaries"¹⁰² and greater flexibility for security testing.¹⁰³ Other recommendations propose new permanent exemptions, such as for assistive technologies,¹⁰⁴ codifying a right to repair,¹⁰⁵ including the circumvention of obsolete access controls,¹⁰⁶ but the Copyright Office declined to recommend a right for "tinkering" or modification.¹⁰⁷ These are steps in the right direction and the Copyright Office deserves praise for challenging the status quo, especially for advocating for a right to third-party help for those undertaking exempted activities and a permanent right to repair exemption.

However, the Copyright Office's rejection of further reform is disappointing. It rejects the most simple and straightforward proposal that easily encompasses all of its proposed piecemeal reforms: a requirement of a nexus to infringement for liability.¹⁰⁸ This is due to concerns that such a requirement would limit the power of copyright holders to exercise meaningful control over their works. However, the Copyright Office ignores the benefits to public welfare. It also rejects several smaller, more targeted exemptions, perhaps reflecting bias towards the status quo. Examples of this bias can be found throughout the Report, such as when the Copyright Office rejects broad statutory amendments but then gives roadmaps of possible statutory language if Congress chooses to do so. This can be seen in both its discussion on the

U3WC]; John Eggerton, *Copyright Office: Circumvention Prohibition Framework Remains Sound*, BROADCASTING & CABLE (June 22, 2017), <http://www.broadcastingcable.com/news/washington/copyright-office-circumvention-prohibition-framework-remains-sound/166735> [<https://perma.cc/U2RG-G5QR>] ("The Center for Democracy and Technology was pleased with the recommendation that the exemption for cybersecurity research was currently too narrow . . .").

102. SECTION 1201 REPORT, *supra* note 5, at 60.

103. *See id.* at 77.

104. *See id.* at 84 (defining "Assistive Technologies" as technologies that "facilitate access to literary works . . . by persons who are blind, visually impaired or print-disabled").

105. *See id.* at 90 (stating that circumvention for repair purposes "would be consistent with the statutes overall policy goals").

106. *See id.* at 92 (this recommendation also groups "damaged or malfunctioning TPMs" with obsolete access controls).

107. *See id.* at 90 (suggesting that the triennial rulemaking is a more appropriate forum for these exemptions).

108. *See id.* at 42–47.

reverse engineering¹⁰⁹ and security research exemptions.¹¹⁰ These roadmaps, contrasted with their conclusions, show that the Copyright Office may at least be more open to a more substantive reform than a mere summary of recommendations would reveal.

1. *A Nexus to Infringement Requirement Allows the Flexibility Required to Regulate Future Changes in Technology*

Technology changes. Like Hanna-Barbara imagining a future of stilted buildings, robot maids, and a society run on sprockets,¹¹¹ few could have predicted Spotify or Facebook in 1998. The fundamental flaw at the heart of the DMCA is that it was intended to set bounds on something constantly growing: a bottle to contain the genie of instantaneous copying and transmission. This genie of the Information Age has the power to deliver knowledge and entertainment regardless of whether the end result is a Wikipedia or a Napster. The DMCA is not flexible enough even with the triennial rulemaking as a failsafe. The result has been an explosion: the genie is free, but shrapnel has hit numerous bystanders. The starting point is to allow this expansion. The first step in doing so is a statutory requirement for a nexus to infringement, a step the Copyright Office forcefully rejects.¹¹²

However, such a requirement would not only cure the ills of software-embedded garage door openers or ink cartridges using TPMs to anticompetitively control the repair and services market,¹¹³ but would greatly reduce the chilling effect the DMCA has had on legitimate research.¹¹⁴ The

109. *See id.* at 71 (“[T]he Office is not convinced that amendment . . . is . . . necessary . . . to engage in the legitimate activities to enable the interoperability that Congress intended That said, if Congress wishes to do so, the Office would also welcome legislative clarification of the circumstances under which persons may (or may not) engage in circumvention for interoperability purposes.”).

110. *See id.* at 74 (“While the Office is not at this time proposing statutory language for reform, it continues to believe that the exemption adopted in 2015 can be a useful starting point, and notes that most of the security researchers who petitioned for that exemption, as well as other commenters, agree.”).

111. *See The Jetsons* (ABC television broadcast starting 1962).

112. *See* SECTION 1201 REPORT, *supra* note 5, at 42–43.

113. *See* Daniel C. Higgs, Note, *Lexmark International, Inc. v. Static Control Components, Inc. & Chamberlain Group, Inc. v. Skylink Technologies, Inc.: The DMCA and Durable Goods Aftermarkets*, 19 BERKELEY TECH. L.J. 59, 83 (2004) (“[M]anufacturers of durable goods recognized in these provisions the potential for a broader application: the exclusion of competitors from aftermarkets. If left unchecked, this troubling extension of the DMCA could have drastic effects on U.S. aftermarket industries and consumers alike.”).

114. *See, e.g.*, Edward Felten, *The Chilling Effects of the DMCA*, SLATE (Mar. 29, 2013), http://www.slate.com/articles/technology/future_tense/2013/03/dmca_chilling_effects_how_copyright_law_hurts_security_research.html [<https://perma.cc/KR6P-HT5B>]; Robert

Copyright Office expresses some concern about this chilling effect on research,¹¹⁵ but the best solution would be the nexus requirement. In our brave new world of network devices, linking everything from picture frames,¹¹⁶ refrigerators,¹¹⁷ and medical devices,¹¹⁸ the danger of cyberattacks is omnipresent.¹¹⁹ Instead of hindering such security and encryption research, we should be encouraging it.

This would clear similar clouds over freedom of speech¹²⁰ and educational issues,¹²¹ allowing society to benefit from less restricted expression and allowing new innovative methods of teaching. A nexus requirement also would

Lemos, *Russian Crypto Expert Arrested at Def Con*, CNET, (Mar. 2, 2002), <https://www.cnet.com/news/russian-crypto-expert-arrested-at-def-con> [<https://perma.cc/QJB4-QGWH>]; Parker Higgins, *Research and Remixes the Law Won't Allow*, ELECTRONIC FRONTIER FOUND.: DEEPLINKS BLOG (July 21, 2016), <https://www.eff.org/deeplinks/2016/07/research-and-remixes-law-wont-allow> [<https://perma.cc/UP7F-72VF>].

115. See SECTION 1201 REPORT, *supra* note 5, at 80 (recommending clarification for encryption research due to concerns over chilled research).

116. See Elinor Mills, *Latest Problem Import? Infected Digital Photo Frames*, CNET (Jan. 8, 2009), <https://www.cnet.com/news/latest-problem-import-infected-digital-photo-frames> [<https://perma.cc/W3PL-G2SM>].

117. See Swapnil Bhartiya, *Your Smart Fridge Might Kill You: The Dark Side of the IoT*, INFO WORLD (Mar. 3, 2017), <https://www.infoworld.com/article/3176673/internet-of-things-your-smart-fridge-may-kill-you-the-dark-side-of-iot.html> [<https://perma.cc/83BR-5VFF>].

118. See Cory Doctrow, *Medical Implants and Hospital Systems are Still InfoSec Dumpster Fires*, BOING BOING (May 26, 2017), <https://boingboing.net/2017/05/26/disclosure-vs-dmca.html> [<https://perma.cc/E5XJ-BCJT>].

119. See Lee Raine & Janna Anderson, *The Internet of Things Connectivity Binge: What Are the Implications?*, PEW RES. CTR. (June 6, 2017), <http://www.pewinternet.org/2017/06/06/the-internet-of-things-connectivity-binge-what-are-the-implications> [<https://perma.cc/VU9P-YNPZ>].

120. See, e.g., Wendy Seltzer, *Free Speech Unmoored in Copyright's Safe Harbor: Chilling Effects of the DMCA on the First Amendment*, 24 HARV. J. L. & TECH. 171 (2010) (discussing the chilling effects the DMCA has had on free speech and proposing policy reform based on first amendment principles); ELEC. FRONTIER FOUND., UNINTENDED CONSEQUENCES—16 YEARS UNDER THE DMCA 3–12 (2014) (“Experience with section 1201 demonstrates that it is being used to stifle free speech and scientific research. The lawsuit against 2600 magazine, threats against Princeton Professor Edward Felten’s team of researchers, and prosecution of Russian programmer Dmitry Sklyarov have chilled the legitimate activities of . . . the public.”) <https://www.eff.org/files/2014/09/16/unintendedconsequences2014.pdf> [<https://perma.cc/X9WE-J2XC>] [hereinafter EFF UNINTENDED CONSEQUENCES].

121. See, e.g., Renee Hobbs, *Lessons in Copyright Activism: K-12 Education and the DMCA 1201 Exemption Rulemaking Process*, 12 INT’L J. INFO. & COMM. TECH. EDUC. 50, 53 (2016) (“Because many educators and learners depend on clips from film DVDs for use in both classroom teaching and student media production assignments, the law has had a negative impact on digital learning and, in particular, has discouraged educators from using film as a teaching resource.”); EFF UNINTENDED CONSEQUENCES, *supra* note 120, at 6–7.

allow product owners to tinker and modify the products they own. Tinkering and modification are not only long-held rights of property owners,¹²² but also essential to our creative ecosystem.¹²³ This kind of dynamic modification and knowledge sharing is exactly what the DMCA needs to embrace.

2. *The 1201 Rulemaking Process Should Operate as a Fail-Safe as Congress Intended*

The 1201 Rulemaking Process and its exemptions have the same problem as Tribbles:¹²⁴ they keep multiplying. Rulemaking has grown exponentially both in public petitions, exemptions granted, and public interest.¹²⁵ This is not only costly and onerous, but due to the DMCA's imbalance in favor of content owners, the burden usually falls on public interest groups to seek these exemptions.¹²⁶ This time-consuming process is not operating as the fail-safe that Congress intended. If an infringement nexus were required, the number of petitions would sharply decrease. This is because the majority of the petitions deals with repair, preservation, education use, or some other well-settled non-infringing use under copyright law.¹²⁷ Litigating copyright infringement can be very expensive, with most stages of litigation costing

122. See Samuelson, *supra* note 3, at 566.

123. *Id.* at 567–68. For real-world examples of the benefits of tinkering see, e.g., David Labrador, *Teaching Robot Dogs New Tricks*, SCI. AM. (Jan. 21, 2002), <https://www.scientificamerican.com/article/teaching-robot-dogs-new-t> [<https://perma.cc/428R-NU2J>] (detailing the improvements made by users to a robotic dog toy); Craig Pearson, *A Brief History of Garry's Mod: Count to Ten*, ROCK PAPER SHOTGUN (Aug. 29, 2012), <https://www.rockpapershotgun.com/2012/08/29/a-brief-history-of-garrys-mod-count-to-ten> [<https://perma.cc/794X-CE3K>] (detailing the history of Half Life 2's Most Popular Mod which allows users a platform create their own works in a variety of media); Luke Bouma, *A Short History of Kodi*, TING (Mar. 24, 2016), <https://ting.com/blog/a-short-history-of-kodi> [<https://perma.cc/VLW5-DKVL>] (giving the history of Kodi, one of the most popular open source media interfaces, and its origins as a tinkering project of the open source Xbox Media Center software).

124. See *Star Trek: The Trouble with Tribbles* (NBC television broadcast Dec. 29, 1967).

125. The Copyright Office notes that the first rulemaking received 392 public comments and the Office recommended two temporary exemptions, while the 2015 rulemaking saw almost 40,000 public comments with 22 exemptions recommended. See SECTION 1201 REPORT, *supra* note 5, at 25.

126. For example, the Electronic Frontier Foundation sought six exemptions in the 2015 Rulemaking. 2015 DMCA Rulemaking, ELECTRONIC FRONTIER FOUND., <https://www EFF.org/cases/2015-dmca-rulemaking> [<https://perma.cc/N3SA-2CVL>].

127. See Krista Cox, *1201 Rulemaking for a New Era?*, ASS'N RES. LIBRARY (Jan. 20, 2016), <http://policynotes.arl.org/?p=1262> [<https://perma.cc/7CHM-GDAW>] (“The proceeding also continues to perpetuate the fatal flaw in Section 1201 – exemptions are requested for uses that would all be considered non-infringing if these same copyrighted works were analog and did not have TPMs.”).

hundreds of thousands of dollars and complaint to trial often totaling over a million dollars.¹²⁸ If the law required a nexus to infringement, the rulemaking could function as a true fail-safe process that could flexibly respond to novel questions of technology, instead of being bogged down by clear fair uses.

C. THE LEGISLATURE

With the Copyright Office's current timid position and with the courts facing a circuit split, the burden falls on Congress to amend the problems arising from § 1201. The law is not working as it intended. Congress intended the DMCA to protect the kinds of expression that copyright has historically regulated, things like movies, video games, and music, not the tractors and garage door openers that are now being litigated under the DMCA. However, even their intended area of protection, media, has gone further than intended. The preservation of "born digital" works is now in jeopardy.¹²⁹ As more works are created and exist in intangible form, and TPM software controls access to these works, preservation is hindered due to potential liability under § 1201 because merely circumventing these TPMs raise liability under a reading of the DMCA without a nexus requirement.¹³⁰ Proof that § 1201 is now hampering the preservation efforts can easily be found, whether it be digital news applications¹³¹ or videogames.¹³²

This shows that the DMCA is eroding fair use far more than Congress intended and that the law has failed to keep up with our ever-changing world. Members of Congress have introduced multiple bills following the DMCA's passage to remedy the harms created by the DMCA, including a successful bill that allows consumers and technicians to circumvent cellphone TPMs to allow

128. See AM. INTELLECTUAL PROP. LAW ASS'N, REPORT OF THE ECONOMIC SURVEY 2017 I-183 (2017).

129. See SECTION 1201 REPORT, *supra* note 5, at 41. "Born Digital" is another way of saying that the work exists and was created as a digital product, like a novel that was exclusively released via eBook.

130. See generally Laura Gasaway, *Archiving and Preservation in U.S. Copyright Law*, in COPYRIGHT AND CULTURAL HERITAGE: PRESERVATION AND ACCESS TO WORKS IN A DIGITAL WORLD 131, 140 (Estelle Derclaye ed., 2010) (explaining certain problems archives and libraries face, such as an onsite access requirement for digital works, in their attempts at preservation as a result of the DMCA).

131. See Katherine Boss & Meredith Broussard, *Challenges Facing Born Digital News Applications*, 43 INT'L FED'N LIBR. ASS'NS J. 150, 153 (2017) (stating that "[l]egal issues also present a final, major obstacle in the preservation of news apps" while later mentioning the DMCA specifically).

132. See Allison M. Hudgins, *Preservation of the Videogame*, 29 PROVENANCE, J. SOC'Y GA. ARCHIVISTS 32, 37 (2011) (describing copyright law, and the DMCA specifically, as a significant obstacle to the preservation of video games).

access to wireless networks outside of their original carrier.¹³³ This shows that members of Congress are concerned about the DMCA's erosion of fair use and also understand the need for real reform to tie § 1201 liability to copyright infringement.

1. *The World Has Changed in Unforeseeable Ways*

Trying to predict the future is a lot like peering into a crystal ball; you usually only see your distorted reflection or the person sitting across from you. Our present circumstances always cloud our judgement. Few could have predicted Apple's rise and Microsoft's stagnation back in 1998 and no one would have attributed it to phone and music sales. In 1998, 41% of adults used the internet,¹³⁴ in 2016 88% did.¹³⁵ The rise of the IoT has been equally meteoric, with more and more of our devices, vehicles, appliances, and toys running embedded software capable of accessing the internet.¹³⁶

It is difficult to legislate for future technology. Therefore, the DMCA should be updated not only to reflect today's realities but made flexible enough to meet tomorrow's challenges as well. Congress can narrow liability through a statutory amendment requiring a nexus to copyright infringement. This puts the focus properly back on expressive content protection instead of garage door remotes.

V. CONCLUSION

The Copyright Office's Section 1201 Report proposes focusing on streamlining and giving themselves broader administrative discretion for the temporary exemption rulemaking process.¹³⁷ While these are welcome and much needed changes, marginal rulemaking solutions ignore the underlying defects of the DMCA. Section 1201, from its creation, has been broken and in need of substantial reform. The best way to achieve this is by requiring a statutory nexus to infringement. With the circuits split and the Copyright

133. See *supra* note 89 for examples of these bills and further discussion of the Unlocking Consumer Choice Act.

134. Susannah Fox, *The Internet Circa 1998*, PEW RES. CTR. (June 21, 2007), <http://www.pewinternet.org/2007/06/21/the-internet-circa-1998> [https://perma.cc/35U4-2VGD].

135. See *Internet/Broadband Fact Sheet*, PEW RES. CTR. (Jan. 12, 2017), <http://www.pewinternet.org/fact-sheet/internet-broadband> [https://perma.cc/Z3NE-HJWV].

136. See SOFTWARE REPORT, *supra* note 6, at 2–3. This led to concerns that the use of these products with its implications to copyright law “are particularly acute with respect to products that have not required software to operate in the past.” *Id.* at 8.

137. See SECTION 1201 REPORT, *supra* note 5, at 127–47.

Office's position unchanged, it is up to Congress to cure these defects and the easiest solution would be to amend § 1201 to require a nexus to copyright infringement.

Therefore, it is up to Congress to act, and the time to act is now. The DMCA's negative impact on repair, ownership, education, and security has brought public awareness of these issues to an all-time high. Congress should replace the inflexibility of the current DMCA with an infringement nexus that would fence in infringing uses while allowing the internet's creative ecosystem to freely graze.

A MISSED OPPORTUNITY: THE SUPREME COURT'S NEW SEPARABILITY TEST IN *STAR ATHLETICA*

Trenton Davis[†]

I. INTRODUCTION

In *Star Athletica v. Varsity Brands*, the Supreme Court sought to fix one of the most troublesome areas of copyright law: § 101's separability test under the useful article doctrine.¹ The case concerned the designs on cheerleading uniforms—namely whether the chevrons, stripes, and lines adorning the uniforms were separable from the outfits.² In attempting to sort out the trouble with the useful article doctrine, the Supreme Court created a new test that reset the playing board and rid the circuits of their various tests.³ However, as this Note will show, this new test will continue to create “uncertainty for creators, litigants, and judges”⁴ because the Court's analysis was far too vague for future courts deciding the issue of separability.

In a majority opinion, the Supreme Court created a seemingly straightforward two-pronged separability test.⁵ It held that an artistic feature of the design of a useful article could be copyrighted if 1) it “can be perceived as a two- or three-dimensional work of art separate from the useful article,” and 2) it “would qualify as a protectable pictorial, graphic, or sculptural work either on its own or in some other medium if imagined separately from the useful article.”⁶ This holding purportedly focused on the two requirements in the 1976 Copyright Act for separability: separate identification and independent existence.⁷ However, the holding fails to give sufficient guidance on how to apply the test,⁸ and raises more questions than it answers.

Scholars are sharply divided when it comes to the *Star Athletica* decision.

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1. *Star Athletica, LLC v. Varsity Brands, Inc.*, 137 S. Ct. 1002, 1007 (2017).

2. *Id.* at 1007–08.

3. *Id.* at 1007.

4. Christopher Buccafusco & Jeanne C. Fromer, *Forgetting Functionality*, 166 U. PA. L. REV. ONLINE 119, 119 (2017), http://scholarship.law.upenn.edu/cgi/viewcontent.cgi?article=1206&context=penn_law_review_online [<https://perma.cc/CAL4-QT9L>].

5. *Star Athletica, LLC*, 137 S. Ct. at 1016.

6. *Id.*

7. *See* 17 U.S.C. § 101 (2012).

8. *See Star Athletica, LLC*, 137 S. Ct. at 1012.

Some believe it may infringe on other areas of intellectual property law,⁹ while others praise the decision for its simplicity and possible move toward fashion design protection.¹⁰ Finally, a third group believes this case was not the proper vehicle for simplifying the array of separability tests plaguing the circuits.¹¹

Whatever scholars' positions may be, the new test creates layers of unpredictability. Under the new test, if one draws a plain picture of a shovel, one could not protect the useful article (the shovel) through copyright.¹² But, can one receive a copyright in an artistic aspect of that shovel, and thereby gain a copyright in the useful article as a whole? If the shovel had an intricate, sculpture-like handle or shovel head, can one receive a copyright in the shovel itself? In other words, can an artistic feature that is informed by the utilitarian features of a useful article be separated from the underlying useful article?¹³ The answer is, unfortunately, unknown and perhaps even unpredictable at this time.

This Note argues that the Supreme Court failed to create a more unified separability test, and created the possibility of protecting utilitarian features of useful articles going forward. In order to avoid these problems, it should have laid out a more comprehensive separability analysis of Varsity Brands' designs when applying the new two-factor test. That way, lower courts would not have to grapple with vague and general language in determining how artistic features could be separated from the useful articles themselves. Further, this Note argues that, going forward, courts will have to keep in mind certain limiting principles that the dissent and the majority referred to when deciding cases where the pictorial, graphic, or sculptural (PGS) features are completely inseparable from the overall design of the useful article.

In Part II, this Note briefly discusses the background law surrounding the case—the useful article doctrine and the different tests circuits have come up

9. See Peter S. Menell & Daniel Yablon, *Star Athletica's Fissure in the Intellectual Property Functionality Landscape*, 166 U. PA. L. REV. ONLINE 137, 137 (2017), <http://www.pennlawreview.com/online/166-U-Pa-L-Rev-Online-137.pdf> [<https://perma.cc/4b86-6C29>].

10. See generally David E. Shipley, *All for Copyright Stand Up and Holler! Three Cheers for Star Athletica and the U.S. Supreme Court's Perceived and Imagined Separately Test*, 36 CARDOZO ARTS & ENT. L.J. 149 (2018).

11. See Jane C. Ginsburg, *Courts Have Twisted Themselves into Knots: U.S. Copyright Protection for Applied Art*, 60 COLUM. J.L. & ARTS 1, 51 (2016).

12. See *Star Athletica*, 137 S. Ct. at 1013 n.2 (noting that one may not obtain a copyright in a shovel from a copyrighted picture of one, despite what Justice Breyer argued in his dissent).

13. For an example of a design that was informed by utilitarian needs, see *Brandir Int'l, Inc. v. Cascade Pac. Lumber Co.*, 834 F.2d 1142, 1145 (1987) (holding a PGS feature is conceptually separable if “the design elements can be identified as reflecting the designer’s artistic judgment exercised independently of functional influences”).

with over the years. Part III examines the cases leading up to the Supreme Court's ruling, as well as the ruling itself—Justice Thomas' majority holding, Justice Ginsburg's concurring opinion, and Justice Breyer's dissenting opinion. Part IV turns to the aftermath of the opinion, and three very important aspects that have arisen since its release—namely, the worry about increased litigation and whether the test may be useful in simple cases, the overlap between copyright and design patent, and the possibility of copyright protecting functional aspects. In Part IV, this Note also discusses principles that courts should keep in mind to better apply the *Star Athletica* test. Part V concludes.

II. THE USEFUL ARTICLE DOCTRINE AND BACKGROUND CASE LAW

This Part looks at the *Mazer* decision, the useful article doctrine, and the nine different tests circuits and scholars created to deal with copyright's separability issue. It also provides a way to classify these tests into two different categories—one focusing on creativity and one focusing on utility—so that the different approaches may be more easily understood.

A. MAZER V. STEIN AND THE USEFUL ARTICLE DOCTRINE

The useful article doctrine was created under the 1909 Copyright Act in the Supreme Court case of *Mazer v. Stein*,¹⁴ and codified in the 1976 Copyright Act.¹⁵ In *Mazer*, the Supreme Court held that a ballerina lamp base, though initially designed for a useful article,¹⁶ could be copyrighted.¹⁷ In doing so, it created the separability analysis, in which PGS features of useful articles could be copyrighted so long as they could be identified separately and exist independently from the underlying useful articles.¹⁸ The theory behind the

14. *Mazer v. Stein*, 347 U.S. 201, 213 (1954).

15. *See generally* 17 U.S.C. § 101 (2012).

16. *See id.* (“A ‘useful article’ is an article having an intrinsic utilitarian function that is not merely to portray the appearance of the article or to convey information. An article that is normally a part of a useful article is considered a ‘useful article.’”).

17. *See Mazer*, 347 U.S. at 218:

We find nothing in the copyright statute to support the argument that the intended use or use in industry of an article eligible for copyright bars or invalidates its registration . . . Nor do we think the subsequent registration of a work of art published as an element in a manufactured article, is a misuse of the copyright.

18. 17 U.S.C. § 101 (2012) states:

[T]he design of a useful article, as defined in this section, shall be considered a pictorial, graphic, or sculptural work only if, and only to the extent that, such design incorporates pictorial, graphic, or sculptural features that can be identified separately from, and are capable of existing independently of, the utilitarian aspects of the article.

holding was that it did not matter whether the aesthetic features were first created as part of a useful article or reproduced on a useful article; the features were still copyrightable so long as they could be separated.¹⁹

Congress codified this holding in the 1976 Copyright Act²⁰ and recognized there were two different ways in which courts could separate the PGS features from the useful articles: physically and conceptually.²¹ This is important because after *Mazer* and its codification, there was uncertainty. The *Mazer* Court had failed to outline a standard separability test or provide detailed reasoning behind its conclusion that the statuettes were separate from the lamps.²² As a result, each circuit developed a different approach to interpreting the statute and determining whether a design feature was separable from a useful article.²³

B. THE NINE DIFFERENT TESTS FOR DETERMINING SEPARABILITY

To better understand this confusion surrounding the useful article doctrine, we must delve into the nine different tests used by circuit courts and

19. *See Mazer*, 347 U.S. at 218:

We find nothing in the copyright statute to support the argument that the intended use or use in industry of an article eligible for copyright bars or invalidates its registration . . . Nor do we think the subsequent registration of a work of art published as an element in a manufactured article, is a misuse of the copyright.

20. *See* 17 U.S.C. § 101 (2012):

‘Pictorial, graphic, and sculptural works’ include two-dimensional and three-dimensional works of fine, graphic, and applied art, photographs, prints and art reproductions, maps, globes, charts, diagrams, models, and technical drawings, including architectural plans. Such works shall include works of artistic craftsmanship insofar as their form but not their mechanical or utilitarian aspects are concerned; the design of a useful article, as defined in this section, shall be considered a pictorial, graphic, or sculptural work only if, and only to the extent that, such design incorporates pictorial, graphic, or sculptural features that can be identified separately from, and are capable of existing independently of, the utilitarian aspects of the article.

21. *See* *Star Athletica, LLC v. Varsity Brands, Inc.*, 137 S. Ct. 1002, 1031 (2017) (Breyer, J., dissenting) (citing H. R. REP. NO. 94-1476 (1976)).

22. *See Mazer*, 347 U.S. at 218:

We find nothing in the copyright statute to support the argument that the intended use or use in industry of an article eligible for copyright bars or invalidates its registration . . . Nor do we think the subsequent registration of a work of art published as an element in a manufactured article, is a misuse of the copyright.

23. *See* *Varsity Brands, Inc. v. Star Athletica, LLC*, 799 F.3d 468, 484–85 (6th Cir. 2015) (describing nine different tests circuits and scholars came up with to deal with the useful article doctrine).

proposed by scholars before the Supreme Court decided *Star Athletica*. Articulated by the Sixth Circuit's decision leading up to *Star Athletica*, these tests are: 1) the Copyright Office Approach;²⁴ 2) the Primary-Subsidiary Approach;²⁵ 3) the Objectively Necessary Approach;²⁶ 4) the Ordinary-Observer Approach;²⁷ 5) the Design Process Approach;²⁸ 6) the Stand-Alone Approach;²⁹ 7) the Likelihood-of-Marketability Approach;³⁰ 8) Patry's Approach;³¹ and 9) the Subjective-Objective Approach.³² Additionally,

24. *See id.* at 484 (citing U.S. COPYRIGHT OFFICE, COMPENDIUM OF U.S. COPYRIGHT OFFICE PRACTICES § 924.2(B) (3d ed. 2014)) (“A pictorial, graphic, or sculptural feature satisfies [the conceptual-separability] requirement only if the artistic feature and the useful article could both exist side by side and be perceived as fully realized, separate works—one an artistic work and the other a useful article.”).

25. *See id.* (citing *Kieselstein-Cord v. Accessories by Pearl, Inc.*, 632 F.2d 989, 993 (2d Cir. 1980) (holding that a belt buckle was copyrightable because “the artistic features of the design [were] ‘primary’ to the ‘subsidiary utilitarian function’ ”).

26. *See id.* (citing *Carol Barnhart, Inc. v. Economy Cover Corp.*, 773 F.2d 411, 419 (2d Cir. 1985)) (a PGS “feature is conceptually separable if the artistic features . . . are not necessary to the performance of the utilitarian function of the article”).

27. *See id.* (citing *Carol Barnhart, Inc.* 773 F.2d at 422 (Newman, J. dissenting)) (a PGS “feature is conceptually separable if ‘the design creates in the mind of the ordinary[, reasonable] observer two different concepts that are not inevitably entertained simultaneously’ ”).

28. *See id.* (citing *Brandir Int’l, Inc. v. Cascade Pac. Lumber Co.*, 834 F.2d 1142, 1145 (2d Cir. 1987)) (a PGS “feature is conceptually separable if ‘the design elements can be identified as reflecting the designer’s artistic judgment exercised independently of functional influences’ ”).

29. *See id.* (citing *Pivot Point Int’l, Inc. v. Charlene Prods.*, 372 F.3d 913, 934 (7th Cir. 2004) (Kanne, J. dissenting)) (a PGS “feature is conceptually separable if ‘the useful article’s functionality remain[s] intact once the copyrightable material is separated’ ”).

30. *See id.* (citing *Galiano v. Harrah’s Operating Co.*, 416 F.3d 411, 419 (5th Cir. 2005)) (a PGS “feature is conceptually separable if ‘there is substantial likelihood that even if the article had no utilitarian use it would still be marketable to some significant segment of the community simply because of its aesthetic qualities’ ”).

31. *See id.* at 484–85 (citing 2 PATRY ON COPYRIGHT §§ 3:145, 3:146 (2015)) (Courts do not need to engage in a separability analysis if: “(A) the work is the design of a three-dimensional article, and (B) the design is not of a ‘useful article.’ ” Furthermore, the focus should be on whether the PGS aspects “are separable from the ‘utilitarian aspects’ of the article, not the ‘article’ because the ‘protected features need not be capable of existing apart from the article, only from its functional aspects’ ”).

32. *See id.* at 485 (citing Barton R. Keyes, *Note: Alive and Well: The (Still) Ongoing Debate Surrounding Conceptual Separability in American Copyright Law*, 69 OHIO ST. L.J. 109, 141 (2008)) (“Conceptual separability is determined by balancing (A) ‘the degree to which the designer’s subjective process is motivated by aesthetic concerns’; and (B) ‘the degree to which the design of a useful article is objectively dictated by its utilitarian function.’ ” Furthermore, “[i]f the design of the useful article ‘is mostly dictated by function,’ then that fact ‘weigh[s] against conceptual separability, and therefore, against copyright protection.’ ”).

although the Sixth Circuit never explicitly stated as such,³³ the test it created was a hybrid approach, effectively increasing the number of possible separability tests to at least ten.³⁴

Although the number of separability tests associated with the useful article doctrine may seem quite daunting, these tests fall into either one of two separate categories. Depending on the test used, a court focused on creativity and the artistic PGS features, or function and the useful article's utilitarian aspects.³⁵ In other words, the tests can be separated into a creative category and a utilitarian category. Separating the previous tests in this manner allows us to easily categorize the multitude of approaches to separability under the useful article doctrine for this Note and helps to better understand the focus of *Star Athletica's* test.³⁶

The first category focuses on the creative aspects of the useful article itself. These tests asked courts to look at factors such as whether an ordinary observer could see a PGS work apart from the useful article (the Ordinary-Observer Approach), whether the PGS features would be marketable by themselves (the Likelihood of Marketability Approach), whether the artistic features were the primary appeal to the useful article (the Primary-Subsidiary Approach), and whether the artistic features could stand alone apart from the useful article once separated (the Copyright Office Approach).³⁷ Each of these tests emphasized an examination of the creative PGS features of the design of a useful article when determining separability.³⁸ Put another way, these tests placed much greater weight on the art and artistic judgment of creators than on the utility of a useful article.³⁹

33. *Id.* at 487–88.

34. *Id.*; see also Alexandra Spina, *Varsity Brands, Inc. v. Star Athletica, LLC*, 61 N.Y.L. SCH. L. REV. 239, 245 (2016).

35. See *infra* notes 38 & 40. For another way to separate these tests, see Larry C. Russ & Nathan D. Meyer, *Fashion Forward*, 40 L.A. LAW. 20, 22 (2017) (noting similarly that the nine tests focus on “(1) whether the artistic work and the useful article could be conceptually separated with one part surviving (conceptually) as a useful article and the element as an artistic work, or 2) whether there were aspects of the design of the useful article that were not dictated by function”).

36. See Russ, *supra* note 35, at 22.

37. See *Varsity Brands, Inc. v. Star Athletica, LLC*, 799 F.3d 468, 484–85 (6th Cir. 2015); see also *supra* notes 24, 25, 27, 30. Each of these tests focuses on the PGS features, in other words, whether an ordinary observer could see the PGS work apart from the utilitarian article, whether the PGS features would be marketable by itself if it had no utilitarian function, or whether the PGS features could be removed from the utilitarian article without destroying the usefulness of said article. In essence, they all focus on the creative aspects of the useful articles.

38. See *id.*; see also Russ, *supra* note 35, at 22.

39. See *Varsity Brands, Inc.*, 799 F.3d at 484–85; see also *supra* notes 24, 25, 27, 29, 30; Case Comment, *Copyright Act of 1976—Useful Articles—Star Athletica, L.L.C. v. Varsity Brands, Inc.*, 131 HARV. L. REV. 363, 368–69 (2017) [hereinafter *Copyright Act of 1976—Useful Articles*].

On the other hand, the second category focuses on the utilitarian aspects of the useful article. The tests within this category asked a court to determine such things as whether or not removing the PGS features left the utilitarian aspects of the useful article intact (Stand Alone Approach), whether the artistic design fit the utilitarian function (Design Process Approach), whether the artistic features were necessary for the function of the useful article (Objectively Necessary Approach), or whether the designer's process was influenced by concerns with the useful article's functionality (Subjective-Objective Approach).⁴⁰ Each of these tests placed much more emphasis in examining the utilitarian aspects of the article rather than the separable PGS features.⁴¹ Put another way, the ultimate focus of these tests was function and utility, not art or artistic judgment.⁴²

Although the overall inquiry required courts to examine both the PGS features (creativity) and the useful article (utility), these tests forced a court to focus on one or the other.⁴³ As a result, the analysis of useful articles was subjective, and ultimately up to each court's discretion.⁴⁴ For instance, the creative category of tests allowed courts to use their subjective artistic judgment when deciding separability cases⁴⁵ by examining such things like the primary function of a useful article,⁴⁶ or whether the PGS features could be marketable to a large section of the public when detached from the useful article.⁴⁷ The problem with these types of tests, as the Sixth Circuit alluded to in its decision, is that focusing on artistic features “[privilege] a judge’s personal taste” and are “often based entirely on conjecture.”⁴⁸

Conversely, the utilitarian category of tests asked courts to determine the

40. See *Varsity Brands, Inc.*, 799 F.3d at 484–85; see also *supra* notes 26, 28, 29, and 32. For instance, each of these tests focus on whether form fits function, such as the *Brandir* bicycle rack, or whether the PGS features are necessary to the performance of the utilitarian function (with a focus on the utilitarian function). In essence, each of these examples focus on the utilitarian function of the work itself—not the creative aspects part of the article.

41. See *id.*

42. See *id.*

43. For a discussion of issues with subjectivity and the types of separability tests before *Star Athletica*, see *Copyright Act of 1976—Useful Articles*, *supra* note 39, at 369.

44. See *id.* at 369–70.

45. See *id.* at 368–69.

46. See *Kieselstein-Cord v. Accessories by Pearl, Inc.*, 632 F.2d 989, 993 (2d Cir. 1980) (holding that a belt buckle was copyrightable because the artistic features of the design were “primary” to the “subsidiary utilitarian function”).

47. See *Varsity Brands, Inc.*, 799 F.3d at 484–85 (citing *Galiano v. Harrah’s Operating Co.*, 416 F.3d 411, 419 (5th Cir. 2005)) (a PGS “feature is conceptually separable if ‘there is substantial likelihood that even if the article had no utilitarian use it would still be marketable to some significant segment of the community simply because of its aesthetic qualities’”).

48. See *id.* at 489.

actual function of the useful article itself.⁴⁹ While perhaps seemingly more objective than those in the creative category, these tests were just as subjective. Take, for instance, the *Varsity Brands* series of cases leading to *Star Athletica*. While the District Court held the designs to be part of the utilitarian features of the cheerleading uniforms because they informed onlookers that the person wearing the uniform was a cheerleader,⁵⁰ the Sixth Circuit held that the utilitarian features were limited to “cover[ing] the body,” “wick[ing] away moisture,” and permitting free movement.⁵¹ Interestingly, the dissenting opinion in the Sixth Circuit argued that a broader definition of function was required when dealing with the cheerleading uniforms at issue.⁵² As discussed below, even the Supreme Court seemed to have difficulty with this issue and punted it in *Star Athletica*.⁵³

With this large number of tests, each of which approached the useful articles differently, it is no wonder why the conceptual separability test “continue[d] to flummox federal courts” since its codification.⁵⁴ The question the Supreme Court had to answer in *Star Athletica* was whether any of these previous tests were the proper test for the separability analysis, or whether the circuits needed a new, more standardized, and consistent test.⁵⁵ As will be shown below, the *Star Athletica* test falls fully into the creative category, as it focuses solely on the PGS features of the useful article and seemingly forgoes any focus on the useful aspects of a useful article.⁵⁶

49. See *Copyright Act of 1976—Useful Articles*, *supra* note 39, at 369–70.

50. *Varsity Brands, Inc. v. Star Athletica, LLC*, No. 10-2508, 2014 WL 819422 at *23–24 (W.D. Tenn. Mar. 1, 2014); see also *Varsity Brands, Inc.*, 799 F.3d at 475.

51. See *Varsity Brands, Inc.*, 799 F.3d at 490–91.

52. *Id.* at 495 (McKeague, J., dissenting) (“It follows that the stripes, braids, and chevrons on a cheerleading uniform are integral to its identifying function.”).

53. See *Star Athletica, LLC v. Varsity Brands, Inc.*, 137 S. Ct. 1002, 1013–14 (2017) (“The debate over relative utility of a plain white cheerleading uniform is unnecessary. The focus of the separability inquiry is on the extracted feature and not on any aspects of the useful article that remain after the imaginary extraction.”).

54. *Galiano v. Harras’s Operating Co.*, 416 F.3d 411, 419 (5th Cir. 2005).

55. See Lili Levi, *The New Separability* at 2–4 (Univ. of Miami Legal Studies Research Paper No. 17-28, 2017), <https://ssrn.com/abstract=3044830>, [<https://perma.cc/P5AE-SC2D>].

56. According to the Supreme Court in *Star Athletica, LLC*, 137 S. Ct. at 1013: The focus of the separability inquiry is on the extracted feature and not on any aspects of the useful article that remain after the imaginary extraction. The statute does not require the decisionmaker to imagine a fully functioning useful article without the artistic feature. Instead, it requires that the separated feature qualify as a non-useful pictorial, graphic, or sculptural work on its own.

III. *STAR ATHLETICA V. VARSITY BRANDS*

This Part delves into the Supreme Court's decision in *Star Athletica v. Varsity Brands* by examining the lower courts' rulings, the Supreme Court majority's decision and the reasoning behind it, and, finally, Justice Ginsburg's concurring opinion as well as Justices Breyer and Kennedy's dissenting opinion.

A. THE ROAD TO *STAR ATHLETICA*

Varsity Brands designs, makes, and sells cheerleading uniforms.⁵⁷ Before *Star Athletica*, it owned over two hundred U.S. copyright registrations for two-dimensional designs that appeared on the surface of cheerleading uniforms.⁵⁸ These designs were usually composed of a combination of chevrons, angles, diagonals, stripes, lines, and curves.⁵⁹ *Star Athletica* was also in the business of selling and marketing cheerleading uniforms.⁶⁰

Varsity Brands brought a suit against *Star Athletica* in the Western District of Tennessee alleging *Star Athletica* infringed five of their copyrighted designs.⁶¹ The district court held the designs were inseparable from the useful articles.⁶² In doing so, the district court reasoned that a blank cheerleading uniform lost its utility when it lacked surface designs.⁶³ Therefore, it was not possible to physically or conceptually separate the copyrighted designs from the uniforms because they were a fundamental part of the cheerleading uniforms' function by portraying those who wore them as cheerleaders.⁶⁴ As a result, the district court granted *Star Athletica*'s cross-motion for summary judgment on the copyright claims.⁶⁵

However, the Sixth Circuit reversed, holding that the designs were separable from the underlying uniforms.⁶⁶ Noting that its sister circuits had used nine different approaches to determine whether a PGS feature was conceptually separable from the utilitarian aspects of a useful article, it then came up with one of its own.⁶⁷ The Sixth Circuit adopted an approach asking a series of questions aimed at whether there were pictorial, graphic, or

57. *Id.* at 1007.

58. *Id.*

59. *Id.*

60. *Id.*

61. *Varsity Brands, Inc. v. Star Athletica, LLC*, No. 10-2508, 2014 WL 819422 at *1–2 (W.D. Tenn. March 1, 2014).

62. *Id.* at *8–9.

63. *Id.*

64. *Id.*

65. *Id.* at *9–10.

66. *Varsity Brands, Inc. v. Star Athletica, LLC*, 799 F.3d 468, 471 (6th Cir. 2015).

67. *Id.* at 487.

sculptural features that existed on a useful article with utilitarian or functional aspects.⁶⁸ If there were PGS features, the court went on to ask whether those features were required for the functioning of the useful article or were ultimately unnecessary to its utilitarian performance.⁶⁹ Rejecting the district court's holding that the designs were "inextricably intertwined with the utilitarian aspects of a cheerleading uniform," the Sixth Circuit noted that such a holding would "render nearly all artwork unprotectable."⁷⁰ As a result, the Sixth Circuit held that the designs were separable from the cheerleading uniforms and reversed and remanded the case.⁷¹ Star Athletica then appealed this decision to the Supreme Court, which granted certiorari.⁷²

B. MAJORITY HOLDING

The Supreme Court granted certiorari to, in its own words, "resolve widespread disagreement over the proper test for implementing" the separability analysis of § 101.⁷³ The Court looked to both the plain language of the statute as well as the history of the Copyright Act to create a new § 101 separability test.⁷⁴ The Court noted that the combination of § 101 and § 113(a)⁷⁵ ensures that "copyright protection extends to pictorial, graphic, and sculptural works regardless of whether" they were created as features of useful articles or as standalone works of art.⁷⁶ Given this understanding of the statute, the ultimate question for the Court was "whether the feature for which copyright protection is claimed would have been eligible for copyright protection as a pictorial, graphic, or sculptural work had it originally been fixed in some tangible medium other than a useful article."⁷⁷ The Court formulated a test in which:

[A] feature incorporated into the design of a useful article is eligible for copyright protection only if the feature (1) can be perceived as a two- or three-dimensional work of art separate from the useful article and (2) would qualify as a pictorial, graphic, or sculptural work—either on its own or fixed in some other tangible medium of

68. *Id.*

69. *Id.* at 488.

70. *Id.* at 490–91.

71. *Id.* at 491–92.

72. *Star Athletica, LLC v. Varsity Brands, Inc.*, 137 S. Ct. 1002, 1007 (2017).

73. *Id.*

74. *Id.* at 1010–11; *see also* 17 U.S.C. § 101 (2012).

75. *Star Athletica, LLC*, 137 S. Ct. at 1010–11; *see also* 17 U.S.C. § 113(a) (2012) ("Subject to the provisions of subsection (b) and (c) of this section, the exclusive right to reproduce a copyrighted pictorial, graphic, or sculptural work in copies under section 106 includes the right to reproduce the work in or on any kind of article, whether useful or otherwise.").

76. *Star Athletica, LLC*, 137 S. Ct. at 1010–11.

77. *Id.* at 1011.

expression—if it were imagined separately from the useful article into which it is incorporated.⁷⁸

The majority created a test that focuses on the creative aspects of a utilitarian article. As long as the design of a useful article is capable of being perceived as a work of art separate from the useful article and would qualify as a PGS work “on its own or fixed in some other tangible medium of expression,” it is separable from the useful article.⁷⁹ In other words, *Star Athletica* asks a court to simply look at the artistic PGS features without much regard to the utilitarian features of a useful article.⁸⁰

In a “straightforward” analysis applying the new test, the Court held the “decorations” were separable from the uniforms in question.⁸¹ The Court noted that the first part of the test, separate identification, was not hard to overcome.⁸² In its analysis of the designs at hand, the Court reasoned that “one can identify the decorations as features having pictorial, graphic, or sculptural qualities” and that “imaginatively removing the surface decorations from the uniforms and applying them in another medium would not replicate the uniform itself.”⁸³ That comprises the entirety of the majority’s analysis of Varsity Brands’ designs at issue in *Star Athletica*.

Furthermore, the Court rejected both *Star Athletica*’s and the dissent’s arguments that the designs were not separable because trying to separate the designs from the uniforms created a picture of a cheerleader uniform.⁸⁴ The Court instead noted that “two-dimensional applied art” necessarily “correlates to the contours of the article on which it is applied.”⁸⁵ It likened the designs on the cheerleading uniforms to a fresco on a wall or a design “etched or painted” on a guitar.⁸⁶ These examples are easy to understand because both are two-dimensional works that “correspond[] to the shape of the useful article to which they are applied,” but are still capable of existing apart from the useful articles themselves.⁸⁷

Under the Supreme Court’s new test, separability hinges on whether the feature would have been eligible as a PGS work had it been originally fixed in

78. *Id.* at 1007.

79. *Id.*

80. *Id.*; see also *supra* Section II.B, text accompanying notes 37–42.

81. *Star Athletica, LLC*, 137 S. Ct. at 1012.

82. *Id.* at 1010 (“The first requirement—separate identification—is not onerous. The decisionmaker need only be able to look at the useful article and spot some two- or three-dimensional element that appears to have pictorial, graphic, or sculptural qualities.”).

83. *Id.*

84. *Id.*

85. *Id.*

86. *Id.*

87. *Id.*

some other medium than a useful article. The test is simple for two-dimensional designs.⁸⁸ For instance, as the Court noted, an artistic print design on the surface of a guitar is easily separated from the underlying useful article itself.⁸⁹ Circuit courts will most likely find the issue of separability very straightforward in such a case.⁹⁰

However, determining the separability of a three-dimensional feature of a useful article that has some functionality will be more difficult for courts.⁹¹ Put aside the guitar from the Court majority's dicta,⁹² and examine one of the hardest separability cases prior to *Star Athletica: Brandir International*.⁹³ As discussed in Part II, the court in *Brandir* held the PGS features of the ribbon bike rack were not separable from the utilitarian aspects.⁹⁴ That case was difficult because the artistic design was completely intertwined with the overall function of the useful article.⁹⁵ If a court were to apply the *Star Athletica* test to the ribbon rack, it could conceivably go either way in its analysis.⁹⁶ Under the first step of the Court's new test, the ribbon rack can be perceived as a separate PGS work because a lay observer can imagine the ribbon bike rack as a PGS work in and of itself. Second, if drawn or created in a separate medium, it would be protectable as a PGS work. Therefore, the bike rack could pass the separability test and receive copyright protection in its useful aspects.⁹⁷ One of the more prominent issues scholars have pointed out is this very problem—the uncertainty regarding three-dimensional designs in the majority's test might extend copyright protection to a useful article's utilitarian features,⁹⁸ as the example above demonstrates.

C. JUSTICE GINSBURG'S CONCURRENCE

In her concurring opinion, Justice Ginsburg argued that the Court should not have reached the separability issue.⁹⁹ Justice Ginsburg noted that the designs at issue were “not designs of useful articles,” but instead PGS works

88. See Shipley, *supra* note 10, at 153.

89. See *Star Athletica, LLC*, 137 S. Ct. at 1012.

90. See Shipley, *supra* note 10, at 153.

91. See *id.*

92. *Star Athletica, LLC*, 137 S. Ct. at 1012.

93. See *Brandir Int'l, Inc. v. Cascade Pac. Lumber Co.*, 834 F.2d 1142, 1145 (1987) (holding a PGS feature is conceptually separable if “the design elements can be identified as reflecting the designer's artistic judgment exercised independently of functional influences”).

94. See *id.*

95. See *id.*

96. See *Star Athletica*, 137 S. Ct. at 1012; see also *Brandir Int'l, Inc.*, 834 F.2d at 1145.

97. See *Star Athletica, LLC*, 137 S. Ct. at 1016.

98. See Shipley, *supra* note 10, at 173–74.

99. *Star Athletica, LLC*, 137 S. Ct. at 1019 (Ginsburg, J., concurring).

“reproduced on useful articles.”¹⁰⁰ Therefore, there was no need for the Court to address separability because the owner of a copyright in a PGS work can reproduce the work in or on any medium they so desire without losing protection.¹⁰¹ Her concurrence follows the advice of her daughter, Professor Jane C. Ginsburg, who similarly argued that *Star Athletica* did not involve designs of useful articles, but designs reproduced on useful articles.¹⁰² To her, *Star Athletica* was an inappropriate case to rule on such a problematic issue that had troubled courts for decades.¹⁰³

If the majority had followed Justice Ginsburg’s concurrence, *Star Athletica* would have been a Supreme Court decision on PGS works reproduced on useful articles—not a redrawing of the separability test that has plagued the circuit courts.¹⁰⁴ Justice Ginsburg’s approach would have ultimately maintained the anarchy of having multiple circuit tests, but it also might have saved the issue of separability for another, perhaps better, case for the Supreme Court to more thoroughly address this thorny and problematic issue.¹⁰⁵

D. DISSENT

Justice Breyer, joined by Justice Kennedy, dissented, arguing that the designs were not separable from the cheerleading uniforms.¹⁰⁶ Breyer reasoned that applying the majority’s test to Varsity’s designs resulted in an unprotectable work because Varsity’s designs were not capable of being physically or conceptually separated from the underlying useful article.¹⁰⁷ Justice Breyer argued that the majority saw Varsity’s designs as something completely different than what they were.¹⁰⁸ To him, the designs did not simply depict designs; they depicted articles of clothing.¹⁰⁹ In Justice Breyer’s mind, Varsity wanted to protect “the design and cut of the dresses by seeking to

100. *Id.* at 1018.

101. *See id.* (citing 17 U.S.C. § 113(a) (2012)).

102. *See* Ginsburg, *supra* note 11, at 24.

103. *See id.* (“A PGS work applied to (‘reproduced on’) a useful article is not itself a useful article, and courts need not ‘twist themselves into knots’ endeavoring to parse the meaning of the statutory separability standard.”).

104. *See Star Athletica, LLC*, 137 S. Ct. at 1019–20 (Ginsburg, J., concurring).

105. *Id.*; *see also supra* note 11 at 24.

106. *Star Athletica, LLC*, 137 S. Ct. at 1030 (Breyer, J., dissenting).

107. *Id.* at 1032–33.

108. *Id.* at 1036.

The majority imagines that Varsity submitted something different—that is, only the surface decorations of chevrons and stripes, as in a textile design. As the majority sees it, Varsity’s copyright claim would be the same had it submitted a plain rectangular space depicting chevrons and stripes, like swaths from a bolt of fabric. But considered on their own, the simple stripes are plainly unoriginal.

109. *Id.*

protect surface decorations whose ‘treatment and arrangement’ are *coextensive with that design and cut*.”¹¹⁰ He warned the Court that it had “lost sight of its own important limiting principle” because copyrights in a useful article cannot be claimed by simply creating a replica in some other medium.¹¹¹

The dissent’s argument suggests the majority’s holding will allow creators to copyright previously uncopyrightable designs of useful articles.¹¹² Some scholars and practitioners have agreed with this contention.¹¹³ However, others have disagreed and predicted that the new test will not lead to many changes in the current landscape of protection for designs of useful articles.¹¹⁴ Whatever impact the test may have on the copyrightability of useful articles, the majority’s holding is extremely vague. The dissent’s application of the test already demonstrates that courts will create and contend with varying interpretations of the same test going forward.¹¹⁵

E. IMPLICATIONS AND CHANGES IN THE LEGAL LANDSCAPE

Star Athletica deceptively simplifies the useful article doctrine’s separability test. The test itself has two prongs: whether the claimed aesthetic features can be perceived as a work of art separate from the useful article, and whether they would qualify as a PGS work if imagined in some separate medium of expression.¹¹⁶ The Court noted the first prong, separate identification, is not particularly difficult to overcome.¹¹⁷ However, the Supreme Court offered very little in terms of substantial analysis when applying the first prong to the cheerleading uniforms.¹¹⁸ The Court simply noted that it could identify the aesthetic features as having PGS qualities.¹¹⁹ Not onerous, indeed. Despite the Supreme Court’s contention that the first prong can be easily applied, other courts will have to grapple with several questions, including how best to

110. *Star Athletica, LLC*, 137 S. Ct. at 1036 (Breyer, J., dissenting). For a critique on this argument, see Menell & Yablon, *supra* note 9, at 138–39.

111. *Star Athletica, LLC*, 137 S. Ct. at 1036 (Breyer, J., dissenting).

112. *See id.*

113. *See generally* Shipley, *supra* note 10, at 150 nn. 2, 3, & 4 (discussing several practitioners’ opinions on the case’s new test and potential outcome for the useful article doctrine’s application to fashion designs and useful articles).

114. *Id.*

115. *See Star Athletica, LLC*, 137 S. Ct. at 1036 (Breyer, J., dissenting); *see also* Levi, *supra* note 55, at 21.

116. *Star Athletica, LLC*, 137 S. Ct. at 1016.

117. *See id.* at 1010 (“The first requirement—separate identification—is not onerous. The decisionmaker need only be able to look at the useful article and spot some two- or three-dimensional element that appears to have pictorial, graphic, or sculptural qualities.”).

118. *See id.* at 1012 (“First, one can identify the decorations as features having pictorial, graphic, or sculptural qualities.”).

119. *See id.*

recognize PGS features, what the purpose of the first prong really is, and which types of features of a design of a useful article are inherently not able to satisfy the first prong.¹²⁰

The second prong is much more problematic for courts going forward because of the extreme uncertainty it creates. The Court noted that the second prong, independent existence, is much harder to overcome.¹²¹ To satisfy this prong, the aesthetic features must be able to exist as a PGS work separate from the utilitarian aspects of the useful article.¹²² Applying this prong of the test to cheerleader uniforms seemed relatively straightforward because the designs were easily imagined in another medium.¹²³ Perhaps what made the Court's analysis so simple was the fact that the designs at issue were two-dimensional aesthetic features applied to useful articles, not three-dimensional features intertwined with the utilitarian aspects.¹²⁴ Once again, the Court's analysis fell short in terms of substantially explaining how to apply the test.¹²⁵ For instance, the Court noted the surface design arrangements could be imagined on some other medium of expression.¹²⁶ Therefore, the designs at issue were separable from the useful articles.¹²⁷ The vague and ill-explained reasoning will most likely cause inconsistent results across the circuits once more.¹²⁸ This is especially true because the majority's test can be subject to a broad range of interpretations.¹²⁹

With *Star Athletica*, the Supreme Court not only “supposedly simpl[ified]” the separability test, it also erased the existing multitude of tests across the circuit courts.¹³⁰ Where the circuit courts distinguished between physical and conceptual separability, the Supreme Court opted instead for an overall conceptual inquiry.¹³¹ In so doing, the Court rejected the distinction between physical and conceptual separability of the useful article's features.¹³² It also rejected the previous separability tests of the circuit courts that focused on the

120. See Levi, *supra* note 55, at 19–21 (discussing the problems, concerns, and possible questions courts may have going forward regarding the first prong).

121. *Star Athletica, LLC*, 137 S. Ct. at 1010.

122. See *id.*

123. See *id.* at 1012.

124. See *id.* at 1012–13.

125. See *id.*; see also Levi, *supra* note 55, at 21–24.

126. See *Star Athletica, LLC*, 137 S. Ct. at 1012.

127. See *id.*

128. Levi, *supra* note 55, at 21.

129. See *id.* at 21; see also *Star Athletica, LLC*, at 1012–13 (referring to the dissent's contention that the designs were not separable because imagining the designs in a separate medium resulted in the useful articles themselves).

130. See Levi, *supra* note 55, at 15.

131. See *id.* at 17–19; see also *Star Athletica, LLC*, 137 S. Ct. at 1014.

132. See Levi, *supra* note 55, at 17–19.

remaining useful article itself, choosing to move the focus entirely to the perceived PGS features once they were separated from the useful articles.¹³³ As Professor Levi notes, courts will now have to focus on the claimed aesthetic features of the useful article itself—not on the marketability, functional considerations, or primary artistic appeal of the useful articles.¹³⁴ Furthermore, erasing the previous precedents creates another important problem for courts going forward—there is no guidance or precedent for courts to use when determining how to apply the *Star Athletica* separability test.¹³⁵ Given the opposing interpretations of the test within the case itself,¹³⁶ it is likely the test will yield inconsistent results.¹³⁷

IV. AFTERMATH OF THE OPINION

In the weeks following *Star Athletica*'s publication, a spate of lawyers and commentators argued vehemently about whether the opinion created a sound and consistent test. Both scholars and practitioners entered the fray, arguing for and against the new test. A few argued the opinion completely changed the legal landscape surrounding the useful article doctrine. Others argued the new test allows for a broader spectrum of copyrightability in useful articles.¹³⁸ A third group argued the new test may infringe on other aspects of intellectual property, such as design or utility patents.¹³⁹ This Part first examines current cases that grappled with or are currently grappling with the *Star Athletica* test. This Part then turns to the three biggest implications of the new test, and the problems courts will face going forward.

A. PARALLELS BETWEEN THE PREDICTIONS MADE AND CURRENT CASES

In the year since the Supreme Court decided *Star Athletica*, only a small smattering of cases have brought up the separability issue—one of which tacked on a copyright infringement claim to an existing design patent complaint. Most, however, have analyzed the test at a very surface level and

133. See Levi, *supra* note 55, at 15–16; see also *Star Athletica, LLC*, 137 S. Ct. at 1013–14.

134. See Levi, *supra* note 55, at 16–17.

135. See *id.* at 14–15.

136. *Star Athletica, LLC*, 137 S. Ct. at 1012–13 (referring to the dissent's contention that the designs were not separable because imagining the designs in a separate medium resulted in the useful articles themselves).

137. See Levi, *supra* note 55, at 14–15.

138. See Gene Quinn & Steve Bachmann, *Copyrights at the Supreme Court: Star Athletica v. Varsity Brands, IPWATCHDOG* (March 22, 2017), www.ipwatchdog.com/2017/03/22/copyrights-supreme-court-star-athletica-v-varsity-brands/id=79767/ [https://perma.cc/D84F-F9EF] (citing practitioner responses to *Star Athletica*'s holding).

139. See Menell & Yablon, *supra* note 9, at 137.

granted summary judgment on copyright separability issues.

1. *Applying the New Test in New Cases*

As noted above, scholars disagree about the implications of this new ruling on the useful article doctrine and copyright law going forward. Some argue the test simplifies the existing landscape while others argue the test creates more questions than answers. For instance, Professor David Shipley believes the new test “brings uniformity” and “should be relatively easy to apply” when it comes to pictorial or graphic works.¹⁴⁰ He believes the test could expand copyright protection where it was denied in the past.¹⁴¹ For Shipley, the problem with the test is the difficulty in applying it to sculptural features on useful articles.¹⁴² However, Professor Lee Burgunder takes issue with the Court’s new test because it fails to guide judges implementing this test in the future.¹⁴³ Indeed, he argues that the test itself will require judges to create even more tests to resolve this lack of guidance.¹⁴⁴ Similarly, Professor Lili Levy argues that courts will have a troublesome time with the second prong of the test because it is susceptible to opposite interpretations.¹⁴⁵ To her, the Court’s new test will be problematic going forward because courts will either apply it extremely liberally or conservatively depending on their subjective methodology.¹⁴⁶ Perhaps confirming Professor Shipley’s predictions about the application of *Star Athletica*’s test to simple two- and three-dimensional designs, courts have already applied the test with relative ease to straightforward cases.

Soon after the Supreme Court decided *Star Athletica*, the District Court for the Central District of Illinois reconsidered a partial summary judgment order in a copyright infringement case in light of *Star Athletica*.¹⁴⁷ At issue was the

140. Shipley, *supra* note 10, at 151.

141. *See id.* at 167–71, 171–74. More specifically, Professor Shipley revisits (somewhat) *Samara Bros., Inc. v. Wal-Mart Stores, Inc.*, 165 F.3d 120 (2d Cir. 1998), *Pivot Point Int’l, Inc. v. Charlene Prods.*, 372 F.3d 913 (7th Cir. 2004), *Carol Barnhart, Inc. v. Economy Cover Corp.*, 773 F.2d 411 (2d Cir. 1985), *Esquire, Inc. v. Ringer*, 591 F.2d 796 (D.C. Cir. 1978), and, finally, *Brandir Int’l, Inc. v. Cascade Pac. Lumber Co.*, 834 F.2d 1142 (2d Cir. 1987).

142. *See* Shipley, *supra* note 10, at 151.

143. Lee Burgunder, *Does Star Athletica Raise More Questions Than it Answers?*, IPWATCHDOG (April 13, 2017), <http://www.ipwatchdog.com/2017/04/13/star-athletica-raise-questions-answers/id=81977> [<https://perma.cc/7CCU-MGSC>].

144. Lee Burgunder, *District Court Applies New Supreme Court Product Design Standard to Light Bulbs*, IPWATCHDOG (September 19, 2017), <http://www.ipwatchdog.com/2017/09/19/district-court-applies-new-product-design-standard-light-bulbs/id=87667/> [<https://perma.cc/GH27-Q5ZL>].

145. *See* Levi, *supra* note 55, at 21.

146. *See id.*

147. *Design Ideas, Ltd. v. Meijer, Inc.*, No. 15-cv-03093, 2017 U.S. Dist. LEXIS. 94489 (C.D. Ill. June 20, 2017).

copyright to a clothespin clip that had “a silhouetted bird design on top.”¹⁴⁸ In the original motion for summary judgment, the court had applied the separability test under the law at the time and found that the bird design was “both physically and conceptually separable from the utilitarian aspect of the work.”¹⁴⁹ In light of the new standard set forth by *Star Athletica*, the district court again found that the bird design on the clothespin was separable from the underlying useful article.¹⁵⁰ The bird design could 1) be “perceived as a three-dimensional work of art separate from the useful article,” and 2) “qualify as a protectable sculptural work on its own if it were imagined separately from the useful article.”¹⁵¹

The defendant argued that the bird design on top of the clothespin was useful because the clothespin could be hung from a variety of places using the bird’s beak.¹⁵² The district court rejected this argument because, in its own words, “what is the usefulness of hanging the bird from a rod or hanging the bird on a string by its beak?”¹⁵³ Therefore, the district court’s original ruling was still valid under the new *Star Athletica* separability test.¹⁵⁴

This case represents a relatively simple application of *Star Athletica*’s new separability test to a three-dimensional feature. For instance, the bird on the clothespin was easily separable from the useful article.¹⁵⁵ The sculptural bird statuette was not integrated with the form or function of the clothespin and only sat on top.¹⁵⁶ As a result, the court was able to do a simple and straightforward surface level analysis to hold that it was separable.¹⁵⁷ In other words, the bird was separable because it simply topped the clothespin itself—there was no integration of form and function.¹⁵⁸

In another ongoing case concerning copyright infringement and the issue of separability, the District Court for the Southern District of New York rejected a defendant’s motion for summary judgment because the copyrighted feature of a light set could be separable from the useful article.¹⁵⁹ At issue, in

148. *Id.* at *1.

149. *Id.* at *3.

150. *Id.* at *5–6.

151. *Id.* at *6.

152. *Id.*

153. *Id.* at *7 (“The *Star Athletica* Court noted that the design feature must qualify as a nonuseful pictorial, graphic, or sculptural work.”) (referring to *Star Athletica, LLC v. Varsity Brands, Inc.*, 137 S. Ct. 1002, 1013 (2017)).

154. *See id.* at *8.

155. *Id.* at *5–6.

156. *See id.*

157. *See id.*

158. *See id.*

159. *Jetmax Ltd. v. Big Lots, Inc.*, 15-cv-9597 (KBF), 2017 U.S. Dist. LEXIS 138041, at *2–3 (August 28, 2017).

this case, is an ornamental light set with a teardrop cover and wire frame.¹⁶⁰ Holding that the teardrop covers were separable from the underlying useful article, the court noted the covers “undoubtedly . . . ha[d] sculptural qualities.”¹⁶¹ Furthermore, the court noted the covers, as sculptural works, were “capable of existing apart from the utilitarian aspect of the light set.”¹⁶² As with the bird clothespin case discussed above, this was a relatively straightforward application of the new separability test; the decorative light covers could be seen as standalone PGS works apart from the useful article and were not integrated into the overall function or form of the light string.¹⁶³

2. *Copyright’s Overlap with Design Patent*

After the *Star Athletica* decision came out, some scholars predicted possible adverse effects in realms of overlapping intellectual property law, such as that of copyright and design patent. For instance, Professor Peter Menell argues that the decision may have “more significant effects on design patent protection and the larger intellectual property landscape than . . . on copyright[s] . . . useful article doctrine.”¹⁶⁴ Arguably, Professor Menell’s prediction is correct because the line between obtaining copyright or design patent protection in most cases is extremely blurry—they both protect nonfunctional artistic aspects of useful articles.¹⁶⁵

The *Star Athletica* decision continues to muddy the distinction between the two intellectual property regimes¹⁶⁶ by noting in its dicta that design patent and copyrights are not mutually exclusive.¹⁶⁷ In Professor Viva Moffat’s opinion, the availability of multiple forms of intellectual property protection for designs makes it difficult to determine which regime—design patent, copyright, or trademark—is appropriate to protect ornamental designs.¹⁶⁸ As a result, the

160. *See id.* at *3–4.

161. *Id.* at *15.

162. *Id.* at *16 (“[O]nce the covers are removed, the remainder is a functioning but unadorned light string.”).

163. *See id.*

164. Menell & Yablon, *supra* note 9, at 137.

165. *See* Viva R. Moffat, *Mutant Copyrights and Backdoor Patents: The Problem of Overlapping Intellectual Property Protection*, 19 BERKELEY TECH. L.J. 1473, 1475–77 (2004) (discussing the erosion of the boundaries between patents, copyrights, and trademarks, the greater protection sought by creators through multiple intellectual property regimes, and the failure of Congress to address this problem).

166. *See id.* at 1475–77.

167. *See* *Star Athletica, LLC v. Varsity Brands, Inc.*, 137 S. Ct. 1002, 1015–16 (2017) (noting that “we have long held that design patent and copyright are not mutually exclusive” (discussing *Mazer v. Stein*, 347 U.S. 201, 217 (1954))).

168. *See* Moffat, *supra* note 165 at 1511–12 (discussing the problems of the overlapping intellectual property regimes protecting ornamental design features).

overlap between copyright and design patent is detrimental to the intellectual property regime as a whole because the different regimes are not properly coordinated and provide only patchwork protection for ornamental designs.¹⁶⁹ For instance, whereas copyright protection extends to any PGS features of a useful article,¹⁷⁰ a design patent protects “new, original, and ornamental design[s]” of articles of manufacture so long as the design is “primarily ornamental.”¹⁷¹ Therefore, much like the useful article doctrine of copyright limiting protection for functionality, design patents protect non-functional aspects of articles of manufacture.¹⁷² Because of this overlap of protection, designers can choose between the different regimes when trying to protect design features of functional articles.¹⁷³

There is one notable case that is grappling with the *Star Athletica* decision in this regard, *Puma, SE v. Forever 21*, which involves a specific line of Puma shoes.¹⁷⁴ Perhaps validating the dissent’s fear,¹⁷⁵ Puma added copyright infringement to their design patent claim against Forever 21 after *Star Athletica*’s holding came out.¹⁷⁶ The case itself revolves around a line of shoes co-designed and created by Rihanna and Puma.¹⁷⁷ This shoe line is protected by design patents, but because of *Star Athletica*’s holding, Puma amended its complaint to include claims of copyright infringement.¹⁷⁸ As a result, Puma has combined the two different regimes of copyright and design patent into one complaint to try and protect a line of designer shoes from being copied by Forever 21.¹⁷⁹

According to commentators, this is an example of a company seeking to push the boundary of copyright protection for useful articles.¹⁸⁰ To fashion

169. *See id.* at 1512.

170. *See* 35 U.S.C. §§ 101–102 (2012).

171. 35 U.S.C. § 171 (2012); *L.A. Gear, Inc. v. Thom McAn Shoe Co.*, 988 F.2d 1117, 1123 (Fed. Cir. 1993).

172. *See* Mark P. McKenna & Christopher Jon Sprigman, *What’s In, and What’s Out: How IP’s Boundary Rules Shape Innovation*, 30 HARV. J.L. & TECH. 491, 502 (2017).

173. *See* Alana M. Fuierer & Shanna K. Sanders, *Copyright and Design Protection Post-Star Athletica: Supreme Court Issues Key Decision Regarding Copyrightability of Design Features of Useful Articles*, HRFM TODAY (May 5, 2017), <http://www.hrfmtoday.com/2017/05/copyright-and-design-protection-post-star-athletica.html> [<https://perma.cc/7ZAP-MLHW>].

174. *See* Amended Complaint, *Puma v. Forever 21, Inc.*, No. 2:17-cv-02523-PSG-E, 2017 WL 3309169 (C.D. Cal. April 4, 2017) [hereinafter Amended Complaint].

175. *See supra* note 109; *see also* Amended Complaint, *supra* note 174, at 3–6.

176. *See* Amended Complaint, *supra* note 174, at 6–8; *see also* *Puma SE et al. v. Forever 21, Inc.*, No. CV17-2523 PSG Ex, 2017 WL 4771004, at *1, *6–8 (granting Forever 21’s motion to dismiss in part and allowing Puma to amend its copyright infringement claim).

177. *See id.*

178. *See id.*

179. *See id.*

180. *See id.*; *see also* Levi, *supra* note 55, at 4.

industry experts and copyright lawyers, *Star Athletica* represented a step toward allowing fashion designers to more easily protect original aspects of their clothing designs against the knock-off industry through copyright without having to go through the hassle of obtaining a design patent.¹⁸¹ By amending their design patent complaint against Forever 21 to include copyright infringement, Puma is effectively doing just that—testing the boundaries of the *Star Athletica* ruling.¹⁸² It remains to be seen, however, whether *Star Athletica* will push the boundaries of copyright protection for fashion designs or designs of useful articles in general.¹⁸³ Despite this uncertainty, the Supreme Court's ruling strengthens the trend for creators to prefer and seek copyright protection rather than other areas of intellectual property law for protecting aesthetically artistic features of useful articles.¹⁸⁴

3. *Protecting Functionality*

More worrisome, however, is the question of whether this ruling allows some functional aspects of useful articles to be copyrighted. Professors Christopher Buccafusco and Jeanne C. Fromer argue that the Supreme Court's ruling effectively rejected the idea that copyright law should only protect the exclusively expressive features of a useful article.¹⁸⁵ To them, the ruling creates a potential problem that conflicts with the underlying purpose of the useful article doctrine: preventing the protection of functional aspects.¹⁸⁶ Thus, they argue, this holding pushes some of the burden of policing functionality to other copyright doctrine mechanisms.¹⁸⁷ For example, the merger doctrine and the filtering analysis that copyright law demands when examining an infringing work might be able to render functional separable PGS features unprotectable.¹⁸⁸

181. See Levi, *supra* note 55, at 4; see also Patrick J. Concannon, *Many Options to Protect Your Fashion Design, but No One-Stop Shop*, ART L.J. (July 10, 2017), <https://artlawjournal.com/fashion-design> [https://perma.cc/R7H2-TD2S].

182. See Amended Complaint, *supra* note 174, at 8 (including a copyright claim against Forever 21); see also Levi, *supra* note 55, at 4.

183. See Quinn & Backmann, *supra* note 138 (citing practitioner responses to *Star Athletica*'s holding).

184. See Shipley, *supra* note 10, at 152–53.

185. Christopher Buccafusco & Jeanne C. Fromer, *Fashion's Function in Intellectual Property Law*, 93 NOTRE DAME L. REV. 51, 91 (2017).

186. See *id.* at 91–92.

187. See *id.* at 91–92.

188. See *id.* The merger doctrine denies copyright protection when there are only a limited number of ways in which one may express something. The filtering analysis described above refers to courts filtering out unprotectable elements from a copyrighted work when engaging in an infringement analysis. Professors Buccafusco and Fromer argue that both of these aspects of copyright law might render PGS features on useful articles unprotectable. See *id.* at 92.

The problem posed in Section IV.A.2, that there will be a trend toward increased copyright protection for PGS aspects of useful articles, has the potential for allowing creators to copyright utilitarian features of useful articles.¹⁸⁹ Justice Breyer's dissent alluded to such an issue because, as he noted, almost any artistic industrial design can be perceived as a separate PGS work in some other medium.¹⁹⁰ His famed example being that of Marcel Duchamp's shovel art.¹⁹¹ This idea is potentially even more dangerous because the majority noted that the "imagined remainder" does not have to be a fully functioning useful article.¹⁹² Therefore, it is not inconceivable that overall designs of useful articles that can be conceived as separate PGS works could be separable and copyrightable under the Supreme Court's test.¹⁹³ The question then becomes one of how much of the utilitarian aspects of a useful article should remain before a court determines the PGS features are not separable.¹⁹⁴ This question is extremely important in cases where the design of the useful article is completely intertwined with the utilitarian aspects of a useful article and are not separable from its function.¹⁹⁵

As there is no current case dealing with this issue, older cases where form and function were one are important to examine under the Court's new test. For instance, as discussed in Section III.B, applying the *Star Athletica* test to the facts and circumstances of *Brandir* might have led a court to rule that the ribbon bike rack is separable.¹⁹⁶ Another case that perhaps can be called into question here is *Kieselstein-Cord*.¹⁹⁷ In *Kieselstein-Cord*, the Second Circuit considered evidence that decorative belt buckles were primarily sold as jewelry, despite evidence of the belt buckles in question being used normally as well.¹⁹⁸ As a result, the Second Circuit held the PGS features of the belt buckles were conceptually separable from the underlying useful article because their primary

189. See Shipley, *supra* note 10, at 150–51 (discussing the danger of applying the *Star Athletica* test too leniently); see also Menell & Yablon, *supra* note 9, at 145–47.

190. See *Star Athletica, LLC v. Varsity Brands, Inc.*, 137 S. Ct. 1002, 1033–34 (2017) (Breyer, J., dissenting).

191. See *id.* at 1033–34.

192. See *id.* at 1006 (majority opinion).

193. See Shipley, *supra* note 10, at 171 ("Moreover, notwithstanding the Court's statement in *Star Athletica* that 'the statute does not require the imagined remainder to be a fully functioning useful article at all,' the opinion should not be pushed to hold that the overall shapes . . . are copyrightable . . .").

194. See *id.*

195. See *id.*

196. See *supra* Section III.B, notes 91–96 and accompanying text.

197. See *Kieselstein-Cord v. Accessories by Pearl, Inc.*, 632 F.2d 989, 993 (2d Cir. 1980) (holding that a belt buckle was copyrightable because the artistic features of the design were "primary" to the "subsidiary utilitarian function").

198. See *id.* at 990–91.

function was artistic.¹⁹⁹ Under *Star Athletica's* test, a court will not look to see whether the PGS features of a belt buckle are primary to the utilitarian features of a useful article.²⁰⁰ Instead, a court will determine whether the belt buckle's PGS features can exist in some other medium of expression apart from the useful article.²⁰¹ Given the fact that the belt buckles' PGS features were held to be separable from the utilitarian aspects,²⁰² the case may have come out differently under *Star Athletica's* test depending on the amount of function a court allowed the PGS features to encompass.²⁰³

To avoid giving copyright protection to utilitarian aspects of useful articles, a court should, under the new test, still keep the functional aspects of a useful article in mind before turning to focus on the PGS features. The Supreme Court majority pushed aside any consideration of a useful article's utilitarian aspects when it decided to focus solely on the claimed PGS features.²⁰⁴ While this approach avoids the sticky question of what constitutes the utility of a useful article, it also raises the problem of differentiating between the PGS and utilitarian features. As both the District Court's holding and Sixth Circuit's dissent in *Varsity Brands* demonstrate,²⁰⁵ defining the term "function" and understanding the article's utility is an important first step; without first defining that term, a court will not be able to separate the PGS features from the utilitarian features when engaging in the separability analysis.

Furthermore, in those rare cases where form and function are intertwined, a court must keep in mind the majority's statement that the claimed PGS feature cannot be a useful article in and of itself.²⁰⁶ As alluded to in Justice Breyer's dissent,²⁰⁷ a generous approach to applying the new test could render almost any aesthetically pleasing design of a useful article copyrightable as a PGS work. However, there may be a faint glimmer of hope for avoiding copyright protection for functional aspects given the majority's limiting statement that the design cannot constitute a useful article by itself.²⁰⁸

199. *See id.* at 993–94.

200. *See id.*

201. *Star Athletica, LLC v. Varsity Brands, Inc.*, 137 S. Ct. 1002, 1016 (2017).

202. *See Kieselstein-Cord*, 632 F.2d at 994–95 (Weinstein, J., dissenting).

203. *See supra* note 185; *see also* Section IV.A.3, notes 185–195.

204. *See Star Athletica, LLC*, 137 S. Ct. at 1013–14 (“But the statute does not require the imagined remainder to be a fully functioning useful article at all, much less an equally useful one.”).

205. *See Varsity Brands, Inc. v. Star Athletica, LLC*, 799 F.3d 468, 494–95 (6th Cir. 2015) (McKeague, J., dissenting); *see also Varsity Brands, Inc. v. Star Athletica, LLC*, No. 10-2508, 2014 WL 819422 at *8–9 (W.D. Tenn. Mar. 1, 2014).

206. *See Star Athletica, LLC*, 137 S. Ct. at 1010 (“Of course, to qualify as a pictorial, graphic, or sculptural work on its own, the feature cannot itself be a useful article[.]”).

207. *See id.* at 1033–34 (Breyer, J. dissenting).

208. *See id.* at 1010 (majority opinion) (“Of course, to qualify as a pictorial, graphic, or

Therefore, when the utilitarian and PGS features are completely intertwined and nigh-indivisible, courts should not give copyright protection to functional aspects of useful articles.²⁰⁹ This is ultimately, however, a question for the lower courts, which, due to the vague and unhelpful analysis of the Supreme Court, will likely create a morass of tests similar to the useful article doctrine's legal landscape before *Star Athletica*.²¹⁰

V. CONCLUSION

While the Supreme Court wanted to create a standard test for separability across the circuit courts, it ultimately created a vague test that presents more questions than answers. In other words, *Star Athletica* was a missed opportunity to provide much-needed clarification on copyright's useful article doctrine. While applications of the test related to two-dimensional and some three-dimensional designs are unlikely to be difficult so long as they have no part in the functionality of the useful article, applications of the test to functional, aesthetically pleasing three-dimensional artworks will be much more difficult.

While courts must focus on the artistic PGS features of a useful article, they should also keep in mind the overall function and utility of the useful article. That way, courts are better able to separate the copyrightable PGS features from the non-copyrightable utilitarian features. However, when these two features are intertwined, courts would do well to remember the Supreme Court's limiting sentence: "[o]f course, to qualify as a [PGS] work on its own, the feature cannot itself be a useful article."²¹¹ As Professor Ginsburg points out, this part of the holding has the potential to limit protection of useful articles when the design and function are one.²¹² Hopefully, this will ensure that courts can avoid giving copyright protection to useful articles where the PGS features encompass the entirety of the useful article.

sculptural work on its own, the feature cannot itself be a useful article[.]").

209. See Jane C. Ginsburg, *The Sum Is More Public Domain than Its Parts?: US Copyright for Works of Applied Art Under Star Athletica's Imagination Test*, 166 U. PA. L. REV. ONLINE 83, 97–100 (2017), <http://www.pennlawreview.com/online/166-U-Pa-L-Rev-Online-83.pdf> [<https://perma.cc/H4NQ-Q6WR>].

210. See *Copyright Act of 1976—Useful Articles*, *supra* note 39, at 371–72.

211. See *Star Athletica, LLC*, 137 S. Ct. at 1010.

212. See Ginsburg, *supra* note 209, at 97–98.

SPEAK NO EVIL: NATIONAL SECURITY LETTERS, GAG ORDERS, AND THE FIRST AMENDMENT

Rachel Dallal[†]

I. INTRODUCTION

Imagine for a moment that you are the owner of a small start-up. Your company provides multiple online services to its subscribers: a blogging interface, an email platform, and a file-sharing site. As an activist and a digital entrepreneur, you nurture a powerful belief in the democratizing potential of the Internet, and you dedicate much of your free time to campaigning for such causes as net neutrality and consumer data protection. One day, unexpectedly, you receive a letter from the FBI. Under the auspices of the USA Freedom Act, the letter requires you to disclose certain information about one of your subscribers immediately.¹

There is no search warrant. No court has seen or approved the contents of this letter. It is, however, a legal demand. And it comes with an additional mandate: a nondisclosure order, prohibiting you from notifying the FBI's target and from ever revealing—to anyone—that the government has contacted you for information at all. The receipt of this letter marks your induction into the controversial world of national security letters, and until a federal court contradicts the FBI's insistence on your silence, you may not reveal the details of your situation to anyone but a lawyer.

This scenario plays out on a regular basis. An increasingly ubiquitous weapon in the FBI's investigative arsenal, the national security letter (NSL) is unique among the federal government's myriad search powers. Most akin to administrative subpoenas, NSLs permit the FBI to efficiently compel the release of individual consumer data from third-party institutions, such as banks, telephone companies, and Internet service providers (ISPs).² They are, quite literally, letters: sent directly from the FBI to the recipient, demanding access to information that the FBI certifies is relevant to an ongoing national

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1. See Hannah Bloch-Wehba, *Process Without Procedure: National Security Letters and First Amendment Rights*, 49 SUFFOLK UNIV. L. REV. 367 (2016) (identifying such information as pertaining to telephone calls, texts, emails, instant messaging services, and more).

2. See William Bendix & Paul J. Quirk, *Deliberating Surveillance Policy: Congress, the FBI, and the Abuse of National Security Letters*, 28 J. POL'Y HIST. 447, 448 (2016).

security investigation.³ The vast majority of the time,⁴ they are accompanied by a nondisclosure order prohibiting the recipient from communicating anything about the letter—including the bare fact of its existence—to “any person.”⁵ And, as in the hypothetical described above, both the NSL and the accompanying gag order are issued without any judicial oversight.⁶

In First Amendment jurisprudence, censorship that prohibits speech *in advance* of its occurrence—as opposed to regulating it by instituting a *post hoc* penalty—is known as a prior restraint.⁷ Critics have convincingly argued, both in and out of court, that NSL nondisclosure orders constitute such prior restraints because they unilaterally prohibit certain communication before it takes place. Such restraints receive a “heavy presumption” of invalidity when examined by the courts,⁸ and NSL nondisclosure orders have come under heavy judicial fire as a result.⁹ The USA Freedom Act of 2015 was intended to remedy the constitutional deficiencies of past NSL regimes. However, while undoubtedly an improvement on prior statutes, the Act has not done enough to fully guarantee the safeguards that are required for any system of prior restraints to pass constitutional muster.

The Ninth Circuit, however, believes that the Freedom Act is constitutionally sufficient. In July of 2017, the court evaluated a First Amendment challenge to the NSL provision that applies to ISPs—§ 2709¹⁰—and upheld its constitutionality.¹¹ In doing so, the court made two crucial

3. *See id.* at 451 (explaining that “FBI officials simply issue a letter ordering a business to surrender a customer’s or client’s information”); *see also* 18 U.S.C. § 2709(b)(1) (2012) (requiring the FBI to certify that the targeted information is “relevant to an authorized investigation”).

4. *See infra* note 46 and accompanying text.

5. 18 U.S.C. § 2709(c) (2012).

6. *See id.* (permitting the FBI to issue nondisclosure orders subject only to internal certification that disclosure may cause one of four enumerated harms).

7. *See, e.g.*, *Alexander v. United States*, 509 U.S. 544, 550 (1993) (explaining that prior restraints “forbid[] certain communications when issued in advance of the time that such communications are to occur”); *Near v. Minnesota*, 283 U.S. 697, 713–14 (1931) (defining prior restraints as any “previous restraint upon publication,” rather than a later penalty).

8. *See Bantam Books, Inc. v. Sullivan*, 372 U.S. 58, 70 (1963) (noting that any prior restraint comes before the Court “bearing a heavy presumption against its constitutional validity”).

9. The following Part lays out the political and legal evolution of the NSL authority and includes a discussion of the district court cases that sharply criticized its restrictive impact on speech in the wake of 9/11. *See infra* Section II.D.

10. Section 2709 delineates the FBI’s NSL authority with respect to wire and electronic communications providers, such as telephone companies and ISPs. *See* 18 U.S.C. § 2709 (2012).

11. *See In re Nat’l Sec. Letter*, 863 F.3d 1110, 1131 (9th Cir. 2017) (“[A]ssuming the

assertions. The first was an expression of serious doubt as to whether the FBI's gag orders constituted prior restraints at all.¹² The second was that the law's procedural safeguards were constitutionally sufficient regardless of whether prior restraint doctrine applied, making a final determination on the matter unnecessary.¹³ In this Note, I contend that the court erred on both fronts, having strayed both from precedent and from sound First Amendment policy.

First, I argue that the NSL nondisclosure orders are prior restraints,¹⁴ and that the Ninth Circuit's doubt on that point rested on faulty premises that have serious implications for the First Amendment's continued vitality. Second, I argue that the procedural safeguards implemented by the 2015 USA Freedom Act are insufficient to render NSL nondisclosure orders constitutionally permissible. While a marked improvement over the previous statute, the current framework nonetheless fails to meet the exacting standard required by the Supreme Court's prior restraint jurisprudence.¹⁵

This Note proceeds in three parts. Part II explains the relevant First Amendment caselaw and lays out the legal history of the NSL authority, examining the decades-long dialogue between Congress, the FBI, and the federal courts as they have considered the constitutionality of NSL nondisclosure orders. Part III delves into the Ninth Circuit's recent decision in *In re National Security Letter* to illustrate the court's route to its problematic

nondisclosure requirement is the type of prior restraint for which the *Freedman* procedural safeguards are required, the NSL law provides those safeguards. The nondisclosure requirement in the NSL law therefore does not run afoul of the First Amendment.”); *see also* *Freedman v. Maryland*, 380 U.S. 51 (1965). The Ninth Circuit's decision marks the first time that a federal appellate court has reviewed the constitutionality of the USA Freedom Act.

12. *See id.* at 1129 (“[T]he NSL law is more similar to governmental confidentiality requirements that have been upheld by the courts.”).

13. *See id.* (“We need not, however, resolve the question whether the NSL law *must* provide procedural safeguards, because the 2015 NSL law in fact provides all of them.”).

14. *See, e.g., Alexander v. United States*, 509 U.S. 544, 550 (1993) (explaining that prior restraints “forbid[] certain communications when issued in advance of the time that such communications are to occur”).

15. The Supreme Court has held that prior restraints can only pass constitutional muster if they incorporate three procedural safeguards. First, the initial restraint must be imposed only for a brief, specified period. Second, the censored speaker must be guaranteed expeditious judicial review. Third, the government must bear the burden of petitioning for said review and must also bear the burden of proving the necessity of the restraint before the court. *See Freedman v. Maryland*, 380 U.S. 58–59 (1965); *see also In re Nat'l Sec. Letter*, 863 F.3d at 1129–30 (quoting *Thomas v. Chi. Park Dist.*, 534 U.S. 316, 321 (2002)) (“First, *Freedman* requires that ‘any restraint prior to judicial review can be imposed only for a specified brief period Second, *Freedman* requires that ‘expeditious judicial review’ must be available Finally, *Freedman* requires that the government ‘bear the burden of going to court to suppress the speech’ and ‘the burden of proof once in court.’”).

ruling. Finally, Part IV argues that the current iteration of the NSL law authorizes prior restraints and fails to provide the safeguards that would render such restraints constitutionally permissible. Part V concludes.

II. LEGAL BACKGROUND

This Part provides the background necessary to situate the Ninth Circuit's recent decision within the complex legal and historical context of both First Amendment law and NSLs. First, I briefly explain First Amendment jurisprudence on prior restraints, illustrating the constitutional framework against which the validity of NSL nondisclosure orders has been evaluated. Next, I describe the evolution of the FBI's NSL authority, tracking its development from a rarely used and severely limited exception to a modern staple of the investigative process. In the process, I identify and explain the cases that have characterized the First Amendment debate over NSL nondisclosure orders.

A. PRIOR RESTRAINT DOCTRINE

Prior restraints are a form of censorship that is traditionally anathema to the First Amendment. As described throughout this Note, they are restrictions that “*forbid*] certain communications when issued in advance of the time that such communications are to occur,” suffocating speech before it can ever reach its audience.¹⁶ While such restraints are “not unconstitutional per se,”¹⁷ they come before the courts “bearing a heavy presumption against [their] constitutional validity”¹⁸ due to “a theory deeply etched in our law: a free society prefers to punish the few who abuse rights of speech after they break the law than to throttle them and all others beforehand.”¹⁹ This principle requires a greater presumption and “broader” degree of protection against prior restraints than other, *post hoc* censorship schemes.²⁰ To this end, the Supreme Court has commanded that prior restraints be targeted to accomplish only constitutionally permitted, “pin-pointed objective[s],” for which they must be “tailored as precisely as possible.”²¹ In other words, the Supreme Court's First Amendment jurisprudence demands that the federal courts examine prior restraints with the strictest form of scrutiny, and assume from the outset that they are most likely unconstitutional. Consequently, the Ninth

16. *Alexander*, 509 U.S. at 550.

17. *Se. Promotions Ltd. v. Conrad*, 420 U.S. 546, 558 (1975).

18. *Bantam Books, Inc. v. Sullivan*, 372 U.S. 58, 70 (1963).

19. *Conrad*, 420 U.S. at 559.

20. *Id.*

21. *Carroll v. Comm'rs of Princess Anne*, 393 U.S. 175, 183–84 (1968).

Circuit itself has repeatedly described the evaluation of prior restraints as “extraordinarily exacting.”²²

To pass constitutional muster, a system of prior restraints must not only survive exacting scrutiny but must also fully conform to three procedural safeguards delineated by the Supreme Court’s decision in *Freedman v. Maryland*.²³ First, the initial imposition of the restraint must be limited to a specified, brief period, by the end of which the censor must lift the prohibition or bring it before a court.²⁴ Second, the restrained speaker must be guaranteed expeditious judicial review.²⁵ And third, the burden of seeking that review, and of proving the necessity of the restraint, must be borne by the government.²⁶ In sum, a constitutional prior restraint would involve a brief, temporary nondisclosure order issued to maintain the status quo while the government seeks judicial review; without an expeditious judicial ruling in favor of its necessity under a standard of strict scrutiny, the restraint would then expire. This is because “only a procedure requiring a judicial determination suffices to impose a valid final restraint.”²⁷ The Court also emphasized this principle in *Bantam Books*, stating that it would “tolerate[] such a system [of prior restraints] only where it operated under judicial superintendence and assured an almost immediate judicial determination of the validity of the restraint.”²⁸

In the Pentagon Papers case, the Supreme Court addressed the question of whether prior restraints could operate constitutionally in a context that pitted compelling national security interests against free speech.²⁹ In that case,

22. *CBS v. Dist. Court*, 729 F.2d 1174, 1178 (9th Cir. 1984); *see also* *Hunt v. NBC*, 872 F.2d 289, 295 (9th Cir. 1989).

23. 380 U.S. 51 (1965).

24. *See id.* at 58–59 (“To this end, the exhibitor must be assured, by statute or authoritative judicial construction, that the censor will, within a specified brief period, either issue a license or go to court to restrain showing the film. Any restraint imposed in advance of a final judicial determination on the merits must similarly be limited to preservation of the status quo for the shortest fixed period compatible with sound judicial resolution.”); *see also In re Nat’l Sec. Letter*, 863 F.3d 1110, 1129 (9th Cir. 2017) (quoting *Thomas v. Chi. Park Dist.*, 534 U.S. 316, 321 (2002)) (“First, *Freedman* requires that ‘any restraint prior to judicial review can be imposed only for a specified brief period.’”).

25. *Freedman*, 380 U.S. at 59 (“[T]he procedure must also assure a prompt final judicial decision.”); *see also In re Nat’l Sec. Letter*, 863 F.3d at 1130 (quoting *Thomas*, 534 U.S. at 321) (“Second, *Freedman* requires that ‘expeditious judicial review’ must be available.”).

26. *See Freedman*, 380 U.S. at 59 (“[T]he censor will . . . go to court.”); *see also In re Nat’l Sec. Letter*, 863 F.3d at 1130 (quoting *Thomas*, 534 U.S. at 321) (“Finally, *Freedman* requires that the government ‘bear the burden of going to court to suppress the speech’ and ‘the burden of proof once in court.’”).

27. *Freedman*, 380 U.S. at 58.

28. *Bantam Books, Inc. v. Sullivan*, 372 U.S. 58, 70 (1963).

29. *See N.Y. Times Co. v. United States*, 403 U.S. 713 (1971).

the government sought an injunction to prevent the New York Times and the Washington Post from publishing classified documents about the Vietnam War.³⁰ The Court ruled that the government had not met the “heavy burden” required to justify “the imposition of [a prior] restraint.”³¹ Justice Black, in his concurrence, explained that the First Amendment’s “emphatic command” prohibited the government from restricting speech “in the name of ‘national security,’” a term that he described as a “broad, vague generality.”³² Similarly, Justice Douglas noted that, while “these disclosures may have a serious impact,” the risk was “no basis for sanctioning a previous restraint on the press.”³³ He, Justice Stewart, and Justice White all further extolled the critical importance of an informed public to a functioning democracy. They unequivocally stated that permitting the government to impose a prior restraint on information of public importance would be unacceptable, even weighed against the indisputable interest of maintaining the nation’s wartime security.³⁴

As discussed below, NSL nondisclosure orders restrict speech in advance of the act of speaking but do not guarantee the safeguards that the First Amendment requires under *Freedman*. This makes them unconstitutional prior restraints, despite their national security purpose. Further, because § 2709 does not conform to *Freedman*’s requirements, it also does not satisfy the Supreme Court’s mandate that prior restraints be “tailored as precisely as possible.” Therefore, applying strict scrutiny, the Ninth Circuit should have found the law unconstitutional.³⁵

B. NATIONAL SECURITY LETTERS: AN INTRODUCTION

Today, NSLs are an established feature of the FBI’s investigative machinery and are authorized by a variety of statutory provisions.³⁶ As a general rule, they permit the government to compel the release of private, individual consumer information from various third-party institutions without a warrant or any other form of judicial order.³⁷ However, their specifics vary

30. *See id.*

31. *Id.* at 714.

32. *Id.* at 719.

33. *Id.* at 722–23.

34. *See id.* at 719–20.

35. *Carroll v. Comm’rs of Princess Anne*, 393 U.S. 175, 183–84 (1968).

36. The Right to Financial Privacy Act, 12 U.S.C. § 3414(a)(5)(A) (2012), the Fair Credit Reporting Act, 15 U.S.C. § 1681u(a) (2012), and the Electronic Communications Privacy Act, 18 U.S.C. § 2709 (2012), all separately authorize NSLs.

37. *See, e.g.*, 18 U.S.C. § 2709 (2012); 50 U.S.C. § 3162 (2012) (authorizing the FBI to issue NSLs to financial agencies, financial institutions, consumer reporting agencies, etc.); 12 U.S.C. § 3414 (2012) (authorizing NSLs for financial records relevant to “certain intelligence and protective purposes”); 15 U.S.C. §§ 1681(u), (v) (2012) (authorizing NSLs for consumer

slightly depending on the nature of the targeted information.

The particular NSL provision at issue here—a feature of the Electronic Communications Privacy Act (ECPA), known as § 2709—applies specifically to wire and electronic communication service providers, such as telephone companies and ISPs.³⁸ It requires such companies to respond to NSLs with relevant subscriber information, toll billing records information, or electronic communication transactional records.³⁹ These records may include a broad swath of information related to telephone calls, texts, emails, and instant messaging services, such as Facebook messenger.⁴⁰

To issue an NSL, the Director of the FBI or a designee must certify that the targeted information is “relevant” to an “authorized investigation to protect against international terrorism or clandestine intelligence activities.”⁴¹ Certification is entirely internal, and is not subject to judicial oversight or review.⁴²

Similarly, the FBI may—on proper certification—issue a nondisclosure order prohibiting the NSL recipient from speaking about or even revealing the mere fact of the investigation.⁴³ Such an order restrains the recipient from communicating anything about the NSL to “any person” other than an attorney, an FBI-approved exception, or anyone who must be informed to effectively comply with the demand for records.⁴⁴ The certification required to authorize these orders is relatively straightforward. The Director of the FBI or a designee must certify that disclosure “may result” in one of four broad, enumerable harms: (1) “danger to the national security of the United States;” (2) “interference with a criminal, counterterrorism, or counterintelligence investigation;” (3) “interference with diplomatic relations;” or (4) “danger to the life or physical safety of any person.”⁴⁵ The FBI issues these certifications liberally. “[B]y the government’s own estimate,” ninety-seven percent of NSLs come with a gag order.⁴⁶

Like the certification required for NSL issuance, certification for an

reporting agencies).

38. See 18 U.S.C. § 2709 (2012).

39. See 18 U.S.C. § 2709(a) (2012).

40. See Bloch-Wehba, *supra* note 1.

41. 18 U.S.C. § 2709(b) (2012).

42. See 18 U.S.C. § 2709 (2012).

43. See 18 U.S.C. § 2709(c)(1)(A) (2012).

44. 18 U.S.C. § 2709(c)(2)(A) (2012).

45. 18 U.S.C. § 2709(c)(1)(B) (2012).

46. *In re Nat'l Sec. Letter*, 930 F. Supp. 2d 1064, 1074 (N.D. Cal. 2013).

accompanying gag order occurs internally, independent of the courts.⁴⁷ Thus, the FBI is at liberty both to compel the release of customer records and to order complete silence on the subject, all without any prior judicial approval. This is remarkable. In other contexts involving the release of customer records, the courts—not the government—make the tricky constitutional determination as to whether the given investigative circumstances warrant a gag order.⁴⁸ But under the NSL law, a judge only sees nondisclosure orders after they have been issued, and then only if the recipient petitions for judicial review.⁴⁹ Otherwise, the gag's necessity will only ever be examined internally, by FBI review procedures that require nondisclosure orders to be revisited twice: once three years after their issuance, and again at the close of the relevant investigation.⁵⁰ It is, therefore, entirely possible for the FBI to issue a nondisclosure order, re-certify its necessity at the required intervals, and then leave it in place forever, without once being required to submit the matter to a judge.⁵¹

Under the auspices of § 2709's companion provision, § 3511, the subject of an NSL gag may bring the issue before a court via a process known as "reciprocal notice."⁵² This means that the subject may notify the FBI that it would like judicial review, and, in response, the FBI must initiate court proceedings within thirty days.⁵³ The statute then requires the reviewing court

47. See 18 U.S.C. § 2709 (2012).

48. See Bloch-Wehba, *supra* note 1 at 397 (this "confluence of administrative subpoena authority and administrative gag authority is found only in the NSL context When the government seeks a nondisclosure order under the SCA, the government is not empowered to determine itself whether it also met the requisite standard justifying nondisclosure; that inquiry resides with the court Even in the context of FISA applications, in which the FISC enters an ex parte order approving an application with a nondisclosure order as a matter of law, judicial order compels nondisclosure, not executive fiat").

49. See *id.* ("[T]he NSL provision only permits a court to conduct such an inquiry under the limited circumstances in which a recipient has filed a petition for review.").

50. FED. BUREAU OF INVESTIGATION, TERMINATION PROCEDURES FOR NATIONAL SECURITY LETTER NONDISCLOSURE REQUIREMENT (2015) [hereinafter FBI TERMINATION PROCEDURES].

51. As this Note will argue in greater detail in Part IV, such a possibility is one that First Amendment jurisprudence has, historically, been careful to guard against; courts have long recognized the dangers inherent to any system in which the government can preemptively and unilaterally prohibit speech without the guarantee of judicial oversight. Yet, here, the Ninth Circuit has authorized such a system.

52. See Bloch-Wehba, *supra* note 1, at 375 (explaining the Second Circuit's decision to construe the 2006 iteration of the NSL statute as providing for judicial review via "reciprocal notice").

53. 18 U.S.C. § 3511(b)(1) (2012).

to “rule expeditiously” on the matter.⁵⁴ However, it also mandates that the court should uphold the gag order if it finds “reason to believe” that disclosure “may result” in one of the four harms enumerated above.⁵⁵ The combined result of these strictures is that NSL nondisclosure orders are substantially shielded from judicial scrutiny: the courts are absent at their issuance and constrained by a remarkable degree of statutorily stipulated deference in the uncertain event of later review.⁵⁶

The NSL authority has undergone numerous reinventions in an evolution fueled by an ongoing dialogue between the FBI, the legislature, and the courts. To understand the Ninth Circuit’s recent decision on the modern NSL statute, it is, therefore, necessary to understand NSLs within the context of their initial, restricted scope and their subsequent development into a ubiquitous, far-reaching, and opaque investigative tool.

C. THE PRE-PATRIOT ACT ERA: 1978–2001

The FBI’s NSL authority was born in 1978. Originally introduced as a narrow exception to the sweeping data protections implemented by that year’s Right to Financial Privacy Act (RFPA), the FBI’s NSL authority was intended to serve as a limited alternative to new provisions requiring law enforcement to seek some manner of formal judicial order before demanding individual financial records.⁵⁷ During this initial period, NSLs were a means for the FBI to respond to the pressing needs of “foreign intelligence, Secret Service protective functions and emergency situations” without waiting on the slow-moving machinery of the courts.⁵⁸ In contrast to today, NSLs at this time were explicitly *not* meant to be issued in conjunction with investigations “proceeding only under the rubric of ‘national security.’”⁵⁹ Most notably, all letters were

54. 18 U.S.C. § 3511(b)(1)(c) (2012).

55. 18 U.S.C. § 3511(b)(3) (2012).

56. As Part IV will elaborate, well-established precedent holds that restrictions on speech of this sort—prior restraints—are subject to the most exacting degree of judicial scrutiny. *See infra* Section IV.B. The deference the Freedom Act affords to the FBI’s judgment therefore does not accord with legal precedent; indeed, it attempts to subvert the “heavy presumption of invalidity” that traditionally accompanies prior restraints.

57. The RFPA introduced reforms requiring law enforcement to receive either a search warrant or some other formal, written judicial order prior to seizing an individual’s financial records. These measures gave the target of the investigation notice and the opportunity to challenge the order or warrant in court. *See* Andrew E. Nieland, *National Security Letters and the Amended Patriot Act*, 92 CORNELL L. REV. 1201, 1208 (2007).

58. *Id.*

59. *Id.* (“The drafters intended that requests under this Section would be used sparingly, and explicitly warned that ‘investigations proceeding only under the rubric of “national security” do not qualify’ for the exception.”).

framed as requests rather than demands; recipients responded voluntarily, or not at all.⁶⁰

This formulation soon caused problems for the FBI.⁶¹ Many state privacy statutes prohibited the sort of voluntary disclosures that NSLs encouraged, and, as a result, few companies were willing to comply with the government's requests.⁶² So the FBI turned to Congress for assistance,⁶³ beginning the slow expansion of the NSL apparatus that would characterize the next several decades.

In 1986, Congress passed the Electronic Communications Privacy Act (ECPA).⁶⁴ Like the RFPA, ECPA's primary purpose was to shore up safeguards for individual privacy; however, again like the RFPA, it contained an NSL exception.⁶⁵ This exception, granted as a partial response to the FBI's lobbying efforts, established NSL authority regarding wire and electronic communication service providers and also codified nondisclosure orders.⁶⁶ While ECPA did not cement NSLs as compulsory processes on the same footing as subpoenas, it did insulate them from the restrictive effects of state privacy laws.⁶⁷ Suddenly, NSLs were a tool that could achieve tangible results.

ECPA's NSL provision was the precursor to the modern law at issue in the Ninth Circuit's decision in *In re National Security Letter*. And while it represented a substantial victory for the FBI, legitimizing and enhancing NSLs as an investigative tool, it also imposed relatively stringent certification standards. These included a requirement that the Director of the FBI or his designee certify "specific and articulable facts" indicating that the individual to whom the targeted records pertained was a "foreign power or an agent of a foreign power."⁶⁸ However, over the next several decades, this requirement

60. *See id.* at 1208 (explaining that disclosures in response to NSLs were "not mandatory"); *see also* Bendix, *supra* note 2, at 452.

61. *See* Nieland, *supra* note 57, at 1208–09.

62. *See, e.g., id.* at 1209 ("[M]any states enacted privacy laws prohibiting such voluntary disclosures."); Bendix, *supra* note 2, at 452; Brian D. Eyink, *Constitutional Secrecy: Aligning National Security Letter Nondisclosure Provisions with First Amendment Rights*, 58 DUKE. L.J. 473, 479 (2008).

63. *See* Nieland, *supra* note 57, at 1209.

64. *See id.*

65. *See id.*; Bendix, *supra* note 2, at 452.

66. *See* Nieland, *supra* note 57, at 1209.

67. *See id.* at 1210 (explaining that "the drafters did not include any mechanism for enforcing compliance," thereby making NSLs less powerful than subpoenas, but "perfectly sufficient in situations where state privacy legislation presented the only barrier to compliance").

68. Electronic Communication Privacy Act of 1986, Pub. L. No. 99-508 § 201, 100 Stat. 1848, 1867 (1986).

would be significantly relaxed. Today, the FBI must only certify to a target's "relevance" to an ongoing investigation to issue an NSL⁶⁹—a notable departure from the particularity required by the original standard.

For almost twenty years after ECPA's passage, Congress straddled a fine line on NSLs. Faced with calls from the FBI to expand the scope of ECPA's NSL provision but reluctant to nudge NSLs firmly into the realm of administrative subpoenas, the legislature hedged. In 1993, it adjusted the certification requirements to allow the FBI to compel production of records on any target who was allegedly *communicating* with a foreign power about terrorism or other clandestine intelligence operations, rather than requiring the target to *himself* be a foreign power.⁷⁰ Notably, however, in the process of amending this language, the House Judiciary Committee remarked that NSLs were "extraordinary device[s]" whose power should be only sparingly expanded, given that they were "[e]xempt from the judicial scrutiny normally required for compulsory processes."⁷¹

Thus, in the first chapter of its history, the FBI's NSL authority was structured as a limited exception to the general rules of otherwise sweeping privacy legislation. It was regarded warily by a Congress that recognized its potential for executive abuse because it was shielded from the judicial scrutiny that accompanied other compulsory processes. As a result, the FBI's certification requirements were, for decades—and despite their 1993 expansion—extremely stringent by today's standards. All of this changed dramatically in the aftermath of 9/11, when the Patriot Act did away with most of the constraints on NSL use.

D. THE PATRIOT ACT: 2001–2006

Section 505 of the Patriot Act, passed in the wake of 9/11, broadly expanded § 2709 authority with two critical amendments. First, the bill drastically reduced the particularity requirement of the ECPA-era provision, eliminating the need for the FBI to certify "articulable facts" linking the subject of the desired records to a foreign power.⁷² Instead, the Patriot Act allowed the FBI to issue NSLs for any records whose subject was "relevant" to an "authorized investigation" of "international terrorism or other clandestine intelligence activities."⁷³ Second, the Act increased the number of FBI agents with the power to certify an NSL.⁷⁴ Whereas the previous law had permitted

69. See *supra* Section I.B.

70. See Nieland, *supra* note 57, at 1211.

71. *Id.*

72. See *id.*

73. USA Patriot Act of 2001, Pub. L. No. 107-56 § 505, 115 Stat. 273, 365 (2001).

74. The amendment added fifty-six certification-eligible FBI agents. See Bendix, *supra*

only the Director of the FBI or a designated senior official to issue a certification, the Patriot Act made any Special Agent in charge of a field office eligible for the task.⁷⁵

These changes fundamentally altered the role of NSLs in the FBI's investigative arsenal. Far from remaining the sort of limited exception that Congress had envisioned in its late-20th-century privacy legislation, NSLs became ubiquitous. In 2000, the FBI issued approximately 8,500 NSLs.⁷⁶ By 2003, two years after the passage of the Patriot Act, that number had skyrocketed to 39,000.⁷⁷ By 2005, it had reached 74,000.⁷⁸ At liberty to demand the records of any person whom it could internally certify was "relevant" to a national security investigation, the FBI vastly expanded its reach.

At this time, the nondisclosure provision of the NSL law was significantly more restrictive than it is today. It prohibited NSL recipients from speaking to "any person," *including* an attorney for legal advice.⁷⁹ It provided no mechanism for seeking judicial review,⁸⁰ and it was automatically permanent, imposing no requirement on the FBI to revisit the necessity of a gag order at any point after its issuance.⁸¹

The marked uptick in NSL usage following the Patriot Act was, of course, accompanied by an increase in nondisclosure orders. The new volume of demands, coupled with the heavy restrictiveness of the FBI's gags, resulted in litigation assailing the new statute on First Amendment grounds. Two cases defined this early era of Patriot Act NSL jurisprudence.

The first was *Doe v. Ashcroft*. In *Ashcroft*, the ACLU represented an anonymous ISP—an NSL recipient—who alleged that the nondisclosure provision violated the First Amendment.⁸² The reviewing court agreed.⁸³ Specifically, the Southern District of New York court ruled that the law "axiomatically" constituted a system of prior restraints because of the

note 2, at 453.

75. See Patriot Act § 505.

76. Eyink, *supra* note 62, at 477.

77. *Id.*

78. *Id.*

79. See *Doe v. Ashcroft*, 334 F. Supp. 2d 471, 494–97 (S.D.N.Y. 2004), *vacated*, *Doe v. Gonzales*, 449 F.3d 415 (2d Cir. 2006) (holding that the 2006 reauthorization of the Patriot Act, which newly allowed NSL recipients to consult with an attorney, warranted vacating the plaintiff's First Amendment claims so that they could be reconsidered in the first instance by the district court).

80. See *id.*

81. See *id.* at 519.

82. See *id.* at 475.

83. See *id.*

“straightforward observation that it prohibit[ed] speech before the speech occur[red].”⁸⁴ The government attempted to argue that this was not the case, claiming that NSL gag orders were not prior restraints because they did not involve the sort of licensing scheme that was the traditional subject of prior restraint jurisprudence. The court rejected this argument, reasoning that “a blanket permanent prohibition on future disclosures is an *even purer* form of prior restraint than a licensing system in which the speaker may at least potentially obtain government approval and remain free to speak.”⁸⁵

Applying strict scrutiny, the court ruled that the NSL law was an impermissibly overbroad restriction on speech.⁸⁶ It noted that, measured against the backdrop of other compulsory investigative procedures, NSLs stood “virtually alone in providing for blanket secrecy entirely outside the context of judicial process.”⁸⁷ Ultimately, the court’s decision was a resounding rejection of the government’s equivocations. Rather, the court emphatically affirmed that “democracy abhors undue secrecy” and that “public knowledge secures freedom.”⁸⁸

The second case had a similar outcome. In *Doe v. Gonzales*⁸⁹ (*Gonzales I*)—decided a year after *Ashcroft* and brought by a member of the American Library Association⁹⁰—the Southern District of New York again found that the nondisclosure provision constituted an invalid prior restraint, given that it “unquestionably prohibit[ed] speech in advance of it having occurred.”⁹¹ The court held that although the statute “may not [have] look[ed] like a *typical* prior restraint” it certainly was one, for “contrary to [the government’s] assertion . . . prior restraints [were] not limited” to being either licensing schemes or court orders.⁹² Although those two categories populated the bulk of the Supreme Court’s relevant jurisprudence, the court was emphatic that they did not define the entire universe of prior restraints.

Just like in *Ashcroft*, the court also criticized the nondisclosure provision for overbreadth. It noted that the subject matter covered by the gag orders

84. *Id.* at 511–12.

85. *Id.* at 512 (emphasis added).

86. *Id.* at 519 (saying that § 2709 is “extraordinary in that the breadth and lasting effects of its reach are uniquely exceptional, potentially compelling secrecy even under some decidedly non-sensitive conditions or where secrecy may no longer be justifiable under articulable national security needs”).

87. *Id.* at 515.

88. *Id.* at 519.

89. 386 F. Supp. 2d 66 (S.D.N.Y. 2005).

90. *Id.* at 70.

91. *Id.* at 74.

92. *Id.* (emphasis added).

included “[a]ll details relating to the NSL,” even those that posed no potential risk to the investigation.⁹³ Similarly, it critiqued the categorical permanence of the orders, which would not lapse even once the subject of the investigation had “cease[d] to be of legitimate interest” to the FBI.⁹⁴ This utter lack of circumstantial tailoring was constitutionally fatal. Further, the court pointed out that the law significantly implicated the public interest, “creat[ing] a unique situation in which the only people who possess non-speculative facts about the reach of broad, federal investigatory authority [were] barred from discussing their experience with the public.”⁹⁵ Thus, it was not only the NSL law’s clumsy construction that choked its constitutionality; it was also the law’s chilling effect on public discourse.

With *Ashcroft* and *Gonzales I*, the federal courts dealt § 2709 a serious blow. The Patriot Act had overstepped, creating a system of prior restraints without any of the procedural safeguards or narrow tailoring that would shore up its constitutionality. Congress hurried to address some of these issues shortly after the *Gonzales* decision.

E. THE PATRIOT ACT, TAKE TWO: 2006–2015

In 2006, Congress reauthorized the Patriot Act. In the process, it revised the NSL nondisclosure provision to partially accommodate the First Amendment concerns raised by *Ashcroft* and *Gonzales I*. This involved three principal amendments. First, to issue a gag order, the FBI was now required to certify that disclosure “may result” in one of four enumerable harms—this, of course, remains the standard today.⁹⁶ Second, the new law carved out a nondisclosure exception that allowed recipients to speak with an attorney to seek legal advice—this also remains the case in the modern law.⁹⁷ Third, Congress instituted a provision for judicial review.⁹⁸ This provision mandated a highly deferential standard of review, directing the courts to modify or overturn a nondisclosure order only if there was “no reason” to believe that disclosure might result in one of the four harms.⁹⁹ It also stipulated that the FBI’s certification as to the likelihood of those harms should be treated as “conclusive” unless the court found that it had been made “in bad faith.”¹⁰⁰

93. *Id.* at 80.

94. *Id.* at 79.

95. *Id.* at 81.

96. *See* Nieland, *supra* note 57, at 1224.

97. *See id.*

98. *See id.*

99. USA Patriot Improvement and Reauthorization Act of 2006, Pub. L. No. 109-177 § 115, 120 Stat. 192, 211 (2006).

100. *Id.*

The first case to consider the new iteration of § 2709 was *Doe v. Gonzales*¹⁰¹ (*Gonzales II*), in which the Southern District of New York re-examined *Ashcroft* on remand from the Second Circuit.¹⁰² Once again, the court found that the nondisclosure provision was a violation of the First Amendment. Its various revisions did not prevent it from being a prior restraint, “authoriz[ing] suppression of speech in advance of its expression,” and therefore triggering strict scrutiny.¹⁰³ The court criticized the new judicial review provision for placing the burden of going to court on the NSL recipient, rather than on the government, as prior restraint jurisprudence dictates.¹⁰⁴ Picking up on the thread of public interest concerns raised in *Gonzales I*, it also noted that the enormous breadth and permanence of the gag orders still excluded the most relevant speakers from full participation in “the national debate over the government’s use of surveillance tools such as NSLs.”¹⁰⁵ The First Amendment’s core democratic principles were therefore very much at issue.

The court invalidated the NSL law in its entirety, finding that the facially unconstitutional nondisclosure provision could not be severed from the broader statute.¹⁰⁶ The government appealed, and the Second Circuit decided the case a year later, in *Doe v. Mukasey*.¹⁰⁷

Mukasey was the Second Circuit’s final determination on the issues initially raised by *Ashcroft* four years earlier. Ultimately, the panel upheld the *Gonzales II* decision in part and reversed it in part.¹⁰⁸ It permitted the law to stand, albeit with several revisions instituted by the court; these were later codified in 2015 with the passage of the USA Freedom Act.

The *Mukasey* court was the first to question whether the nondisclosure provision constituted a prior restraint. The panel observed that the restriction was not imposed on “those who customarily wish to exercise rights of free expression, such as speakers in public fora, distributors of literature, or exhibitors of movies,” and that the gagged content was extremely limited

101. 500 F. Supp. 2d 379 (S.D.N.Y. 2007).

102. *See id.* *Ashcroft* and *Gonzales I* had gone to the Second Circuit on a consolidated appeal, but the panel dismissed *Gonzales I*—because the FBI had voluntarily lifted the gag order, rendering the plaintiff’s claims moot—and sent *Ashcroft* back down to the District Court to be considered in light of the new law.

103. *Id.* at 397.

104. *See id.* at 406.

105. *Id.* at 395.

106. *Id.* at 424.

107. 549 F.3d 861 (2d Cir. 2008).

108. *See id.* at 864 (“We agree that the challenged statutes do not comply with the First Amendment, although not to the extent determined by the District Court We therefore affirm in part, reverse in part, and remand for further proceedings.”).

compared to that which was typically affected by unconstitutional prior restraints.¹⁰⁹ Considering these factors, the court was less willing than its predecessors to label the law a prior restraint. However, it found that a similarly strict standard of review should apply.¹¹⁰ This was in no small part because of the highly political nature of the censored speech, which was “relevant to intended criticism of a governmental activity,” placing it at “the very center of the First Amendment.”¹¹¹

Thus, the court proceeded with doubt as to whether the law was a prior restraint, while still applying a similar degree of scrutiny to that which such restrictions require. Importantly, the panel agreed with the lower court that the statute should have placed the burden of seeking judicial review on the government, rather than on the gagged speaker, and that its failure to do so rendered the relevant provision unconstitutional.¹¹² However, the court lent some credence to the government’s claim that seeking judicial approval for every NSL disclosure order would be unduly burdensome.¹¹³ Rather than calling for such a requirement, it advocated a compromise: the reciprocal notice procedure that has since been codified in the modern law.¹¹⁴ The court suggested:

The Government could inform each NSL recipient that it should give the Government prompt notice, perhaps within ten days, in the event that the recipient wishes to contest the nondisclosure requirement. Upon receipt of such notice, the Government could be accorded a limited time, perhaps 30 days, to initiate a judicial review proceeding to maintain the nondisclosure requirement, and the proceeding would have to be concluded within a prescribed time, perhaps 60 days.¹¹⁵

The court explained that such a system would minimize the burden on the government while also ensuring that NSL recipients have their day in court without being forced to jump through all of the hoops typically necessary to get in front of a judge.¹¹⁶

109. *Id.* at 876.

110. *Id.* at 877–78.

111. *Id.* at 878.

112. *Id.* at 881 (“[I]n the absence of Government-initiated judicial review, Subsection 3511(b) is not narrowly tailored to conform to First Amendment procedural standards.”).

113. *Id.* at 879.

114. *Id.* at 879.

115. *Id.*

116. *See id.* (“Thus, the Government’s litigating burden can be substantially minimized, and the resulting slight burden is not a reason for precluding application of the third *Freedman*

Despite its hesitation to classify the nondisclosure provision as a prior restraint, the *Mukasey* court rejected a government argument that the Ninth Circuit found credible in July 2017. In *Mukasey*, the government contended that NSL gag orders could not be prior restraints because the source of the speaker's desire to communicate was founded in government action—that is, the issuance of the NSL—and pertained to government-originated information.¹¹⁷ Therefore, the government should be at liberty to control the speech. The panel was unconvinced. It noted that, here, “[t]he recipient’s ‘participation’ in the investigation is entirely the result of the Government’s action,” unlike the confidentiality agreements and grand jury nondisclosure orders to which the government had tried to analogize.¹¹⁸ In total, the court was dubious that unilateral government action could dilute the First Amendment rights of a gagged speaker simply because the speech’s content was government-focused. This would set a precedent permitting the government greater latitude to restrain speech when the subject of that speech was government action.

With the 2008 *Mukasey* ruling, the NSL statute was left in a state of limbo. As written, it had been ruled unconstitutional. However, the *Mukasey* court had modified the district court’s injunction to comport with its construction of the statute, so the FBI was free to continue issuing NSL nondisclosure orders, as long as they were in keeping with the court’s guidelines.¹¹⁹ This changed in 2015 when Congress passed the USA Freedom Act and substantially revised the NSL law to comport with the *Mukasey* court’s recommendations.¹²⁰

F. THE USA FREEDOM ACT: 2015–PRESENT

The USA Freedom Act, which governs the current iteration of § 2709 and its accompanying judicial review provision, § 3511, must be understood within the context of the Edward Snowden revelations, to which it was largely drafted in response. Two years before the Act was passed, in the summer of 2013, Snowden—a disillusioned government contractor with near-unfettered access to U.S. security secrets—leaked an enormous amount of information regarding

safeguard.”).

117. *See id.* at 880–81 (“Unlike the movies subject to licensing in *Freedman*, which were created independently of governmental activity, the information kept secret by an NSL, the Government contends, is ‘information that the recipient learns by (and only through) his participation in the [G]overnment’s own investigatory processes.’”).

118. *Id.* at 880.

119. *Id.* at 885.

120. These revisions were also likely made in response to the Northern District of California’s 2013 ruling in *In re National Security Letter I*, striking down the NSL statute. *See infra* Section III.A.

the extent of the American surveillance apparatus.¹²¹ Among other things, the public learned that the National Security Agency (NSA) had been indiscriminately collecting the telephone metadata of millions of Americans since at least 2001 under the authority of the Patriot Act.¹²²

The outcry in response to this revelation was one of deafening outrage. The European Union issued scalding statements condemning the NSA's alleged surveillance of European citizens and German Chancellor Angela Merkel, saying that the United States had severely damaged its bond of trust with its closest allies.¹²³ Meanwhile, domestically, protests erupted across the country.¹²⁴ Also capitalizing on the momentum, technology companies and privacy advocacy groups rallied together to push for legislative reform.¹²⁵ Facing this mounting domestic and international pressure, a "clear majority in the House of Representatives favored reforming surveillance authorities" in the wake of Snowden's leaks.¹²⁶

Reform arrived in the form of the Freedom Act, which was signed into law in 2015. Supported by technology companies and privacy advocates alike,¹²⁷ the bill was a direct response to the political disruption caused by the

121. Mark Mazetti & Michael S. Smith, *Ex-Worker at C.I.A. Says He Leaked Data on Surveillance*, N.Y. TIMES (June 9, 2013), <http://www.nytimes.com/2013/06/10/us/former-cia-worker-says-he-leaked-surveillance-data.html> [<https://perma.cc/LJE2-CTX8>].

122. See Glenn Greenwald, *NSA Collecting Phone Data of Millions of Verizon Customers Daily*, GUARDIAN (June 6, 2013, 6:05 AM), <https://www.theguardian.com/world/2013/jun/06/nsa-phone-records-verizon-court-order> [<https://perma.cc/2FYH-QTD6>] (explaining that the dragnet surveillance system was founded in an "extreme interpretation" of the "business records" provision of the Patriot Act").

123. See, e.g., *EU Says Distrust of US on Spying May Harm Terror Fight*, BBC NEWS (Oct. 25, 2013), <http://www.bbc.com/news/world-europe-24668286> [<https://perma.cc/MGG3-A4GA>]; *EU Threatens to Stop Sharing Data with U.S. over Spying Reports*, N.Y. DAILY NEWS (July 6, 2013, 12:42 PM), <http://www.nydailynews.com/news/world/eu-threatens-stop-sharing-data-u-s-spying-reports-article-1.1391702> [<https://perma.cc/2LWF-SUCF>] (reporting that EU officials were considering suspending data-sharing programs with the U.S.).

124. See, e.g., Bart Jansen & Carolyn Pesce, *Anti-NSA Rally Attracts Thousands to March in Washington*, USA TODAY (Oct. 26, 2013, 12:41 PM), <https://www.usatoday.com/story/news/nation/2013/10/26/nsa-dc-rally/3241417> [<https://perma.cc/JE9G-YXRY>] (explaining that thousands of people had marched on Washington to protest the NSA); Heather Kelly, *Protests Against the NSA Spring up Across U.S.*, CNN (July 5, 2013), <http://edition.cnn.com/2013/07/04/tech/web/restore-nsa-protests> [<https://perma.cc/WCF2-LQF4>] (detailing Independence Day protests in "more than 80 U.S. cities").

125. Bart Forsyth, *Banning Bulk: Passage of the USA FREEDOM Act and Ending Bulk Collection*, 72 WASH. & LEE L. REV. 1308, 1323 (2015) (describing an event called "The Day We Fight Back," at which over forty technology companies and privacy groups joined forces to advocate the passage of the USA Freedom Act).

126. *Id.* at 1322.

127. *Id.*

Snowden revelations.¹²⁸ And while national security letters were not the focus of the public's outrage, Congress used this opportunity to make pointed revisions to § 2709's judicial review procedures under § 3511, thereby formally amending the NSL authority to comply with the *Mukasey* court's construction.¹²⁹

This involved three primary changes to the language of the Patriot Act-era statute. First, the new law officially codified the reciprocal notice procedure described in *Mukasey*, shifting the burden of petitioning for judicial review further—although not fully—onto the government.¹³⁰ Second, it eliminated the unconstitutional mandate that reviewing courts treat FBI certification regarding the potential harm of disclosure as conclusive absent a showing of bad faith.¹³¹ Instead, courts were given a slightly less deferential standard and exhorted to uphold nondisclosure orders if they found “reason to believe” that harm “may” otherwise result.¹³² Finally, the new law required the Attorney General to institute procedures for the FBI to review the necessity of nondisclosure orders at “appropriate intervals;” any orders deemed no longer necessary were to be promptly lifted.¹³³ However, the law did not specify what these procedures should be or precisely when they should occur.¹³⁴ The government, therefore, instituted them on its own, providing for review on the three-year anniversary of a nondisclosure's issuance and on the close of the relevant investigation.¹³⁵ These amendments, while undoubtedly improvements over the status quo, still did not go far enough toward developing an NSL authority that would fully comport with the First Amendment.

In re National Security Letter is the first NSL case to be litigated at the appellate level under the USA Freedom Act. It afforded the Ninth Circuit the opportunity to firmly elucidate the stringent First Amendment standards to which the NSL nondisclosure regime ought to comply. Unfortunately, as I

128. Senator Bob Corker explicitly recognized Snowden as the catalyst for Congress's action on the issue. See Jessica Schulberg, *The Elephant in The Room: Senators Finally Credit Edward Snowden for Role in Patriot Act Reforms*, HUFFINGTON POST (June 1, 2015, 1:46 PM, updated Sept. 8, 2015), https://www.huffingtonpost.com/2015/06/01/snowden-nsa-patriot-act_n_7485702.html [<https://perma.cc/YQ43-5XZA>].

129. See USA Freedom Act of 2015, Pub. L. No. 114–23 § 502(g), 129 Stat. 268, 288 (2015).

130. *Id.* (amending 18 U.S.C. § 3511(b)(1)(A) (2012)).

131. *Id.* (amending 18 U.S.C. § 3511(b)(3) (2012)).

132. *Id.*

133. *Id.* at § 502(f)(1).

134. *Id.*

135. FBI TERMINATION PROCEDURES, *supra* note 50.

discuss below, the court hedged. It issued an opinion in which very little seemed to be clear other than that the current law is—one way or another—approximately good enough.

III. *IN RE NATIONAL SECURITY LETTER*

A. THE DISTRICT COURT'S 2013 DECISION

In re National Security Letter involved two ISP plaintiffs—CREDO and Cloudflare—who had received a combined total of five NSLs between 2011 and 2013, while the 2006 re-authorization of the Patriot Act still governed § 2709.¹³⁶ A nondisclosure order accompanied each letter.¹³⁷ The two companies petitioned for judicial review, and the Northern District of California issued a ruling in 2013, shortly before the passage of the Freedom Act.¹³⁸

In that initial case, the district court found the NSL provision facially unconstitutional. While it explained that NSL nondisclosure orders were not “classic” prior restraints, it nonetheless held that the demanding standards of prior restraint doctrine should apply.¹³⁹ In this, the court’s decision echoed *Gonzales I*, where the Southern District of New York had similarly recognized that § 2709 created a system of prior restraints that did not entirely conform to the traditional features of the doctrine, but was not exempt from heightened scrutiny.¹⁴⁰

Thus, the court dismissed the government’s attempts to distinguish NSL nondisclosure orders from traditional prior restraints by arguing that they were more akin to speech restrictions required in various court proceedings.¹⁴¹ Instead, the court evaluated § 2709 against *Freedman*, the case in which the Supreme Court dictated the three procedural safeguards that are required to render a system of prior restraints constitutionally permissible.¹⁴² In so doing, the court ruled that it could not accept the government’s assurances that the

136. *See In re Nat'l Sec. Letter*, 930 F. Supp. 2d 1064, 1119 (N.D. 2013).

137. *Id.*

138. *Id.* at 1064.

139. *Id.* at 1071 (explaining that the law must “still meet the heightened justifications for sustaining prior restraints announced in *Freedman v. Maryland*”).

140. *See supra* Section II.D.

141. *See In re Nat'l Sec. Letter*, 930 F. Supp. 2d at 1071–72 (“The Court is not persuaded by the government’s attempt to avoid application of the *Freedman* procedural safeguards by analogizing to cases which have upheld restrictions on disclosures of information by individuals involved in civil litigation, grand jury proceedings and judicial misconduct investigations.”).

142. *See id.*

required safeguards were being applied in practice—according to the *Mukasey* court’s mandate—although they were not codified by the language of § 2709.¹⁴³ The government had provided no concrete evidence of its compliance.¹⁴⁴ Therefore, the court explained that “the issuance of a nondisclosure order is, in essence, a permanent ban on speech absent the rare recipient who has the resources and motivation to hire counsel and affirmatively seek review by a district court.”¹⁴⁵ This was an impermissible violation of the Supreme Court’s prior restraint jurisprudence.

Ultimately, the district court ruled that the law, as written, did not pass constitutional muster.¹⁴⁶ It enjoined the government from issuing any further NSLs under § 2709 and from enforcing any nondisclosure orders; however, given the potential national security implications, the court stayed its judgment pending appeal.¹⁴⁷

Critically, throughout its opinion, the district court emphasized that § 2709 implicated speech that was immensely relevant to the ongoing “public debate on the appropriate use of NSLs or other intelligence devices.”¹⁴⁸ The social and political import of the censored information seemed to weigh heavily in the court’s calculus—understandably so, given the alarming implications of any unilateral government action to restrict speech on matters of public concern.¹⁴⁹

The government appealed the district court’s decision, but while the Ninth Circuit deliberated, Congress passed the Freedom Act.¹⁵⁰ The Ninth Circuit, therefore, vacated the district court’s judgments and remanded the case to be

143. *See id.* at 1073–74 (ruling that the statute’s risk of suppressing legitimate speech could not “be adequately ameliorated by governmental promises to comply with *Freedman*’s requirements”).

144. *See id.* at 1073 (“There is no evidence that the Department of Justice has implemented regulations to impose the constructions and safeguards mandated by the Second Circuit in the *John Doe v. Mukasey* decision. There is no evidence that either the DOJ or the FBI has adopted a formal ‘policy’ adhering to those constructions and safeguards.”).

145. *See id.* at 1077.

146. *See id.* at 1081.

147. *See id.*

148. *Id.* at 1071 (“Under section 2709(c), the FBI has been given the unilateral power to determine, on a case-by-case basis, whether to allow NSL recipients to speak about the NSLs. As a result, the recipients are prevented from speaking about their receipt of NSLs and from disclosing, as part of the public debate on the appropriate use of NSLs or other intelligence devices, their own experiences.”).

149. *See id.* at 1072 (emphasizing that “[h]ere, the concern is the government’s unilateral ability to prevent individuals from speaking out about the government’s use of NSLs, a subject that has engendered extensive public and academic debate”).

150. *See In re Nat’l Sec. Letter*, 863 F.3d 1110, 1119–20 (9th Cir. 2017).

reviewed in light of the new law.¹⁵¹ The second time around, evaluating a § 2709 that formally incorporated *Mukasey*'s suggestions, the district court upheld the NSL law.¹⁵² The plaintiffs appealed, and the Ninth Circuit issued its ruling upholding the statute's constitutionality in July of 2017.¹⁵³

B. THE NINTH CIRCUIT

The Ninth Circuit, like the *Mukasey* court, doubted that NSL nondisclosure orders were prior restraints.¹⁵⁴ In fact, the Ninth Circuit directly quoted *Mukasey*'s reasoning, distinguishing between speakers gagged by NSL nondisclosure orders and speakers that have traditionally figured in prior restraint jurisprudence.¹⁵⁵ Here, the court pointed out, the gagged ISPs “did not intend to speak . . . *prior to* the Government’s issuance of an NSL.”¹⁵⁶ According to the court, this distinguished them from the speakers who had been classically protected by constitutional limits on prior restraints. Unlike those speakers with a preexisting desire to speak, such as journalists and movie theater operators, CREDO and Cloudflare had no original desire to express themselves, and their ability to engage in that expression was certainly not “key” to their business models.¹⁵⁷ By making such a distinction, the Ninth Circuit delineated a class of speakers for whom advance restrictions on speech *were* prior restraints and a class of speakers for whom the same advance restrictions on speech *were not* prior restraints. In other words, it adjusted the weight of First Amendment protection based on the character and intent of the censored speaker.

The Ninth Circuit also implied an adjacent adjustment in First Amendment protection based on the source and content of the repressed information, hesitating to apply prior restraint doctrine to “a single, specific piece of information that was generated by the government.”¹⁵⁸ This was a crucial point in the court’s reasoning: Because the repressed speech pertained only to information “generated by the government,” it was not something about which the ISPs would have otherwise independently communicated.¹⁵⁹ Therefore, the court reasoned that it was less deserving of stringent constitutional protection. In contrast to the *Mukasey* court and the district

151. *See id.*

152. *See id.* at 1120.

153. *See id.* at 1110.

154. *See id.* at 1127 (holding that “this argument is not entirely persuasive”).

155. *See id.* at 1128.

156. *Id.*

157. *Id.* at 1129.

158. *Id.* at 1128.

159. *Id.*

courts,¹⁶⁰ the Ninth Circuit did not view the gag order's government-focused subject matter as a factor that ought to heighten judicial scrutiny rather than lessen it.

The court also made an important observation regarding the basic definition of a prior restraint. Expending only a few words to briefly acknowledge that § 2709 does indeed bar speech “in advance” of its occurrence, the Ninth Circuit instead focused on the fact that prior restraints “generally” fall into one of two categories: “censorship schemes and licensing schemes.”¹⁶¹ According to the court, § 2709 did not fit into either category: “It neither require[d] a speaker to submit proposed speech for review and approval, nor [did] it require a speaker to obtain a license before engaging in business.”¹⁶² For the court, this cast significant doubt on the statute's classification as a prior restraint. However, the court did not address the fact that, by issuing a blanket prohibition on speech—the default duration of which is indefinite—§ 2709, in fact, creates a system that the *Ashcroft* court recognized as an “even purer” form of prior restraint than the traditional schemes.¹⁶³ Instead, the Ninth Circuit found that NSL nondisclosure orders were most akin to confidentiality agreements, such as those that bind witnesses in grand jury proceedings.¹⁶⁴ The panel pointed out that such agreements have consistently been “upheld by the courts.”¹⁶⁵

In the end, despite its skepticism, the Ninth Circuit did not definitively rule that § 2709 did not create a system of prior restraints. Instead, the court held that such a determination was unnecessary because the USA Freedom Act adequately provided the procedural safeguards required to render prior restraints constitutional.¹⁶⁶ Therefore, whether or not prior restraint doctrine applied, the statute satisfied its mandates.

The court addressed each of the constitutionally imposed safeguards in

160. See *supra* Section III.E (noting that Mukasey found that the fact that the content of the restricted speech was “relevant to intended criticism of a governmental activity” meant that it was “at the very center of the First Amendment”); see also *Doe v. Gonzales* 386 F. Supp. 2d 66, 81 (S.D.N.Y. 2005) (expressing concern that NSLs “create[] a unique situation in which the only people who possess non-speculative facts about the reach of broad, federal investigatory authority [were] barred from discussing their experiences with the public”); *Doe v. Ashcroft*, 334 F. Supp. 2d 471, 519 (S.D.N.Y. 2004) (arguing that “democracy abhors undue secrecy,” and “public knowledge secures freedom”).

161. See *In re Nat'l Sec. Letter*, 863 F.3d at 1127.

162. *Id.* at 1128.

163. See *supra* Section III.D.

164. See *In re Nat'l Sec. Letter*, 863 F.3d at 1129.

165. *Id.*

166. See *id.* at 1129 (“We need not, however, resolve the question whether the NSL law *must* provide procedural safeguards, because the 2015 NSL law in fact provides all of them.”).

turn. First, it considered the requirement that the initial restraint must be imposed only for a “specified brief period” to maintain the status quo until the censor either removes it or goes to court to enforce it.¹⁶⁷ The court found that the Freedom Act “readily provide[d] this assurance” through its reciprocal notice procedure.¹⁶⁸ It held that the § 3511’s thirty-day window—within which the government must go to court after being notified that an NSL recipient would like judicial review—was both “specified and brief.”¹⁶⁹ Second, the court found that the Freedom Act sufficiently provided for timely judicial review by directing courts to “rule expeditiously” on any NSL nondisclosure matter.¹⁷⁰ And third, it held that because the statute did not require the NSL recipient shoulder the burden of initiating court proceedings, only of notifying the FBI that such proceedings were desired, § 3511 adequately placed the burden of seeking judicial review on the government.¹⁷¹

Altogether, the Ninth Circuit ruled that the Freedom Act had eliminated the NSL law’s longstanding flaws by providing adequate prior restraint safeguards whether or not they were actually required. In many ways, the court’s analysis was a fair recognition of the Freedom Act’s improvements. In many other ways, however, its opinion read as an unjustified departure from precedent, frequently seeming simply to relax constitutional standards to carve out an NSL exception.

IV. THE USA FREEDOM ACT AUTHORIZES UNCONSTITUTIONAL PRIOR RESTRAINTS

As this Part will illustrate, the Ninth Circuit’s decision to uphold the current NSL regime was faulty in two respects: in its bases for questioning the nature of NSL gags as prior restraints, and in its elastic interpretation of the *Freedman* requirements. As to the first, the court proved willing to put stock in analogies that every other court to consider the issue had previously dismissed as inapt. As to the second, the court compromised where compromise had never been envisioned.

The result is not reassuring. It is the confirmation of a statute that authorizes the advance censorship of politically relevant speech, potentially indefinitely, unless the target has the resources and the will to challenge the FBI in federal court. This Part argues that such a scheme should correctly be characterized as a system of prior restraints, imposed with only a diluted

167. *Id.*

168. *Id.*

169. *Id.*

170. *Id.* at 1130.

171. *See id.*

version of the constitutionally required safeguards.

A. THE NSL NONDISCLOSURE PROVISION IS A PRIOR RESTRAINT

1. *The Speaker's Identity and Motivation Is Irrelevant to the Degree of First Amendment Protection*

The Ninth Circuit's decision disregarded the definitional core of a prior restraint. As every other court except *Mukasey* has repeatedly recognized,¹⁷² § 2709 prohibits speech in advance of its occurrence: this is the quintessential feature of a prior restraint.¹⁷³ The Ninth Circuit's departure from this reasoning distorts longstanding First Amendment doctrine and misrepresents the character of prior restraint jurisprudence.

For instance, the court erred by gesturing toward the possibility that nondisclosure orders are prior restraints when they bind some speakers—those with a preexisting desire to speak, such as journalists or movie theater operators—but something less insidious when they bind others.¹⁷⁴ By making such an argument, the court implied that a speaker's identity ought to inform the extent of First Amendment protection available to that speaker. Under such reasoning, traditional targets of prior restraints, nurturing an intent to communicate that predated their gag orders, would benefit from the “heavy presumption” of unconstitutionality that typically applies to prior restraints.¹⁷⁵ Meanwhile, non-traditional targets—such as ISPs and other corporate entities, whose desire to speak may only have been triggered by their involvement in a controversial and clandestine surveillance operation—would not receive this benefit.

This logic is both misguided and incongruent with the Supreme Court's rulings on the issue. For one, corporations are entitled to full First Amendment rights. The Supreme Court's decision in *Citizens United v. Federal Election Commission* made this abundantly clear, holding that companies receive the

172. See *Doe v. Gonzales (Gonzales II)*, 500 F. Supp. 2d 379 (S.D.N.Y. 2007); *Doe v. Gonzales*, 386 F. Supp. 2d 66 (S.D.N.Y. 2005); *Doe v. Ashcroft*, 334 F. Supp. 2d 471 (S.D.N.Y. 2004). While these cases were decided under an earlier iteration of § 2709, the core question regarding the nondisclosure orders' classification as a prior restraint remains the same. In all of its various forms, the statute has authorized the government to restrict speech in advance of its occurrence.

173. See, e.g., *Alexander v. United States*, 509 U.S. 544, 550 (1993) (explaining that prior restraints “[forbid] certain communications when issued in advance of the time that such communications are to occur”); *Near v. Minnesota*, 283 U.S. 697, 713–14 (1931) (holding that a prior restraint is a “previous restraint upon publication” instead of a later punishment).

174. See *supra* Section III.B.

175. *Bantam Books, Inc. v. Sullivan*, 372 U.S. 58, 70 (1963).

same free speech protections as individual citizens.¹⁷⁶ Indeed, the Court emphatically stated the principle that “the First Amendment stands against attempts to disfavor certain subjects or viewpoints *or to distinguish among different speakers.*”¹⁷⁷

Second, the First Amendment’s egalitarian sweep is particularly potent in the context of political speech, including that which relates to the “controversial government powers” at issue in NSL cases.¹⁷⁸ To this end, the Supreme Court has held that “there is no basis for the proposition that, in the political speech context, the Government may impose restrictions on certain disfavored speakers.”¹⁷⁹ Yet, by doubting that gagged ISPs should trigger the same degree of exacting judicial scrutiny that would be afforded to journalists in a similar situation,¹⁸⁰ the Ninth Circuit has advanced precisely that proposition.

This heralds a potentially dangerous shift in First Amendment jurisprudence. If the courts lend credence to the idea that some speakers are simply not vulnerable to certain categories of censorship, such as prior restraints, the judiciary will then be forced to delineate boundaries between different groups and identify the degree of protection that they deserve. This is an affront to the Supreme Court’s ruling in *Citizens United*, and antithetical to the equal protection that ought to be ensured by the First Amendment.

Further, it opens the door to increasingly restrictive government arguments. In distinguishing between ISPs and traditional speakers, the Ninth Circuit implied that there was a similar difference between speech triggered by government action and speech that pre-existed government action. The court reasoned that because the government was both the subject and the source of the suppressed communication, it should be at liberty to restrain the ISPs’ speech.¹⁸¹ But where is the logical end point to this line of reasoning? Should the government be able to argue that it has the right to censor any speech that originates in government action, or that involves information provided by the government to the speaker? The Ninth Circuit’s logic would imply that this is so, but the First Amendment dictates the opposite. As the *Mukasey* court emphasized, the government’s role as both the originator and the subject of the ISPs’ gagged speech *heightened* the presumption of constitutional

176. *Citizens United v. Fed. Election Comm’n*, 558 U.S. 310 (2010).

177. *Id.* at 312 (emphasis added).

178. *In re Nat’l Sec. Letter*, 930 F. Supp. 2d 1064, 1077 (N.D. 2013).

179. *Citizens United*, 558 U.S. at 312.

180. *See supra* Section III.B.

181. *See supra* Section III.B.

invalidity.¹⁸²

While it is tempting to defer to the government's judgment regarding the release of information pertinent to national security, such a calculus cannot end the First Amendment inquiry. As Justice Stewart forcefully declared in the Pentagon Papers case, "[t]he only effective restraint upon executive policy and power in the areas of national defense and international affairs may lie in an enlightened citizenry."¹⁸³ Justice Black was equally emphatic: "The guarding of military and diplomatic secrets at the expense of informed representative government provides no real security for our Republic."¹⁸⁴ Democracy thrives on robust national debate such as that which has surrounded the use of NSLs¹⁸⁵—the courts should not turn a permissive gaze on government censorship schemes that would curtail such debate, particularly when the focus is government action, and even when the countervailing interest is national security.

2. Confidentiality Agreements Are a Poor Analogue for NSL Gags

The Ninth Circuit further doubted the applicability of prior restraint doctrine because, according to the court, NSL nondisclosure orders were more akin to confidentiality agreements than prior restraints.¹⁸⁶ But confidentiality agreements are a poor analogue for the unilateral, potentially permanent effects of a gag order imposed by the FBI. Even the *Mukasey* court, the only other court to doubt that NSL gags might be prior restraints, dismissed this argument without reservation.¹⁸⁷ NSL nondisclosure orders simply do not share the characteristics that both define confidentiality agreements and remove them from exacting judicial scrutiny.

Take the Ninth Circuit's grand jury analogy, for example. The court pointed out that grand jury witnesses may be prohibited from speaking publicly about any information they learn during the proceedings. In that respect, grand jury confidentiality involves the government imposing a prior restraint on a speaker with regard to information that she gleaned as the result of participation in a government action. However, the judicial process demands

182. See *supra* Section II.E.

183. *N.Y. Times Co. v. United States*, 403 U.S. 713, 728 (1971) (Stewart, J., concurring).

184. *Id.* at 719 (Black, J., concurring).

185. See *supra* Section II.F (explaining that the USA Freedom Act's reforms were a direct response to the public debate fostered by the Edward Snowden revelations).

186. See *In re Nat'l Sec. Letter*, 863 F.3d 1110, 1129 (9th Cir. 2017).

187. See *supra* Section II.E. The *Mukasey* court noted that the "recipient's 'participation' in the investigation is entirely the result of the Government's action." The court found this distinguishable from the grand jury and confidentiality agreements to which the government had tried to analogize. *Doe v. Mukasey*, 549 F.3d 861, 880 (2d Cir. 2008).

secrecy by the very nature of its democratic function: to ensure fair, unbiased trials and the neutral administration of justice. The NSL law, on the contrary, imposes secrecy “at the demand of the Executive Branch under circumstances where [it] might or might not be warranted, depending on the circumstances alleged to justify such secrecy.”¹⁸⁸ As the *Mukasey* court recognized, grand jury confidentiality agreements accompany proceedings that always, inherently, have powerful democratic justifications for secrecy.¹⁸⁹ NSL nondisclosure orders, on the other hand, may or may not possess these justifications: national security, while a potent concern, is—as Justice Black described in the Pentagon Papers case—“a broad, vague generality whose contours should not be invoked to abrogate the fundamental law embodied in the First Amendment.”¹⁹⁰ It is, therefore, more difficult to justify their indiscriminate use and their potential to remain in place indefinitely.¹⁹¹

Ultimately, the Ninth Circuit turned to the confidentiality agreement analogy because it reasoned that prior restraints could only exist as either “censorship schemes [or] licensing schemes.”¹⁹² While it is true that most prior restraint doctrine involves restrictions that fall into one of those two categories, they do not encompass the full spectrum of possible prior restraints. *Gonzales I* recognized this, correctly pointing out that the existence of two predominant species of prior restraint did not foreclose the possibility of there being other, equally restrictive varieties.¹⁹³ In *Bantam Books v. Sullivan*, for instance, the Supreme Court ruled that a local ban on the circulation of certain publications was a prior restraint.¹⁹⁴ The ban was not a licensing scheme in which publishers could disseminate content if granted government

188. *Mukasey*, 549 F.3d at 877.

189. *Id.* at 876 (“The justification for grand jury secrecy inheres in the nature of the proceeding. As the Supreme Court has noted, such secrecy serves several interests common to most such proceedings, including enhancing the willingness of witnesses to come forward, promoting truthful testimony, lessening the risk of flight or attempts to influence grand jurors by those about to be indicted, and avoiding public ridicule of those whom the grand jury declines to indict . . . [In contrast], the nondisclosure requirement of Subsection 2709(c) is imposed at the demand of the Executive Branch under circumstances where secrecy might or might not be warranted, depending on the circumstances alleged to justify such secrecy.”).

190. *N.Y. Times Co. v. United States*, 403 U.S. 713, 719 (1971).

191. As the Northern District of California recognized, “[t]he issuance of a nondisclosure order is, in essence, a permanent ban on speech absent the rare recipient who has the resources and motivation to hire counsel and affirmatively seek review by a district court.” *In re Nat’l Sec. Letter*, 930 F. Supp. 2d 1064, 1127 (N.D. 2013) (“*In re NSL P*”).

192. *In re Nat’l Sec. Letter*, 863 F.3d 1110, 1127 (9th Cir. 2017).

193. *See supra* Section II.D.

194. 372 U.S. 58, 70 (1963).

approval; rather, the ban prohibited the publications outright.¹⁹⁵ Nor was the ban a censoring injunction via judicial order, for it was perpetrated by a local governmental commission.¹⁹⁶ And yet the Court ruled that the ban was, quite unquestionably, a classic prior restraint.¹⁹⁷ The deciding inquiry was whether the ban was an advance prohibition of speech, not whether the ban took a particular form or function. That inquiry should also be decisive here.

B. THE USA FREEDOM ACT'S PROCEDURAL SAFEGUARDS ARE CONSTITUTIONALLY DEFICIENT

The Ninth Circuit erred by ruling that the Freedom Act's safeguards comport with *Freedman v. Maryland*'s requirements. In fact, if *Freedman* had been applied with appropriate strictness, the court would have found that two of the three prongs remained unsatisfied by the Freedom Act's revisions.

First, the current statute does not adequately ensure that NSL nondisclosure orders will last for only a "specified brief period"¹⁹⁸ of time before being brought before a court or lifted by the FBI. The Ninth Circuit held that the thirty-day window following the initiation of reciprocal notice fulfilled this function.¹⁹⁹ However, the thirty-day period is only triggered if the gagged recipient chooses to challenge the nondisclosure order in court.²⁰⁰ The law's default is to leave the nondisclosure order in place—unexamined—for a minimum of three years, at which point the FBI will conduct the first of its two internal assessments regarding the order's continuing necessity.²⁰¹ This hardly restricts the nondisclosure order's effects to a "specified brief period," and certainly does not serve the limited purpose of maintaining the status quo only until a court can issue a final determination.

That is of course because the Freedom Act also does not sufficiently shift the burden of seeking judicial review onto the government, another of *Freedman*'s mandates. While reciprocal notice is an improvement on previous regimes, it still leaves the onus of initiating court proceedings on the recipient of the gag order. Without action on the part of the targeted ISP, the FBI is under no obligation to justify its nondisclosure orders in court.²⁰² That the

195. *See id.* at 61.

196. *See id.*

197. *See id.* at 70 ("We have tolerated such a system only where it operated under judicial superintendence and assured an almost immediate judicial determination of the validity of the restraint.").

198. *See supra* Section II.A

199. *See In re Nat'l Sec. Letter*, 863 F.3d 1110, 1129 (9th Cir. 2017).

200. *See* 18 U.S.C. § 3511 (2012).

201. *See id.*; *see also supra* Section II.B.

202. *See* 18 U.S.C. § 3511 (2012).

Bureau must be the party to officially petition for judicial review, once notified that it is desired, is a mere formality. The reality remains that, absent action on the part of the ISP, the government is under no obligation to obtain judicial approval of its prior restraints. This is directly contrary to the purpose of *Freedman*'s safeguards, which were intended to ensure that such restraints always quickly ended up before a court, whose final approval was necessary to constitutionally maintain the censorship.²⁰³ The government may contend that it should not be obligated to affirmatively seek judicial review for ISPs which would otherwise not be disposed to ask for it, but that is precisely what *Freedman* requires. Judicial review of a prior restraint should not depend on the gagged speaker's legal action or inaction—it should be automatic.

Despite the Ninth Circuit's willingness to dilute their mandates, the *Freedman* safeguards are not a mere formality. They exist because of the immense presumption against constitutional validity afforded to prior restraints. By watering down and adjusting their strictures, the Ninth Circuit effectively carved out a constitutional exception for NSLs, allowing the FBI to skate past the *Freedman* requirements without shouldering the full weight of their burden, or being expected to meet the standard of exacting scrutiny that the Supreme Court has imposed on prior restraints.

Ultimately, by failing to properly implement *Freedman*, the Ninth Circuit has acquiesced to the possibility of a nondisclosure order that exists in perpetuity, censoring politically important speech indefinitely without ever being examined by a court. If a recipient chooses not to initiate reciprocal notice—whether due to lack of resources or for any other reason—the burden on the government to seek judicial review dissipates entirely. In that case, the FBI must only revisit the necessity of the nondisclosure order a maximum of twice, with the final review occurring at the close of the relevant investigation.²⁰⁴ If at that time the government determines—independent of any external oversight—that the order is still appropriate, it may remain in place forever. The FBI would have no further obligation to assess its relevance, even if the circumstances that weighed against disclosure had changed entirely. This is precisely the sort of scenario that *Freedman*'s safeguards, if enforced with strict scrutiny, ought to guard against. That it is still possible, and indeed likely, concretely demonstrates the failings of the Ninth Circuit's analysis.

V. CONCLUSION

By upholding the constitutionality of the USA Freedom Act's NSL provision, the Ninth Circuit has signaled that the First Amendment is

203. *See supra* Section II.A.

204. *See supra* Section II.B.

astonishingly malleable—capable, at least in the national security context, of accommodating government censorship on issues of immediate, pressing public concern. The court has neutered the impact of *Freedman v. Maryland*, applying its three safeguards haphazardly and with apparent willingness to tolerate significant diversions from its mandate, even if the ultimate effect is to permit precisely the sort of unexamined and unfettered system of prior restraints that the case was meant to guard against. The court did all of this while hesitating to recognize NSL nondisclosure orders as prior restraints at all, in large part due to the identity of their targets.

This is a troubling capitulation to capstone an era that has seen NSLs mutate from their original function as an exceptional, limited-scope, and voluntary investigative mechanism to a massive, compulsory system with the potential to sweep millions of American citizens into its net. The USA Freedom Act was passed in response to revelations about the U.S. surveillance apparatus that spurred urgent public debate.²⁰⁵ It is deeply ironic that the Ninth Circuit would dilute First Amendment doctrine to accommodate the failings of such legislation, particularly when those failings are uniquely geared towards suppressing democratic transparency.

205. *See supra* Part II.F.

ANTONICK V. ELECTRONIC ARTS: EXPERT WITNESSES AND SOFTWARE COPYRIGHT INFRINGEMENT

Ran Duan[†]

I. INTRODUCTION

In the information age, computer software is crucial to almost all sectors of the modern economy. For example, software has numerous applications in telecommunications, social media, finance, education, research, transportation, manufacturing, and healthcare. Ensuring that computer programmers will benefit from their work is crucial for the development of the software industry.

In the 1980s, there were extensive discussions on whether the patent system or the copyright system should be used to protect programmer interests.¹ These discussions resulted in general acceptance that copyright best protects software, while patent only protects a portion of computer programs.²

Software, especially source code, presents a unique challenge for copyright law because it is difficult for a layperson to understand. Literal or visual works are easily understood by a lay audience. In contrast, readers without extensive training in computer programming would find the source code of a commercial software impenetrable and overwhelming. When determining substantial similarity in a copyright infringement case, the role of the expert is crucial because it would be extremely difficult for the trier of fact to determine the structure and function of the program without an expert's aid. Therefore, even with access to the complete source code in question, the result of an infringement analysis could be arbitrary unless a court permits expert testimony.

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1. See Susan A. Dunn, *Defining the Scope of Copyright Protection for Computer Software*, 38 STAN. L. REV. 497 (1986); David W. Carstens, *Legal Protection of Computer Software: Patents, Copyrights, and Trade Secrets*, 20 J. CONTEMP. L. 13 (1994); John C. Philips, *Sui Generis Intellectual Property Protection for Computer Software*, 60 GEO. WASH. L. REV. 997 (1992); John M. Jr. Griem, *Against a Sui Generis System of Intellectual Property for Computer Software*, 22 HOFSTRA L. REV. 145 (1993); Andres G. Gonzalez, *The Software Patent Debate*, 1 J. INTELL. PROP. L. & PRAC. 196 (2006).

2. See, e.g., Carstens, *supra* note 1, at 29–37 (discussing Federal Circuit cases determining whether computer programs were patentable).

This Note argues that courts should allow expert witness testimony to aid fact finders determining whether computer programs in question are substantially similar. Part II explains some fundamental concepts of computer programming. Additionally, Part II introduces the current state of copyright law and the tests for substantial similarity. Part III discusses *Antonick v. Electronic Arts* and explains the role of expert witnesses in the Ninth Circuit's test for substantial similarity. Part IV examines how other circuits have approached the use of experts in software copyright infringement cases. From this case law, Part V argues that expert testimony should be admissible at every stage when determining substantial similarity of software works. Finally, Part VI concludes.

II. BACKGROUND

A. BASIC CONCEPTS OF COMPUTER HARDWARE AND SOFTWARE

A computer requires both hardware and software to function properly.³ Computer hardware refers to physical devices of a computer system, such as the central processing unit (CPU), memory, hard disk, electrical circuits, input devices, and output devices.⁴ Computer software refers to both operating systems and application programs, which programmers design to control the hardware.⁵ Computer programs include both source code and object code.⁶ Programmers usually write and edit source code because it is often written in a programming language.⁷ Programming languages are more similar to human languages than object code.⁸ Object code is usually a binary file, which is machine executable and is not similar to human language.⁹ Thus, programmers must convert (“compile”) source code into object code to allow computers to execute the code.¹⁰

Although source code is human readable in principle, it is challenging for people without training in computer programming to understand.¹¹ Moreover, commercial software source code could include millions of lines of code,

3. *Computer*, WIKIPEDIA, <https://en.wikipedia.org/wiki/Computer> [<https://perma.cc/8DRD-ULR9>] (last visited Feb. 18, 2019).

4. *See id.*

5. *See id.*

6. *Computer Program*, WIKIPEDIA, https://en.wikipedia.org/wiki/Computer_program [<https://perma.cc/FAS6-GMJ4>] (last visited Feb. 18, 2019).

7. *See id.*

8. *See id.*

9. *See id.*

10. *See id.*

11. *Definition of Source Code*, LAW INSIDER, <https://www.lawinsider.com/dictionary/source-code> [<https://perma.cc/Y8LB-3VY7>] (last visited Feb. 18, 2019).

which is virtually impossible for a reader to read in the timeframe of a litigation.¹² Even computer software experts do not read the complete source code for purposes of detecting infringement; they have developed specially designed computer programs to flag similar parts in different source codes.¹³ These programs make it feasible to compare millions of lines of source code produced by both parties within the litigation timeframe.¹⁴

B. INTRODUCTION TO CURRENT COPYRIGHT LAW

In 1980, Congress chose the copyright system as the primary vehicle to protect computer programmers' interests.¹⁵ The copyright statute defines "computer program" as "a set of statements or instructions to be used directly or indirectly in a computer to bring about a certain result."¹⁶

Under current copyright law, to prove copyright infringement, a copyright holder must prove "(1) ownership of a valid copyright, and (2) copying of constituent elements of the work that are original."¹⁷ To satisfy the second element, a copyright holder needs proof of both actual copying of the work and that such copying constitutes an "improper appropriation."¹⁸ Copyright holders can establish actual copying by direct evidence, such as witness testimony or surveillance videos. When direct evidence is not available, a copyright holder may use circumstantial evidence to prove actual copying.¹⁹ Circumstantial evidence must show that the defendant had access to the original work and that the original and allegedly infringing works are substantially similar.²⁰ Likewise, to prove improper appropriation, the plaintiff must show that the defendant's allegedly infringing work is substantially similar to the copyrightable expression in the original work.²¹

12. *Codebases*, INFORMATION IS BEAUTIFUL, <https://informationisbeautiful.net/visualizations/million-lines-of-code> [<https://perma.cc/7YGL-K232>] (last visited Feb. 18, 2019).

13. Lydia Pallas Loren & Andy Johnson-Laird, *Computer Software-Related Litigation: Discovery and the Overly-Protective Order*, 6 FED. CTS. L. REV. 75, 83–86 (2012).

14. *Id.* at 85–86.

15. See Act of Dec. 12, 1980, Pub. L. No. 96-517, § 10, 94 Stat. 3028 (codified as amended at 17 U.S.C. § 117 (2012)); see also *Apple Comput., Inc. v. Franklin Comput. Corp.*, 714 F.2d 1240, 1249 (3d Cir. 1983) (finding that a computer program is a literary work and protected under copyright).

16. 17 U.S.C. § 101.

17. *Feist Publ'ns, Inc. v. Rural Tel. Serv. Co.*, 499 U.S. 340, 361 (1991).

18. See *Arnstein v. Porter*, 154 F.2d 464, 468 (2d Cir. 1946).

19. See 4 NIMMER & NIMMER, NIMMER ON COPYRIGHT § 13.01 (Matthew Bender, Rev. Ed. 2017).

20. See *id.*

21. See *Nichols v. Universal Pictures*, 45 F.2d 119, 121 (2d Cir. 1930).

A plaintiff's case often hinges on proving substantial similarity.²² For one, even after establishing actual copying, the plaintiff still needs to prove improper appropriation, which depends on the substantial similarity of the original work and allegedly infringing work.²³ For two, unless the defendant wholesale copies the plaintiff's copyrighted work, a plaintiff's case often hinges on whether the plaintiff can provide evidence establishing substantial similarity between plaintiff's work and the alleging infringing work.²⁴

1. *The Role of Experts*

As the Federal Rules of Evidence Advisory Committee noted, “[a]n intelligent evaluation of facts is often difficult or impossible without the application of some scientific, technical, or other specialized knowledge.”²⁵ The role of the expert witness is to supply this knowledge and assist the trier of fact to better evaluate evidence proffered by both parties. Under rule 702, qualified experts may “testify in the form of an opinion or otherwise if the expert’s scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue.”²⁶

Copyright jurisprudence developed in the context of literal works, visual arts, music, and other areas comprehensible by lay observers.²⁷ Courts are often willing to trust the judgment of lay jurors because courts believe that lay observers can correctly find similarities among these traditionally copyrighted works.²⁸ In *Arnstein v. Porter*, the Second Circuit set forth the two-step framework comprising the determination of factual copying and whether such copying amounts to misappropriation.²⁹ The court explicitly excluded expert testimony when determining unlawful appropriation.³⁰ The court reasoned that for unlawful appropriation, “the test is the response of the ordinary lay hearer; accordingly, on that issue, dissection and expert testimony are irrelevant.”³¹

In these areas, courts are cautious about expert testimony for fear that

22. *Shaw v. Lindheim*, 919 F.2d 1353, 1361 (9th Cir. 1990) (“No amount of proof of access will suffice to show copying if there are no similarities.”).

23. *Arnstein*, 154 F.2d at 473 (“The question, therefore, is whether defendant took from plaintiff’s works so much of what is pleasing to the ears of lay listeners, who comprise the audience for whom such popular music is composed, that defendant wrongfully appropriated something which belongs to the plaintiff.”).

24. See 4 NIMMER & NIMMER, *supra* note 19, at § 13.03.

25. FED. R. EVID. 702, advisory committee notes.

26. FED. R. EVID. 702.

27. See *Dawson v. Hinshaw Music Inc.*, 905 F.2d 731, 733–35 (4th Cir. 1990).

28. See *id.* at 734.

29. See *Arnstein v. Porter*, 154 F.2d 464, 468–69 (2d Cir. 1946).

30. *Id.* at 468.

31. *Id.* (internal quotation marks omitted).

expert testimony may unfairly influence the jury.³² Experts may be biased because they are paid by parties. Some experts may only present facts and opinions favorable to the party that employs them or sneak legal conclusions into otherwise factual presentations.³³ The risk of undue influence may also be elevated when the jury views experts as intelligent and trustworthy.³⁴

Computer software cases are different from traditional copyright cases because of their complicated and technical subject matter. As the Second Circuit noted in *Computer Associates International, Inc. v. Altai*, “computer programs are likely to be somewhat impenetrable by lay observers—whether they be judges or juries—and, thus, seem to fall outside the category of works contemplated by those who engineered the *Arnstein* test.”³⁵ Because the various tests for determining substantial similarities were developed in “the context of artistic and literary, rather than utilitarian, works,” they assume that lay people can determine the similarity of expressions in the works at issue.³⁶ In artistic and literary cases, the jury can better perform its duty without the interference and bias of experts. However, in computer software cases where the jury cannot make the subjective comparison in the first place, allowing expert witness will help the jury performing its duty.³⁷

2. Existing Tests for Substantial Similarity

As discussed earlier, proving substantial similarity is often crucial in a copyright infringement case. Without an effective and predictable way to determine substantial similarity, copyright protection would be of little value to computer programmers. Unfortunately, courts do not apply a uniform test to determine substantial similarities.³⁸ There are three main tests for determining substantial similarities: the ordinary observer or intended audience test used by the Second Circuit; the extrinsic/intrinsic test developed by the

32. See, e.g., *Marx & Co. v. Diners' Club, Inc.*, 550 F.2d 505, 511 (2d Cir. 1977) (“With the growth of intricate securities litigation over the past forty years, we must be especially careful not to allow trials before juries to become battles of paid advocates posing as experts on the respective sides concerning matters of domestic law.”).

33. See Note, *Expert Legal Testimony*, 97 HARV. L. REV. 797, 808–09 (1984).

34. See *Rottlund Co. v. Pinnacle Corp.*, 435 F.3d 726, 733 (8th Cir. 2006) (“[E]xperts enjoy an aura of reliability and trustworthiness and it is probable that the disputed evidence persuaded the jury in this case . . .”).

35. *Comput. Assocs. Int'l, Inc. v. Altai, Inc.*, 982 F.2d 693, 712 (2d Cir. 1992).

36. *Comput. Assocs. Int'l, Inc. v. Altai, Inc.*, 775 F. Supp. 544, 558 (E.D.N.Y. 1991).

37. See *Altai*, 982 F.2d at 713 (“In making its finding on substantial similarity with respect to computer programs, we believe that the trier of fact need not be limited by the strictures of its own lay perspective.”).

38. Compare *Altai*, 982 F.2d at 706–12 (setting forth a three-step test for computer software cases), with *Antonick v. Elec. Arts, Inc.*, 841 F.3d 1062 (applying extrinsic/intrinsic test to computer software cases).

Ninth Circuit; and the abstraction, filtration, and comparison test. The Second Circuit and Ninth Circuit's tests are the most influential in this field.

a) The Ordinary Observer Test and Intended Audience Test

Arnstein was an early but influential case for determining non-literal copyright infringement. It was decided by the Second Circuit in 1946.³⁹ *Arnstein* set forth the ordinary observer test for substantial similarity, where expert testimony is not admissible when determining unlawful appropriation.⁴⁰

In *Arnstein*, composer Ira Arnstein alleged that another composer, Cole Porter, infringed his copyrights on several songs.⁴¹ Porter moved for summary judgment, claiming that he had never heard Arnstein's songs.⁴² The district court granted Porter's motion.⁴³ The Second Circuit reversed, holding that Arnstein's credibility as a witness was better left for a jury to decide.⁴⁴

As discussed earlier, *Arnstein* set forth a two-step test for non-literal copyright infringement.⁴⁵ In the copying step of the analysis, expert testimony about substantial similarity is allowed.⁴⁶ However, in the unlawful appropriation step of the test, the court made clear that "expert testimony are irrelevant."⁴⁷ Although the *Arnstein* court did not provide much explanation of unlawful appropriation, the test is understood to require substantial similarity in the two works' protected expression, indicating that the defendant improperly copied that expression from the plaintiff's work.⁴⁸ The Second Circuit explained that in the second step of the test, "[e]xpert testimony of musicians . . . will in no way be controlling on the issue of illicit copying, and should be utilized only to assist in determining the reactions of lay auditors."⁴⁹ The court reasoned that "the views of [musician experts] are caviar to the general—and plaintiff's and defendant's compositions are not caviar."⁵⁰

In *Dawson v. Hinshaw*, the Fourth Circuit pointed out that the ordinary observer test for non-literal infringement was flawed when the works at issue

39. *Arnstein v. Porter*, 154 F.2d 464, 464 (2d Cir. 1946).

40. *Id.* at 473. Although expert testimony is admissible when determining factual copying, the court made it clear that it is not admissible on the issue of unlawful appropriation.

41. *Arnstein v. Porter*, No. 29-754, 1945 WL 6897, at *1-2 (S.D.N.Y. July 27, 1945).

42. *Id.* at *2.

43. *Id.*

44. *Arnstein*, 154 F.2d at 467-69.

45. *Id.*

46. *Id.*

47. *Id.* at 468.

48. *Id.*; see also Pamela Samuelson, *A Fresh Look at Tests for Nonliteral Copyright Infringement*, 107 NW. U. L. REV. 1821, 1825 (2013).

49. *Arnstein*, 154 F.2d at 473.

50. *Id.*

are caviar to the general.⁵¹ In *Dawson*, the copyright holder of an arrangement of the spiritual “Ezekiel Saw De Wheel” sued composer Gilbert Martin and a music company alleging that their arrangement infringed his copyright.⁵² After a bench trial, the district court held for the defendant.⁵³

On appeal, the Fourth Circuit found the district court erred in applying an “ordinary lay observer test,” instead of an ordinary intended observer test.⁵⁴ The court noted that *Arnstein* appropriately applied the ordinary observer test because the composition at issue was popular and could be appreciated by lay observers.⁵⁵ The court reasoned that according to *Arnstein*’s logic, “where the intended audience is significantly more specialized than the pool of lay listeners, the reaction of the intended audience would be the relevant inquiry.”⁵⁶ Therefore, the court decided to adopt an intended observer test.⁵⁷ The court further explained that “an ordinary lay observer characterization of the test [is] only [permitted] where the lay public fairly represents the works’ intended audience.”⁵⁸ The intended audience in *Dawson* was not the lay listener, as it was in *Arnstein*, but rather the choral director purchasing sheet music.⁵⁹

b) The Extrinsic/Intrinsic Test

The extrinsic/intrinsic test incorporates ideas from earlier approaches. In *Sid & Marty Krofft Television Prods., Inc. v. McDonald’s Corp.*, the Ninth Circuit established this two-prong test for determining substantial similarity.⁶⁰ In this case, Krofft Productions sued McDonald’s for copyright infringement of the Pufnstuf programs, a children’s television series.⁶¹ It alleged that McDonald’s had copied expressive elements from its programs and used them in commercials.⁶²

The Ninth Circuit announced the two-prong extrinsic/intrinsic test.⁶³ The first prong determines whether there is substantial similarity in ideas.⁶⁴ The court called the first step “extrinsic” because “it depends not on the responses

51. See *Dawson v. Hinshaw Music Inc.*, 905 F.2d 731 (4th Cir. 1990).

52. See *id.* at 732.

53. See *id.*

54. See *id.* at 733.

55. See *id.*

56. *Id.* at 734.

57. See *id.*

58. *Id.*

59. See *id.* at 737–38.

60. 562 F.2d 1157 (9th Cir. 1977).

61. See *id.* at 1161–62.

62. See *id.*

63. See *id.*

64. See *id.* at 1164.

of the trier of fact, but on specific criteria which can be listed and analyzed.”⁶⁵ In this step, dissective analysis and expert testimony are permissible.⁶⁶ The second prong determines whether there is substantial similarity between the forms of expression.⁶⁷ This step, “intrinsic test,” is a subjective comparison that focuses on whether the ordinary, reasonable audience would find the works substantially similar in the total concept and feel of the works.⁶⁸ The court characterized the second step as “intrinsic” because “it does not depend on the type of external criteria and analysis which marks the extrinsic test.”⁶⁹ Expert testimony is not admissible under the “intrinsic” analysis step.⁷⁰

In *Krofft*, the jury found that there was substantial similarity between the Pufnstuf programs and the McDonald’s commercials.⁷¹ The Ninth Circuit noted that “the intrinsic test for expression is uniquely suited for determination by the trier of fact,” and the standard of review should be the “clearly erroneous” standard.⁷² The court subsequently found that the jury’s finding was not clearly erroneous.⁷³

c) The Abstraction, Filtration, and Comparison Test

In *Altai*, the Second Circuit announced the most influential substantial similarity test for computer programs.⁷⁴ The abstraction, filtration, and comparison (AFC) test comprises three steps.⁷⁵ First, courts must construct an abstraction hierarchy of the computer program.⁷⁶ Second, courts need to filter out various unprotectable elements, such as standard programming techniques, platform determined interfaces and routines, non-original modules, and other elements excluded by various copyright doctrines.⁷⁷ After filtration, courts compare the copyright protectable elements left in the original program with the corresponding elements in the allegedly infringing program.⁷⁸ This test differs from the extrinsic/intrinsic test because it allows expert testimony in all three steps.⁷⁹

65. *Id.*

66. *See id.*

67. *See id.*

68. *See id.*

69. *Id.*

70. *See Olson v. Nat’l Broad. Co.*, 855 F.2d 1446, 1448–49 (9th Cir. 1988) (stating that expert testimony is appropriate under the extrinsic test, but not under the intrinsic test).

71. *See Krofft*, 562 F.2d at 1162.

72. *Id.* at 1166.

73. *See id.* at 1167.

74. *Comput. Assocs. Int’l, Inc. v. Altai, Inc.*, 982 F.2d 693, 706–07 (2d Cir. 1992).

75. *See id.*

76. *See id.*

77. *See id.* at 707–10.

78. *See id.* at 710.

79. *See id.* at 712–14.

In *Altai*, Computer Associates sued Altai for copyright infringement of a subprogram of a job-scheduling program.⁸⁰ Altai incorporated parts of the subprogram into its own job-scheduling program.⁸¹ When Computer Associates discovered that Altai might have appropriated parts of its program, it sued for copyright infringement and trade secret misappropriation.⁸² The Second Circuit agreed with the district court's finding that most of the parameter lists and macros in question were "either in the public domain or dictated by the functional demands of the program."⁸³ Therefore, the court found that "the district court could reasonably conclude that they did not warrant a finding of infringement given their relative contribution to the overall program."⁸⁴

III. *ANTONICK V. ELECTRONIC ARTS*

In *Antonick v. Electronic Arts*, the Ninth Circuit confirmed the test and evidentiary standards for determining substantial similarity in computer program copyright infringement cases.⁸⁵ This case is influential because the Ninth Circuit covers the most significant region for computer program litigations. However, it is troubling that the Ninth Circuit applied the extrinsic/intrinsic test to this software copyright infringement case. Because courts must exclude expert testimony when determining the intrinsic prong, the test may promote arbitrariness in cases involving source code and result in unpredictable doctrine.

A. BACKGROUND AND FACTS

Robin Antonick developed the original John Madden Football game for the Apple II computer (Apple II Madden).⁸⁶ It was the first football video game mimicking NFL football games.⁸⁷ Antonick subsequently transplanted this game to IBM-compatible computers (IBM Madden).⁸⁸ In 1989, Antonick began to work for Electronic Arts (EA), a computer game company, to develop similar Madden Football games for the Nintendo and Sega Genesis platforms.⁸⁹ In August 1990, EA told Antonick to stop working on the Madden Football game, because they had hired Park Place Productions to

80. *See id.* at 698–700.

81. *See id.*

82. *See id.*

83. *Id.* at 714.

84. *Id.* at 714–15.

85. *Antonick v. Elec. Arts, Inc.*, 841 F.3d 1062 (9th Cir. 2016).

86. *See id.* at 1064.

87. *See id.*

88. *See id.*

89. *See id.*

create a version with “more of an arcade style.”⁹⁰ In November 1990, EA released its first version of Sega Madden.⁹¹ In late 1991 or early 1992, EA released Antonick’s last Madden game, an updated version of IBM Madden.⁹² From 1992 to 1996, EA released a new version of the Madden Football game for Sega and Nintendo platforms every year (“Sega Madden” and “Nintendo Madden,” respectively).⁹³

Under Antonick’s contract with EA, EA would pay royalties to Antonick for any “derivative work” of Apple II Madden, where “derivative work” was defined “within the meaning of the United States copyright law.”⁹⁴ However, EA did not pay any royalties to Antonick for Sega Madden or Nintendo Madden.⁹⁵ In 2011, Antonick sued EA seeking contract damages for unpaid royalties for Sega Madden and Nintendo Madden.⁹⁶ Antonick claimed that Park Place copied his code and that Sega Madden and Nintendo Madden were derivative works of Apple II Madden.⁹⁷ Antonick produced evidence that Park Place finished Sega Madden in an unreasonably short timeframe, particularly considering that Park Place was understaffed.⁹⁸ Antonick’s expert witness, Michael Barr, opined that Sega Madden was substantially similar to certain elements of Apple II Madden.⁹⁹ Specifically, Mr. Barr opined that both games had “similar formations, plays, play numberings, and player ratings; a similar, disproportionately wide field; a similar eight-point directional system; and similar variable names, including variables that misspelled scrimmage.”¹⁰⁰ However, the complete source code of neither Apple II Madden nor Sega Madden was introduced into evidence.¹⁰¹

The jury found that Sega Madden was a derivative work of Apple II Madden, but the district court granted judgment as a matter of law in favor of EA.¹⁰² The district court held that Antonick had not met his burden of proof that Sega Madden was a derivative work because Antonick did not introduce the source code of the two video games into evidence.¹⁰³

90. *See id.*

91. *See id.*

92. *See id.*

93. *See id.*

94. *See id.* at 1065.

95. *See id.*

96. *See id.*

97. *See id.*

98. *See id.*

99. *See id.*

100. *Id.* (internal quotation marks omitted).

101. *See id.*

102. *See id.*

103. *See id.*

B. SUMMARY OF DISTRICT COURT DECISION

To determine whether Sega Madden was a derivative work of Apple II Madden, the district court applied the extrinsic/intrinsic test.¹⁰⁴ Two questions were presented to the jury: (1) whether EA copied the expression of any protected element in any of the Sega Madden games at issue; and (2) if so, whether that copying made Sega Madden an infringing work of Apple II Madden.¹⁰⁵

The first question corresponds to the extrinsic prong of the test. The jury found that for each version of Sega Madden, Antonick proved that there were substantial similarities between the copyright protectable elements “plays and formations.”¹⁰⁶ The second question asked whether the copying of the source code that expressed “plays and formations” amounted to infringement.¹⁰⁷ The jury found that all versions of Sega Madden were virtually identical to Apple II Madden.¹⁰⁸ Therefore, the jury found that all versions of Sega Madden were derivative works of Apple II Madden and that EA owed royalties to Antonick.¹⁰⁹

The district court, however, granted judgment as a matter of law in favor of EA.¹¹⁰ The court noted that there was insufficient evidence to enable the jury to make a comparison of Apple II Madden and the different versions of Sega Madden because neither the source code of Apple II Madden or Sega Madden was introduced into evidence.¹¹¹ The court noted that without both games’ source code, the jury had no evidence from which to place the protected expression “in the context of Apple II Madden as a whole.”¹¹² In addition, the Court found Mr. Barr’s testimony and the visual presentation of the “plays and formations” of Apple II Madden and Sega Madden impermissible because the plays and formations were not copyright protectable.¹¹³ The Court explained that Antonick’s ownership was limited to the “expression of the plays and formations in his source code, not the plays

104. *See* Antonick v. Elec. Arts Inc., No. C 11-1543 CRB, 2014 WL 245018, at *5–6 (N.D. Cal. Jan. 22, 2014).

105. *See id.*

106. *Id.*

107. *Id.*

108. *See id.*

109. *See id.*

110. *See id.*

111. *See id.*

112. *Id.* at *7–8.

113. *Id.* at *11 (citing 17 U.S.C. § 102(b) (2006)) (“In no case does copyright protection for an original work of authorship extend to any idea, procedure, process, system, method of operation, concept, principle, or discovery.”).

and formations themselves.”¹¹⁴

C. SUMMARY OF NINTH CIRCUIT DECISION

The Ninth Circuit affirmed the district court’s ruling.¹¹⁵ The court first affirmed that the two-part extrinsic/intrinsic test was the proper test to determine substantial similarity in this case.¹¹⁶ The court then concluded that without the games’ source code, the jury could not “compare the works to determine substantial similarity.”¹¹⁷ The court noted Antonick did not satisfy his evidentiary burden under the best evidence rule. Under the best evidence rule, Antonick was required to introduce the complete source code of his original work to compare with the allegedly infringing work.¹¹⁸ Moreover, the court found that expert testimony could not satisfy the plaintiff’s burden of proof under the intrinsic prong.¹¹⁹ The court further noted that the lay testimony about the appearance of the games was irrelevant, because Antonick did not assert a copyright interest in Apple II Madden’s audiovisual appearance, but only in its source code.¹²⁰ Therefore, the Court affirmed District Court’s judgment as a matter of law in favor of EA.¹²¹

IV. EXPERT WITNESS ADMISSIBILITY ON OUTSIDE THE NINTH CIRCUIT

As discussed in Part I, the Second Circuit applies the AFC test, which allows expert witnesses when determining substantial similarity.¹²² Although other circuits may use different tests, most also allow expert witnesses to assist the jury to assess substantial similarities. The First, Tenth, and Eleventh Circuits also adopted the AFC test.¹²³ The Fourth and Sixth Circuits adopted the intended audience test, which allows expert testimony when dealing with computer software cases.¹²⁴ Although the Fifth, Seventh, and Eighth Circuits adopted the ordinary observer test, some districts in these circuits still allow

114. *Id.* (citing *Oracle Am., Inc. v. Google Inc.*, 872 F. Supp. 2d 974, 997–98 (N.D. Cal. 2012)) (“[T]here might be a myriad of ways in which a programmer may . . . express the idea embodied in a given subroutine.”).

115. *See Antonick v. Elec. Arts, Inc.*, 841 F.3d 1062, 1064 (9th Cir. 2016).

116. *See id.* at 1065–66.

117. *Id.* at 1066.

118. *See id.* (“There can be no proof of ‘substantial similarity’ and thus of copyright infringement unless Seiler’s works are juxtaposed with Lucas’ and their contents compared.”) (applying the best evidence rule in a copyright action).

119. *See id.* at 1067.

120. *See id.*

121. *See id.* at 1069.

122. *See* discussion *supra* Section II.B.2.

123. *See* discussion *infra* Section IV.A.

124. *See* discussion *infra* Section IV.B.

experts to testify on substantial similarity.¹²⁵ Thus, the most important factor when a court determines whether to allow expert witnesses is the test that the court applies. This Part will discuss software copyright infringement cases that allowed expert testimony across circuits and grouped by the test applied.

A. THE ABSTRACTION, FILTRATION, COMPARISON TEST

Under the AFC test, courts allow experts to testify on the issue of substantial similarity.

1. *The First Circuit*

In *Baystate Technologies v. Bentley System*, Baystate Technologies, a software company that designs computer-aided design (CAD) software sued another software company, Bentley System, alleging that Bentley's data transfer program infringed its CAD software copyright.¹²⁶ The data transfer program was designed to help users transfer data from Baystate's CAD software to Bentley's CAD software.¹²⁷ Both parties offered expert testimony.¹²⁸ The experts agreed that the data structures were, at least to some extent, similar.¹²⁹ However, Baystate's expert opined that these similarities were necessary.¹³⁰

The court allowed the parties to present their expert testimony and adopted the AFC test.¹³¹ The court admitted expert testimony on whether Baystate's data structures were similar to Bentley's.¹³² Based on the expert testimony, the court found that Baystate and Bentley's CAD software were substantially similar.¹³³

2. *The Tenth Circuit*

In *Gates Rubber Co. v. Bando Chemical Industries, Ltd.*, the owner of a copyright for software, Gates Rubber, sued its competitor, Bando Chemical, for infringement.¹³⁴ Bando Chemical had hired a former employee of Gates Rubber to develop a computer program with similar functions.¹³⁵

125. See discussion *infra* Section IV.C.

126. See *Baystate Techs., Inc. v. Bentley Sys., Inc.*, 946 F. Supp. 1079, 1085 (D. Mass. 1996).

127. See *id.* at 1084.

128. See *id.* at 1085.

129. See *id.*

130. See *id.*

131. See *id.* at 1090, 1098.

132. See *id.* ("The documentation contained the data structures which were the subject of the experts' comparisons.").

133. See *id.*

134. See *Gates Rubber Co. v. Bando Chem. Indus., Ltd.*, 9 F.3d 823, 830–31 (10th Cir. 1993).

135. See *id.*

The court in *Gates Rubber* allowed expert testimony and adopted the AFC test.¹³⁶ The court stated, “[g]iven the complexity and ever-changing nature of computer technology, we decline to set forth any strict methodology in the abstraction of computer programs.”¹³⁷ The court further explained, “in most cases[,] we foresee that the use of experts will provide substantial guidance to the court in applying an abstraction test.”¹³⁸ Likewise, the court held that expert testimony should also be considered in the subsequent filtration and comparison steps.¹³⁹

3. *The Eleventh Circuit*

In *CMAX/Cleveland v. UCR*, the owner of a copyright for a computer information system, CMAX, sued a rent-to-own company, UCR, for infringement.¹⁴⁰ UCR first licensed the software from CMAX, but in light of financial considerations and CMAX’s unwillingness to make modifications, later decided to develop its own system.¹⁴¹ CMAX alleged that UCR copied its source code and data files in developing UCR’s own software.¹⁴²

In *UCR*, the Middle District of Georgia adopted the AFC test.¹⁴³ The court allowed both parties to present their expert witness, and the court found that CMAX’s expert gave a more credible testimony.¹⁴⁴ CMAX’s expert concluded that UCR’s software copied the “file structures, record layouts, transaction codes and internal documentation” of the CMAX software.¹⁴⁵ The court ultimately held for CMAX.¹⁴⁶

B. THE INTENDED AUDIENCE TEST

Under the intended audience test, lay observers should not be considered the intended audience in computer software infringement cases. Thus, to aid the trier of fact’s understanding, courts applying the intended audience test allow experts to testify on the question of substantial similarity.

136. *See id.* at 834–35.

137. *Id.*

138. *Id.*

139. *See id.* at 842–45.

140. *See CMAX/Cleveland, Inc. v. UCR, Inc.*, 804 F. Supp. 337 (M.D. Ga. 1992).

141. *See id.*

142. *See id.* at 344.

143. *See id.*

144. *See id.* at 348 (“Having considered the expert testimony presented by both parties regarding the structural similarities that actually exist between the two systems at issue, the Court concludes that Rick Ramsden, Computemax’s expert, gave the best supported and most credible testimony.”).

145. *Id.*

146. *See id.* at 356–57.

1. *The Fourth Circuit*

In *Dawson v. Hinshaw Music*, the Fourth Circuit held that the second step of the *Arnstein* approach should be conducted from the view of an intended audience, instead of lay observers.¹⁴⁷ Although *Dawson* is not a computer software case, the court discussed software copyrights in dicta. The court noted that “the advent of computer programming infringement actions has forced courts to recognize that sometimes the non-interested or uninformed lay observer simply lacks the necessary expertise to determine similarities or differences between products.”¹⁴⁸ Citing a Third Circuit opinion, the *Dawson* court noted that “the complexity of computer programs, combined with the general public’s unfamiliarity with such programs, rendered the ordinary observer test senseless.”¹⁴⁹ The court concluded that “only a reckless indifference to common sense would lead a court to embrace a doctrine that requires a copyright case to turn on the opinion of someone who is ignorant of the relevant differences and similarities between two works.”¹⁵⁰ Thus, the *Dawson* court explicitly embraced expert testimony in computer software copyright infringement cases.¹⁵¹

2. *The Sixth Circuit*

The Sixth Circuit did not have its own specific test for determining substantial similarity in copyright cases until 2003 when it set forth a two-step test.¹⁵² Under this test, courts first filter out unoriginal, unprotectable elements, then look at the substantial similarity of the works from the perspective of the intended audience.¹⁵³

a) *SAS Institute, Inc. v. S&H Computer Systems, Inc.*

In *SAS Institute v. S&H*, decided before 2003, the Middle District of Tennessee applied the ordinary observer test.¹⁵⁴ SAS, the owner of a copyright for statistical analysis software, brought the infringement suit against S&H, its

147. See *Dawson v. Hinshaw Music Inc.*, 905 F.2d 731, 734 (4th Cir. 1990) (“[W]e think it sensible to embrace *Arnstein’s* command that the ultimate comparison of the works at issue be oriented towards the works’ intended audience.”).

148. *Id.* at 735.

149. *Id.* at 735 (citing *Whelan Associates v. Jaslow Dental Lab., Inc.*, 797 F.2d 1222 (3rd Cir. 1986)).

150. *Id.*

151. See *id.* (“He further reasoned that where the finder of fact is the same for both the extrinsic and intrinsic tests, it seems silly to ask the finder of fact to ‘forget’ the expert testimony when considering similarity of expression.”).

152. See *Kohus v. Mariol*, 328 F.3d 848, 854 (6th Cir. 2003).

153. See *id.* at 857.

154. See *SAS Inst., Inc. v. S & H Comput. Sys., Inc.*, 605 F. Supp. 816, 818 (M.D. Tenn. 1985).

competitor.¹⁵⁵ Although the ordinary observer test does not allow expert testimony, the Middle District of Tennessee nevertheless allowed experts to testify on the question of substantial similarity, and in fact, appointed an expert to assist the court.¹⁵⁶ SAS's expert testified that "early source code for the S&H product was substantially similar to the source code for SAS."¹⁵⁷ The court ultimately found that the plaintiff's expert's testimony was credible.¹⁵⁸

b) *Kobus v. Mariol*

The Sixth Circuit first mandated its two-step test in *Kobus*.¹⁵⁹ In the first step, similar to the first step in the AFC test, the court must identify which aspects of the plaintiff's work are protected by copyright.¹⁶⁰ After the court filters out the unprotectable elements, the court then looks at the substantial similarity of the works.¹⁶¹

Endorsing the Fourth Circuit's approach, the Sixth Circuit made clear that the second step should be directed to the perspective of the intended audience.¹⁶² Following *Dawson*, the court reasoned that "[t]he ordinary observer test is based on the economic incentive view of copyright law, that the 'purpose of the copyright laws is to provide creators with a financial incentive to create for the ultimate benefit of the public.'¹⁶³ The court noted that the *Arnstein* test was "designed for cases where the lay audience purchases the product at issue, and where the lay audience's untutored judgment determines whether the product will sell."¹⁶⁴ The court further noticed that in cases "where the target audience possesses specialized expertise . . . the specialist's perception of similarity may be much different from the lay observer's, and it is appropriate in such cases to consider similarity from the specialist's perspective."¹⁶⁵ On the admissibility of expert witnesses, the court held that "[e]xpert testimony will usually be necessary to educate the trier of fact in those elements for which the specialist will look."¹⁶⁶

155. *See id.* at 817.

156. *See id.* at 817–18; *cf.* *Arnstein v. Porter*, 154 F.2d 464, 468 (2d Cir. 1946).

157. *SAS Inst.*, 605 F. Supp. at 822.

158. *See id.*

159. *See* *Kobus v. Mariol*, 328 F.3d 848, 855 (6th Cir. 2003).

160. *See id.*

161. *See id.*

162. *See id.* at 857 ("The larger principle here is that the inquiry in the second prong of the substantial similarity test should focus on the intended audience.").

163. *Id.* at 856 (internal corrections omitted) (quoting *Dawson v. Hinshaw Music, Inc.*, 905 F.2d 731, 733 (4th Cir. 1990)).

164. *Id.*

165. *Id.* at 857.

166. *Id.*

C. THE ORDINARY OBSERVER TEST

As discussed earlier, under the ordinary observer test, courts look at whether, in the lay observer's view, the works are substantially similar, showing that the defendant unlawfully appropriated the plaintiff's work.¹⁶⁷ Expert testimony is not admissible under this test. However, several districts applying the ordinary observer test allowed expert witnesses to testify on the question of substantial similarity in software copyright infringement cases.

1. *The Fifth Circuit*

In *Seastrunk v. Darwell Integrated Tech.*, the owner of a copyright for air conditioner monitoring software, Seastrunk, brought the infringement action against Darwell, alleging that Darwell had copied his source code in developing its own version of monitoring software.¹⁶⁸

The Northern District of Texas allowed Seastrunk's expert to testify, but ultimately found the testimony that the parties' software was substantially similar not credible.¹⁶⁹ The court noted that Darwell's rebuttal expert "pointed out several instances where [Seastrunk's expert] found substantial similarity that [was] actually standard in the industry or dictated by third-party hardware."¹⁷⁰ Subsequently, the court found that Seastrunk failed to show that Darwell's software was substantially similar to his own.¹⁷¹

2. *The Seventh Circuit*

In *Century Consultants v. Miller Group*, the owner of a copyright for school administration software, Century, brought an infringement action against its licensee, Miller, for violating the license agreement.¹⁷² Specifically, Century alleged that Miller had improperly used Century's source code and structures in violation of the licensing agreement while developing its own school management software.¹⁷³

The Central District of Illinois allowed Century's expert to testify on the question of substantial similarity.¹⁷⁴ The expert opined that "all the programs contained substantial similarities, including similar language, structure, and

167. See discussion *supra* Section II.B.2.

168. See *Seastrunk v. Darwell Integrated Tech., Inc.*, No. 3:05-CV-0531, 2008 WL 898766 (N.D. Tex. Mar. 28, 2008).

169. See *id.* at *4.

170. *Id.*

171. See *id.* at *9–10.

172. See *Century Consultants, Ltd. v. Miller Grp., Inc.*, 2008 WL 345541, at *5 (C.D. Ill. Feb. 7, 2008).

173. See *id.*

174. See *id.*

logic.”¹⁷⁵ He thus concluded that Miller’s school management software was “developed from” Century’s software.¹⁷⁶ The court subsequently granted summary judgment in favor of Century because Miller did not provide any expert testimony to rebut Century’s allegations.¹⁷⁷

3. *The Eighth Circuit*

Although the Eighth Circuit applies a general *Arnstein* test, in *E.F. Johnson Co. v. Uniden Corp. of America*, the District of Minnesota allowed expert testimony on substantial similarity.¹⁷⁸ In *E.F. Johnson*, the owner of a software copyright for a radio system, E.F. Johnson, brought an infringement action against its competitor, Uniden.¹⁷⁹ E.F. Johnson’s radio system had been on the market for some time when Uniden’s system was released.¹⁸⁰ After a thorough comparison of the products, E.F. Johnson’s engineers concluded that Uniden had copied their software.¹⁸¹

The court allowed experts to testify on the issue of substantial similarity, finding that “[b]ecause a copyrighted computer program is stored on a computer chip or disc well-hidden from public view, application of the ordinary observer test in a computer software context has proven problematical.”¹⁸² The court held that “[t]he fiction of the lay observer is thus abandoned in favor of an analysis of similarities and differences in the copyrighted and allegedly offending computer programs.”¹⁸³ With the aid of experts, the court concluded that Uniden’s radio system was substantially similar to E.F. Johnson’s.¹⁸⁴

V. DISCUSSION

Expert witnesses play a crucial role in software intellectual property litigations. Rule 702 of the Federal Rules of Evidence provides:

If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience,

175. *Id.*

176. *Id.*

177. *See id.* at *6.

178. *See E.F. Johnson Co. v. Uniden Corp. of America*, 623 F. Supp. 1485 (D. Minn. 1985).

179. *See id.* at 1486.

180. *See id.* at 1490.

181. *See id.* at 1490.

182. *Id.* at 1493.

183. *Id.*

184. *See id.*

training, or education, may testify thereto in the form of an opinion or otherwise.¹⁸⁵

It is a long-established rule in patent litigation that expert testimony is allowed to help the trier of fact understand technical terms.¹⁸⁶ Expert witnesses are crucial for translating technical jargon understood by those skilled in the art into terms comprehensible to courts and lay juries. In fact, some courts even allowed expert witnesses to testify on legal issues such as obviousness and infringement.¹⁸⁷

Although copyright and patent protections differ in several aspects, both require courts and juries to understand the content of the works in question. It is well-established that copyright extends to certain non-literal expressions. In non-literal software infringement cases, courts cannot determine substantial similarity without first understanding the technical aspects of the original and allegedly infringing works. As discussed in Part IV, with the exception of the Third and Ninth Circuits, most courts allow expert witness testimony when determining substantial similarity in software copyright infringement. In contrast, the Third and Ninth Circuits follow rules developed in other contexts that fail to consider the highly technical nature of computer software.

In *Antonick*, the District Court reasoned, and the Ninth Circuit agreed, that “the jury had no evidence of Apple II Madden or Sega Madden as a whole to enable it to make this subjective comparison.”¹⁸⁸ The court pointed out that “[b]y failing to offer evidence of the games in their entirety, Antonick’s proof on Question 2 (the intrinsic prong) was insufficient.”¹⁸⁹ However, the jury would not be able to make this subjective comparison with or without the complete source code, unless an expert witness is allowed to testify.

First, source code does not present the viewer with a subjective impression. Different from literary or visual works, which usually give an overall impression to viewers, source code leaves untrained readers with confusion, at most. Second, even if source code could have a total concept and feel, an average juror without formal training in programming could not understand the source code without the aid of an expert. Further, in *Antonick*, the source codes in question were in different programming languages—much

185. FED. R. EVID. 702.

186. See *Seymour v. Osborne*, 78 U.S. 516, 516 (1870); JOHN GLADSTONE MILLS III, DONALD C. REILEY III, ROBERT CLARE HIGHLEY & PETER D. ROSENBERG, 6 PATENT LAW FUNDAMENTALS § 20:105 (2d ed. 2018).

187. See *Marvin Glass & Assocs. v. Sears, Roebuck & Co.*, 318 F. Supp. 1089 (S.D. Tex. 1970).

188. *Antonick v. Elec. Arts Inc.*, No. C 11-1543 CRB, 2014 WL 245018, at *7 (N.D. Cal. Jan. 22, 2014).

189. *Id.*

like a literal work written in different languages. It would be fruitless for lay jurors to evaluate substantial similarities of a novel written in Japanese and Russian unless they happen to know both languages. In this analogy, even if the infringing work is a literal translation of the original work, which is clearly subject to copyright protection,¹⁹⁰ the jurors who do not speak the two languages in question would not be able to find the similarity. Likewise, in the computer source code context, the jurors who do not know the programming languages in question would not recognize any similarities. Without an expert's help, a lay jury would be inclined to compare the works literally, which would lead to overly narrow copyright protection.

A. THE CONSEQUENCE OF EXCLUDING EXPERT TESTIMONY IN
COPYRIGHT INFRINGEMENT

Excluding expert testimony in substantial similarity determinations frustrates the primary purpose of copyright—"to promote the Progress of Science and useful Arts."¹⁹¹ As the Supreme Court explained in *Mazer v. Stein*, "[t]he economic philosophy . . . is the conviction that encouragement of individual effort by personal gain is the best way to advance public welfare."¹⁹² Thus, the monopoly right granted to authors plays a crucial role in advancing copyright's purpose.¹⁹³

As discussed earlier, excluding expert testimony in determining substantial similarity would lead to an elevated infringement standard, which would under-protect the copyright owner's exclusive rights granted by Congress. Moreover, excluding expert testimony would also promote uncertainty in copyright litigation outcomes. Without the aid of an expert, the trier of fact is unlikely to understand the organization, workflow, and structure of source code, which may result in arbitrary infringement determinations. Uncertainty in copyright doctrine would further frustrate the purpose of the copyright system because authors will not know for sure whether their works would be protected under copyright law.

VI. CONCLUSION

Software copyrights present a unique challenge for infringement actions because of the specialized knowledge required to understand the works at issue. Specifically, software source code does not present the viewer with an overall

190. *See* *Itar-Tass Russian News Agency v. Russian Kurier, Inc.*, 153 F.3d at 82 (2d Cir. 1998).

191. U.S. CONST. art. I, § 8 cl. 8.

192. *Mazer v. Stein*, 347 U.S. 201, 219 (1954).

193. *See* 1 NIMMER & NIMMER, NIMMER ON COPYRIGHT § 1.03 (Matthew Bender, Rev. Ed. 2017).

impression, and ordinary lay observers do not possess the expertise to compare computer programs and decide whether they are substantially similar. Therefore, most courts in the U.S. agree that expert testimony should be allowed when determining substantial similarity. Excluding expert testimony would result in under-protection of software copyright and create uncertainty in copyright infringement litigations, both of which are detrimental to the copyright system. Thus, without expert aid, software copyright is insufficient to promote “the Progress of Science and useful Arts.”

The Ninth Circuit is in the minority of U.S. courts in that it excludes expert testimony from key determination in software copyright infringement cases. The Ninth Circuit must reconsider its copyright infringement test and allow expert testimony in determining the issue of substantial similarity between software source code. Otherwise, the Ninth Circuit’s current rule risks incorrect case outcomes and harm to software innovation.

LET ME GOOGLE THAT FOR YOU: *ELLIOTT V. GOOGLE* AND ITS CONFLICTS WITH THE GENERICIDE DOCTRINE IN A DIGITAL AGE

Christopher Brown[†]

On September 25, 2017, the legal team at Velcro Companies (“Velcro”) attempted to educate their customer base about trademark law through a unique brand play.¹ Velcro created a YouTube video entitled “Don’t Say Velcro.”² In the video, the Velcro legal team discusses how people mistakenly call their product “velcro,” while they refer to their invention as hook and loop.³ The legal team passionately sings that if everyone calls every version of the product “velcro,” then the company will “lose [its] Circled R.”⁴ To the team’s nearly 500,000 viewers, this video may have seemed comical. However, couched in the Velcro legal department’s playful video is a real legal fear.

The Velcro lawyers are referring to a doctrine called genericide, which applies when a protected trademark is appropriated by the relevant public as the name of a product.⁵ Once a mark is declared to be a generic name, the designation enters the “linguistic commons” and is free for all to use.⁶ Velcro, like many large companies with household names, is constantly thinking about protecting its intellectual property, including its trademark. Losing its

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1. Velcro Companies (VELCRO® Brand), *Don't Say Velcro*, YOUTUBE (Sept. 25, 2017), <https://www.youtube.com/watch?v=rRi8LptvFZY> [<https://perma.cc/V55V-4XS2>].

2. *Id.*

3. *Id.* at 00:38–48.

4. *Id.* at 00:44. “Circle R” refers to the enclosed R used to mark trademarks that are registered with the United States Patent and Trademark Office. *See* 15 U.S.C. § 1111 (2012).

5. J. THOMAS MCCARTHY, 2 MCCARTHY ON TRADEMARKS AND UNFAIR COMPETITION § 12:1 (5th ed. 2018).

6. *America Online, Inc. v. AT&T Corp.*, 243 F.3d 812 (4th Cir. 2001) (“The task of distinguishing words or phrases functioning as trademarks from words or phrases in the ‘linguistic commons’ begins with the development of an understanding of the common meaning of words and their common usage and then proceeds to a determination of whether the would-be trademark falls within this heartland of meaning and usage.”); *see also* *OBX-Stock, Inc. v. Bicast, Inc.*, 558 F.3d 334, 339–40 (4th Cir. 2009) (the law protects the “linguistic commons” by denying protection for “words that do not identify goodwill attached to products or product sources but rather are used for their common meaning or meanings not indicative of products and product sources”).

trademark would alter Velcro's business model and create unwanted situations for the company to navigate, similar to Band-Aid, Clorox, and Rollerblade.⁷

Velcro's video highlights how trademark protection is a vital tool for all companies, big and small, who attempt to brand themselves. But as companies have evolved, so have brands. With the market becoming so saturated with products, and with technology often making products obsolete, the brand has become the focal point of what companies are selling.⁸ Subsequently, consumers fall in love with the brand, while the product is more of a catalyst to promote a profitable brand.⁹ Although this shift has changed the way businesses strategize, the same transformation has not occurred in courts and legal policy.

This conceptual struggle is highlighted in the Ninth Circuit's recent *Elliott v. Google* decision.¹⁰ That case, decided in June of 2017, upheld a summary judgment ruling that found Google's trademark not generic.¹¹ While the court in *Elliott* attempted to follow precedent, they failed to discuss the contextual differences between a brand like Google and other companies that are focused on a product rather than a brand.¹²

There is no denying that the vast majority of the market uses the Google search engine when searching the Internet. Oxford Dictionary has added the verb "google" as a way to describe someone who is searching the web on Google.¹³ Google has successfully integrated their brand with the common vernacular of the average person, yet the court held, as a matter of law, that "google" was not a generic term. Further, while the *Elliott* court attempted to define what does and does not constitute a generic mark, they unintentionally complicated the genericide analysis with a needless policy argument surrounding whether or not verb usage of a trademark constituted genericness.

This Note focuses on the Ninth Circuit's decision on verb usage in relation to the genericness of a mark. Velcro's video highlights the delicate balance of attempting to promote a brand while not stepping on the Lanham Act's toes, to avoid triggering a genericness claim. This Note argues that *Elliott's* faulty logic on verb use of a trademark risks tipping that balance and promotes uncertainty within the genericide doctrine.

7. See Velcro Companies, *supra* note 1, at 01:32–49 (ironically censoring these generic names).

8. See DAVID A. AAKER & ALEXANDER L. BIEL, BRAND EQUITY & ADVERTISING: ADVERTISING'S ROLE IN BUILDING STRONG BRANDS 67 (1993) ("Brands have become so ubiquitous in 20th-century America that we could say we are living in a rich 'brandscape.'").

9. THE EXPRESSIVE ORGANIZATION: LINKING IDENTITY, REPUTATION, AND THE CORPORATE BRAND 52 (Majken Shultz et al. eds., 2000).

10. *Elliott v. Google, Inc.*, 860 F.3d 1151 (9th Cir. 2017), *cert. denied*, 138 S. Ct. 362 (2017).

11. See *id.* at 1163.

12. See *id.*

13. *Google*, OXFORD DICTIONARY OF ENGLISH.

Part I of this Note gives a brief history of trademark law and the Lanham Act and highlights how courts typically deal with genericide claims through the use of surveys. Part II discusses how branding has rapidly evolved over the past few decades through the use of a brand name as a verb, and how social media has helped that expansion. Part III brings in *Elliott v. Google* and explains the Ninth Circuit's decision surrounding the viability of verb usage for a registered mark. Part IV examines the problems post-*Elliott* with respect to the purposes of trademark law and its intersection with company branding techniques. Part V concludes.

I. TRADEMARK LAW AND THE LANHAM ACT

Before 1946, courts largely relied on the common law to guide trademark decisions.¹⁴ In 1946, Congress created the Lanham Act, which aimed “to protect the public from deceit, to foster fair competition, and to secure to the business community the advantages of reputation and goodwill by preventing their diversion from those who have created them to those who have not.”¹⁵ The Lanham Act has two primary purposes: to protect consumers against confusion about the origin of a particular good or service, and to encourage companies to stand behind their goods and services by creating goodwill through a reliable and recognizable mark.¹⁶ For a trademark to be protected, the relevant public must recognize the mark as a source indicator for a particular type of good or service.¹⁷ However, if a mark becomes too recognizable, a court may cancel the trademark's registration under the doctrine of genericide.¹⁸

A. INTRODUCTION TO GENERICIDE

The Lanham Act provides that if a registered mark becomes the generic name for the goods or services for which it is registered, a challenger can file a petition in court to have that registration canceled.¹⁹ Courts have held that even when a term itself is a generic term or phrase, it is likely still protectable if it has a secondary meaning that ties the terms to a product and causes

14. Irina D. Manta, *Branded*, 69 S.M.U. L. REV. 713, 725 (2016).

15. S. REP. NO. 79-1333, at 4 (1946).

16. See Frank I. Schechter, *The Rational Basis of Trademark Protection*, 40 HARV. L. REV. 813, 818 (1927); see also *Qualitex Co. v. Jacobson Prods. Co. Inc.*, 514 U.S. 159, 163–64 (1995) (“The true functions of the trademark are . . . to identify a product as satisfactory and thereby to stimulate further purchases by the consuming public.”).

17. See 15 U.S.C. §§ 1051(a)(1), 1127 (2012).

18. See 15 U.S.C. § 1064 (2012).

19. *Id.* § 1064(3).

purchasers to buy the product because of its source.²⁰ Rather, the test for determining the generic nature of a mark assesses the primary meaning of the registered mark to the relevant public.²¹

Congress highlighted the importance of the perspective of the relevant public in determining genericness in a 1984 Amendment to 15 U.S.C. § 1064(3), the provision codifying the genericide doctrine.²² A set of 1984 amendments were introduced after a controversial Ninth Circuit decision, *Anti-Monopoly, Inc. v. General Mills Fun Group*.²³ In *Anti-Monopoly*, the court held that if consumers do not buy a product primarily out of loyalty to the company which makes it, the trademark for the product is public property.²⁴ In making the 1984 amendments, Congress directly sought to overturn *Anti-Monopoly*, highlighting the importance of the consumers' interpretation of the mark, rather than their loyalty.²⁵

The 1984 amendments discussed above codified a test developed by Judge Learned Hand.²⁶ In the landmark case *Bayer Co. v. United Drug Co.*, Judge Learned Hand held the term "aspirin" to be generic after asking this key question: "What do buyers understand by the word for whose use the parties are contending?"²⁷ Thus, the central issue in a genericness case is whether a term, as applied to a product, is primarily understood to be a trademark or a generic name for the product to which it is tied.²⁸

However, sometimes overly simplistic solutions to complex issues result in unsatisfactory and problematic decisions that are less likely to stand the test of time.²⁹ If Judge Learned Hand presented the most applicable method to tackle genericide inquiries, how can courts analyze what is a generic mark in the first place? How do courts enter the mind of the relevant consumer?

20. *See* *Abercrombie & Fitch Co. v. Hunting World, Inc.*, 537 F.2d 4, 8 (2d Cir. 1976) (explaining that although "safari" was a generic word, a genuine issue of fact existed as to whether the plaintiff had created a secondary meaning in its use of the word "identifying the source" and showed that "purchasers [were] moved to buy it because of its source").

21. *See id.* at 9.

22. Vincent N. Palladino, *Genericness and the Trademark Clarification Act of 1984: Five Years Later*, 79 TRADEMARK REP. 657 (1989).

23. *See* 611 F.2d 296 (9th Cir. 1979).

24. *See id.* at 300.

25. *See* Palladino, *supra* note 22, at 658.

26. *See* *Magic Wand, Inc. v. RDB, Inc.*, 940 F.2d 638, 640 (Fed. Cir. 1991); *Comm. for Idaho's High Desert v. Yost*, 92 F.3d 814 (9th Cir. 1996).

27. 272 F. 505, 509 (S.D.N.Y. 1921). *See also* *DuPont Cellophane Co. v. Waxed Prod. Co.*, 85 F.2d 75 (2d Cir. 1936), *cert. denied*, 299 U.S. 601 (1936); *Telechron, Inc. v. Telicon Corp.*, 198 F.2d 903 (3d Cir. 1952); *Dresser Indus., Inc. v. Heraeus Engelhard Vacuum, Inc.*, 395 F.2d 457 (3d Cir. 1968), *cert. denied*, 393 U.S. 934 (1968).

28. *See* Palladino, *supra* note 22, at 678.

29. *See id.*

B. SURVEY EVIDENCE

One of the main methods used for determining genericide in the modern age relies on survey evidence, usually gathered by the lawyers on either side of the claim. Judges are now accustomed to, and often expect, survey evidence in genericness disputes.³⁰ As intellectual property scholar, J. Thomas McCarthy, explains, survey evidence is only not required if there is overwhelming evidence outside the surveys to prove genericness.³¹ Further, surveys need to show only that a bare majority of respondents do not view a trademark as generic to save a trademark from genericide.³² For example, judges have found that trademarks where sixty percent of survey respondents identify with a specific product are not generic.³³

There are various types of survey evidence that are used to assess genericness, but courts have approved two main models. Those models are the Thermos Survey and the Teflon Survey.³⁴

1. *The Thermos Survey*

The Thermos survey is the less used of the two main surveys and is named for the survey used to prove the term “Thermos” was a generic term.³⁵ A Thermos survey asks respondents how they would ask for the product at issue.³⁶ In the example of the thermos, if the respondents were to refer to the product by the brand name, Thermos, rather than what the good was intended to be called, a vacuum bottle, then the survey points towards the mark being generic. The term would be generic because the consumers would be using it

30. *See* *Heroes, Inc. v. Boomer Esiason Hero’s Foundation, Inc.*, 43 U.S.P.Q.2d 1193 (D.C. Cir. 1997) (rejecting a challenge that HEROES was generic name of charitable services assisting surviving family of police and firefighters killed in line of duty because, in part, “defendant has introduced no consumer surveys”); *Magic Wand*, 940 F.2d at 642 (rejecting a challenge that TOUCHLESS is a generic name for a type of auto wash services, in part because the challenger introduced no survey evidence); *Heroes, Inc. v. Boomer Esiason Hero’s Found., Inc.*, 43 U.S.P.Q.2d 1193 (D.C. Cir. 1997); *Hermes Intern. v. Lederer De Paris Fifth Avenue, Inc.*, 50 F. Supp. 2d 212 (S.D.N.Y. 1999), *rev’d on other grounds*, 219 F.3d 104 (2d Cir. 2000) (challenger failed to conduct genericness survey in opposition to the survey of the mark owner: summary judgment of genericness was denied).

31. MCCARTHY, *supra* note 5, at § 12:14.

32. *See* *TY, Inc. v. Softbelly’s, Inc.*, 353 F.3d 528, 530 (7th Cir. 2003).

33. *See id.* at 530–31. While the court in *Ty* referred to the plaintiff’s survey evidence as probative, the defendant also failed to present its own survey evidence of genericness. *See id.* at 531.

34. *See* MCCARTHY, *supra* note 5, at § 12:14.

35. *Am. Thermos Prod. Co. v. Aladdin Indus., Inc.*, 207 F. Supp. 9 (D. Conn. 1962), *aff’d*, 321 F.2d 577 (2d Cir. 1963).

36. *See, e.g., E.T. Browne Drug Co. v. Cococare Prod., Inc.*, 538 F.3d 185, 194–95 (3d Cir. 2008).

to refer to the product category rather than a producer who makes products within that product category.³⁷

The Thermos survey model has been used in multiple cases to help judges determine whether a mark is generic.³⁸ However, its design has been criticized because it does not account for the possibility that respondents who are very brand loyal may refer to the product type by the brand name while recognizing that the term is a brand and not a common name.³⁹ Therefore, while it is essential to know how a Thermos survey is structured to understand how courts attempt to hear the relevant consumer, it is also important to note that this type of straight-forward questioning may not be the best indicator of genericness.⁴⁰ In contrast, the Teflon survey is both more probative and more popular.

2. *The Teflon Survey*

The Teflon survey model is the most widely used survey format to resolve genericness challenges. The name of the survey comes from a 1973 telephone survey conducted to show that the mark Teflon was a valid trademark rather than a generic name for a non-stick coating.⁴¹ The Teflon survey asks the consumers to associate a given word with either a registered mark that they know or with a name of a generic product. For example, in *TY, Inc. v. Softbelly's, Inc.*, a survey conducted by the plaintiffs' expert aimed at determining how consumers classified the term "beanies."⁴² The survey revealed that sixty percent of respondents identified "beanies" as a brand name for soft plush

37. *See id.* Other sample questions used in the Thermos brand survey included: Can you think of any other words that you would use to ask for a container that keeps liquids hot or cold? Do you know the names of any manufacturers who make these containers that keep liquids hot or cold? Can you name any trademarks or brand names that are used on these containers?

MCCARTHY, *supra* note 5, at § 12:15.

38. *See, e.g., E.T. Browne*, 538 F.3d 185; *Am. Thermos*, 207 F. Supp. at 9; *Nightlight Sys., Inc. v. Nitelites Franchise Sys., Inc.*, 2007 WL 4563873 (N.D. Ga. 2007).

39. MCCARTHY, *supra* note 5, at § 12:15.

40. *See Anti-Monopoly, Inc. v. General Mills Fun Group*, 684 F.2d 1316 (9th Cir. 1982), *cert. denied*, 459 U.S. 1227 (1983), where the court enthusiastically embraced the results of a Thermos survey without considering the possibility of brand loyalty coloring responses.

41. *E. I. DuPont de Nemours & Co. v. Yoshida Intern., Inc.*, 393 F. Supp. 502 (E.D.N.Y. 1975); *see Greenbaum, Ginsburg & Weinberg, A Proposal for Evaluating Genericism After "Anti-Monopoly"*, 73 TRADEMARK REP. 101, 118 (1983); *Jacob Zimmerman v. National Assoc. of Realtors*, 70 U.S.P.Q.2d 1425 (T.T.A.B. 2004) (defects in the structure and administration of a Teflon-type survey—such as failing to provide a "don't know" response—resulted in the survey being accorded "very little weight").

42. 353 F.3d 528 (7th Cir. 2003).

toys filled with beads.⁴³ While that could also indicate that as many as forty percent of respondents saw the term as a generic identifier, the court concluded that the sixty percent response rate was evidence that the primary significance of the mark was to designate the source of the plaintiffs' goods.⁴⁴

There are three main steps to crafting a Teflon survey. First, a survey maker explains the basic definitions of terms like "common generic name" and "brand name."⁴⁵ This aims at eliminating the possible survey bias within the survey by making the participants aware of the difference between the two concepts.⁴⁶ Consumers who are loyal to a brand, say Teflon, and based on that loyalty only buy Teflon non-stick spray, may still associate the term "Teflon" with a common term for non-stick spray despite being aware of the Teflon brand.⁴⁷

Second, a survey maker conducts a mini test with the goal of revealing whether the survey participants truly understand the differences between the terms just described.⁴⁸ This involves asking the participants to describe some obvious test terms as either a brand name or common term. Anyone who fails to correctly distinguish between the terms is eliminated from the main genericness survey.⁴⁹

Finally, the survey maker constructs the most relevant part of the survey. This involves displaying the mark in question, as well as similar marks and terms, and asking the survey participants to classify them.⁵⁰ The results from this third step help a court determine whether the relevant consumer interprets a mark as generic.

43. *Id.* at 530–31.

44. *See id.* (While the court in *Ty* referred to the plaintiff's survey evidence as probative, the defendant also failed to present its own survey evidence of genericness.).

45. Justin Anderson, *Three Essential Elements of a Genericness Survey*, MMR STRATEGY GROUP (Nov. 19, 2014), <http://mmrstrategy.com/three-essential-elements-of-a-genericness-survey-2/> [<https://perma.cc/SFB5-4G36>].

46. *See id.*

47. *See id.*

48. *See id.*

49. *See id.*

50. *See id.* In designing a Teflon type survey, both the initial "mini-test" and the other marks and generic names in the list must be carefully constructed and tailored to the facts of a particular case. See discussion of how to properly construct a Teflon-type survey in E. Deborah Jay, *Genericness Surveys in Trademark Disputes: Under the Gavel, in Trademark and Deceptive Advertising Surveys*, in TRADEMARK AND DECEPTIVE ADVERTISING SURVEYS 112–24 (ABA, Eds. Diamond & Swann 2012).

The Teflon survey is the most judicially accepted survey for testing for genericness.⁵¹ In the original Teflon case, the court praised the effectiveness of the Teflon survey, concluding that:

[T]he responses of the [Teflon survey] reveal that the public is quite good at sorting out brand names from common names, and, for TEFLON, answers the critical question left unanswered by the ambiguities inherent in [the Thermos-type] surveys—that of the principal significance of the TEFLON mark to the public.⁵²

Despite the wide acceptance of the Teflon survey, there is still little consistency in how differently courts rule on genericide claims. This inconsistency may be explained by modern branding techniques and how they conflict with a basic reading of the genericide doctrine.

II. THE BRAND AS THE PRODUCT

In 1989, Daymond John trawled the streets of Queens to sell his first batch of handmade wool beanies.⁵³ He made \$800 on his first day—a solid day’s work, but not enough for rapid growth without a little corporate magic.⁵⁴ John ran with his idea, however, and began staking out music video sets, attempting to coax rappers to wear his apparel, which he had branded as being “For Us, By Us.”⁵⁵ Fast forward to 1998—the company now branded as FUBU peaked at \$350 million in annual sales.⁵⁶ Celebrities in various industries were wearing the FUBU brand, and millions of customers were champing at the bit to wear a plain v-neck t-shirt printed with the letters “FUBU.”⁵⁷

John’s story highlights the power of the brand. In the past, a brand played a relatively limited role in marketing, serving mainly to indicate a specific

51. See Jay, *supra* note 50, at 110 (“Teflon surveys have provided the preferred format for genericness surveys as reflected in U.S. court opinions and U.S. Trademark Trial and Appeal Board decisions in which they have been approved.”).

52. *E. I. DuPont de Nemours & Co. v. Yoshida Int’l, Inc.*, 393 F. Supp. 502, 527 (E.D.N.Y. 1975). Judge Neaher further held that the only survey which really gets down to the critical element is the Teflon Survey. He observed that the challenger’s Thermos survey was ambiguous because responses to “What is the name . . . ?” could be taken as either a generic or a trademark response. MCCARTHY, *supra* note 5, at § 12:16.

53. Alec Banks, *The Rise and Fall of FUBU: A Lesson in Business and Branding*, HUNDREDS (June 30, 2015), <https://thehundreds.com/blogs/content/the-rise-and-fall-of-fubu> [<https://perma.cc/VF9X-9X97>].

54. *See id.*

55. *See id.*

56. *See id.*

57. *See id.*

product.⁵⁸ However, today companies brand the trademark, and the cultural identities associated with the mark, as the product itself.⁵⁹ Companies no longer focus on the product, but the brand.⁶⁰

At the simplest level, a brand is defined as “a name that refers to the product of a particular manufacturer in a particular product category.”⁶¹ Brands today can arguably be more valuable than the book value given to a particular product.⁶² This concept of brand value has many tangible and protectable elements, such as the design and physical appearance of a product, as well as the logos and structure of the packaging.⁶³ However, brands carry intangible value as well.⁶⁴ These include consumer attitudes toward the manufacturing company and beliefs about the brand in relation to oneself and others.⁶⁵ With these intangible elements, a brand can encapsulate much more than a trademark or a logo; it encompasses the essence of a corporation—its products, its employees, and increasingly, its consumers.⁶⁶

Branding has evolved drastically over time and will continue to evolve with the ever-expanding nature of capitalist growth. This Part looks at two different aspects of branding: “verbifying” a brand, and the increasing use of social media.

A. VERBIFYING A BRAND

One of the more effective ways to incorporate a brand into the minds and language of the everyday consumer is to make it a verb.⁶⁷ Companies that can make their brand the descriptor verb for the product or service that the brand is associated with can dominate the market.⁶⁸ The brand simply becomes the only way to refer to a certain type of product. Whether intentional or not, “verbifying” a brand increases the chances of creating a mega brand. This

58. Sonia Katyal, *Stealth Marketing and Antibranding: The Love that Dare Not Speak Its Name*, 58 BUFF. L. REV. 795, 801 (2010).

59. *See id.*

60. *See* KEITH DINNIE, *THE EXPRESSIVE ORGANIZATION: LINKING IDENTITY, REPUTATION, AND THE CORPORATE BRAND* 51 (2003).

61. AAKER, *supra* note 8, at 33; *see also* Deborah R. Gerhardt, *Consumer Investment in Trademark*, 88 N.C. L. REV. 427, 459–67 (2010); Jerre B. Swann, *An Interdisciplinary Approach to Brand Strength*, 96 TRADEMARK REP. 943, 946–55 (2006).

62. *See* WILLIAM LEISS ET AL., *SOCIAL COMMUNICATION IN ADVERTISING: PERSONS, PRODUCTS AND IMAGES OF WELL-BEING* 105–07 (1990).

63. *See* Katyal, *supra* note 58, at 804

64. *See* AAKER, *supra* note 8, at 33.

65. *See id.*

66. *See* Katyal, *supra* note 58, at 804.

67. *See* Colleen Ryan, *When A Brand Becomes A Verb*, IDEALOG (Sept. 27, 2016), <https://idealog.co.nz/etc/2016/09/when-brand-becomes-verb> [https://perma.cc/TD6H-YG5G].

68. *See id.*

process is not always led by the brand company, however, but may be guided by the interpretation of the reasonable consumer.

“Verbifying” a brand is not a new concept. Brands have been trying to get their names into people’s mouths for many years, with varying degrees of success. Verbification of a trademark is more likely to arise during periods of technological breakthrough. In instances where the brand name is the only term the consumer associates with the good or service, the consumer can take hold of how the brand is used in language. One of the most prominent stories of this is that of Xerox.

Xerox was founded in 1906 and originally manufactured photographic paper and equipment.⁶⁹ It was first branded as The Haloid Photographic Company.⁷⁰ The company changed its name to Xerox later to reflect the innovative new technology that the company used to produce its product.⁷¹ Looking for a term to differentiate its new system, Haloid coined the term Xerography from two Greek roots meaning “dry writing.”⁷² Haloid subsequently changed its name to Haloid Xerox in 1958, and then Xerox Corporation in 1961.⁷³

In 1959, the company came to prominence with the invention of the Xerox 914, the first plain paper photocopier. Revenue went up by almost ten times within the next five years.⁷⁴ The Xerox 914 and the iterations that followed became the industry standard for photocopying and remained as such until the invention of digital printing in the late 20th century.⁷⁵

With the rise in Xerox sales came the rise of the Xerox brand. Interestingly, because there was nothing like it on the market and there was no dominant term to describe the act of photocopying an image on a Xerox machine, people began to use the term “xerox” to describe the act of photocopying.⁷⁶ Fast-

69. *Xerox: History Timeline—1950’s* [HEREINAFTER Xerox History Timeline], XEROX, <https://www.xerox.com/about-xerox/history-timeline/1950-decade/enus.html> [<https://perma.cc/7TBB-48WU>] (last visited Dec. 21, 2018).

70. *See id.*

71. *See id.*

72. Kristya Tima, *Xerox: Brand That Became a Common Name*, <https://bookonlime.ru/system/files/node/lecture/20-timofeeva.pdf> [<https://perma.cc/S5XL-33M6>].

73. *See Xerox History Timeline, supra note 69.*

74. *See id.*

75. *See id.*

76. *See* Laura A. Heymann, *The Grammar of Trademarks*, LEWIS & CLARK L. REV. 1313, 1320 (2010); *see also* Stuart Elliott, *The Verb Treatment for an Investment House*, N.Y. TIMES (Mar. 15, 2010), <https://www.nytimes.com/2010/03/15/business/media/15adco.html> [<https://perma.cc/Y7MG-R2UA>] (reporting advertising campaign for the Vanguard Group that introduced the verb “Vanguarding”); Geoffrey K. Pullum, *Trademark Grammar*, LANGUAGE LOG (May 22, 2004), <http://itre.cis.upenn.edu/myl/languagelog/archives/>

forward a couple of decades, and the term “xerox” was defined in many major dictionaries, including The Oxford English Dictionary, as a verb with a similar definition to photocopy.⁷⁷ “Xerox” had effectively grown from a brand name for the Xerox Corporation into a new word.

Xerox was aware of this use of their mark, and the danger it posed in light of the genericide doctrine. Xerox released many statements over the years encouraging its customers not to use the term generically. It declared that “you cannot ‘xerox’ a document, but you can copy it on a Xerox Brand copying machine.”⁷⁸ Despite its efforts, the term “xerox” remains in most major dictionaries.⁷⁹ However, Xerox continues to protect its trademark, and the mark has never been officially deemed generic. In fact, in India, one of Xerox’s largest markets, the Intellectual Property Appellate Board (IPAB) declared in 2012 that “Xerox” was a non-generic term after “almost 50 years of continued existence on the register without challenge, and with proof of almost 44 years of use evident.”⁸⁰ That decision was made despite the fact that, as of 2015, most Indians were still using “xerox” as a synonym for photocopying.⁸¹

Some have criticized Xerox for spending unnecessary resources on dissuading its customers from using the term “xerox” generically.⁸² As legal scholar Rebecca Tushnet puts it, “the risk of becoming generic is so low, and the benefits of being on the top of someone’s mind are so high.”⁸³ However, with the unintentional verbification of trademarks came a greater awareness within companies like Xerox about what it meant for a brand to become generic.

Introduction of new technologies, like the Xerox photocopier, which perform functions for which no word previously existed, has led to verbification of trademarks. Introduction of another new technological

000943.html [https://perma.cc/XPQ5-SVKF] (suggesting that modern advertising encourages consumers to use trademarks as language).

77. *Xerox*, OXFORD LIVING DICTIONARIES.

78. R. RADHAKRISHNAN & S. BALASUBRAMANIAN, INTELLECTUAL PROPERTY RIGHTS: TEXT AND CASES 129 (2008).

79. *See id.*

80. R. Sivaraman, *Appellate Board Upholds Trademark Status of Xerox*, HINDU (Sept. 22, 2012), <http://www.thehindu.com/news/national/tamil-nadu/appellate-board-upholds-trademark-status-of-xerox/article3927133.ece> [https://perma.cc/M7ZG-SKNV].

81. Express News Service, *Maggi Returns*, INDIAN EXPRESS (Nov. 11, 2015), <http://indianexpress.com/article/opinion/editorials/maggi-returns/> [https://perma.cc/787S-P2FF].

82. *See* Noam Cohen, *The Power of the Brand as Verb*, N.Y. TIMES (July 18, 2009), <https://www.nytimes.com/2009/07/19/weekinreview/19cohen.html> [https://perma.cc/5LKJ-G5HF].

83. *Id.*

product, social media, has also changed the way consumers interact with brands.

B. THE BRANDING OF SOCIAL MEDIA

Social media has had a huge impact on our daily lives. Since the release of AOL Instant Messenger in 1997,⁸⁴ the exponential advancement in digital communication has contributed to every aspect of society.⁸⁵ Today, whether you are on Facebook, Twitter, YouTube, or any other digital sharing platform, you will see a wide variety of advertisements. Advertising for products or service-based companies is nothing new and is an essential part of any business model where the customer pays a premium to use the good. However, the rise of the Internet and social media created a new challenge in the advertising and branding space: how should a company brand and market itself when the service it provides is free?

To look deeper into this question, it is important to understand some of the history of branding the free. Facebook serves as the prime example of this model. Created in February 2004, Facebook served initially as a social media experiment on a closed network of college students.⁸⁶ Since its early stages, Facebook has held ads for other companies.⁸⁷ In August of 2006, Facebook announced a partnership with J.P. Morgan Chase to promote the Chase credit card.⁸⁸ In the one-year marketing agreement, Facebook hosted Chase banner ads inviting users to join a special Chase network.⁸⁹ Members of this group then earned reward points for their actions, like paying their bills on time.⁹⁰

In September of 2006, Facebook announced “Election 2006,” which allowed anyone to search for and interact with candidates for the Senate, House, and state governorships.⁹¹ With this feature, Facebook signified its

84. Steve Baxter, *Netscape, AOL Team Up on Instant Messenger*, CNN (Oct. 14, 1997), <http://www.cnn.com/TECH/9710/14/internet.messaging/> [https://perma.cc/T7RG-SL7Y].

85. See Vineet Kaul, *The Changing World of Media & Communication*, J. MASS COMM. & JOURNALISM (Apr. 22, 2012), <https://www.omicsonline.org/open-access/the-changing-world-of-media-and-communication-2165-7912.1000116.php?aid=6473> [https://perma.cc/9D9U-TLJ9].

86. See Sarah Phillips, *A Brief History of Facebook*, GUARDIAN (Jul. 25, 2007), <https://www.theguardian.com/technology/2007/jul/25/media.newmedia> [https://perma.cc/F7R6-48P2].

87. See Chris Redshaw, *The History of Advertising on Facebook [Infographic]*, REEF (Dec. 20, 2011), <http://www.reefdigital.com.au/blog/the-history-of-advertising-on-facebook-infographic/> [https://perma.cc/RL4S-HKLM].

88. *See id.*

89. *See id.*

90. *See id.*

91. *See id.*

intent to become a platform for users to read news, discuss topical issues, and integrate themselves with a larger community. In November of 2006, Facebook created the share function, which allowed users to share news or ideas with anyone they were connected with on Facebook.⁹² Facebook quickly turned into the most popular place for people to talk with friends, have a voice, and feel included. At this point, Facebook surely realized that it was sitting on a social goldmine. It could integrate itself into the lives of every single person worldwide. So, Facebook made that its mission. Within a matter of years, Facebook became an essential part of billions of lives, attracting people of all ages, races, and beliefs.⁹³

Facebook was not the only company offering a free service that managed to reach this level of success. Other companies began to corner their niche social markets and made their way towards becoming household names. Twitter became an even more specialized sharing site for people to discuss politics, trends, and celebrity news.⁹⁴ Fitting a complete thought into a 140 character “tweet” became an art that everyone wanted to master.⁹⁵ Yelp became the platform for people to leave reviews on restaurants and other businesses.⁹⁶ And, of course, there is Google.

Google, along with many other less-remembered names like Yahoo, Bing, and AskJeeves, became an easily accessible way to answer any question.⁹⁷ Just type a question into the search bar, and the algorithm spits out the most relevant matches. But how did Google make money and surpass its competitors to be the one-stop shop for all of your questions? Google had to brand itself as the premium product in the search engine space.

How did Google accomplish this feat? It was not offering extensions or add-ons, or anything that would cost the consumer money. Google’s appeal during its early growth days was that it was free. Thus, Google took another route; it aimed to use the intimacy of social media to integrate itself into the

92. *See id.*

93. *See Number of Monthly Active Facebook Users Worldwide as of 4th Quarter 2017 (in millions)*, STATISTA (Mar. 18, 2018), <https://www.statista.com/statistics/264810/number-of-monthly-active-facebook-users-worldwide/> [<https://perma.cc/8A57-7MWD>].

94. *See* Elisa Shearer & Jeffrey Gottfried, *News Across Social Media Platforms in 2017*, PEW RES. CTR. (Sept. 7, 2017), <http://www.journalism.org/2017/09/07/news-use-across-social-media-platforms-2017/> [permalink needed].

95. *See* Courtney Seiter, *A Scientific Guide to Writing Great Tweets: How to Get More Clicks, Retweets and Reach*, HUFFINGTON POST (May 19, 2014), https://www.huffingtonpost.com/courtney-seiter/a-scientific-guide-to-wri_b_5331506.html [<https://perma.cc/XDN3-ZP8Z>].

96. *See* *Yelp*, WIKIPEDIA, <https://en.wikipedia.org/wiki/Yelp> [<https://perma.cc/VE7J-UAQ4>] (last visited Dec. 21, 2018).

97. *See id.*

consumer's everyday lives and common vernacular. To do that, Google focused on language and verb use.

Through Google's social media branding, "I googled it" grew into a common phrase.⁹⁸ Over the course of the last decade, the term "google" has been added to every major dictionary.⁹⁹

Google's dominance has huge implications. Google is everywhere, partnering with companies and expanding their product line to include a variety of different kinds of products and services.¹⁰⁰ Google is a beast of a company in the modern age. Notably, Google, like Facebook, Twitter, and other technology companies, has become an essential part of our lives. The Google brand has spread to all aspects of the lives of the average consumer. It has entered the common vernacular of the world. But then how does society reconcile that with the doctrine of genericide? One needs to look at how people attempt to use the doctrine of genericide to stop Google's continued branding dominance, and how courts respond to those arguments.

With the rise of various technology companies, verbifying a mark has taken on a whole new meaning. Remember, the aim of the genericide doctrine in conjunction with trademark protection is to prevent businesses from monopolizing a name that defines a whole category of products.¹⁰¹ As a result, a company is discouraged from popularizing its name such that it defines all similar products on the market. However, the speed at which companies are made and destroyed in the age of technology has changed how companies think about the danger of verbifying a brand name—dominate the market now, worry about it later.¹⁰²

Brand verbification combined with advanced digital communication creates complexities for the genericide doctrine. When faced with those complexities, the Ninth Circuit attempted to make a strong statement in their decision in *Elliott v. Google*.¹⁰³

98. See Suzanne Choney, *No Googling, Says Google — Unless You Really Mean It*, NBC (Mar. 26, 2013), <https://www.nbcnews.com/technolog/no-googling-says-google-unless-you-really-mean-it-1C9078566> [<https://perma.cc/CJG5-HFFY>].

99. See *Google*, MERRIAM-WEBSTER DICTIONARY, *Google*, OXFORD LIVING DICTIONARIES.

100. See *List of Google Products*, WIKIPEDIA, https://en.wikipedia.org/wiki/List_of_Google_products [<https://perma.cc/5ARM-XQZX>] (last visited Dec. 21, 2018).

101. See Frank I. Schechter, *The Rational Basis of Trademark Protection*, 40 HARV. L. REV. 813, 818 (1927).

102. See Cohen, *supra* note 82.

103. 860 F.3d 1151 (9th Cir. 2017), *cert. denied*, 138 S. Ct. 362 (2017).

III. *ELLIOTT V. GOOGLE*

The *Elliott v. Google, Inc.* case arose in 2014 when Chris Gillespie purchased 763 domain names that included the term “google.”¹⁰⁴ Google filed a complaint with the National Arbitration Forum.¹⁰⁵ Subsequently, plaintiff David Elliott claimed, and plaintiff Gillespie joined later, that Google’s mark qualified for genericide as the term “google” had become universally tied to the act of searching the Internet.¹⁰⁶ Plaintiffs claimed that Google violated the Lanham Act, specifically § 1064(3), and petitioned for cancellation of Google’s trademarks.¹⁰⁷

Plaintiffs’ main arguments were that (1) a majority of the relevant public uses the word “google” as a verb—for example, “I googled it,” and (2) verb use constitutes generic use as a matter of law.¹⁰⁸ Google claimed that verb use did not automatically trigger genericide and that plaintiffs had failed to bring any triable issue of fact.¹⁰⁹ The district court agreed, and granted summary judgment in favor of Google.¹¹⁰ Notably, the district court also relied on a Teflon-type survey that showed 94% of participants identified “google” as a brand name, not a “common name.”¹¹¹

On appeal, plaintiffs raised two main issues.¹¹² First, they claimed that the district court failed to note the importance of verb use when determining the generic nature of a mark.¹¹³ Second, they argued that the district court impermissibly weighed the evidence when it granted summary judgment for Google.¹¹⁴

The Ninth Circuit affirmed the district court’s decision.¹¹⁵ On the first issue of verb use, the court countered plaintiffs’ claim in two ways.¹¹⁶ First, the court emphasized that according to its reading of the Lanham Act, a claim of genericide had to be linked to a particular good or service.¹¹⁷ Second, and more

104. *See id.* at 1154.

105. *See id.*

106. *See id.*

107. *See id.* at 1155, 15 U.S.C. § 1064(3) (2012).

108. *Elliott*, 860 F.3d at 1155.

109. *See id.*

110. *See id.*

111. *Elliott v. Google Inc.*, 45 F. Supp. 3d 1156, 1167 (D. Ariz. 2014).

112. *See Elliott*, 860 F.3d at 1155.

113. *See id.*

114. *See id.*

115. *See id.*

116. *See id.*

117. *See id.* at 1156.

importantly for this Note's purposes, the court found that verb use does not automatically constitute genericness.¹¹⁸

The Ninth Circuit's decision relied heavily on the holding in *Coca-Cola Co. v. Overland, Inc.*¹¹⁹ The court in *Overland* noted that Overland could not accurately testify as to "what . . . customers [were] thinking" when they used the term "coke" to order a soda, or whether they had a particular source in mind.¹²⁰ Simultaneously, customers still knew that Coca-Cola itself was a brand.¹²¹ The court subsequently upheld the protection of the Coca-Cola trademarks.¹²² Similarly, the *Elliott* court noted that someone using the term "google" as a verb for searching the Internet did not reveal which search engine they were planning on using to perform that search.¹²³ This argument, the court noted, implicitly rejected plaintiffs' argument that verb use automatically constituted a generic mark.¹²⁴

Plaintiffs' second grounds for appeal concerned the district court's alleged error in overlooking the "sheer quantity" of evidence they presented that highlighted the generic nature of the term "google."¹²⁵ Plaintiffs relied on expert testimony, dictionary entries, and a Teflon-style survey, all of which, they claimed, showed how the public refers to searching the Internet by using the term "google."¹²⁶ When analyzing this evidence, however, both the district court and the Ninth Circuit weighed the consumer surveys provided by Google on the interpretation of their brand as stronger evidence highlighting non-genericide.¹²⁷

In a concurring opinion, Judge Watford wrote that while he agreed with the holding of summary judgment, he could not say that a reasonable jury should be foreclosed from analyzing the way the relevant public uses the mark in determining that mark's genericness.¹²⁸ Judge Watford declined to join the majority opinion to the extent that it could possibly be read as foreclosing the consideration of such evidence as a matter of law.¹²⁹ The Supreme Court denied the petition for a writ of certiorari.¹³⁰

118. *See id.* at 1157.

119. *See id.*

120. *Coca-Cola Co. v. Overland, Inc.*, 692 F.2d 1250, 1255 (9th Cir. 1982).

121. *See id.*

122. *See id.* at 1252.

123. *Elliott*, 860 F.3d 1158.

124. *See id.*

125. *Id.* at 1159.

126. *See id.*

127. *See id.* at 1160; *Elliott v. Google Inc.*, 45 F. Supp. 3d 1156, 1167 (D. Ariz. 2014).

128. *See Elliott*, 860 F.3d at 1164 (Watford, J., concurring).

129. *See id.*

130. *See Elliott v. Google Inc.*, 138 S. Ct. 362 (2017).

With the Court ruling at the summary judgement stage, the *Elliott* decision essentially turns on the holding that verb use does not automatically constitute genericness.¹³¹ Verb usage of the term “google,” according to the Ninth Circuit, did not even bring up a question of material fact.¹³² This aggressive holding raises potential problems that courts of the future will likely have to deal with.

IV. PROBLEMS AFTER *ELLIOTT*

The *Elliott* decision raises a unique concern for the future of genericide. The doctrine, as interpreted in *Elliott*, grants trademark owners considerable leeway in developing branding strategies. In the past, as discussed, brands have encouraged the public to use their marks only in identifying their specific products for fear of losing their mark protection to genericide.¹³³ *Elliott* opens the door for companies to intentionally *create* common parlance surrounding their mark. While this new goal technically aligns with the statutory language in the Lanham Act, the consideration of why trademark protection exists reveals that this new incentive is inconsistent with the Act’s purpose.

A. TRADEMARK SOLELY AS A PROPERTY RIGHT

If mark protection is viewed solely as a means to protect consumers from confusion, as described in the Lanham Act,¹³⁴ there may be little justification for the *Elliott* court’s protection of benefits derived from integrating a mark into the everyday vernacular. However, viewing trademark protection as a simple property right or protection of the investment made in a brand may weigh more heavily in favor of protecting against genericide.

This property right justification has been used in previous genericness cases. The premier example is *Quality Inns Int’l, Inc. v. McDonald’s Corp.*¹³⁵ In 1987, Quality Inns started a new chain of hotels under the name “McSleep Inn.”¹³⁶ McDonald’s responded immediately with a cease and desist letter, which Quality Inn followed with a declaratory judgment suit.¹³⁷ One of Quality Inn’s main arguments was that the term “Mc” as a prefix had become generic and had entered the English language with a recognized meaning of its own.¹³⁸

131. *See Elliott*, 860 F.3d at 1155.

132. *See id.*

133. *See* Velcro Companies, *supra* note 1; RADHAKRISHNAN, *supra* note 78, at 129.

134. *See* 15 U.S.C. § 1064(3) (2012).

135. 695 F. Supp. 198 (D. Md. 1988).

136. *Id.* at 201.

137. *See id.*

138. *See id.* at 202.

Both sides brought in various expert witnesses to either corroborate or dispute this claim of genericness through research and surveys.¹³⁹

On the genericness of “Mc,” the court held that McDonald’s had the right to use the prefix “Mc” in conjunction with a generic word.¹⁴⁰ Evidence showed that each word with “Mc” as a prefix was associated with McDonald’s, whether positively or negatively.¹⁴¹ The court thus supported the McDonald’s branding strategy of using the term “Mc” to increase brand recognition. The court felt that it would be unfair to penalize the work McDonald’s had done and rejected any contention that McDonald’s had lost its right to enforce its marks.¹⁴²

The *Quality Inns* decision’s reasoning can explain *Elliott*. The plaintiffs in *Elliott* presented expert testimony and survey evidence that a majority of the relevant consumers viewed “google” as a generic term for searching the Internet.¹⁴³ The plaintiffs asserted that the fact that “google” can and is used as an indiscriminate verb for searching the Internet indicated that the term was generic under the Lanham Act. However, the court in *Elliott*, like the court in *Quality Inns*, gave weight to Google’s masterful branding.¹⁴⁴ These cases point toward trademark protection as a means to incentivize companies to protect their brand, rather than to protect customers from confusion.¹⁴⁵ Customer confusion, which the court hints at by acknowledging the Google survey evidence, is no longer a major concern when addressing superbrands with dedicated customer bases.¹⁴⁶

However, the court’s holding on indiscriminate verb usage in relation to genericide raises interesting questions for companies. Trademark owners, especially big conglomerates like Google, spend large sums of money to protect their brand.¹⁴⁷ As discussed, Xerox has waged an advertising campaign to urge their consumers not to use the term “xerox” generically.¹⁴⁸ Velcro’s recent video ad campaign shows similar behavior.¹⁴⁹ It is fair to assume that

139. *See id.* at 203–16.

140. *See id.* at 216.

141. *See id.*

142. *See id.*

143. *Elliott v. Google, Inc.*, 860 F.3d 1151, 1163 (9th Cir. 2017).

144. *See id.* at 1155; 695 F. Supp. at 216.

145. *See Elliott*, 860 F.3d at 1155; *Quality Inns*, 695 F. Supp. at 216.

146. *See Elliott*, 860 F.3d at 1155.

147. *See* Press Release, Hogan Lovells, U.S. and European Companies Spend Twice as Much of Their Trademark Budget on Enforcement Than Those in Asia (May 12, 2015), <https://www.hoganlovells.com/news/us-and-european-companies-spend-twice-as-much-of-their-trademark-budget-on-enforcement-than-those-in-asia> [https://perma.cc/5Y]X-W9F2].

148. *See* RADHAKRISHNAN, *supra* note 78, at 129.

149. *See* Velcro Companies, *supra* note 1.

these actions arise out of a fear that the mark may be used as either a noun or a verb, and thus trigger a genericide claim.

The court in *Elliott* lessened this fear by finding that indiscriminate use of a mark alone does not support genericide.¹⁵⁰ However, in his concurring opinion, Judge Watford warned against reading the majority opinion to foreclose indiscriminate verb usage as evidence.¹⁵¹

The *Elliott* approach leaves companies like Google with a choice. Do they continue to follow the long-standing practices of protecting their mark through policing and consumer education? Or, if the rules of genericide are now relaxed, do they abandon their efforts to police verb usage? Only time will reveal how companies will react, and what the answer to this new dilemma is.

V. CONCLUSION

Typically, survey evidence has been one of the few consistent methods used by courts to help reveal what consumers think about different products, trademarks, and companies. But can these common survey questionnaires adapt and conform to the *Elliott* holding regarding indiscriminate verb use? By making a broad ruling, the Ninth Circuit has unnecessarily introduced new questions into the genericide doctrine.

The Court's decision on verb usage in *Elliott* was unnecessary. In holding for Google at summary judgment, the Court did not need to answer policy questions on verb usage regarding genericness.

With little statutory guidance, genericide is a doctrine that requires courts to make subjective judgments. Various forms of evidence have been found relevant to the genericness inquiry. This evidence all revolves around the question of how the relevant consumer interprets and understands the mark or brand. This type of abstract question is difficult to translate into a legal standard. The question is further complicated by the shifts in modern corporate branding. In a world where the brand is now the product, consumers have developed such loyalty to companies and brands that they are more tied to the image and lifestyle of the mark rather than the product with which it is associated. Courts need to have some contextual framework to deal with these changing methods and how they intersect with genericide. If no solid framework is created, the doctrine of genericide will eventually become obsolete. Unfortunately, the *Elliott* decision has substantially hindered the doctrine's advancement by answering a question that simply did not need to be answered. By unnecessarily ruling that verb use is not evidence of genericide, the Ninth Circuit sped along the demise of the genericide doctrine.

150. See *Elliott*, 860 F.3d at 1163.

151. See *id.* at 1163–64.

Although Velcro may have been acting conservatively when it released its anti-genericide video, it is very unlikely to do the same post-*Elliott*. *Elliott* made clear that the verbification of a brand is acceptable within the framework of the genericide doctrine. Courts now must question whether they can consider any evidence of a mark being used as a verb, or possibly a noun, in genericness cases. Companies will be incentivized to ignore the checks put into place by the genericide doctrine and push forward their brand in any way they can. With the Ninth Circuit's decision to foreclose verb usage as evidence, the doctrine will now need to overcome an additional roadblock to stay relevant in the age of the superbrands.

IF DISPARAGEMENT IS DEAD, DILUTION MUST DIE TOO

Zabaraa Hadi[†]

I. INTRODUCTION

Words—even a single word—can be powerful. In *Matal v. Tam*, Simon Shiao Tam hoped to federally register and use his band name, “The Slants,” to make a statement about the racial and cultural issues prevalent in this country.¹ By reappropriating a historically disparaging word, Tam hoped to change the public discourse surrounding that word.² However, under section 2(a) of Lanham Act, a comprehensive national system for registering and protecting trademarks, disparaging marks are precluded from federal registration.³ This is primarily due to the fact that many disparaging marks convey hurtful speech that harms members of oft-stigmatized communities.⁴ In *Tam*, the Patent and Trademark Office rejected Tam’s mark under the disparagement provision of section 2(a).⁵ The Federal Circuit reversed the PTO’s decision and held that section 2(a) violated the First Amendment as a content and viewpoint based restriction on speech.⁶ The Supreme Court affirmed the Federal Circuit’s decision and found that the disparagement provision of the Lanham Act was facially invalid under the First Amendment.⁷ For better or worse, the First Amendment protects hurtful speech.⁸ The government cannot refuse to register marks because it concludes that such marks will be disparaging to others.⁹ *Tam*’s novelty—that denial of registration burdens a constitutional speech interest—implicates Tam’s mark, but also affects the status of the

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1. *In re Tam*, 808 F.3d 1321, 1327–28 (Fed. Cir. 2015).

2. *Id.* at 1328.

3. 15 U.S.C. § 1052(a) (2012).

4. *Tam*, 808 F.3d at 1328.

5. *Id.* at 1331.

6. *Id.* at 1328.

7. *Matal v. Tam*, 137 S. Ct. 1744 (2017).

8. *Tam*, 808 F.3d at 1328.

9. *Id.* at 1328.

controversial Washington “Redskins” trademark as well as any other potentially disparaging marks that have been denied registration by the PTO.

Tam is also significant because it calls into question other parts of the Lanham Act, particularly trademark dilution. Under federal law, an owner of a “famous mark that is distinctive” is entitled to an injunction against the user of a mark that is “likely to cause dilution . . . of the famous mark.”¹⁰ Federal dilution is actionable in two situations: (1) dilution by “blurring” and (2) dilution by “tarnishment.”¹¹ This Note will apply the *Tam* court’s analysis to trademark dilution to show that the anti-dilution provisions are also subject to First Amendment scrutiny and, in fact, pose bigger threats to free expression than the disparagement provision struck down in *Tam*.

Part II of this Note provides background on the Lanham Act. Part III summarizes the Court’s holdings and reasoning in *Tam*. Part IV applies the *Tam* analysis to trademark dilution. Part V highlights the current state of trademark law and discusses potential implications. Part VI concludes.

II. LEGAL BACKGROUND

A trademark is “any word, name, symbol, or device or any combination thereof used by any person to identify and distinguish his or her goods, including a unique product, from those manufactured or sold by others and to indicate the source of the goods, even if that source is unknown.”¹² Regardless of whether a mark is registered, the “right to a particular mark grows out of its use, not its mere adoption”¹³ Thus, use of a mark in commerce, by itself, creates a host of common law rights.¹⁴ These common law rights are limited in scope, however. For example, the common law grants the owner of a mark the right to exclusive use only in the geographic areas where the mark has actually been used.¹⁵ Historically, the United States has protected trademarks under these state common law rights.¹⁶ The movement for stronger trademark

10. 15 U.S.C. § 1125(c)(1) (2012).

11. § 1125(c).

12. *Two Pesos, Inc. v. Taco Cabana, Inc.*, 505 U.S. 763, 768 (1992).

13. *United Drug Co. v. Theodore Rectanus Co.*, 248 U.S. 90, 97 (1918).

14. *Hanover Star Milling Co. v. Metcalf*, 240 U.S. 403, 413–15 (1916).

15. *In re Tam*, 808 F.3d 1321, 1328 (Fed. Cir. 2015).

16. In 1870 Congress first attempted to establish a federal trademark regime. However, in 1879 the Supreme Court struck down the 1870 statute in the *Trade-Mark Cases*. There were two subsequent attempts at federal trademark legislation, the Trademark Act of 1881 and the Trademark Act of 1905. These subsequent acts provided little protection for the rights of trademark users. *See Trade-Mark Cases*, 100 U.S. 82 (1879).

legislation began in the 1920s and was championed in the 1930s by Representative Fritz Lanham, of Texas.¹⁷

Congress ultimately enacted the Lanham Act in 1946 to provide a more comprehensive national system for registering and protecting trademarks.¹⁸ The intention of the legislature was:

[T]o regulate commerce within the control of Congress by making actionable the deceptive and misleading use of marks in such commerce; to protect registered marks used in such commerce from interference by State, or territorial legislation; to protect persons engaged in such commerce against unfair competition; to prevent fraud and deception in such commerce by the use of reproductions, copies, counterfeits, or colorable imitations of registered marks; and to provide rights and remedies stipulated by treaties and conventions respecting trademarks, trade names, and unfair competition entered into between the United States and foreign nations.¹⁹

Under the Lanham Act, an applicant can seek to register a trademark through an administrative process within the PTO.²⁰ After reviewing an application, “[if] a trademark examiner believes that registration is warranted, the mark is published in the Official Gazette of the PTO” as well as the Principal Register.²¹ Registration is significant as it confers important legal rights and benefits on trademark owners who register their marks.²² These benefits, which are unavailable in the absence of federal registration, are numerous and include both substantive and procedural rights.²³ Whereas

17. Louis T. Pirkey, *Fritz Lanham—Portrait of a Remarkable Man*, 86 TRADEMARK REP. 355 (1996).

18. *Tam*, 808 F.3d at 1328.

19. 15 U.S.C. § 1127 (2012).

20. § 1051.

21. *B & B Hardware, Inc. v. Hargis Indus.*, 135 S. Ct. 1293, 1300 (2015) (citing 15 U.S.C. § 1062); *see also* 15 U.S.C. § 1057.

22. *B & B Hardware Inc.*, 135 S. Ct. at 1300.

23. Some of the benefits include:

- (1) constructive notice of the registrant’s claim of ownership of the trademark;
- (2) prima facie evidence of the validity of the registration, of the registrant’s ownership of the mark, and of his exclusive right to use the mark in commerce as specified in the certificate;
- (3) the possibility that, after five years, registration will become incontestable and constitute conclusive evidence of the registrant’s right to use the mark;
- (4) the right to request customs officials to bar the importation of goods bearing infringing trademarks;
- (5) the right to institute trademark actions in federal courts without regard to diversity of citizenship or the amount in controversy; and
- (6) treble damage actions against infringing trademarks and other remedies.

common law trademark rights are limited by geographic location, the holder of a federal trademark under the Lanham Act has a right to exclusive nationwide use of that mark where there was no prior use by others.²⁴

Under the Lanham Act, the PTO must register source-identifying trademarks unless the mark falls into one of several categories of marks precluded from registration.²⁵ Section 2(a) of the Lanham Act, the main focus of this Note, states that a trademark may be refused registration if it: (1) “[c]onsists of or comprises immoral, deceptive, or scandalous matter,” (2) if it “may disparage or falsely suggest a connection with persons, living or dead, institutions, beliefs, or national symbols, or bring them into contempt, or disrepute,” or (3) if it inaccurately indicates the geographic origin of wines or spirits.²⁶ The text of section 2(a), which contains only three parts, is relatively straightforward. However, due to a long and somewhat tortuous legislative history and judicial interpretation, section 2(a) encompasses five grounds for possible refusal of registration.²⁷ These five grounds are: (1) immoral or scandalous marks, (2) deceptive marks, (3) disparaging marks, (4) false suggestion marks, and (5) marks that inaccurately indicate the geographic origin of wines or spirits.²⁸

A. LEGISLATIVE HISTORY AND JUDICIAL INTERPRETATION OF SECTION 2(A)

There were few marks rejected under the disparagement provision following enactment of the Lanham Act.²⁹ In fact, it is only within the last several decades that the disparagement provision became a more frequent ground of rejection or cancellation of trademarks.³⁰ This is likely due to the chronological development of section 2(a).³¹ The first reported case dealing with a mark involving religious disparagement, *In re Riverbank Canning Company*,³² was decided in 1938 under the “immoral or scandalous matter” provision of the Trademark Act of 1905—since the disparagement provision would not be established until 1946.³³ Due to this precedent, up until 1994, the

Georator Corp. v. United States, 485 F.2d 283, 285 (4th Cir. 1973) (citing 15 U.S.C. § 1051(a)–(e)).

24. *In re Tam*, 808 F.3d 1321, 1328 (Fed. Cir. 2015).

25. 15 U.S.C. § 1052 (2012).

26. 1052(a).

27. *See In re Lebanese Arak Corp.*, 94 U.S.P.Q.2d 1215, 1216 (T.T.A.B. Mar. 4, 2010).

28. *See id.*

29. *See Tam*, 808 F.3d at 1330.

30. *See id.*

31. *Lebanese Arak Corp.*, 94 U.S.P.Q.2d at 1216.

32. *In re Riverbank Canning Co.*, 95 F.2d 327 (CCPA 1938).

33. *Lebanese Arak Corp.*, 94 U.S.P.Q.2d at 1216.

ground for a refusal involving a perceived offense to religious or ethnic sensibilities was based on the scandalousness analysis of section 2(a) and not disparagement.³⁴

In *Riverbank Canning*, the Court of Customs and Patent Appeals affirmed an examiner's refusal to register the mark "Madonna" for wines as it was scandalous.³⁵ The court defined scandalous as "giving offense to the conscience or moral feelings."³⁶ The word "Madonna" at the time was generally understood to refer to the Virgin Mary.³⁷ The court found that the representation of the Virgin Mary as a trademark is "of very doubtful propriety," and that its use upon wine for beverage purposes would be shocking to the sense of propriety of nearly all who do not use wine as a beverage, and also to many who do so use it; therefore, the use of the word Madonna would be scandalous and its registration prohibited under said trademark act.³⁸ The *Riverbank Canning* case set a precedent where marks involving religious disparagement were to be analyzed under the scandalousness provision. *Riverbank Canning* thus influenced a later case: *In re Sociedade Agricola*.³⁹

In re Sociedade Agricola was an appeal to the Trademark Trial and Appeal Board⁴⁰ ("Board") after a PTO examiner refused registration under section 2(a) on the ground that "Messias" is scandalous as applied to wine and brandy.⁴¹ This case was decided in 1968, well after the enactment of the Lanham Act, and yet the Board chose not to examine it under the disparagement provision but rather, under the "immoral and scandalous" provision.⁴² In fact, the Board in *In re Sociedade Agricola* specifically noted that the examiner had made the section 2(a) refusal after relying on the *Riverbank Canning* case.⁴³ This may explain the assertion of a scandalousness refusal rather than a disparagement refusal in the judicial interpretation. Although *Riverbank Canning* and subsequent Board decisions discussed scandalousness as the ground for refusal, these decisions clearly stated that the marks were

34. See *Riverbank Canning Co.*, 95 F.2d at 327.

35. *Id.* at 329.

36. *Id.* at 328.

37. *Id.* at 328.

38. *Id.* at 329.

39. *In re Lebanese Arak Corp.*, 94 U.S.P.Q.2d 1215, 1216 (T.T.A.B. Mar. 4, 2010).

40. If a mark is precluded from registration, the Trademark Trial and Appeal Board (TTAB), a body within the USPTO, is responsible for hearing appeals from decisions by PTO Examiners denying registration of marks.

41. *In re Sociedade Agricola v. Comerical Dos Vinhos Messias, S.A.R.L.*, 159 U.S.P.Q. 275 (T.T.A.B. 1968).

42. *Id.* at 275.

43. *Id.* at 275.

problematic because they offended the beliefs or identities of particular groups of individuals—the essence of disparagement.⁴⁴

With the Federal Circuit’s 1994 decision in *In re Mavety Media Group*, it became clear that the proper ground for refusing marks that would offend the sensibilities of an ethnic or religious group is under the disparagement provision of 2(a), rather than under the offensive or scandalous provision.⁴⁵ In *Mavety*, the Federal Circuit held that a mark may be found scandalous only if it is offensive to a “substantial composite” of the general public.⁴⁶ However, many ethnic and religious groups only constitute a small minority of the entire U.S. population; therefore, marks that are offensive to members of these groups could rarely be refused under the “scandalous” ground of refusal under section 2(a).⁴⁷ As Jerome Gilson, a leading commentator on Trademark Law, has said:

[The disparagement bar] differs from the scandalousness provision, foremost because there is a particular object of disparagement, i.e., a person, group, set of beliefs, institution or symbol, and the statutory bar depends on the perspective of the object of disparagement. In contrast, the scandalousness provision protects the public as a whole and the effect of the trademark is judged from the perspective of the general public.⁴⁸

The *Mavety* decision did not extend the section 2(a) scandalousness analysis to cases involving religious or ethnic sensibilities.⁴⁹ Therefore, despite whatever inconsistency or uncertainty may have resulted from *Riverbank*

44. See, e.g., *id.* at 275 (“[T]he word ‘Scandalous’ is variously defined as ‘shocking to the sense of truth, decency or propriety . . . disgraceful, offensive’, ‘giving offense to the conscience or moral feelings’”); see also *In re Riverbank Canning Company*, 95 F.2d 327, 329 (C.C.P.A. 1938) (“[T]o commercialize the name of, or a representation of, the Virgin Mary as a trade-mark is of very doubtful propriety, and we feel certain that its use upon wine for beverage purposes would be shocking to the sense of propriety of nearly all who do not use wine as a beverage, and also to many who do so use it; therefore, we think such use of the word ‘Madonna’ would be scandalous and its registration prohibited under said trade-mark act.”).

45. *In re Lebanese Arak Corp.*, 94 U.S.P.Q.2d 1215, *3 (T.T.A.B. Mar. 4, 2010).

46. *In re Mavety Media Group Ltd.*, 33 F.3d 1367, 1371 (Fed. Cir. 1994).

47. *Lebanese Arak Corp.*, 94 U.S.P.Q.2d at 1217.

48. JEROME GILSON ET AL., TRADEMARK PROTECTION AND PRACTICE § 3.04[6][a][i][B], at 3–122 (2003).

49. *Lebanese Arak Corp.*, 94 U.S.P.Q.2d at 1217.

Canning and the subsequent Board decisions, the ground for a refusal involving a perceived offense to religious or ethnic sensibilities is now disparagement.⁵⁰

To determine if a mark is disparaging under section 2(a), a trademark examiner of the PTO applies a “two-part test.” The examiner considers: (1) the likely meaning of the matter in question, taking into account not only dictionary definitions, but also the relationship of the matter to the other elements in the mark, the nature of the goods or services, and the manner in which the mark is used in the marketplace in connection with the goods or services; and (2) if that meaning is found to refer to identifiable persons, institutions, beliefs or national symbols, whether that meaning may be disparaging to a substantial composite of the referenced group.⁵¹

Some marks that the PTO has found to be disparaging include: REDSKINS;⁵² STOP THE ISLAMISATION OF AMERICA;⁵³ THE CHRISTIAN PROSTITUTE;⁵⁴ AMISHHOMO;⁵⁵ and DON’T BE A WET BACK.⁵⁶

Section 2(a) has not been without controversy—plaintiffs have previously attempted to argue that section 2(a) violates the First Amendment. Of particular importance on this matter is the case of *In re McGinley*.⁵⁷ In *McGinley*, a plaintiff sought to register a mark that comprised a photograph of a nude man and woman kissing and embracing in a manner appearing to expose the male genitalia.⁵⁸ Initially, the PTO examiner refused registration on the basis that “(t)he mark indicates that the newsletter deals with illicit sexual intercourse” and that “(t)he mark indicates that the services deal with illicit sexual intercourse.”⁵⁹ After the plaintiff submitted additional evidence at the examiners’ behest, the examiner finally refused registration on the basis that appellant’s services involve “various ‘mini-affairs’ between two unmarried people; sometimes two or more unmarried people.”⁶⁰ The examiner declared: “Such activities are considered deviations from the sexual norm of husband and wife relations. Such activities are immoral or scandalous The mark graphically indicates the activity carried on in applicant’s Club; sex not

50. *Id.*

51. *Matal v. Tam*, 137 S. Ct. 1744, 1753–54 (2017).

52. *Pro-Football, Inc. v. Blackhorse*, 112 F. Supp. 3d 439 (E.D. Va. 2015).

53. *In re Geller*, 751 F.3d 1355 (Fed. Cir. 2014).

54. *In re Tam*, 808 F.3d 1321, 1330 (Fed. Cir. 2015).

55. *Id.*

56. *Id.*

57. *In re McGinley*, 660 F.2d 481 (C.C.P.A. 1981).

58. *Id.* at 484.

59. *Id.* at 482.

60. *Id.*

normally sanctioned by (even today's permissive) social standards."⁶¹ The plaintiff appealed and argued that section 2(a) was "void for vagueness" and therefore violated the First Amendment.⁶² The court affirmed the board's decision and held that the PTO's refusal to register a mark does not affect a person's right to use their mark, therefore, "no conduct is proscribed, and no tangible form of expression is suppressed."⁶³ Consequently, a trademark owner's First Amendment rights would not be abridged by the refusal to register a mark under section 2(a).⁶⁴

III. CASE SUMMARY: *MATAL V. TAM*

Matal v. Tam, the main focus of this Note, is a Supreme Court case in which the Court unanimously held that the disparagement provision of the Lanham Act violated the First Amendment. This section will summarize the Court's holdings and reasoning in *Tam* and will highlight the long and somewhat conflicted procedural history the Court had to assess in reaching the main holding.

A. INTRODUCTION AND PROCEDURAL HISTORY

Tam is the "front man" for the Asian-American band "The Slants."⁶⁵ On November 14, 2011, Tam filed an application seeking to register the mark THE SLANTS for "Entertainment in the nature of live performances by a musical band," based on his use of the mark since 2006.⁶⁶ The examiner refused to register Tam's mark, finding it disparaging to "persons of Asian descent."⁶⁷ The examiner explained that the term "slants" had "a long history of being used to deride and mock a physical feature" of people of Asian descent.⁶⁸ Even though Tam may have chosen the mark to "reappropriate the disparaging term," the examiner found that a substantial composite of persons of Asian descent would find the term offensive.⁶⁹ The Board affirmed the examiner's refusal to register the mark.⁷⁰ The Board wrote that "it is abundantly clear from the record not only that THE SLANTS . . . would have the 'likely meaning' of people of Asian descent but also that such meaning has

61. *Id.*

62. *Id.* at 483.

63. *Id.* at 484.

64. *Id.*

65. *In re Tam*, 808 F.3d 1321, 1331 (Fed. Cir. 2015).

66. *Id.*

67. *Id.*

68. *Id.*

69. *Id.* at 1331–32.

70. *Id.* at 1332.

been so perceived and has prompted significant responses by prospective attendees or hosts of the band's performances.⁷¹ To support its finding that the mark likely referred to people of Asian descent, the Board pointed to dictionary definitions, the band's website, and a statement by Tam that he selected the mark in order to "own" the stereotype it represents.⁷² The Board also found that the mark is disparaging to a substantial component of people of Asian descent because there was record evidence of individuals and groups in the Asian community objecting to Tam's use of the word.⁷³ The Board therefore disqualified the mark for registration under section 2(a).⁷⁴

Tam appealed, arguing that the Board erred in finding the mark disparaging and that section 2(a) was unconstitutional.⁷⁵ The Court of Appeals, after affirming the PTO decision, sua sponte ordered a rehearing en banc.⁷⁶ The core issue that the Court of Appeals grappled with was whether the bar on registration of disparaging marks in section 2(a) violated the First Amendment.⁷⁷ As noted above, this argument has historically failed as *In re McGinley* set precedent that section 2(a) does not implicate the First Amendment.⁷⁸ However, over thirty years had passed since the decision in *McGinley*. In that time, both the *McGinley* decision and the courts reliance on it have been criticized.⁷⁹ Furthermore, the *McGinley* analysis was cursory, without citation to legal authority, and decided at a time when the First Amendment had only recently been applied to commercial speech.⁸⁰ Since then, the Supreme Court has ruled that content-based suppression of non-misleading speech, including non-misleading commercial speech, is presumptively unconstitutional and, to be upheld, must be shown to be narrowly tailored to serve compelling state interests.⁸¹ As First Amendment jurisprudence has evolved significantly since the *McGinley* decision, the Court of Appeals found it necessary to revisit the question.⁸² The Federal Circuit rejected the *McGinley* argument, stating that the First Amendment's standards, including those broadly invalidating message discrimination, are not limited by the fact that

71. *In re Tam*, No. 85472044, 2013 WL 5498164, at *5 (T.T.A.B. Sept. 26, 2013).

72. *Id.*

73. *Id.* at *7.

74. *Tam*, 808 F.3d at 1332.

75. *Id.*

76. *Id.* at 1334.

77. *Id.*

78. *In re McGinley*, 660 F.2d 481, 484 (C.C.P.A. 1981).

79. *Tam*, 808 F.3d at 1333.

80. *Id.* at 1333–34 (citing *Central Hudson Gas & Elec. Corp. v. Public Service Commission of N. Y.*, 447 U.S. 557, 566 (1980)).

81. *Reed v. Town of Gilbert, Arizona*, 135 S. Ct. 2218, 2226 (2015).

82. *Tam*, 808 F.3d at 1333–34.

“no conduct is proscribed, and no tangible form of expression is suppressed.”⁸³ The Court also acknowledged that while it is true that a trademark owner may use its mark in commerce even without federal registration, it has been widely recognized that federal trademark registration bestows significant benefits upon trademark holders,⁸⁴ and thus, there is a disincentive to choose a mark that may be called into question by the disparagement provision of 2(a). This disincentive is not cabined to an “understandable range of expressions,”⁸⁵ since the statute extends to marks that “may disparage.”⁸⁶ The uncertainty as to what constitutes disparaging is evident both “on its face,” as well as “confirmed by the record of PTO grants and denials over the years.”⁸⁷ Therefore, the court found that section 2(a) creates an uncertainty about speech-affecting standards, which has long been recognized as a First Amendment problem.⁸⁸

Furthermore, the court found that it is likely that Tam will be barred from registering his mark in nearly every state due to the Model State Trademark Act (Model Act).⁸⁹ The Model Act contains language barring a mark from registration if it “consists of or comprises matter which may disparage . . . persons, living or dead, institutions, beliefs, or national symbols, or bring them into contempt, or disrepute.”⁹⁰ Virtually all states have adopted the Model Act and its disparagement provision.⁹¹ Thus, not only are the benefits of federal registration unavailable to Tam, so too are the benefits of trademark registration in nearly all states.⁹² The government’s argument that the denial of Tam’s registration “does not eliminate any common-law rights that might exist in [his] mark” was also called into question.⁹³ The court found that it was

83. *McGinley*, 660 F.2d at 484. *See* *Pitt News v. Pappert*, 379 F.3d 96, 111–12 (3d Cir. 2004) (Alito, J.) (“The threat to the First Amendment arises from the imposition of financial burdens that may have the effect of influencing or suppressing speech, and whether those burdens take the form of taxes or some other form is unimportant.”).

84. *B & B Hardware, Inc. v. Hargis Indus.*, 135 S. Ct. 1293, 1300 (2015).

85. *Tam*, 808 F.3d at 1341.

86. 15 U.S.C. § 1052(a) (2012).

87. *Tam*, 808 F.3d at 1341–42.

88. *Id.* at 1342. *See* *Broadrick v. Oklahoma*, 413 U.S. 601, 613 (1973) (discussing the overbreadth doctrine).

89. *Id.* at 1343–44. Three years after the enactment of the Lanham Act, the United States Trademark Association prepared the Model Act—a bill patterned on the Lanham Act. 5 J. THOMAS MCCARTHY, MCCARTHY ON TRADEMARKS AND UNFAIR COMPETITION § 26:32 at § 22:5 (4th ed.) [hereinafter “MCCARTHY”].

90. 1964 Model State Trademark Act, § 2.

91. MCCARTHY, *supra* note 89, § 22:5.

92. *Tam*, 808 F.3d at 1344.

93. *Id.* (citing En Banc Brief for Appellee at 20, *In re Tam*, 808 F.3d 1321 (Fed. Cir. 2015) (No. 2014–1203), 2015 WL 4400893, at *20).

unclear whether or not Tam could actually enforce any common law rights to a disparaging mark.⁹⁴ In fact, the court found that common law rights to a mark may be limited to marks “entitled to registration.”⁹⁵ Whether a user of an unregistrable, disparaging mark has any enforceable common law rights was unclear.⁹⁶ Furthermore, the government did not point to a single case where the common-law holder of a disparaging mark was able to enforce that mark, nor could the court find one.⁹⁷ Thus, the court found that the government's suggestion that Tam has common-law rights to his mark appeared to be illusory.⁹⁸

Ultimately, the en banc Federal Circuit found the disparagement clause facially unconstitutional under the First Amendment's Free Speech Clause.⁹⁹ The majority found that the disparagement clause engages in viewpoint-based discrimination, that the clause cannot be treated as a regulation of commercial speech, and that the clause is subject to and cannot satisfy strict scrutiny.¹⁰⁰ The majority also rejected the Government's argument that registered trademarks constitute government speech, as well as the Government's contention that federal registration is a form of government subsidy rather than a speech restriction.¹⁰¹

The United States Patent and Trademark Office (USPTO) appealed the decision to the United States Supreme Court, presenting the following question in its petition for certiorari: whether the disparagement provision in 15 U.S.C. § 1052(a) “is facially invalid under the Free Speech Clause of the First Amendment.”¹⁰² The Supreme Court granted certiorari and addressed the issue in *Matal v. Tam*.¹⁰³

B. SUPREME COURT'S ANALYSIS

The Courts conclusion was announced in opinion written by Justice Alito.¹⁰⁴ Justice Alito was joined by Chief Justice Roberts and Justices Kennedy, Thomas, Ginsburg, Breyer, Sotomayor, and Kagan in respect to the

94. *Id.*

95. *Id.*

96. *Id.*

97. *Id.*

98. *Id.*

99. *Id.* at 1357.

100. *Id.* at 1334–39.

101. *Id.* at 1339–55.

102. *Matal v. Tam*, 137 S. Ct. 1744, 1755 (2017).

103. *Id.*

104. *Id.* at 1744.

result.¹⁰⁵ Although, the Court was split 4-4 on some arguments.¹⁰⁶ Justice Gorsuch took no part in the consideration or decision of the case.¹⁰⁷

1. “Natural Persons” Statutory Question

Before reaching the question of whether or not the disparagement provision violated the First Amendment, the Court considered Tam’s statutory argument that the disparagement provision did not reach marks that disparage racial or ethnic groups.¹⁰⁸ The disparagement provision prohibits the registration of marks that disparage “persons,” and Tam claimed that the term “persons” “included only natural and juristic persons,” not “non-juristic entities such as racial and ethnic groups.”¹⁰⁹ Tam did not raise this argument to the PTO or the Federal Circuit, and the Court declined to grant certiorari on that question.¹¹⁰ However, in its petition for certiorari, the Government pointed out that accepting Tam’s statutory interpretation would resolve the case and leave the First Amendment question for another day.¹¹¹ The Court has before stressed that it is important to avoid the premature adjudication of constitutional questions¹¹² and that it ought not to pass on questions of constitutionality unless such adjudication is unavoidable.¹¹³ Since addressing Tam’s statutory argument could avoid the constitutional question, the Court began its analysis by examining the argument. The Court found that Tam’s argument was refuted by the “plain terms” of the disparagement provision.¹¹⁴ The provision applies to marks that disparage “persons,” so “a mark that disparages a ‘substantial’ percentage of the members of a racial or ethnic group necessarily disparages many ‘persons’ namely, members of that group.”¹¹⁵ Furthermore, the court noted that the disparagement provision does not only apply to marks that disparage “persons,” but also “institutions” and “beliefs”—it is thus broader than Tam’s narrow reading.¹¹⁶ In sum, the Court

105. *Id.*

106. *Id.*

107. *Id.*

108. *Id.* at 1755.

109. *Id.* (citing Brief for Respondent at 46, *Matal v. Tam*, 137 S. Ct. 1744 (2017) (No. 15-1293)).

110. *Id.*

111. *Id.*

112. *Clinton v. Jones*, 520 U.S. 681, 690 (1992).

113. *See Spector Motor Service, Inc. v. McLaughlin*, 323 U.S. 101, 105 (1944).

114. *Tam*, 137 S. Ct. at 1756.

115. *Id.* (citing 15 U.S.C. § 1052(a) (2012)).

116. *Id.* at 1748. *See* 15 U.S.C. § 1052(a) (2012).

found that Tam’s statutory claim was meritless, because the disparagement provision is “not limited to marks that disparage a particular natural person.”¹¹⁷

2. *The Government’s Argument*

Since the disparagement provision did, in fact, apply to marks that disparage the members of a racial or ethnic group, the Court had to decide whether the provision violated the First Amendment.¹¹⁸

To begin this analysis, the Court considered three of the Government’s arguments that would “eliminate any First Amendment protection” or “result in highly permissive rational-basis review.”¹¹⁹ Specifically, the Government contended: “(1) that trademarks are government speech, not private speech, (2) that trademarks are a form of government subsidy, and (3) that the constitutionality of the disparagement clause should be tested under a new ‘government-program’ doctrine.”¹²⁰

a) Government Speech

The government argued that trademark registration is government speech and, therefore, is exempt from First Amendment scrutiny,¹²¹ because “[t]he Free Speech Clause . . . does not regulate government speech.”¹²² As the Court has historically noted, it would be hard to imagine how government would function if it were subject to the same First Amendment restrictions as private speech.¹²³ While the First Amendment does forbid the government from regulating speech in ways that favor some viewpoints at the expense of others,¹²⁴ “[t]he Free Speech Clause does not require government to maintain viewpoint neutrality when its officers and employees speak about that venture.”¹²⁵ The Court found that even though the government-speech doctrine is important, it is susceptible to misuse;¹²⁶ therefore, the Court had to

117. *Id.* at 1756.

118. *Id.* at 1757.

119. *Id.*

120. *Id.*

121. *Id.*; see En Banc Brief for Appellee at 41–42, *In re Tam*, 808 F.3d 1321 (Fed. Cir. 2015) (No. 2014-1203), 2015 WL 4400893, at *41–42.

122. *Tam*, 137 S. Ct. at 1757 (citing *Pleasant Grove City v. Summum*, 555 U.S. 460, 467 (2009)).

123. *Id.*; see *Lamb’s Chapel v. Center Moriches Union Free School Dist.*, 508 U.S. 384, 394 (1993).

124. *Tam*, 137 S. Ct. at 1757. See *Walker v. Texas Div., Sons of Confederate Veterans, Inc.*, 135 S. Ct. 2239, 2245–47 (2015).

125. *Tam*, 137 S. Ct. at 1757.

126. *Id.* at 1758.

think carefully about whether or not government-speech precedents could extend to trademark registration.¹²⁷

The Court found that while it is true that trademarks are registered by the PTO, an arm of the Federal Government, the Government does not create those marks, nor does it edit any of the marks submitted for registration. In fact, “an examiner may not reject a mark based on the viewpoint that it appears to express” unless it falls under one of the statutory exceptions of section 2(a).¹²⁸ Therefore, “an examiner does not inquire whether any viewpoint conveyed by a mark is consistent with Government policy or whether any such viewpoint is consistent with that expressed by other marks already on the principal register.”¹²⁹ In addition, if an examiner finds that a mark is eligible for placement on the principal register, no higher official reviews that decision unless the registration is challenged.¹³⁰ This means that besides a single PTO examiner, no government official looks at a mark and determines whether or not it can be registered as a trademark. Furthermore, once a mark is registered, the PTO is not authorized to remove it from the register unless a party moves for cancellation, the registration expires, or the Federal Trade Commission initiates proceedings based on certain grounds.¹³¹ For these reasons, the Court found that it was “far-fetched” to suggest that registered marks constituted government speech.¹³² The Court went even further to say that if federal registration makes a trademark government speech, then “the Federal Government is babbling prodigiously and incoherently.”¹³³

The Court also pointed out that PTO precedent holds that trademark registration does not constitute government approval of a mark¹³⁴ and that it is unlikely that the vast majority of the public even knows what federal registration means.¹³⁵ Furthermore, the Court found that trademarks themselves share none of the characteristics of the things at issue in the government speech cases which would serve as precedent.¹³⁶ Trademarks have

127. *Id.* (the main abuse that the court was worried about is: “If private speech could be passed off as government speech by simply affixing a government seal of approval, the government could silence or muffle the expression of disfavored viewpoints”).

128. *Id.* See 15 U.S.C. § 1052(a) (2012).

129. *Tam*, 137 S. Ct. at 1758.

130. See 15 U.S.C. §§ 1062(a), 1071 (2012); 37 CFR § 41.31(a) (2016).

131. See 15 U.S.C. §§ 1058(a), 1059, 1064 (2012); 37 CFR §§ 2.111(b), 2.160 (2018).

132. *Tam*, 137 S. Ct. at 1758.

133. *Id.*

134. *Id.* at 1759; see *In re Old Glory Condom Corp.*, 26 U.S.P.Q.2d 1216, 1220, n.3 (T.T.A.B. 1993) (“[I]ssuance of a trademark registration TTT is not a government imprimatur . . .”).

135. *Tam*, 137 S. Ct. at 1759.

136. *Id.*

not traditionally been used to convey a Government message, and except for the statutory exceptions in 2(a), the viewpoint expressed by a mark has not played a role in the decision whether to place it on the principal register.¹³⁷ “Holding that the registration of a trademark converts the mark into government speech would constitute a huge and dangerous extension of the government-speech doctrine.”¹³⁸ Therefore, the Court concluded that there was no government speech at issue that would insulate section 2(a) from First Amendment review.¹³⁹

b) Government Subsidy

Justice Alito, writing for himself, Chief Justice Roberts, Justice Thomas, and Justice Breyer then addressed the Government’s argument that this case should be governed by cases where the Court has upheld the constitutionality of government programs that subsidized speech expressing particular viewpoints.¹⁴⁰ In these “notoriously tricky” cases, the Court has had to determine which of two distinct principles applies.¹⁴¹ These competing principles are: (1) that the government “may not deny a benefit to a person a basis that infringes his constitutionally protected . . . freedom of speech even if he has no entitlement to that benefit,”¹⁴² and (2) that “government is not required to subsidize activities that it does not wish to promote.”¹⁴³ The opinion did not engage the question of which principle applies to *Tam*, since Alito found that “no difficult question is presented here.”¹⁴⁴ Instead, Alito found that *Tam* is distinct from the cases on which the Government relied.¹⁴⁵ This is mainly due to the fact that the precedent revolves around cash subsidies or their equivalent—none of which resemble the federal registration of trademarks.¹⁴⁶ Even though trademark registration provides valuable non-monetary benefits that are “directly traceable to the resources devoted by the federal government to examining, publishing, and issuing certificates of registration for those marks,” the opinion found that “just about every

137. *Id.* at 1760.

138. *Id.*

139. *Id.* (“Trademarks are private, not government, speech.”).

140. *Id.*

141. *Id.* at 1760–61.

142. *Agency for Int’l Development v. Alliance for Open Society Int’l, Inc.*, 133 S. Ct. 2321, 2328 (2013) (some internal quotation marks omitted).

143. *Tam*, 137 S. Ct. at 1761 (citing *Agency for Int’l Development*, 133 S. Ct. at 2328).

144. *Id.*

145. *Id.*

146. *Id.*

government service requires the expenditure of government funds.”¹⁴⁷ Therefore, Alito wrote that these government subsidy cases are not instructive.

c) Government Program

Lastly, the Government argued that the disparagement clause should be sustained under a new doctrine that would apply to “government-program” cases.¹⁴⁸ This doctrine would merge the government-speech cases and the subsidy cases in an attempt to construct a broader doctrine that could then be applied to trademark registration.¹⁴⁹ According to Justice Alito (joined by Chief Justice Roberts, Justice Thomas, and Justice Breyer), “the only new element in this construct consists of two cases involving a public employer’s collection of union dues from its employees”—*Davenport* and *Ysursa*.¹⁵⁰ Alito found that these two cases are “far removed” from trademark registration and they occupy a “special area” of First Amendment law, much like the subsidy cases.¹⁵¹ Therefore, Alito wrote that *Davenport* and *Ysursa* were irrelevant to the *Tam* case.¹⁵²

3. *Viewpoint Discrimination*

Alito (joined by Chief Justice Robert, Justice Thomas, and Justice Breyer) then entered into brief discussion about cases that would be potentially more analogous to *Tam*.¹⁵³ In these cases, the government creates a “limited public forum for private speech.”¹⁵⁴ When the government creates such a forum, some content- and speaker-based restrictions may be allowed.¹⁵⁵ However, even in those cases, “viewpoint discrimination” was still forbidden.¹⁵⁶ Viewpoint discrimination has been defined broadly in precedent cases, and under this broad definition, it is clear that the “disparagement clause discriminates on the bases of ‘viewpoint.’”¹⁵⁷ Even though the disparagement provision “evenhandedly” prohibits disparagement of all groups, it still denies registration to any mark that is offensive to a substantial percentage of

147. *Id.*

148. *Id.*

149. *Id.*

150. *Id.* at 1761–62.

151. *Id.* at 1762.

152. *Id.*

153. *Id.* at 1763.

154. *Id.*; *see, e.g.*, *Good News Club v. Milford Central School*, 533 U.S. 98, 106–07 (2001); *Lamb’s Chapel v. Ctr. Moriches Union Free Sch. Dist.*, 508 U.S. 384 at 392–93 (1993).

155. *Tam*, 137 S. Ct. at 1763; *see Rosenberger v. Rector & Visitors of Univ. of Va.*, 515 U.S. 819, 830–31 (1995).

156. *Tam*, 137 S. Ct. at 1763 (citing *Rosenberger*, 515 U.S. at 831).

157. *Tam*, 137 S. Ct. at 1763.

members of any group—this is viewpoint discrimination because “giving offense is a viewpoint.”¹⁵⁸ “[T]he public expression of ideas may not be prohibited merely because the ideas are themselves offensive to some of their hearers.”¹⁵⁹ This has been described as a “bedrock principle” underlying the First Amendment.¹⁶⁰ For this reason, Justice Alito wrote that “the disparagement clause cannot be saved by analyzing it as a type of government program in which some content- and speaker-based restrictions are permitted.”¹⁶¹

4. *Commercial Speech*

After concluding that the disparagement clause cannot be sustained under (1) government-speech, (2) government subsidy cases, or (3) the Government’s proposed “government-program” doctrine, Justice Alito, confronted the question as to whether or not trademarks constituted commercial speech and were thus subject to the relaxed scrutiny analysis outlined in *Central Hudson Gas & Elec. Corp. v. Public Serv. Comm’n of N.Y.*¹⁶² The Government argued that trademarks are commercial speech because their central purposes is commercial, and since federal law regulates trademarks “to promote fair and orderly interstate commerce.”¹⁶³ Tam, however, contends that trademarks have an expressive component—they do not simply function as source identifiers, instead, they go on to say something more, either about the product, or service, or some other issue.¹⁶⁴ For example, “The Slants” not only identifies the name of Tam’s band, but it also expresses a view about social issues.¹⁶⁵ The opinion did not attempt to resolve whether or not trademarks are commercial or expressive since it found that the disparagement

158. *See id.*, which states:

To be sure, the clause evenhandedly prohibits disparagement of all groups. It applies equally to marks that damn Democrats and Republicans, capitalists and socialists, and those arrayed on both sides of every possible issue. It denies registration to any mark that is offensive to a substantial percentage of the members of any group. But in the sense relevant here, that is viewpoint discrimination: Giving offense is a viewpoint.

159. *Street v. New York*, 394 U.S. 576, 592 (1969); *see also Texas v. Johnson*, 491 U.S. 397, 414 (1989) (“If there is a bedrock principle underlying the First Amendment, it is that the government may not prohibit the expression of an idea simply because society finds the idea itself offensive or disagreeable.”).

160. *Johnson*, 491 U.S. at 414.

161. *Tam*, 137 S. Ct. at 1763.

162. *Id.* at 1763–64; *see Cent. Hudson Gas & Elect. v. Pub. Serv. Comm’n*, 447 U.S. 557 (1980).

163. *Tam*, 137 S. Ct. at 1764.

164. *Id.*

165. *Id.*

clause cannot withstand even *Central Hudson's* relaxed standard of review.¹⁶⁶ Under *Central Hudson*, a restriction of speech must serve “a substantial interest,” and it must be “narrowly drawn.”¹⁶⁷ This primarily means that “[t]he regulatory technique may extend only as far as the interest it serves.”¹⁶⁸ The Court held that the disparagement clause fails this requirement since it is overly broad.¹⁶⁹

The Government claimed that the disparagement clause served two government interests.¹⁷⁰ The first interest is preventing “underrepresented groups” from being “bombarded with demeaning messages in commercial advertising.”¹⁷¹ Basically, the Government has an interest in preventing speech that expresses offensive ideas.¹⁷² However, as the Court has held, this interest strikes at the “heart” of the First Amendment.¹⁷³ “Speech that demeans on the basis of race, ethnicity, gender, religion, age, disability, or any other similar ground is hateful; but the proudest boast of our free speech jurisprudence is that we protect the freedom to express ‘the thought that we hate.’”¹⁷⁴ The second interest that the Government asserted is “protecting the orderly flow of commerce.”¹⁷⁵ According to the Government, commerce is disrupted by trademarks that “involv[e] disparagement of race, gender, ethnicity, national origin, religion, sexual orientation, and similar demographic classification.”¹⁷⁶ These trademarks were analogized to discriminatory conduct, which is something that is recognized as having an adverse effect on commerce.¹⁷⁷ Alito responded to this interest by finding that the disparagement clause is not “narrowly drawn” to drive out trademarks that support invidious discrimination.¹⁷⁸ “The clause reaches any trademark that disparages any person, group, or institution.”¹⁷⁹ According to the opinion, it applies to

166. *Id.*

167. *Id.* (citing *Cent. Hudson*, 447 U.S. at 564–65 (internal quotation marks omitted)).

168. *Id.* (citing *Cent. Hudson*, 447 U.S. at 565).

169. *Id.*

170. *Id.*

171. Brief for Petitioner at 48, *Matal v. Tam* 137 S. Ct. 1744 (2017) (No. 15-1293) (quoting *Tam*, 808 F.3d at 1364 (Dyk, J., concurring in part and dissenting in part)) (internal quotation marks omitted).

172. *Tam*, 137 S. Ct. at 1764.

173. *Id.*

174. *Id.* (quoting *United States v. Schwimmer*, 279 U.S. 644, 655 (1929) (Holmes, J., dissenting)).

175. *Id.*; see *In re Tam*, 808 F.3d 1321, 1379–81 (Fed. Cir. 2015) (Reyna, J., dissenting).

176. *Id.*; see *Tam*, 808 F.3d at 1380–81 (Reyna, J., dissenting).

177. *Id.*; see *Tam*, 808 F.3d at 1380–81; Brief for Petitioner at 49, *Matal v. Tam*, 137 S. Ct. 1744 (2017) (No. 15-1293).

178. *Tam*, 137 S. Ct. at 1764–65.

179. *Id.* at 1765.

trademarks like the following: “Down with racists,” “Down with sexists,” “Down with homophobes.”¹⁸⁰ “It is not an anti-discrimination clause,” Alito concluded, “it is a happy-talk clause.”¹⁸¹ Therefore, the court found that it is broader than necessary to serve its supposed interest.¹⁸² Furthermore, since the disparagement provision also protects “every person living or dead” as well as “every institution,” the Court questioned whether or not it was conceivable to even argue that commerce would always be disrupted by disparaging marks.¹⁸³ For example, “James Buchanan was a disastrous president” is a disparaging mark that would probably not disrupt commerce.¹⁸⁴ Lastly, Alito found that there was a deeper issue with the argument that commercial speech should be “cleansed of any expression likely to cause offense,” especially if “affixing the commercial label permits the suppression of any speech that may lead to political or social ‘volatility,’ free speech would be endangered.”¹⁸⁵

Because disparaging trademarks are: (i) private speech that do not fall under any government speech exceptions, (ii) viewpoint discriminatory, and (iii) unable to withstand *Central Hudson*’s relaxed standard of review, the Court unanimously held that the disparagement clause violated the Free Speech Clause of the First Amendment.

C. KENNEDY CONCURRENCE

Kennedy’s Concurrence, joined by Justice Ginsberg, Justice Sotomayor, and Justice Kagan, went into greater detail about how viewpoint discrimination applied in this case.¹⁸⁶ The First Amendment protects against laws “targeted at specific subject matter,” also referred to as content based discrimination.¹⁸⁷ Within content based discrimination is a subset of laws that are aimed at the suppression of “particular views . . . on a subject.”¹⁸⁸ This is known as viewpoint discrimination, and is “presumptively unconstitutional.”¹⁸⁹ The basic test for viewpoint discrimination is whether the government has “singled out a subset of messages for disfavor based on the views expressed.”¹⁹⁰

180. *Id.*

181. *Id.*

182. *Id.*

183. *Id.*

184. *Id.*

185. *Id.*

186. *Id.* at 1765 (Kennedy, J., asserting that “the viewpoint discrimination rationale renders unnecessary any extended treatment of other questions raised by the parties”).

187. *See Reed v. Town of Gilbert*, 135 S. Ct. 2218, 2230 (2015).

188. *Rosenberger v. Rector & Visitors of Univ. of Va.*, 515 U.S. 819, 829 (1995).

189. *Tam*, 137 S. Ct. at 1766.

190. *Id.*; *see Cornelius v. NAACP Legal Def. & Ed. Fund, Inc.*, 473 U.S. 788, 806 (1985).

In the *Tam* case, the disparagement provision applies to “persons, living or dead, institutions, beliefs, or national symbols.”¹⁹¹ Within this category, an applicant may register a positive or benign mark but would be enjoined from registering derogatory one.¹⁹² This is the essence of viewpoint discrimination.¹⁹³ The Government disputed this conclusion since the law applies equally to *any* trademark that is demeaning or offensive.¹⁹⁴ This, the Government says, is “viewpoint neutral,” since the law would reject marks conveying diametrically opposed viewpoints, if they contained the same offensive word.¹⁹⁵ Kennedy found that this missed the point of viewpoint discrimination since “[a] subject that is first defined by content and then regulated or censored by mandating only one sort of comment is not viewpoint neutral.”¹⁹⁶ If anything, Kennedy found that the fact that the disparagement provision prohibited all sides from criticizing their opponents made a law more viewpoint based, not less so.¹⁹⁷ The Government also argued that the statute was viewpoint neutral since the disparagement provision mainly denied registration based on the reaction of the applicant’s audience—it applied to trademarks regardless of the applicant’s personal views.¹⁹⁸ Kennedy argued that the Government “may not insulate a law from charges of viewpoint discrimination by tying censorship to the reaction of the speaker’s audience.”¹⁹⁹ “The speech is targeted, after all, based on the government’s disapproval of the speaker’s choice of message. And it is the government itself that is attempting in this case to decide whether the relevant audience would find the speech offensive.”²⁰⁰ It is for these exact reasons, Kennedy pointed out, that the Court has historically prohibited the government from justifying a First Amendment burden based on the offensiveness of the speech to be suppressed.²⁰¹

191. *Id.*

192. *Id.*

193. *Id.*

194. *Id.* (“[T]he law is viewpoint neutral because it applies in equal measure to any trademark that demeans or offends.”) (emphasis added).

195. *See In re Tam*, 808 F.3d 1321, 1337 (Fed. Cir. 2015).

196. *Tam*, 137 S. Ct. at 1766.

197. *Id. Cf. Rosenberger v. Rector & Visitors of Univ. of Va.*, 515 U.S. 819, 831–32 (1995) (“The . . . declaration that debate is not skewed so long as multiple voices are silenced is simply wrong; the debate is skewed in multiple ways.”).

198. *Tam*, 137 S. Ct. at 1766.

199. *Id.*

200. *Id.* at 1767.

201. *Id.*

IV. DISCUSSION

The main implication of *Tam* is obvious—it invalidates the disparagement provision of section 2(a), and therefore breaks almost a century’s worth of continuously applied precedent. This is significant for a variety of different reasons—all of which will be discussed in this Part.

A. SIGNIFICANCE OF *MATAL V. TAM*

The larger significance of *Tam* is how it affects other marks. For example, invalidating the disparagement provision of 2(a) not only implicates *Tam*’s mark, but may also affect the highly controversial “Washington Redskins” trademark.²⁰² Invalidating the disparagement provision will undoubtedly lead to a wider registration of marks that offend a substantial number of people and vulnerable communities.

The Court, in rejecting the argument that trademarks constitute government speech, gave short shrift to valid, convincing arguments that the Government made in previous cases that highlight why federally registering disparaging marks constitute government speech. In *Tam*, the Federal Circuit held that the public does not view registration certificates as the government’s expression of its ideas or as the government’s endorsement of the ideas, inventions, or trademarks of the private speakers to whom they are issued.²⁰³ Registration of a trademark “does not endorse any particular product, service, or registrant.”²⁰⁴ However, in a previous case, the Court observed that “[t]he fact that private parties take part in the design or propagation of a message does not extinguish the governmental nature of the message or transform the government’s role into that of a mere forum-provider.”²⁰⁵ Even though individuals, and not the government, create the marks submitted for trademark registration, the marks can still convey a governmental message. Furthermore, the government is more than a mere-forum provider for the validity of trademarks. Instead, “[w]hen the symbol for a federally registered trademark, ®, is affixed to a mark, it is a *declaration* by the federal government that it has approved that mark.”²⁰⁶ If *Tam*’s mark is federally registered, it will associate the government with offensive terminology since “The Slants” will have a ® affixed to it. “Registration of THE SLANTS would cause the mark to be published on the Principal Register; would cause a certificate for the mark to

202. See *Pro-Football, Inc. v. Blackhorse*, 112 F. Supp. 3d 439 (E.D. Va. 2015) (invalidating the mark based on section 2(a)).

203. *In re Tam*, 808 F.3d 1321, 1348 (Fed. Cir. 2015).

204. *Id.* at 1347; see En Banc Brief for Appellee at 24, *In re Tam*, 808 F.3d 1321 (Fed. Cir. 2015) (No. 2014-1203), 2015 WL 4400893, at *24.

205. *Walker v. Tex. Div., Sons of Confederate Veterans, Inc.*, 135 S. Ct. 2239, 2251 (2015).

206. *Pro-Football, Inc.*, 112 F. Supp. 3d at 461 (emphasis added).

be issued ‘in the name of the United States’ (which may be transmitted to foreign countries); and would entitle respondent to use the ® symbol to convey to the public that the mark has an official status.”²⁰⁷ In *Wooley*, the Court recognized “an individual’s First Amendment right to avoid becoming the courier for” a message that he or she finds objectionable.²⁰⁸ Here, the government has an interest in declining to incorporate racially offensive epithets into various official communications.

Outside of official government communications, there are socio-political implications of the federal registration of bigoted marks. In the case of the “Redskins,” for example, the fact that the government would potentially allow registration of a term entrenched in a racist history can signal that the government does not care about the arguments that marginalized people have made against the registering of such marks. Allowing the registration of marks that are disparaging to a significant population of people can signify that we, as a society, do not care about those people who are being disparaged. These socio-political implications are part of the reason why federal law has prohibited registration of disparaging marks since 1946. Furthermore, nearly every state includes a provision in its trademark laws that prohibits state registration of disparaging marks.²⁰⁹ The implication that the federal government would be required to register, publish, and transmit to foreign countries marks containing “crude references to women based on parts of their anatomy” or “the most repellent racial slurs and white-supremacist slogans” runs counter to what was, before the *Tam* decision, a long recognized, valid interest in trademark law.²¹⁰

There is a symbolism in allowing the registration of a mark. If individuals want to use the word “Redskins,” that is their prerogative, and they should not be enjoined from doing so; however, the government should be allowed to refuse endorsing said mark. More importantly, there is now a greater issue of who can reappropriate disparaging words, phrases, and expressions. Before, disparaging marks were unable to be registered. This is no longer the case. Now, racists can register marks, and vigorously defend those marks in court, potentially stopping others from critiquing those marks. For example, if “Redskins” was trademarked, actual Native Americans would be unable to sell merchandise with the imagery of a heroic indigenous person defeating a “Redskin” in football gear without being liable for trademark infringement. *Tam* is a sympathetic case. It tells the story of an Asian man trying to take back

207. Brief for the Petitioner at 39, *Matal v. Tam*, 137 S. Ct. 1744 (2017) (No. 15-1293).

208. *Wooley v. Maynard*, 430 U.S. 705, 717 (1977).

209. *In re Tam*, 808 F.3d 1321, 1343 (Fed. Cir. 2015).

210. Brief for the Petitioner at 10, *Matal v. Tam*, 137 S. Ct. 1744 (2017) (No. 15-1293).

a disparaging word by federally registering it in an attempt to create something new and artistic. Not every markholder will be as sympathetic as Tam.

In addition, the *Tam* case is significant because it calls into question other parts of section 2(a), such as the bars on registration of “scandalous” and “immoral” trademarks. In fact, within a few weeks of *Tam*, the government conceded that section 2(a)’s bar on immoral and scandalous marks was also unconstitutional.²¹¹ More importantly, *Tam*’s reach does not end with section 2(a). The case also calls into question other areas of the Lanham Act—particularly trademark dilution.

B. *IN RE TAM* AND APPLICABILITY TO ANTI-DILUTION

The anti-disparagement provision of the Lanham Act shares features with anti-dilution. Both doctrines have been controversial, and both have had issues with uncertainty. In *Tam*, there were three factors that were significant to the main holding, i.e., the prohibition on the registration of disparaging trademarks was unconstitutional under the First Amendment. These three factors were: (i) that the disparagement provision of section 2(a) is not insulated from First Amendment review based on the government-speech doctrine, (ii) the provision cannot survive even the relaxed scrutiny outlined in *Central Hudson*, and (iii) that disparagement is a viewpoint-discriminatory regulation of speech.²¹² This same exact reasoning can also be used to find anti-dilution unconstitutional. Indeed, trademark anti-dilution’s restraint on speech is worse on First Amendment grounds. Anti-dilution, even more so than disparagement, is: (i) not protected from First Amendment scrutiny based on government speech, (ii) cannot survive *Central Hudson* review, and (iii) is a viewpoint-based suppression of speech. In order to begin this analysis, however, some background on trademark dilution is necessary.

1. *Trademark Dilution Under the Lanham Act*

Since the enactment of the Lanham Act in 1946 there have been many amendments that further protect trademark holders. Federal anti-dilution law is one such example. The concept of trademark dilution has been described as a “subtle” one.²¹³ “When an individual encounters a mark (e.g., a word or symbol) in a store or watching a commercial, he or she can develop an association between a product or service and its corresponding quality, brand reputation, or origin.”²¹⁴ Anti-dilution laws purport to protect those acquired

211. *In re Brunetti*, 877 F.3d 1330 (Fed. Cir. 2017).

212. *See Tam*, 808 F.3d 1321, 1377.

213. *Tiffany (NJ) Inc. v. eBay, Inc.*, 576 F. Supp. 2d 463, 521–22 (S.D.N.Y. 2008).

214. 1 ALEXANDER LINDEY & MICHAEL LANDAU, *LINDEY ON ENTERTAINMENT, PUBLISHING AND THE ARTS* § 2:52.50 (3d ed. 2018).

associations from being diluted by other uses of a plaintiff's trademark.²¹⁵ In fact, Congress has prohibited trademark dilution without requiring proof of actual harm or confusion.²¹⁶ The federal dilution law, the Trademark Dilution Revision Act (TDRA), provides that liability for dilution exists “regardless of the presence or absence of actual or likely confusion, of competition, or of actual economic injury.”²¹⁷

a) Legislative History of Trademark Dilution

In 1988, when Congress adopted amendments to the Lanham Act, it gave consideration to an anti-dilution provision.²¹⁸ During the hearings on the 1988 amendments, there was concern that it might have applied to expression protected by the First Amendment and the provision was deleted from the amendments.²¹⁹

By 1996, the Federal Trademark Dilution Act (FTDA) of 1995 was enacted as a way to protect famous trademarks from uses that dilute their distinctiveness, even in the absence of any likelihood of confusion or competition.²²⁰ The FTDA “permits the owner of a qualified, famous mark to enjoin junior uses throughout commerce, regardless of the absence of competition or confusion.”²²¹ Specifically, the FTDA provides that “[t]he owner of a famous mark shall be entitled, subject to the principles of equity and upon such terms as the court deems reasonable, to an injunction against another person’s commercial use in commerce of a mark or trade name, if such use begins after the mark has become famous and causes dilution of the distinctive quality of the mark.”²²²

215. *Louis Vuitton Malletier, S.A. v. My Other Bag, Inc.*, 156 F. Supp. 3d 425, 432 (S.D.N.Y. 2016).

216. 15 U.S.C. § 1125(c)(1) (2012).

217. *Id.*

218. *Moseley v. V Secret Catalogue*, 537 U.S. 418, 430 (2003).

219. *Id.* at 431 (referencing H.R. Rep No. 100-1028 (1988)).

220. *Id.* at 419.

221. *TCPIP Holding Co. v. Haar Communications Inc.*, 244 F.3d 88, 95 (2d Cir. 2001); 15 U.S.C. § 1127 (2012).

222. 15 U.S.C. § 1125(c)(1) (2012). To establish a violation of the FTDA, a plaintiff must show that:

- (1) the mark is famous; (2) the defendant is making commercial use of the mark in commerce; (3) the defendant's use began after the mark became famous; and (4) the defendant's use of the mark dilutes the quality of the mark by diminishing the capacity of the mark to identify and distinguish goods and services.

Pinehurst, Inc. v. Wick, 256 F. Supp. 2d 424, 431 (M.D.N.C. 2003); *see* 15 U.S.C. § 1125(c) (2012); *Ringling Bros.-Barnum & Bailey Combined Shows, Inc. v. Utah Div. of Travel*

In 2006, the TDRA was passed to amend the FTDA.²²³ The TDRA was primarily designed to overturn the U.S. Supreme Court decision in *Moseley v. V Secret Catalogue*, which specified a need to show actual trademark dilution, rather than the likelihood of dilution.²²⁴ Furthermore, in response to First Amendment concerns, the TDRA expressly exempts certain uses of a famous mark, in particular: (1) “fair use” of a mark in the context of comparative commercial advertising or promotion; (2) non-commercial uses, such as parody, satire and editorial commentary; and (3) all forms of news reporting and news commentary.²²⁵

The Lanham Act, as amended by the Trademark Dilution Revision Act, provides that

the owner of a famous mark that is distinctive, inherently or through acquired distinctiveness, shall be entitled to an injunction against another person who, at any time after the owner's mark has become famous, commences use of a mark or trade name in commerce that is likely to cause dilution by blurring or dilution by tarnishment of the famous mark, regardless of the presence or absence of actual or likely confusion, of competition, or of actual economic injury.²²⁶

Basically, federal dilution is actionable in two situations: (1) dilution by “blurring” and (2) dilution by “tarnishment.”²²⁷ Dilution by blurring refers to an “association arising from the similarity between a mark or trade name and a famous mark that impairs the distinctiveness of the famous mark.”²²⁸ Dilution by tarnishment refers to an “association arising from the similarity between a mark or trade name and a famous mark that harms the reputation of the famous mark.”²²⁹ “A trademark may be tarnished when it is linked to products of shoddy quality, or is portrayed in an unwholesome or unsavory context, with the result that the public will associate the lack of quality or lack of prestige in the defendant’s goods with the plaintiff’s unrelated goods.”²³⁰

Dev., 170 F.3d 449, 452 (4th Cir. 1999); *Panavision Int’l LP v. Toepfen*, 141 F.3d 1316, 1324 (9th Cir. 1998).

223. Trademark Dilution Revision Act of 2006, Pub. L. 109-312, § 120 Stat. 1730 (codified at 15 U.S.C. § 1125(c) (2012) and replacing the Federal Trademark Dilution Act, Pub. L. 104-98).

224. *V Secret Catalogue, Inc. v. Moseley*, 558 F. Supp. 2d 734, 738 (W.D. Ky. 2008).

225. 15 U.S.C. § 1125(c)(3) (2012).

226. § 1125(c)(1).

227. § 1125(c).

228. § 1125(c)(2)(B).

229. § 1125(c)(2)(C).

230. *Hormel Foods Corp. v. Jim Henson Prods., Inc.*, 73 F.3d 497, 507 (2d Cir. 1996).

2. *Tam's Analysis Applied to Trademark Dilution*

Trademark anti-dilution is not protected from a First Amendment analysis based on government speech, cannot survive the relaxed scrutiny of *Central Hudson*, and is a viewpoint-based suppression of speech. Therefore, trademark anti-dilution is actually an active suppression of speech, whereas trademark disparagement is not.

a) Trademark Anti-Dilution Is Not Protected from a First Amendment Analysis Based on Government Speech

In *Tam*, the court found that the disparagement provision of section 2(a) was not insulated from First Amendment review since there was no government speech at issue.²³¹ The same can be said for trademark anti-dilution. In trademark anti-dilution, the regulated speech are trademarks that possibly infringe on famous marks. The diluting use of the mark is not government speech. It is not the Government that creates or edits the infringing marks—it would be “far-fetched” to suggest that the regulation of these marks constituted government speech.²³²

b) Trademark Anti-Dilution Cannot Survive *Central Hudson* Review

According to *Central Hudson*, a restriction of speech must serve “a substantial interest,” and it must be “narrowly drawn.”²³³ This primarily means that “[t]he regulatory technique may extend only as far as the interest it serves.”²³⁴ In *Tam*, the Court held that the disparagement clause fails this requirement since it is overly broad.²³⁵ Trademark anti-dilution is also overly broad and fails this same *Central Hudson* requirement.

The main question in the anti-dilution context becomes: What is the “substantial interest” here and is it “narrowly drawn?” When Congress enacted the federal dilution law, it neither provided a compelling interest to sustain this restriction nor did it attempt to use the least restrictive means to achieve any

231. *Matal v. Tam*, 137 S. Ct. 1744, 1760 (2017).

232. *See id.* at 1758.

233. *Cent. Hudson Gas & Elect. v. Pub. Serv. Comm'n*, 447 U.S. 557, 564–65 (1980) (internal quotation marks omitted).

234. *Id.* at 565.

235. *Tam*, 137 S. Ct. at 1764.

such interest.²³⁶ As many commentators have posited, there is scant empirical basis for the claim that dilution harms famous marks.²³⁷

c) Trademark Anti-Dilution Is a Viewpoint-Based Restriction on Speech

Trademark law's anti-dilution provision creates a content-based right that applies to non-misleading commercial speech.²³⁸ Trademark dilution prevents the creation of unauthorized new associations with registered marks, which, in turn, can prevent consumers from forming new opinions and beliefs about marks.²³⁹ As Rebecca Tushnet so powerfully argued, allowing trademark holders to monopolize the meaning of its brand, and not just its source signification, would lead to discrimination against certain commercial speakers because of the cultural "side" on which they deploy their ads.²⁴⁰ Famous trademark holders, those traditionally considered more "mainstream," would have a robust platform in marketing their brands, while those against the mainstream and those who criticize famous marks could be enjoined from doing so. Speech that leads audiences to think about the social meaning of luxury goods, or forces them to choose from a variety of competing meanings for a particular luxury brand, is speech that should be valued under the First Amendment.²⁴¹ But instead, famous trademark holders, get to use imagery and emotional appeals to enhance their brand reputation, while others are unable to challenge that reputation.²⁴² This is not only a content-based suppression of speech, it is also a viewpoint-based suppression of speech.²⁴³ This is especially true in the case of dilution by tarnishment.

Dilution by tarnishment is an "association arising from the similarity between a mark or trade name and a famous mark that harms the reputation of the famous mark."²⁴⁴ "A trademark may be tarnished when it is linked to

236. Brief of Amicus Curiae Law Professors in Support of Defendant-Appellee at 20, *Louis Vuitton Malletier, S.A. v. My Other Bag, Inc.*, 674 F. App'x 16 (2d Cir. 2016), *cert. denied*, 138 S. Ct. 221 (2017) (No. 16-0241-cv) [hereinafter Law Professor Amicus Brief].

237. *Id.*; see Christo Boshoff, *The Lady Doth Protest Too Much: A Neurophysiological Perspective on Brand Tarnishment*, 25 J. PROD. & BRAND MGMT. 196 (2016) (finding no empirical basis for tarnishment); Robert Brauneis & Paul J. Heald, *The Myth of Buick Aspirin: An Empirical Study of Trademark Dilution by Product and Trade Names*, 32 CARDOZO L. REV. 2533 (2011) (same for dilution).

238. Law Professor Amicus Brief, *supra* note 236, at 20.

239. *Id.*

240. Rebecca Tushnet, *More than a Feeling: Emotion and the First Amendment*, 127 HARV. L. REV. 2392, 2401 (2014).

241. *Id.* (quoting *R. A. V. v. St. Paul*, 505 U.S. 377, 388–89 (1992)).

242. *Id.*

243. Law Professor Amicus Brief, *supra* note 236, at 22.

244. 15 U.S.C. § 1125(c)(2)(C) (2012).

products of shoddy quality, or is portrayed in an unwholesome or unsavory context, with the result that the public associates the lack of quality or lack of prestige in the defendant's goods with the plaintiff's unrelated goods."²⁴⁵ Tarnishment may also result from an association with obscenity, or sexual or illegal activity.²⁴⁶ "The *sine qua non* of tarnishment is a finding that plaintiff's mark will suffer negative associations through defendant's use."²⁴⁷ This is a subjective standard. Here, courts could reject a defendant's use of a mark primarily because it finds the use to be "negative" and "disparaging." In tarnishment cases involving uses of a mark related to sex or the illegal use of drugs, courts rarely require trademark holders to prove harm to sustain a claim of dilution by tarnishment.²⁴⁸ Rather, courts have adopted a virtual per se rule regarding uses of trademarks in contexts involving pornography, finding almost uniformly that such uses tarnish the image of the mark holder.²⁴⁹ On the other hand, when the allegedly tarnishing use is a non-vulgar parody or generally does not relate in any way to sex or the illegal use of drugs, the dilution plaintiff is less likely to prevail.²⁵⁰ For example, in *Pfizer Inc. v. Sachs*, the defendants' display at an adult entertainment exhibition of two models riding a VIAGRA-branded missile and distributing condoms was found to harm the reputation of Pfizer's trademark.²⁵¹ In contrast, in *Louis Vuitton Malletier v. Haute Diggity Dog*, no tarnishment was found when a person sold "Chewy Vuitton" squeaky dog toys.²⁵² Sex is disparaging and negative, puppies are not—this is a viewpoint-based suppression of speech.

d) Anti-Dilution Is an Actual Suppression of Speech

Unlike the disparagement provision of 2(a), which merely prevented registration of disparaging marks, trademark anti-dilution leads to an actual suppression of speech—as evidenced by anti-dilution's use of injunction as remedy. This makes anti-dilution, even more so than disparagement, a viewpoint-based suppression of speech. In the disparagement context, if a

245. *Hormel Foods Corp. v. Jim Henson Prods., Inc.*, 73 F.3d 497, 507 (2d Cir. 1996) (internal quotation marks omitted).

246. *Dallas Cowboys Cheerleaders, Inc. v. Pussycat Cinema, Ltd.*, 467 F. Supp. 366 (S.D.N.Y.), *aff'd*, 604 F.2d 200 (2d Cir. 1979); *Chemical Corp. of Am. v. Anheuser-Busch, Inc.*, 306 F.2d 433 (5th Cir. 1962), *cert. denied*, 372 U.S. 965 (1963).

247. *Hormel Foods*, 73 F.3d at 507.

248. Sandra L. Rierson, *The Myth and Reality of Dilution*, 11 DUKE L. & TECH. REV. 212, 247 (2013).

249. *Id.*

250. *Id.*

251. *Pfizer Inc. v. Sachs*, 652 F. Supp. 2d 512, 525 (S.D.N.Y. 2009).

252. *Louis Vuitton Malletier S.A. v. Haute Diggity Dog, LLC.*, 464 F. Supp. 2d 495 (E.D. Va. 2006).

mark was found disparaging it was barred from federal registration—it was *not* barred from use. Tam could have still used “The Slants” as his band’s name. No speech was actually suppressed. This is not true in the anti-dilution context as famous mark-holders can use injunctions to prevent others from using similar marks.

e) Anti-Dilution Law Further Implicates the First Amendment
Because It Is Both Vague and Overbroad

In *Starbucks Corp. v. Wolfe’s Borough Coffee, Inc.*, Starbucks brought suit against a small, family owned coffee shop in New Hampshire that was using the trade name “Mr. Charbucks” on a coffee blend sold in-store and over the Internet.²⁵³ After a decades long legal battle spanning from before the passage of the TDRA, the appellate court found the “Starbucks” mark both famous and distinctive, but it held that Starbucks had not demonstrated a likelihood of dilution.²⁵⁴ The court found that the marks, as used in the marketplace, were not substantially similar.²⁵⁵ Even though the court found “strong similarity” between “Starbucks” and “Charbucks,” the addition of “Mr.” to the mark, coupled with differences in the products’ logos and packaging, were sufficient to distinguish the marks to the extent that the similarities did not rise to the level of dilution.²⁵⁶ Furthermore, though Starbucks presented survey evidence that 3.1 percent of 600 consumers surveyed believed that Starbucks was a possible source for “Charbucks,” and 30.5 percent of consumers said “Starbucks” was the first thing that came to mind when they heard the name “Charbucks,” the court discounted this evidence.²⁵⁷

In another case, *Perfumebay*, eBay claimed that “Perfumebay” and “PerfumeBay” infringed and diluted the “eBay” mark.²⁵⁸ The Ninth Circuit noted that when one searched for “perfume eBay” search engines produced results for eBay.com and PerfumeBay.²⁵⁹ This was sufficient for the court to find that the “Perfumebay” mark completely incorporated the “eBay” mark.²⁶⁰ The court further held that the eBay mark was so highly distinctive that consumers would be likely to see the Perfumebay mark as essentially the same as eBay’s mark, despite their notable differences—the fact that they sound

253. *Starbucks Corp. v. Wolfe’s Borough Coffee, Inc.*, 736 F.3d 198 (2d Cir. 2013).

254. *Id.* at 213.

255. *Id.* at 211.

256. *Id.* at 208.

257. *Id.* at 202, 211.

258. *Perfumebay Inc. v. eBay, Inc.*, 506 F.3d 1165 (9th Cir. 2007).

259. *Id.* at 1170.

260. *Id.* at 1174.

different, have completely different logos, and utilize different colors.²⁶¹ This was evidenced by the fact that an expert for eBay testified that he developed a consumer survey “to measure the extent to which the word ‘bay’ used in conjunction with a common name causes or is likely to cause confusion . . . or dilution.”²⁶² According to the survey, a substantial majority of consumers, around 70 percent, believed that eBay is the company that comes to mind when they heard “bay.”²⁶³

These cases are difficult to reconcile. If anything, many might find the marks at issue in *Starbucks* to be more similar than those in *Perfumebay*. “Starbucks” and “Charbucks” are phonetically more similar to one another than “Perfumebay” and “eBay.” Furthermore, it makes little sense that adding “Mr.” to “Charbucks” made it dissimilar, and yet, adding an entire word “perfume” to “bay” was not enough to disassociate “Perfumebay” from “eBay.” Also, the term “Charbucks” on its face could evoke images of a burnt coffee which is an unsavory association that could tarnish Starbucks’s brand, yet the *Starbucks* court did not find dilution by tarnishment. Lastly, it seems confusing that the *Perfumebay* court was persuaded by survey evidence that simply showed a mental association regarding the word “bay,” while the *Starbucks* court found much stronger survey results (Charbucks to both Starbucks and coffee) insufficient to tip the balance to dilution. As demonstrated by these examples, trademark anti-dilution is unclear in application, because the statute itself is so overly broad. Furthermore, the trademark dilution analysis is a flexible test where the importance of each factor varies with the facts of each individual case.²⁶⁴ Courts employ a “cautious and gradual approach,” which favors the development of a nonexclusive list of trademark dilution factors over time.²⁶⁵ In practice, the vagueness of the dilution analysis test is influential in creating different results every time. For these reasons, trademark anti-dilution implicates the First Amendment even more than disparagement.

C. COUNTERARGUMENT: TRADEMARK ANTI-DILUTION ALLOWS FAIR USE

Proponents of federal trademark dilution law could argue that anti-dilution, unlike disparagement, is not actually a restriction on speech due to the existence of the trademark fair use doctrine.²⁶⁶ Under the TDRA, “[a]ny

261. *Id.* at 1181.

262. *Id.* at 1172.

263. *Id.*

264. *Nabisco, Inc. v. PF Brands, Inc.*, 191 F.3d 208, 227–28 (2d Cir.1999).

265. *Id.* at 217.

266. *See* 15 U.S.C. § 1125 (c)(3)(A) (2012).

fair use, including a nominative or descriptive fair use” is an exception to trademark dilution.²⁶⁷ This includes “parodying, criticizing, or commenting upon” the famous mark owner or the goods or services of the famous mark owner.²⁶⁸ The fair use doctrine in itself, however, is viewpoint based, and what constitutes a “parody” or “fair use” is a vague and subjective analysis. For example, funny parodies are more likely to survive scrutiny than those that are just stupid or incoherent,²⁶⁹ and cultural icons are likely to be shielded from obscene or repugnant mockery as opposed to other sorts of mockery.²⁷⁰ Furthermore, it is important to realize that the trademark fair use doctrine is anemic, leading to inconsistent protection of trademark rights in the circuit courts. In fact, for cases appearing before the Board, the Board has firmly stated that the fair use defense in trademark dilution cases, provided by the TDRA, cannot succeed if Defendant’s use is commercial.²⁷¹ In the case of parody, the Board has signaled that parody defenses are not likely to be successful in dilution cases, as it “[found] it virtually impossible to conceive of a situation where a parody defense to a dilution claim can succeed in a case before the Board.”²⁷² This is primarily due to the fact that when an applicant’s mark is registerable (because it is being used in commerce as a source identifier), such a use is not a noncommercial use or a fair use.²⁷³ Therefore,

267. § 1125(c)(3).

268. § 1125(c)(3)(A)(ii).

269. See Anthony L. Fletcher, *When The Joke Is on a Trademark*, LAW360 (Jan. 09, 2012), <https://www.law360.com/articles/296759/when-the-joke-is-on-a-trademark> [<https://perma.cc/EH6B-PAW5>]. Fletcher described the true instance of someone who created and sold a poster depicting a very pregnant young woman who was clothed in what appeared to be the official uniform of the Girl Scouts. The text of the poster was the official motto of the Girl Scouts organization: “Be Prepared.” The Girl Scouts sued, and lost, because the court could not believe that the public would be likely to attribute the poster or its message to the Girl Scouts. See *Girl Scouts v. Personality Posters*, 304 F. Supp. 1228 (S.D.N.Y. 1969). In contrast, when a poster substituted “ocaine” for “ola” in an “Enjoy Coca-Cola” ad, Coca-Cola suppressed the poster by finding a few consumers who testified that they actually believed there was some ratification of the message by the company. See *Coca-Cola v. Gemini Rising*, 346 F. Supp. 1183 (E.D.N.Y. 1972).

270. See *id.* (“[W]hen Cabbage Patch dolls were all the rage with young girls, a very rude, crude series of ‘Garbage Pail Kids’ stickers sold like trading cards was prohibited.”) (citing *Original Appalachian Artworks v. Topps Chewing Gum*, 642 F. Supp. 1031 (N.D. Ga. 1986)); see also *Walt Disney Prods. v. Air Pirates*, 581 F.2d 751 (9th Cir. 1978) (finding that comic book “parodies” of Disney characters failed to qualify as protected free speech).

271. *N.Y. Yankees P’ship v. IET Prods. & Servs., Inc.*, 114 U.S.P.Q.2d 1497 (T.T.A.B. 2015).

272. *Id.* at 1498.

273. *Id.*

trademark dilution fair use cannot be seen as a defense to the First Amendment concerns raised in the anti-dilution doctrine.

V. CONCLUSION: A PERVERSE IRONY

When subjected to the type of First Amendment analysis the Supreme Court applied in *Tam*, the TDRA should fail. The empirical basis for the claim that dilution harms famous marks, or indeed any mark, is lacking, and even if it were not, the law as written could not survive on constitutional grounds.²⁷⁴ This is due to the fact that Congress did not provide a compelling interest to sustain its restriction on non-misleading commercial speech when it enacted the federal dilution law, nor did it attempt to use the least restrictive means to achieve any such interest,²⁷⁵ meaning that it cannot even pass the relaxed *Central Hudson* standard. Much like disparagement, anti-dilution suffers many of the same pitfalls that the court in *Tam* found. Both disparagement and anti-dilution are not protected from First Amendment scrutiny based on government speech, both fail *Central Hudson*, and both are content and viewpoint-based restrictions on speech. As the TDRA cannot survive this constitutional standard, and there is no justifiable countervailing government interest, anti-dilution must also be found unconstitutional.

There are consequences in finding the disparagement provision of section 2(a) unconstitutional while other doctrines, such as anti-dilution, remain good law. It is inequitable to prevent vulnerable populations from objecting to disparaging marks, while allowing famous trademark holders to be vigilant in suppressing all speech that “tarnishes” their mark. Yet, this is exactly what could happen now that the disparagement provision has been found unconstitutional while trademark dilution law is still valid.

In the case of dilution, it is important to realize that trademark protection limits the free marketplace of ideas. In fact, robust protection of trademark rights could hinder free debate and criticism of the values promoted by the “famous” marks which are so pervasive in popular culture. The big question becomes “whose speech is protected?” In this case, the answer would be the owner of famous marks, typically corporations. This creates a dynamic where wealthy, powerful corporations are able to dominate conversations about brands and culture, while smaller, non-mainstream dissenters are unable to do so without the threat of a trademark dilution claim.

Meanwhile, in the backdrop of this vigilant suppression of speech by famous trademark holders, vulnerable populations remain enjoined from

274. See generally Boshoff, *supra* note 237 (finding no empirical basis for tarnishment); Brauneis & Heald, *supra* note 237.

275. Law Professor Amicus Brief, *supra* note 238, at 20.

criticizing racist, sexist, or otherwise bigoted marks that may now be registered in light of the *Tam* decision. Imagine a world in which those most defenseless, those most marginalized and oppressed, are once more unable to voice discontent with a famous mark such as the “Redskins” (or reappropriate the name for that matter) for fear of a trademark dilution claim. This seems like a perverse irony that is counter to the goals of the *Tam* court and could only be resolved by subjecting the anti-dilution provisions to *Tam*’s searching First Amendment analysis and striking them down as well.

FOURTH AMENDMENT PARTICULARITY IN THE CLOUD

Bihter Ozgedirne[†]

I. INTRODUCTION

As cloud storage has become cheaper and easily available, more and more people are choosing to utilize services that provide remote storage of their data. While the rapid adoption of cloud storage services has created conveniences for users, it also raises new privacy concerns, particularly with respect to government access to stored data under the Fourth Amendment.

The cloud raises some novel concerns about search and seizure. The amount of data that is available is vast and the service provider is used to execute searches. These issues are highlighted in the way courts have dealt with the particularity requirement of the Fourth Amendment, which requires a warrant to “particularly describ[e] the place to be searched, and the persons or things to be seized.”¹ This Note focuses on the Fourth Amendment and the particularity requirement. Part II explains the amendment and the general landscape of the particularity requirement, Part III provides background on how courts dealt with particularity for tangible property and electronic devices, and Part IV focuses on the various approaches courts have taken to the cloud and particularity. Part V sets forth recommendations for tackling the particularity issue and suggests how courts can minimize the amount of data that is disclosed to the government without unduly interfering with the government’s investigative discretion and effectiveness, and without exposing service providers to their customers’ private data.

II. FOURTH AMENDMENT AND PARTICULARITY

The Fourth Amendment ensures “the right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures.”² It specifies that warrants may be issued only upon probable cause and supported by oath. Most importantly, for the purposes of this Note, warrants must “particularly describ[e] the place to be searched, and the persons

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1. U.S. CONST. amend. IV.

2. *Id.*

or things to be seized.”³ A recent Tenth Circuit case provides a useful metric for determining whether a warrant is sufficiently particular: “[C]onsider whether the warrant’s description of items to be searched would enable the searcher to reasonably ascertain and identify the things authorized to be seized.”⁴

There are a number of reasons to limit the government’s search and seizure power. The Supreme Court emphasized these reasons in *Marron v. U.S.*, stating “the requirement that warrants shall particularly describe the things to be seized makes general searches under them impossible and prevents the seizure of one thing under a warrant describing another.”⁵ The Court has recognized that the Fourth Amendment was “the founding generation’s response to the reviled ‘general warrants’ and ‘writs of assistance’ of the colonial era, which allowed British officers to rummage through homes in an unrestrained search for evidence of criminal activity.”⁶

The constraints imposed by the “particularity requirement” are rather straightforward when applied to physical evidence. If, for example, officers requested a warrant for particular documents believed to be in a house, they may obtain a warrant to search the entire house, but they would not be able to request a warrant authorizing them to seize the entire contents of the home. Such a search would be too broad and would effectively enable a general search warrant. Instead, due to the particularity requirement, they would need to describe both the property to be searched as well as the kinds of documents and other property to be seized.⁷

The particularity requirement is more flexible for electronically stored information. The 2009 amendment to Rule 41 of the Federal Rules of Criminal Procedure endorses a two-step process for the search and seizure of such information. Per the rule, a warrant may authorize the seizure of electronic storage media for later review.⁸ In practice this leads law enforcement agents to seize entire bodies of electronic media and review the information at a later date to determine whether it is consistent with the scope of the warrant.⁹ This approach means law enforcement seizes and searches a large quantity of irrelevant but possibly very private data. This situation is likely to become more

3. *Id.*

4. *United States v. Dunn*, No. 15-1475, 2017 WL 6349439, at *1 (10th Cir. 2017).

5. *Marron v. U.S.*, 275 U.S. 192, 196 (1927).

6. *Riley v. California*, 134 S. Ct. 2473, 2494 (2014).

7. FED. R. CRIM. P. 41(e)(2).

8. *Id.* at 41(e)(2)(B).

9. Orin S. Kerr, *Executing Warrants for Digital Evidence: The Case for Use Restrictions on Nonresponsive Data*, 48 TEX. TECH. L. REV. 1, 7 (2015).

prevalent as individuals rely on cloud storage to serve as virtual file-cabinets and as the seize first, search later approach is extended to data in cloud storage.

This application of the rule to electronically stored data has not gone unquestioned. Magistrate Judge Facciola, from the United States District Court for the District of Columbia, expressed concern with the initial broad collection of data.¹⁰ The 2009 amendment to Rule 41 was introduced to allow law enforcement to sort through large amounts of data, a lengthy process that justifies the two-step process of data collection.¹¹ Judge Facciola argues there are more efficient ways to conduct this process and the standard language in warrants “insisting that the agents must open every file and folder may simply be incorrect and therefore an illegitimate premise for the kind of searching law enforcement will actually do.”¹²

III. PARTICULARITY BEFORE THE CLOUD

A. PARTICULARITY FOR PHYSICAL ITEMS

“Physical data” is used as a catchall term in this Note to encompass traditionally physical sources of data, such as documents and other tangible and non-electronic sources of evidence. A review of how courts have handled particularity in this realm is relevant to understand the evolution of particularity and determine whether aspects of these cases can be applied in the cloud context.

Various cases have provided a framework by which search warrants can comply with the particularity requirement.¹³ Generally, this means both the description of the location and item(s) to be seized must be specific to some degree. For example, in *United States v. Alberts* the warrant stated that “certain large green garbage bags” were believed to be located at the residence of Linda Alberts Thompson.¹⁴ The green bags were ultimately found and seized at the residence of Laverne Goodbird.¹⁵ The court found nothing in the warrant that would support searching this second residence. Thus, the description “certain large green garbage bags” was not sufficient to satisfy the

10. *In re Search of Info. Assoc. with the Facebook Account Identified by the Username Aaron.Alexis*, 21 F. Supp. 3d 1, 8 (D.D.C. 2013).

11. *See* FED. R. CRIM. P. 41(e)(2).

12. *See Aaron.Alexis*, 21 F. Supp. 3d at 11.

13. *See, e.g., United States v. Alberts*, 721 F.2d 636, 639 (8th Cir. 1983) (“A search warrant must contain a description of the place to be searched. The place must be described with sufficient particularity as to enable the executing officer to locate and identify it with reasonable effort.”).

14. *Id.* at 638.

15. *Id.* at 639.

particularity requirement—the description of the garbage bags was not insufficient, but the description did not include a description of the place to be searched.¹⁶ While the garbage bags were identified, the warrant failed to include information about where the garbage bags were located. “Such specificity is required in order to avoid any reasonable probability that another place might mistakenly be searched.”¹⁷

In *Steele v. United States*, the Supreme Court addressed both aspects of the particularity requirement, the place to be searched and the things to be seized.¹⁸ The warrant for the seizure of alcohol was issued after an officer had seen cases of whiskey being unloaded in front of a building.¹⁹ The defendant claimed the building that was searched was improperly identified in the warrant as a garage and place of business. The Court disagreed, finding the description of the location accurate. The Court clarified that “it is enough if the description is such that the officer with a search warrant can, with reasonable effort ascertain and identify the place intended.”²⁰ Additionally, the Court found the description of the property to be seized as sufficient. The warrant referred to “cases of whiskey” and although the cases that were ultimately seized may not have been the exact cases that officers saw being delivered, the Court found the description to be specific enough.²¹

A number of cases have also tackled the issue of imprecise descriptions of property to be searched. In *United States v. Brakeman*, a warrant was issued to search a mobile home.²² The affidavit provided the address, 205 Monksdale, and a description of the property, thus identifying the place to be searched.²³ Later evidence showed this description was ambiguous; 205 Monksdale was the address of the owner of the mobile park and the defendant’s neighbor and landlord. Despite the confusion, the officer was familiar with the property and only searched the defendant’s mobile home. The *Brakeman* court held that the warrant’s description was sufficiently particular, because it described the mobile home in detail and the defendant admitted his property was “physically” at the address listed on the affidavit.²⁴ The court did not take issue with the fact that the officer relied on his knowledge when executing the

16. *Id.*

17. *Id.*

18. *Steele v. United States*, 267 U.S. 498, 499 (1925).

19. *Id.*

20. *Id.* at 502.

21. *Id.*

22. *United States v. Brakeman*, 475 F.3d 1206, 1208–09 (10th Cir. 2007).

23. *Id.* at 1209.

24. *Id.* at 1211.

warrant because the officer's knowledge was not the "sole means of determining what property [was] to be searched."²⁵

A number of courts have also addressed the question of particularity when the warrant provides for a rather expansive search. In *United States v. Ulbricht*, the Second Circuit made it clear that breadth and particularity are distinct concepts and that the breadth of a warrant may be wide without violating the particularity requirement.²⁶ The Second Circuit noted that a warrant authorizing the search of an entire home could be sufficiently particular if "there is probable cause to believe that evidence relevant to that activity may be found anywhere in the residence."²⁷ Similarly, in *U.S. v. Bradley*, the Eleventh Circuit held that a warrant to search all of a business's records was sufficiently particular because traces of the alleged illegal activity "were likely to be found spread out amongst the myriad of records in [the company's] possession."²⁸

However, the Supreme Court has noted that officials "must take care to assure that [searches] are conducted in a manner that minimizes unwarranted intrusions upon privacy."²⁹ Minimization is an established requirement for electronic surveillance,³⁰ but is less commonly discussed in the context of warrants for physical items. Even so, the Court has made it clear that court-approved restraint during a search is necessary³¹ and has taken issue with other examples of surveillance where the amount of collected information was not minimized.³²

25. *Id.* at 1211–12.

26. *United States v. Ulbricht*, 858 F.3d 71, 102 (2d Cir. 2017).

27. *Id.*

28. *United States v. Bradley*, 644 F.3d 1213, 1259–60 (11th Cir. 2011).

29. *Andersen v. Maryland*, 427 U.S. 463, 482 n.11 (1976).

30. 18 U.S.C. § 2518(5) (2012) ("Every order and extension . . . shall be conducted in such as a way as to minimize the interception of communications not otherwise subject to interception under this chapter.").

31.

It is apparent that the agents in this case acted with restraint. Yet the inescapable fact is that this restraint was imposed by the agents themselves, not by a judicial officer . . . In the absence of such safeguards, this Court has never sustained a search upon the sole ground that officers reasonably expected to find evidence of a particular crime and voluntarily confined their activities to the least intrusive means consistent with that end.

See Katz v. United States, 389 U.S. 347, 356–57 (1967).

32. *See Berger v. New York*, 388 U.S. 41, 58–60 (1967) (noting that the two-month duration of the eavesdropping and the lack of termination date was problematic, and that "the statute's blanket grant of permission to eavesdrop is without adequate judicial supervision or protective procedures").

B. PARTICULARITY FOR ELECTRONIC DEVICES

Electronic devices, such as computers, tablets, and cellphones are distinct from “physical data” because they have the ability to store vast amounts of information.³³ Due to this quality and the hectic environment in which warrants are usually served, the Federal Rules of Criminal Procedure authorize a two-step process for the search and seizure of electronically stored information.³⁴ Step one involves “the seizure of electronic storage media or the seizure or copying of electronically stored information,” while step two involves “later review of the media or information consistent with the warrant.”³⁵ This process is meant to address some of the practical constraints of warrant execution, such as law enforcement’s inability to review the large quantity of information stored on electronic devices on site.³⁶

Courts and commentators alike have recognized that seizing electronic data results in over-collection and both have struggled to balance the conflicting demands of particularity and conducting a thorough search. One proposed solution is the elimination of the plain view doctrine, which allows officers, under certain circumstances, to seize evidence in plain view without a warrant.³⁷ Professor Orin Kerr, who proposed this in a 2005 article³⁸ has, however, since rescinded the idea.³⁹ Kerr identified eliminating the doctrine as the simplest, yet most draconian approach, where all evidence beyond the scope of a warrant would be suppressed, thus eliminating the potential for over-collection.⁴⁰ Since then, a variety of other solutions have been put forth, which, rather than reflecting a wholesale rejection of the plain view doctrine, try to resolve the privacy concerns that originate from the doctrine in other ways. The rise of cloud storage and its growing centrality in the way businesses and individuals generate and store data and communications both exacerbates

33. See Kevin Golembiewski, *All Data Are Not Created Equal: Upholding the Fourth Amendment’s Guarantees When Third Party Consent Meets the Shared Electronic Device*, 56 WASHBURN L.J. 35 (2017) (noting that “our smartphones, laptops, tablets, and desktop computers have the capacity to store ‘millions of pages of text, thousands of pictures, or hundreds of videos.’ Given this capacity and the extent to which we rely on these types of electronic devices in our daily lives, such devices ‘carry a cache of sensitive personal information’ that is historically unparalleled”).

34. FED. R. CRIM. P. 41(e)(2)(B).

35. *Id.*

36. *Id.* at 41 (2009 Amendments).

37. See *Coolidge v. New Hampshire*, 403 U.S. 443, 444 (1971).

38. See Orin Kerr, *Searches and Seizures in a Digital World*, 119 HARV. L. REV. 531, 582–83 (2005).

39. See Kerr, *supra* note 9 at 3–4.

40. Kerr, *supra* note 38 at 582–83.

the privacy concern and presents some unique characteristics that have not been explored fully by legal scholars.

The Supreme Court acknowledged that electronic devices are different from “physical items” in *Riley v. California*.⁴¹ While the case centered on whether law enforcement are required to obtain a warrant to search digital information on a cell phone, the Court also discussed what makes electronic devices distinct.⁴² The Court noted the capacity of devices such as cell phones to store vast amounts of data that can date back a number of years and convey more information than physical records.⁴³ Although the Court stated unequivocally that this information is not immune from search, it noted the different nature of cell phones.

Courts have tackled the particularity requirement in relation to electronic devices and scholarship has noted the importance of the requirement in relation to cell phone searches.⁴⁴ In *United States v. Ganius*, the Second Circuit addressed concerns about the retention of seized data.⁴⁵ Federal law enforcement were investigating Ganius’s clients and seized files containing Ganius’s personal financial records in the process. Officials assured Ganius his records would be purged once they searched the relevant files, but his records were retained, and law enforcement began looking into the financial irregularities found in them. After the record had been in the government’s possession for two-and-a-half years, the government obtained another warrant to search and preserve Ganius’s records.⁴⁶ The Second Circuit highlighted the issue of particularity, stating that “if the Government could seize and retain non-responsive electronic records indefinitely, so it could search them whenever it later developed cause, every warrant to search for particular electronic data would become, in essence, a general warrant.”⁴⁷ The Second Circuit later decided, en banc, that the government relied on good faith⁴⁸ and thus did not decide on whether the government violated the Fourth

41. See *Riley v. California*, 134 S. Ct. 2473, 2478 (2014).

42. *Id.* at 2477.

43. *Id.*

44. See generally Adam M. Gershowitz, *The Post-Riley Search Warrant: Search Protocols and Particularity in Cell Phone Searches*, 69 VAND. L. REV. 585 (2016).

45. *United States v. Ganius*, 755 F.3d 125 (2d Cir. 2014), *aff’d*, 792 F.3d 290 (2d Cir. 2015).

46. *Id.* at 128.

47. *Id.* at 139.

48. Good faith is an exception established by the Supreme Court, whereby “the Fourth Amendment exclusionary rule should be modified so as not to bar the use in the prosecution’s case in chief of evidence obtained by officers acting in reasonable reliance on a search warrant issued by a detached and neutral magistrate but ultimately unsupported by probable cause.” See *United States v. Leon*, 468 U.S. 897, 900 (1984).

Amendment.⁴⁹ Regardless, the discussion on the applicability of the particularity requirement to seized data shows the court grappling with technological developments.

The D.C. Circuit, in *United States v. Griffith*, also addressed the unique concerns raised by the application of the particularity requirement to electronic device searches.⁵⁰ The warrant in question “authorized officers to search for and seize *all* cell phones and other electronic devices” in the defendant’s residence.⁵¹ The court was concerned that the seizure of all devices violated the particularity requirement, noting that “a warrant with an ‘indiscriminate’ sweep is ‘constitutionally intolerable.’”⁵² It ultimately held that officers lacked probable cause to seize all devices and found the warrant overbroad.⁵³ Although these kinds of searches are often permissible under step one of the two-step procedure in Rule 41, the court here noted a lack of probable cause. While most individuals own cellphones, the affidavit in this case did not provide any indication that the defendant owned a cell phone, or that incriminating evidence would be found on a phone.⁵⁴ The court also noted that electronic devices are distinct from other objects police may seize. Unlike items such as drugs or weapons that are obvious contraband, electronic devices are lawful objects. The “courts have allowed more latitude in connection with searches for contraband items . . . [and] the understanding is different when police seize innocuous objects.”⁵⁵ The court still provided some flexibility however, stating that there are circumstances when law enforcement may have more latitude to conduct a cursory search of electronic devices to determine their relevance to the investigation, such as when they lack specific information about the make and model.⁵⁶

In *In re Cellular Telephones*, Magistrate Judge Waxse proposed using search protocols as a way to satisfy the particularity requirement.⁵⁷ Waxse denied a search warrant to the Drug Enforcement Agency for “names, addresses, telephone numbers, text messages, digital images, video depictions, or other identification data” located on five cell phones.⁵⁸ While the court was clear that

49. *United States v. Ganius*, 824 F.3d 199 (2d Cir. 2016) (case decided en banc at the court’s own request).

50. *United States v. Griffith*, 867 F.3d 1265 (D.C. Cir. 2017).

51. *Id.* at 1268 (emphasis added).

52. *Id.* at 1275.

53. *Id.* at 1277.

54. *Id.* at 1272–73.

55. *Id.* at 1276 (internal citation and quotation removed).

56. *Id.*

57. *In re Cellular Telephones*, No. L4-MJ-8017-DJW, 2014 WL 7793690, at *1 (D. Kan. 2014).

58. *Id.*

search protocols might not be necessary for all warrants, it held that in many cases “the only feasible way to specify a particular ‘region’ of the computer will be by specifying how to search.”⁵⁹ The court felt this approach was necessary due to the amount of information that could be collected.⁶⁰

IV. PARTICULARITY IN THE CLOUD

The cloud—or cloud computing, to be more accurate—“is a model for enabling ubiquitous, convenient, on-demand network access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications, and services).”⁶¹ The cloud has had revolutionary significance and “few trends in information technology (IT) have had a greater impact than the rising of cloud computing.”⁶² Corporations and individuals alike rely heavily on the cloud.⁶³ A number of companies, such as Google, Amazon, and Microsoft, also host cloud services for companies and individuals.⁶⁴ For example, Snapchat uses Google’s cloud services and many consumers’ e-mails, social media, and gaming services are stored on the cloud.⁶⁵ In practical terms, this means that individuals and corporations store large amounts of data with third-party service providers.⁶⁶

The amount of information available for disclosure through cloud storage challenges courts to address privacy concerns and prevent general warrants. Courts have struggled to translate the language of the Fourth Amendment and

59. *Id.* at *8.

60. *Id.* at *11.

61. Peter Mell & Timothy Grance, *The NIST Definition of Cloud Computing*, NAT’L INST. STANDARDS & TECH. (NIST Special Publication 800-145, Sept. 2011), at 2.

62. Dan Cordingley, *The Next Phase of the Cloud Computing Revolution Is Here*, FORBES (Aug. 11, 2017), <https://www.forbes.com/sites/forbestechcouncil/2017/08/11/the-next-phase-of-the-cloud-computing-revolution-is-here/#6db74db46a16> [<https://perma.cc/6XXU-P2QW>].

63. See Philip Guido, *Three Companies That Transformed Their Business Using Cloud Computing*, FORBES (Nov. 3, 2014), <https://www.forbes.com/sites/ibm/2014/11/03/three-companies-that-transformed-their-businesses-using-cloud-computing/#106c5b361b66> [<https://perma.cc/86UV-C8G6>].

64. See, e.g., Barb Darrow, *How These Fortune 500 Companies Are Moving to the Cloud*, FORTUNE (July 19, 2006), <http://fortune.com/2016/07/19/big-companies-many-clouds/> [<https://perma.cc/UKG2-62V3>].

65. See Quentin Hardy, *The Era of Cloud Computing*, N.Y. TIMES (June 11, 2014), <https://bits.blogs.nytimes.com/2014/06/11/the-era-of-cloud-computing/> [<https://perma.cc/3YDX-JKA5>].

66. For example, many individuals use services like Google Drive, which provides 15 GB of free storage. See GOOGLE DRIVE, <https://www.google.com/drive/> (last visited Mar. 18, 2018) [<https://perma.cc/56HT-HHFL>].

the requirements set by Rule 41 of the Federal Rules of Criminal Procedure to cloud content. This issue has not yet attracted the attention of legal scholars.

Magistrate Judge Facciola summarized the issue in a 2014 case about an Apple e-mail account search, taking issue with the breadth of the initial disclosure, which he labeled an “exploratory rummaging.”⁶⁷ The Fourth Amendment’s purpose is to prevent general warrants and the type of rummaging and privacy invasion that such a warrant would provide. Here, Judge Facciola feared that allowing the government to seize a large amount of e-mails for which they had not established probable cause would amount to issuing a general warrant.⁶⁸

In addition to the matter of sheer volume, government access to cloud storage has another unique aspect: the role of the service provider. Unlike search warrants for traditionally physical data or electronic devices, warrants for cloud content are served on the service providers, who are then responsible for handling the legal process.⁶⁹ The introduction of the third-party service provider results in a very different approach to the execution of the warrant. As discussed in Part III, warrants for digital evidence stored on local devices are normally executed in two stages.⁷⁰ Warrants for cloud content present a challenge to this framework because the execution of the warrant involves a four, rather than two-step process. In the cloud context, the steps are as follows: (1) the service provider searches for the requested content; (2) the service provider seizes the content and turns it over to law enforcement; (3) law enforcement searches the content for relevant information; and (4) law enforcement seizes the relevant content. Reframing the execution steps in this manner provides a clearer framework for investigating particularity concerns.⁷¹

67. See *Matter of Search of Info. Associated with [Redacted]@mac.com that is Stored at Premises Controlled by Apple, Inc.*, 13 F. Supp. 3d 145, 149 (D.D.C. 2014) *vacated sub nom.* *Matter of Search of Info. Associated with [redacted]@mac.com that is Stored at Premises Controlled by Apple, Inc.*, 13 F. Supp. 3d 157 (D.D.C. 2014).

68. *Id.* at 153.

69. *Transparency Report Help Center, Legal Process for User Data Requests FAQ*, GOOGLE, <https://support.google.com/transparencyreport/answer/7381738?hl=en> [<https://perma.cc/J3BM-MYJF>] [hereinafter *Google Transparency Report Help Center*].

70. FED. R. CRIM. P. 41(e)(2)(B) (“A warrant under Rule 41(e)(2)(B) may authorize the seizure of electronic storage media or the seizure or copying of electronically stored information. Unless otherwise specified, the warrant authorizes a later review of the media or information consistent with the warrant. The time for executing the warrant in Rule 41(e)(2)(A) and (f)(1)(A) refers to the seizure or on-site copying of the media or information, and not to any later off-site copying or review.”).

71. See *[Redacted]@mac*, 13 F. Supp. 3d at 153 (clarifying that the two-step procedure should be a narrow exception and applied “only because there is no alternative that would allow the government to access the data for which it does have probable cause”).

Courts have adopted at least four different approaches and solutions to the particularity problem: (1) the “hands off” approach; (2) the “service provider participation” approach; (3) the “ex ante restrictions” approach; and (4) the “plain view and use restrictions” approach. Some courts have chosen to apply one of these approaches, while other courts have combined multiple approaches.

A. THE “HANDS OFF” APPROACH

The “hands off” approach is exemplified by deference to the government and wariness to minimize search warrants. Minimization is a term used frequently when discussing particularity and refers to ways to limit “unwarranted intrusions upon privacy.”⁷² Courts that follow the “hands off” approach are likely to grant search warrants that require the disclosure of entire e-mail accounts and consider the warrant sufficiently particular regarding the “things to be seized.”⁷³

This approach was taken in *United States v. Bowen*, where the government executed search warrants on the defendants’ e-mail accounts.⁷⁴ The court denied the defendants’ motion to “suppress the results of the searches of their e-mail accounts on the grounds that the warrants authorizing those searches lacked sufficient particularity in describing the items to be seized.”⁷⁵ The court held that it was “ill-suited to constrain law enforcement to certain search-terms or methodologies in advance.”⁷⁶ The court reasoned that search terms would constrain the data collection in a manner that could result in law enforcement missing key information, particularly when suspects use code words or untraditional labels to code their documents.⁷⁷ The court rejected ex ante limitations on how the government handles seized data for similar reasons.⁷⁸ The court also rejected requiring the service provider to minimize data collection at the initial search and seizure stages, finding that the Fourth Amendment does not require law enforcement to “delegate a pre-screening function to the Internet service provider or to ascertain which e-mails are relevant before copies are obtained from the Internet service provider.”⁷⁹

72. See Kerr, *supra* note 9, at 18 (recommending use restrictions as a way to minimize intrusion upon privacy for computer searches).

73. See U.S. CONST. amend. IV.

74. *United States v. Bowen*, 689 F. Supp. 2d 675 (S.D.N.Y. 2010).

75. *Id.* at 68.

76. *Id.*

77. *Id.*

78. *Id.* (“To limit the government’s computer search methodology ex ante would ‘give criminals the ability to evade law enforcement scrutiny simply by utilizing coded terms in their files or documents’ or other creative data concealment techniques.”).

79. *Id.* at 682.

Magistrate Judge Gorenstein took a similar approach a few years later in *In the Matter of a Warrant for All Content*, this time regarding a search warrant on an e-mail account of a suspected money launderer.⁸⁰ The search warrant directed the service provider to provide “all content and other information within the Provider’s possession, custody, or control associated with the e-mail account, including all e-mails sent, received, or stored in draft form, all address book information, and a variety of other information associated with the account.”⁸¹ The warrant stated that law enforcement was going to investigate the disclosed data in order to locate specific categories of evidence, but the warrant did not include a search protocol, time limit for the search, or information about the destruction of nonresponsive data.⁸² Judge Gorenstein was explicit in that he did not view seizing an entire e-mail account as a general search and noted that “ample case authority sanctions some perusal . . . of documents . . . in order for the police to perceive the relevance of the documents to crime.”⁸³ Thus, the “perusing” that would result from an initial collection would not be a general search if it was limited in some fashion. Judge Gorenstein was also clear that he would not impose a time restriction on the government because the government may need to retain the materials as the investigation unfolds.⁸⁴ Instead of establishing a new rule to address the broad collection of data, he chose to rely on existing remedies such as suppression of evidence,⁸⁵ civil damages actions, and a motion to return property under Rule 41(g).⁸⁶

Both courts dismissed the need for a more particularized warrant by citing technical limitations and practicality concerns. The *Bowen* court dismissed the possibility of a service provider limiting the data disclosure, stating that “because of time restraints and insurmountable technical limitations, such

80. *In the Matter of a Warrant for All Content & Other Info. Associated with the E-mail Account xxxxxxxx@gmail.com Maintained at Premises Controlled By Google, Inc.* 33 F. Supp. 3d 386 (S.D.N.Y. 2014).

81. *Id.* at 388 (internal quotation marks omitted).

82. *Id.*

83. *Id.* at 391.

84. *Id.* at 398.

85. Evidence may be suppressed through a motion to suppress. *See* WAYNE R. LAFAVE, SEARCH AND SEIZURE: A TREATISE ON THE FOURTH AMENDMENT § 11.2 (5th ed. 2017) (“The motion to suppress is the device by which the issue of whether evidence should be excluded because obtained in violation of the Fourth Amendment is ordinarily raised in a criminal case.”).

86. *Id.* at 399; FED. R. CRIM. P. 41(g) (“A person aggrieved by an unlawful search and seizure of property or by the deprivation of property may move for the property’s return. The motion must be filed in the district where the property was seized. The court must receive evidence on any factual issue necessary to decide the motion. If it grants the motion, the court must return the property to the movant, but may impose reasonable conditions to protect access to the property and its use in later proceedings.”).

searches cannot be carried out at the time the warrant is executed at the premises.”⁸⁷ Judge Gorenstein took this view a step further in *In the Matter of a Warrant for All Content*, stating, “We perceive no constitutionally significant difference between the searches of hard drives . . . and searches of e-mail accounts.”⁸⁸

These courts disregarded the fundamental difference between executing search warrants for electronic devices and cloud storage. These courts’ justifications address the practical concerns of executing a search warrant for devices: such a warrant is generally executed with multiple people around and in an environment that is likely to be hectic and not conducive to the careful investigation of the evidence.⁸⁹ This situation provides sufficient justification for why the seizure of an entire device, regardless of whether the device contains information beyond the scope of the warrant, still satisfies the particularity requirement. It is unlikely that law enforcement can sift through all of the information stored on a device or devices at the scene. Thus, a later review of the seized data is a practical solution.

These constraints, however, do not exist in the cloud context and the courts have committed an error in failing to acknowledge this difference. Search warrants for cloud content are not served on a suspect’s premises or in a crowded environment and are not executed by law enforcement, in the traditional sense. Instead, the warrant is typically delivered to a service provider, which collects and discloses the requested data to law enforcement.⁹⁰ Thus, the concerns cited to justify the initial broad collection in the electronic devices context do not apply. Service providers are not processing these warrants in a hectic manner or in distracting conditions. The Eleventh Circuit

87. See *United States v. Bowen*, 689 F. Supp. 2d 675, 682 (S.D.N.Y. 2010) (citing *United States v. Vilar*, No. S305CR621KMK, 2007 WL 1075041, at *35 (S.D.N.Y. Apr. 4, 2007)).

88. See *xxxxxxx@gmail.com*, 33 F. Supp. 3d at 394.

89. See *Bowen*, 689 F. Supp. 2d at 681 (noting “[I]n most instances, there is no way for law enforcement or the courts to know in advance how a criminal may label or code his computer files and/or documents which contain evidence of criminal activities”); *xxxxxxx@gmail.com*, 33 F. Supp. 3d at 392 (noting that “[i]n the case of electronic evidence, which typically consists of enormous amounts of undifferentiated information and documents, courts have recognized that a search for documents or files responsive to a warrant cannot possibly be accomplished during an on-site search”).

90. See *Google Transparency Report Help Center*, *supra* note 69 (“Does Google give governments direct access to user data? We require that requests for user data be sent to Google directly What does Google do when it receives a legal request for user data? When we receive such a request, our team reviews the request to make sure it satisfies legal requirements and Google’s policies. Generally speaking, for us to produce any data, the request must be made in writing, signed by an authorized official of the requesting agency and issued under an appropriate law.”).

noted this distinction, stating, “[h]ard drive searches require time-consuming electronic forensic investigation . . . and conducting that kind of search in the defendant’s home would be impractical . . . by contrast, when it comes to Facebook account searches, the government need only send a request with the specific data sought and Facebook will respond with precisely that data.”⁹¹ Service providers have the flexibility and time that is usually not available when executing a warrant. This markedly different environment raises questions about the justification provided in both *Bowen* and Judge Gorenstein’s opinion and shows that cloud content is in fact different from electronic devices.

B. THE “SERVICE PROVIDER PARTICIPATION” APPROACH

The second approach relies on service providers to limit the amount of data provided to the government. Courts have employed two methods: (1) requiring a temporal limitation in the warrant, and (2) requiring the service provider to filter content by turning over, for example, only e-mail to or from particular persons. Some courts have chosen to implement both methods, while others only required one.⁹²

The Eleventh Circuit and the Middle District of Alabama have employed temporal limitations in order to address particularity concerns. In *Blake*, the Eleventh Circuit addressed search warrants that were served on the defendant’s Facebook account.⁹³ The warrants were part of an investigation into the members of a suspected prostitution ring.⁹⁴ The warrants required Facebook “to disclose to the government virtually every type of data,” including every sent and received private instant message, every IP address that the accounts had logged in from, every uploaded photograph or photograph in which the defendant was tagged, the name of every public and private group the defendants were a member of, every search conducted on the website, every purchase made through the “Facebook Marketplace,” and the defendants’ entire “friends” list.⁹⁵ The warrants did not provide a timeframe by which to limit the disclosures and thus were not limited to the time period in which the alleged illegal activity occurred.⁹⁶

The Court concluded that such broad disclosure was unnecessary and suggested alternatives that the government could have explored.⁹⁷ Instead of

91. United States v. Blake, 868 F.3d 960, 974 (11th Cir. 2017).

92. See, e.g., *Blake*, 868 F.3d 960.

93. *Id.* at 967.

94. *Id.* at 966.

95. *Id.*

96. *Id.* (“[O]ne warrant asked for all data ‘from the period of the creation of the account’ and the other did not specify what period of time was requested.”).

97. *Id.* at 974.

requesting all private messages, the Court suggested the warrants could have “limited the request to messages sent to or from persons suspected at that time . . . [and] should have requested data only from the period of time during which [the defendant] was suspected of taking part in the prostitution conspiracy.”⁹⁸

The Court also rejected an oft-used justification for this type of broad collection, that searches of this kind are time-consuming and the initial over-collection is necessary to conduct the search in a calmer environment.⁹⁹ The Court acknowledged that these concerns are not entirely present in the cloud context.¹⁰⁰ Nevertheless, the court ultimately affirmed the district court’s decision not to suppress the evidence.¹⁰¹ The court acknowledged “the warrants may have violated the particularity requirement,” but did not find it unequivocally so because “the warrants were not so facially deficient that the FBI agents who executed them could not have reasonably believed them to be valid.”¹⁰²

The Middle District of Alabama also required a temporal limitation on a search warrant seeking cloud content, this time in a case involving a scheme to defraud using stolen identities.¹⁰³ The search warrant in question sought “the contents of all e-mails associated with the account, including stored or preserved copies of e-mails sent to and from the account,” session and IP information, address book information, and all location data, among other types of content.¹⁰⁴ Citing *Blake*, the court took issue with the lack of temporal limitations and required that the warrants prohibit the disclosure of account data prior to January 1, 2015.¹⁰⁵ In addition to a broad temporal limitation, the court also required a stricter limitation to be implemented on a case-by-case basis. This stricter limitation was “based on an assumption that data from three months before the first activity the Government currently has evidence of, and the three months after the last, would more particularly describe the time

98. *Id.*

99. *Id.*

100. *Id.* at 974 (“Hard drive searches require time-consuming electronic forensic investigation with special equipment, and conducting that kind of search in the defendant’s home would be impractical . . . when it comes to Facebook account searches, the government need only send a request with the specific data sought and Facebook will respond with precisely that data.”).

101. *Id.*

102. *Id.* (internal quotes omitted).

103. *United States v. Search of Info. Assoc. with Fifteen E-mail Addresses*, No. 2:17-CM-3152-WC, 2017 WL 4322826, at *1 (M.D. Ala. Sept. 28, 2017).

104. *Id.* at *2–3.

105. *Id.* at *5.

period of information to be searched.”¹⁰⁶ The court did not provide further guidance on how to implement this case-by-case search.

Both courts provided similar reasons for imposing a temporal restriction. They noted the amount of disclosed data was troubling¹⁰⁷ and the Alabama court also found the government had not established probable cause for a disclosure beyond a certain date range.¹⁰⁸ Both courts highlighted that the main issue with the “hands off” approach was that it would allow the search of e-mail accounts from the time of their creation, and instead proposed a limitation that is straightforward and simple to apply and does not require the service provider to play a very active role. A service provider can implement a temporal limitation without expertise on investigative techniques or knowledge of the crime at hand.

In these cases, the government was willing to accept temporal limits, at least when pressed by judges. In fact, in the Alabama case, the government itself proposed limiting the timeframe of the initial collection.¹⁰⁹ This is a significant development and bodes well for the potential standardization of temporal limitations.

The Eleventh Circuit in *Blake* and a number of district courts have proposed additional methods of satisfying the particularity requirement through the service provider.¹¹⁰ These methods require the provider to take a more involved approach and restrict the content that is being disclosed at a finer level.¹¹¹ While temporal restrictions only require the service provider to select a timeframe, these additional methods require the provider to determine which content is responsive to the search warrant. This could take the form of

106. *Id.* at *6.

107. *See* United States v. Blake, 868 F.3d 960, 974 (11th Cir. 2017); *see also* *Fifteen E-mail Addresses*, 2017 WL 4322826, at *6.

108. *Fifteen E-mail Addresses*, 2017 WL 4322826, at *7.

109. *Id.* at *14.

110. *See* United States v. Blake, 868 F.3d 960, 974 (11th Cir. 2017); United States v. Comprehensive Drug Testing, Inc., 621 F.3d 1162, 1179 (9th Cir. 2010); United States v. Galpin, 720 F.3d 436, 451 (2d Cir. 2013); United States v. Mann, 592 F.3d 779, 786 (7th Cir. 2010); United States v. Khanani, 502 F.3d 1281, 1290–91 (11th Cir. 2007).

111.

With respect to private instant messages, for example, the warrants could have limited the request to messages sent to or from persons suspected at that time of being prostitutes or customers. And the warrants should have requested data only from the period of time during which Moore was suspected of taking part in the prostitution conspiracy. Disclosures consistent with those limitations might then have provided probable cause for a broader, although still targeted, search of Moore’s Facebook account.

See Blake, 868 F.3d at 974.

filtering e-mails to and from certain individuals, or other methods. Regardless of the specific method, they all place the initial responsibility of determining the responsiveness of the content on the service provider.

Other courts have been a bit clearer and more proactive in the type of content that service providers should screen. The *Blake* court stated the warrants should have been limited to messages sent to or from suspected persons,¹¹² while the District of the District of Columbia in *Aaron.Alexis* ordered Facebook to limit disclosure to “information about [the suspect’s] account and the content of messages that he sent” and to only disclose records of communication between third parties, rather than the content of the communications.¹¹³

The same court proposed an even more proactive approach a year later, in an order that was ultimately vacated.¹¹⁴ Nevertheless, the order presented a new and unique approach that is worth exploring. The case involved a search warrant where the government requested all information associated with an Apple e-mail account within a certain timeframe.¹¹⁵ Despite the temporal limitation, the judge took issue with the breadth of the initial disclosure, labeling the government’s request a “general warrant,” or an “exploratory rummaging in a person’s belongings.”¹¹⁶ Because the court defined any e-mail turned over to the government as “seized,” it required the government to establish probable cause, not only for the account in question, but the individual disclosed messages.¹¹⁷ The court’s proposed solution involved the service provider, Apple, conducting the initial search of the account and turning over only the relevant data it discovered.¹¹⁸ The court felt the Fourth Amendment required this approach “because nothing else will eliminate the present certainty that the government will unconstitutionally seize data for which it has not established probable cause to seize.”¹¹⁹

These restrictions present interesting options to meet the particularity requirement. It is important to note, however, that placing these restrictions

112. *See id.*

113. *In re Search of Info. Associated with Facebook Account Identified by Username Aaron.Alexis that is Stored at Premises Controlled by Facebook, Inc.*, 21 F. Supp. 3d 1, 5 (D.D.C. 2013).

114. *Matter of Search of Info. Associated with [Redacted]@mac.com that is Stored at Premises Controlled by Apple, Inc.*, 13 F. Supp. 3d 145 (D.D.C. 2014), *vacated sub nom. Matter of Search of Info. Associated with [redacted]@mac.com that is Stored at Premises Controlled by Apple, Inc.*, 13 F. Supp. 3d 157 (D.D.C. 2014).

115. *[Redacted]@mac*, 13 F. Supp. 3d at 145, 139.

116. *Id.* at 149.

117. *Id.*

118. *Id.* at 153.

119. *Id.* at 154.

on the service provider presents a number of issues. First, the employees that handle data disclosure requests at service providers are usually legal assistants who are not trained in law enforcement investigative techniques.¹²⁰ Therefore, either the warrant requiring their active involvement in content minimization would have to include detailed instructions on how to comply, or they would have to be trained to properly execute the warrant. Second, service providers would be required to build out a very specialized infrastructure enabling them to adequately execute these warrants. Many service providers have a data disclosure system in place,¹²¹ but it likely prohibits employees from actively engaging with user content when responding to warrants. A restriction on employee exposure to user content is important. While service provider access is beyond the purview of the Fourth Amendment, it is an important privacy consideration that should not be disregarded while considering other privacy concerns. Regardless, service provider filtering is a valid limitation to explore as it does tackle concerns over the initial broad collection of cloud warrants.

C. THE “EX ANTE RESTRICTIONS” APPROACH

The third approach utilized by courts is ex ante restrictions. This approach places restrictions on how the government handles data once it is turned over by search providers. Restrictions are placed during step two of Rule 41. Courts that follow this approach either require the inclusion of search protocols in the warrant or a declaration that all records that are beyond the scope of the investigation will be returned to the service provider or destroyed.

The use of written search protocols is not a novel concept in the courts. A number of circuit courts have addressed the issue, though not in the cloud context. The Ninth Circuit in *United States v. Comprehensive Drug Testing, Inc.*, upheld the inclusion of search protocols, while the Second, Seventh, and Eleventh Circuits have struck down their required inclusion.¹²²

District courts have addressed this issue within the cloud context. Judge Facciola¹²³ advocated for search protocols to satisfy the particularity

120. The author served as a Legal Assistant at one of these service providers and is thus familiar with the training provided at, at least, one company that receives search warrants for content.

121. See, e.g., *Google Transparency Report Help Center*, *supra* note 69; *Government Requests Report*, FACEBOOK, (<https://govtrequests.facebook.com/country/United%20States/2016-H2/>) [<https://perma.cc/4LNG-FEXY>].

122. See *United States v. Comprehensive Drug Testing, Inc.*, 621 F.3d 1162, 1179 (9th Cir. 2010); *United States v. Galpin*, 720 F.3d 436, 451 (2d Cir. 2013); *United States v. Mann*, 592 F.3d 779, 786 (7th Cir. 2010); *United States v. Khanani*, 502 F.3d 1281, 1290-91 (11th Cir. 2007).

123. Judge Facciola recently retired from the bench. See Mary Mack, *Ediscovery Expert, Retired Judge John M. Facciola, Joins Sunblock Systems' Special Masters Group*, ASS'N CERTIFIED E-

requirement, stating he would only approve the two-step procedure for conducting a search and seizure “if the government provides an adequate protocol explaining how it will perform the search.”¹²⁴ Other judges have explored different options in order to satisfy the requirement.¹²⁵ For example, in *Target E-mail Accounts*, the warrants at hand requested disclosure from multiple service providers, including all e-mails, instant messages, and chat logs, for defendants suspected of knowingly purchasing stolen goods.¹²⁶ The court suggested “appointing a special master with authority to hire an independent vendor to use computerized search techniques . . . or setting up a filter group or taint-team¹²⁷ to review the information for relevance and privilege.”¹²⁸ Although the court left the decision of an appropriate procedural safeguard to the government, it did make clear that some safeguard was necessary.¹²⁹ It is unclear why the court chose to leave discretion on this matter to the government. It is possible the court was proceeding cautiously due to minimal case law¹³⁰ and was struggling to maintain the balance between law enforcement’s ability to investigate and Fourth Amendment rights.¹³¹

DISCOVERY SPECIALISTS (Jan. 25, 2017), <https://www.aceds.org/news/327724/eDiscovery-expert-Retired-Judge-John-M.-Facciola-Joins-SunBlock-Systems-Special-Masters-Group.htm> [<https://perma.cc/3ZSH-FTZ9>].

124. See *Matter of Search of Info. Associated with [Redacted]@mac.com that is Stored at Premises Controlled by Apple, Inc.*, 13 F. Supp. 3d 145, 153 (D.D.C. 2014).

125. See *In re Applications for Search Warrants for Info. Assoc. with Target E-mail Accounts/Skype Accounts (Target E-mail Accounts)*, No. 13-MJ-81630-JPO, 2013 WL 4647554 (D. Kan. Aug. 27, 2013).

126. *Id.* at *1.

127. *Government “Taint Teams” May Open a Pandora’s Box: Protecting Your Electronic Records in the Event of an Investigation*, WILMERHALE PUBLICATION & NEWS (May 11, 2004), <https://www.wilmerhale.com/pages/publicationsandnewsdetail.aspx?NewsPubId=94347> [<https://perma.cc/9X45-48YE>] (A taint-team is a group of reviewing prosecutors and agents. They are referred to as a taint-team “because their purpose is to shield the government from a defense motion to suppress electronic record evidence based on an argument that the prosecution and investigating team was ‘tainted’ by viewing electronic records it had no right to see.”).

128. See *Target E-mail Accounts*, 2013 WL 4647554 at *10.

129. *Id.* (“Only with some such safeguard will the Fourth Amendment’s protection against general warrants be insured.”).

130. *Id.* at *7 (“The Court was able to locate only a few other cases involving a search warrant served on an electronic communications service provider for the contents of an e-mail account.”).

131. *Id.* at *9 (“[T]here must be an appropriate balance between allowing law enforcement to do its job effectively and protecting the Fourth Amendment rights of those being investigated.”).

Similarly, in *Fifteen E-mail Accounts*,¹³² the Middle District of Alabama also emphasized search protocols, though it did not require court pre-approval for the protocols.¹³³ The Alabama court also highlighted the main issue driving the discussion around search protocols and minimization efforts in general; a desire to “restrict [the government] . . . to uncover only information for which the Government has probable cause.”¹³⁴

The purpose of *ex ante* restrictions is clear: they are meant to limit the government’s exposure to user information that is beyond the scope of the warrant. Whether they are desirable is up for debate. The Middle District of Alabama noted the Supreme Court’s instruction that “the manner in which a warrant is executed is subjected to later review as to its reasonableness.”¹³⁵ According to this view, *ex ante* restrictions are not required under the Fourth Amendment. Other courts are concerned about the investigative process and interfering with law enforcement’s discretion.¹³⁶ Both concerns are valid, particularly as *ex ante* restrictions are determined before law enforcement can look at the data. Though investigators likely have information on the things to be seized, they may not be able to predict the format of how the information is organized. This makes search protocols, particularly those involving key words, problematic. A filter group, or taint team, may be the better option though there are some practical constraints with this method as well. For example, a filter group is removed from the main investigation and thus may not be as familiar with the details of the case. This may result in a less thorough or effective search. Unfortunately, there are no examples of courts setting this as a requirement, so it is unclear whether these theoretical concerns are actually the reality.

D. THE “PLAIN VIEW AND USE RESTRICTIONS” APPROACH

The final approach involves either waiving government reliance on the plain view doctrine or placing use restrictions on the collected data. This approach is meant to limit the kinds of information that law enforcement can use against the defendant. The first component of this approach, the plain view doctrine, applies when a police officer “had a prior justification for an intrusion in the course of which he came inadvertently across a piece of evidence

132. *United States v. Search of Info. Assoc. with Fifteen E-mail Addresses*, No. 2:17-CM-3152-WC, 2017 WL 4322826 (M.D. Ala. Sept. 28, 2017). *See supra* Part III(B).

133. *See United States v. Search of Info. Assoc. with Fifteen E-mail Addresses*, No. 2:17-CM-3152-WC, 2017 WL 4322826, at *22 (M.D. Ala. Sept. 28, 2017).

134. *Id.*

135. *Id.* at *10 (citing *Dalia v. United States*, 441 U.S. 238 (1979)).

136. *United States v. Kanodia*, No. CR 15-10131-NMG, 2016 WL 3166370, at *1 (D. Mass. June 6, 2016).

incriminating the accused. The doctrine serves to supplement the prior justification . . . and permits the warrantless seizure.”¹³⁷ The doctrine is very relevant in cloud searches where a large amount of information is seized because “the technology lets the government see everything, and the plain view exception then lets the government use (almost) everything.”¹³⁸ The initial collection of data, while beyond the scope of the warrant, may fall under the plain view doctrine.

The second component of this approach is a use restriction that requires the destruction of nonresponsive data. There is overlap with the *ex ante* approach, but the limitations espoused in each approach are distinct. While *ex ante* restrictions impact how law enforcement agents search the collected information by limiting what they see in the first place, the elimination of plain view and use restrictions limit what law enforcement can do with the information once they see it.

Some judges have advocated for a waiver of the plain view doctrine in searches of electronically stored data. Judge Kozinski, formerly of the Ninth Circuit, expressed this clearly in his concurrence in *United States v. CDT*, stating, “magistrate judges should insist that the government waive reliance upon plain view doctrine in digital evidence cases.”¹³⁹ Judge Facciola cited this statement and noted the potential for abuse of the plain view exception.¹⁴⁰ Despite this potential for abuse, Facciola noted that waiving the plain view doctrine would not cure the problem of over-seizure.¹⁴¹

Some district courts have advocated for a use restriction that would require the destruction of nonresponsive data.¹⁴² These courts request law enforcement to destroy or return data that is nonresponsive and outside the scope of the warrant.¹⁴³ Much like search protocols, this restriction is also an effort to limit the amount of content the government is exposed to and “protect the purpose of the Fourth Amendment.”¹⁴⁴ It would prevent the kind

137. *Coolidge v. New Hampshire*, 403 U.S. 443, 466 (1971).

138. *See Kerr, supra* note 9, at 19.

139. *United States v. Comprehensive Drug Testing, Inc.* 621 F.3d 1162 (9th Cir. 2010).

140. *See Matter of Search of Info. Associated with [Redacted]@mac.com that is Stored at Premises Controlled by Apple, Inc.*, 13 F. Supp. 3d 145, 156 n.15 (D.D.C. 2014), *vacated*, 13 F. Supp. 3d 157 (2014).

141. *Id.* “[T]he government will still have the data and, even if it does not directly use it as evidence for a criminal prosecution, it may use it for other purposes.”

142. *See In re Search of Info. Associated with the Facebook Account Identified by the Username Aaron.Alexis (Aaron.Alexis)*, 21 F. Supp. 3d 1, 10 (D.D.C. 2013); *[Redacted@mac]*, 13 F. Supp. 3d at 156.

143. *Aaron.Alexis*, 21 F. Supp. 3d at 10; *[Redacted@mac]*, 13 F. Supp. 3d at 156.

144. *See Aaron.Alexis*, 21 F. Supp. 3d at 10 (“[M]inimization procedures may be an appropriate way to protect the purpose of the Fourth Amendment even when changes in

of activity that occurred in *United States v. Ganius*, where law enforcement agents seized documents from Ganius in order to investigate his clients.¹⁴⁵ The agents came across discrepancies in Ganius's personal documents, which were also seized, and obtained a warrant to search Ganius's personal records.¹⁴⁶ Concerns about this kind of activity were expressed in *In the Matter of the Search of Information Associated with [Redacted]@mac.com*, where the court stated that keeping nonresponsive data indefinitely is similar to keeping the entire contents of a physical search because one or two pieces of paper show evidence of a crime.¹⁴⁷ The court was adamant that "if the government seizes data it knows is outside the scope of the warrant, it must either destroy the data or return it. It cannot simply keep it."¹⁴⁸

The elimination of the plain view doctrine alone may be problematic. Professor Kerr, who once advocated for eliminating the plain view doctrine for electronic devices, has since moved away from the position and instead recommends imposing use restrictions as a way to combat the privacy concerns raised by executing warrants for digital evidence.¹⁴⁹ Kerr had previously explored the idea that eliminating plain view for computer searches could address the concern that these warrants were functioning similarly to general warrants.¹⁵⁰ Kerr's reluctance to eliminate the plain view doctrine stems from complications raised by the search and seizure of electronic data. He considers the scope of plain view, for example, and asks whether "the doctrine ever appl[ies] to a second seizure—a seizure of property already seized?"¹⁵¹ If we assume that the seizure of data at step one of Rule 41 is a seizure under the Fourth Amendment, would the search and seizure of the data during step two be considered a second seizure? If so, determining whether plain view applies is highly significant because eliminating the exception could result in the exclusion of the data.

Kerr provides three possibilities of how plain view would be affected under different interpretations of seizure.¹⁵² If using the data is not considered an additional seizure then law enforcement can use the nonresponsive data,

technology dramatically change the way in which search and seizures actually occur in the real world.").

145. *United States v. Ganius*, 755 F.3d 125, 128 (2d Cir. 2014).

146. *Id.*

147. *See Redacted@mac*, 13 F. Supp. 3d at 156, *vacated*, 13 F. Supp. 3d 157 (2014).

148. *Id.*

149. *See* Kerr, *supra* note 9, at 17.

150. *See* Orin Kerr, *Digital Evidence and the New Criminal Procedure*, 105 COLUM. L. REV. 279, 314 (2005).

151. *See* Kerr, *supra* note 9, at 22.

152. *Id.* at 23.

making the plain view exception irrelevant. If copying the data constitutes an additional seizure then law enforcement would have to obtain a second warrant, thus the plain view exception would have a moderate effect.¹⁵³ If, however, “the data observed outside of the warrant constitutes an additional seizure . . . eliminating the plain view exception imposes the desired restriction.”¹⁵⁴ Although this may seem like a solution, Kerr is wary of embracing this approach because its broad view of seizure “might have substantial unintended consequences.”¹⁵⁵ This is just one example of the complications that Kerr predicts could arise, which is why he believes “imposing use restrictions on nonresponsive files is the best way to reconcile the government’s need to search for responsive evidence with the Fourth Amendment command to avoid general warrants.”¹⁵⁶

This “plain view and use restrictions” approach addresses concerns that go beyond particularity, such as the government’s use of non-relevant data collected in overly broad seizures. Although courts discuss the plain view and use restrictions approach under the framework of particularity, the approach does not address what the requirement is actually about. The particularity requirement is meant to prevent the execution of a general warrant. Although the issues of plain view and use restrictions are important for a broader privacy discussion, they do not address the ultimate concern of particularity: overbroad searches.

V. RECOMMENDATIONS

The cases above show courts struggling with how to apply the particularity requirement to new technology and exploring avenues beyond particularity to address privacy concerns. This Note endorses temporal limitations, service provider participation through content restrictions, and a service restriction that has not been considered by the courts discussed in this Note in Part IV. It does not recommend *ex ante*, plain view, and use restrictions at this time, as the ultimate goal of the recommendations is to narrow the scope of the initial search in order to prevent overbroad searches.

First, temporal limitations are recommended because this kind of limit is straightforward and can be implemented without too much service provider exposure to user data. The temporal restrictions should reflect the time period

153. *Id.* at 23.

154. *Id.* at 23.

155. *Id.* at 24; see generally Orin S. Kerr, *Fourth Amendment Seizures of Computer Data*, 119 YALE L.J. 700, 705–09 (discussing the definition of seizure for computer data).

156. *Id.* at 17.

in which the alleged illegal activity occurred and will thus limit the breadth of the initial collection. Other scholars have made similar recommendations.¹⁵⁷

The following hypothetical illustrates when a temporal limitation is appropriate. Imagine law enforcement agents suspect Suzie Q of wire fraud and they have evidence that this activity started in March 2017. If law enforcement requested a search of Suzie's e-mail account from its inception in 2005 to the present, it would be an overbroad collection and would fail to satisfy the particularity requirement. In such an instance, law enforcement does not have probable cause for the e-mails created years before the illegal activity prior and could satisfy the particularity requirement by describing the "things to be seized" as the e-mails from a few years before the illegal activity to March 2017 to present.

The second recommend approach is service provider participation through content restrictions, such as e-mails sent to and from particular e-mail addresses.¹⁵⁸ As with all minimization efforts, this approach should be used where applicable. It may take time for providers to implement tools that can sort through user accounts. Such tools should be automated to eliminate the exposure of content to the service provider. Though the implementation is potentially trickier than the temporal limitation, it is likely something that service providers can provide if required to do so. This is the most service provider involvement recommended as there are valid privacy concerns with allowing service providers to actively engage with user content. This approach, like the one endorsed before, can also be achieved without exposing the service provider's employees to user content and serves to restrict the amount of data initially disclosed.

Now imagine a different hypothetical: Law enforcement may or may not know the timeframe of Suzie's alleged activity, but they know that she is working with one other party, whose e-mail account has already been identified. In such an instance, it would be appropriate for the search warrant to only allow the seizure of e-mails to and from Suzie and the other party.

Over-collection could be addressed by requiring probable cause for different cloud services. This framework would require warrants to list particular cloud services and provide probable cause for each service. A similar

157. Nicole Friess, *When Rummaging Goes Digital: Fourth Amendment Particularity and Stored E-mail Surveillance*, 90 NEB. L. REV. 971, 991 (2012) ("Furthermore, the government should seize only those stored e-mails and files sent or received during the time period the evidence suggests the criminal activity occurred.").

158. Other scholars have made similar recommendations. *See id.* at 1013 ("[R]equiring ISPs to segregate sought-after e-mails that are particularly described in warrants from those e-mails the government does not have probable cause to seize ensures constitutional reasonableness. . . .").

approach has been raised in the context of cell phone searches.¹⁵⁹ This approach is feasible because many cloud services are linked to one main account, a feature that makes the process easier for law enforcement because they only need one identifier, and because probability and particularity can often overlap.¹⁶⁰ This would limit the amount of data disclosed and insure that less responsive data is not being provided to the government, thus reducing the concerns that the fourth approach tries to address. Although this limitation would not include ex ante search protocols, it addresses some of the scope concerns.

Scholars, such as Kerr, fail to take into account the privacy concerns raised by the first disclosure of data. He states that “courts should not impose a limit at the physical search stage,” but his proposed solution does not address the privacy concerns that are raised by this initial collection.¹⁶¹ The mere looking at data, even if there is no arrest, is a privacy invasion from an individual’s perspective. A vast amount of information has still been seized, regardless of whether evidence of criminal conduct is found. If the particularity requirement was applied in a more granular fashion, this concern would be alleviated by the reduction of the initial disclosure. Thus, eliminating plain view or applying use restrictions does not solve the problem that particularity is supposed to address.

An application of Suzie’s hypothetical to the service-by-service shows how it can be successfully implemented. Assume Suzie uses Google for various services. This restriction would require law enforcement to provide probable cause for each of Google’s services that Suzy uses. It is possible to imagine that there is probable cause for her e-mail and Drive account considering the types of services one engaged in wire fraud may utilize. It is unlikely, however, that Suzie’s scheme extends to the Google Photos service. Unless law enforcement has probable cause for this content, Suzie’s private photos would be protected from seizure.

The “use restrictions” approach for nonresponsive data is also recommended. The destruction of nonresponsive evidence would eliminate

159. Adam M. Gershowitz, *The Post-Riley Search Warrant: Search Protocols and Particularity in Cell Phone Searches*, 69 VAND. L. REV. 585, 592 (noting that “magistrates can restrict warrants to the particular cell phone application for which there is probable cause”).

160. See Friess, *supra* note 157, at 985 (2012) (“Probable cause and particularity work hand-in-hand: to establish probable cause for the issuance of a warrant, the government must demonstrate the described items are connected with the criminal activity under investigation and the items are to be found in the place to be searched. The less precise the description of the things to be seized, the more likely it will be that one or both of those probabilities has not been established.”).

161. *Id.* at 11.

the concern that cloud content searches are functioning similarly to general warrants.¹⁶² Kerr's suggestion that nonresponsive data be destroyed in the course of a search is also an effective way to implement this requirement.¹⁶³

Suzie's hypothetical is helpful in elaborating this approach as well. Assume Suzie's e-mail account has been seized in connection with insider trading. Officers come across e-mails from her health provider during the course of the search. These e-mails are nonresponsive data and should be destroyed once discovered.

While many of the recommendations are similar to ones proposed by various courts, this Note is wary of recommending *ex ante* and plain view restrictions. Both approaches have the potential to impair law enforcement investigations in a manner that the other approaches do not. While the recommended approaches admittedly reduce the amount of disclosed content, they do not restrict law enforcement's to investigate in the same manner. Some scholars have suggested addressing use restrictions by treating queries like traditional searches.¹⁶⁴ Queries are questions that are used to retrieve specific information from a database.¹⁶⁵ Although this is an interesting argument, it may be difficult to apply in practice because it does not address the concerns raised by opponents of use restrictions; treating queries like searches may be difficult in instances where a defendant is using code words or untraditional labels. Additionally, this restriction and others do not address the initial issue of over-collection.¹⁶⁶

VI. CONCLUSION

The Supreme Court held in *Riley* that digital storage devices are different.¹⁶⁷ The same is true for information stored on the cloud, not only because of the

162. Kerr, *supra* note 9, at 17.

163. *Id.* at 18.

164. Emily Berman, *When Database Queries are Fourth Amendment Searches*, 102 MINN. L. REV. 577, 612 (2017) (“[W]hen queries result in revelations that the Supreme Court has held would violate an expectation of privacy if achieved through collection, that query is a search. In such cases, the reasonable expectation of privacy is no less violated because it was accomplished through a query rather than a more traditional search.”).

165. *Query Language*, ENCYCLOPEDIA BRITANNICA, <https://www.britannica.com/technology/query-language> [https://perma.cc/52A7-AWP3] (last visited Mar. 1, 2019).

166. See Ric Simmons, *The Mirage of Use Restrictions*, 96 N.C. L. REV. 133, 187 (“[C]ourts and legislatures may abandon efforts to control or regulate the surveillance itself and instead limit government use of the information . . . in the long term [this reaction] will almost certainly decrease the pressure on courts and legislatures to craft meaningful restrictions on data collection.”).

167. See *Riley v. California*, 134 S. Ct. 2473 (2014).

volume of information involved, but also because of the participation of the third-party service provider. Courts should utilize the providers to satisfy the particularity requirement. As Kerr stated, “[the service provider is] no longer a significant limit” and can be an effective arm to achieving the requirement that a warrant must describe with particularity the things to be seized.¹⁶⁸

No single approach will provide the perfect solution for satisfying the particularity requirement for the cloud. Sometimes a temporal limitation is sufficient and sometimes a more robust restriction is needed. Different limits should be used depending on the cloud services that are being searched and the facts of the investigation. This will likely mean that magistrates need to be a bit more knowledgeable of services, while also striking a balance between protecting privacy and effective law enforcement.

168. See Kerr, *supra* note 9, at 15.

“HELLO, MY NAME IS USER #101”: DEFINING PII UNDER THE VPPA

Yarden Z. Kakon[†]

I. INTRODUCTION

During Judge Robert Bork’s 1987 Supreme Court nomination hearings, a Washington D.C. newspaper obtained a list of 146 videotapes the Bork family previously rented from their local video store. Using this list, the newspaper published a profile of Judge Bork that described his video rental history. The Senate Judiciary Committee was outraged by the newspaper’s acquisition and publication of Bork’s rentals, and Congress quickly thereafter adopted an act that would protect video-watching histories. The Video Privacy Protection Act (VPPA) was born. The VPPA enhanced the concept of privacy for individuals in their daily lives by defining the right to be protected against unauthorized disclosures of personal information held by videotape providers.¹

The VPPA creates a private cause of action.² To state a claim under the VPPA, a plaintiff must allege that “[a] video tape service provider . . . knowingly disclose[d], to any person, personally identifiable information concerning any consumer of such provider.”³ The VPPA defines personally identifiable information (PII) as “includ[ing] information which identifies a person as having requested or obtained specific video materials or services from a video tape service provider.”⁴

Congress passed the VPPA “[to] preserve personal privacy with respect to the rental, purchase or delivery of video tapes or similar audio-visual materials.”⁵ However, with the shift from video rental stores to online streaming, what does the VPPA mean today? Federal courts have struggled to

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1. *See* S. REP. NO. 100-599 (1988).

2. 18 U.S.C. § 2710 (2012); *see* *Nickelodeon Consumer Privacy Litig.*, 827 F.3d 262, 278 (3d Cir. 2016).

3. 18 U.S.C. § 2710(b)(1).

4. *See* § 2710(a)(3)(4) (“video tape service provider” means “any person, engaged in the business, in or affecting interstate or foreign commerce, of rental, sale, or delivery of prerecorded video cassette tapes or similar audio-visual materials”).

5. *See* S. REP. NO. 100-599 (1988) at 1.

apply the VPPA to modern day technology and practices.⁶ In particular, courts have struggled to define the bounds of PII under the statute.⁷ The majority of courts have adopted a narrow definition of PII, holding that disclosed information cannot constitute PII if it requires additional information to identify the person.⁸ In contrast, a minority of courts have held that PII may include information that requires an entity to use “reasonable and foreseeable” additional resources to identify the user.⁹

The problem of PII is uniquely challenging in the context of the VPPA because the cause of action itself is predicated on whether a third party or entity can actually identify the user, based on his or her video-watching history. While a chatty cashier may have disclosed Judge Bork’s rental history, current processes for storing and disclosing video-watching history are far more complex. More specifically, courts are divided regarding whether digital identifiers—forms of identification used generally to link a user to a specific device or browsing activity—constitute PII.

This Note seeks to understand the scope of PII under the VPPA and propose the best approach to analyzing whether specific digital identifiers should constitute PII. Part II introduces digital identifiers and discuss the technical concepts that are key to understanding the arguments made in current PII litigation.¹⁰ Part III reviews the VPPA’s legislative history and discuss congressional intent. Part IV provides an overview of case law defining

6. Gregory M. Huffman, *Video-Streaming Records and the Video Privacy Protection Act: Broadening the Scope of Personally Identifiable Information to Include Unique Device Identifiers Disclosed with Video Titles*, 91 CHI.-KENT. L. REV. 737 (2016).

7. *Id.*

8. *See* Eichenberger v. ESPN, Inc., 876 F.3d 979, 985 (9th Cir. 2017) (“We adopt the Third Circuit’s ‘ordinary person’ standard. The ‘ordinary person’ test better informs video service providers of their obligations under the VPPA.”); *In re* Nickelodeon Consumer Privacy Litig., 827 F.3d 262, 267 (3d Cir. 2016) (“[P]ersonally identifiable information applies only to the kind of information that would readily permit an ordinary person to identify a specific individual’s video-watching behavior.”); Ellis v. Cartoon Network, Inc., 2014 WL 5023535, at *3 (N.D. Ga. Oct. 8, 2014), *aff’d on other grounds*, 803 F.3d 1251 (11th Cir. 2015) (“PII not disclosed where the third party to whom an Android ID and viewing history were provided had to ‘collect information from other sources’ to identify the plaintiff.”); Locklear v. Dow Jones & Co., 101 F. Supp. 3d 1312, 1318 (N.D. Ga. 2015), *abrogated on other grounds*, 803 F.3d 1251 (11th Cir. 2015) (“[A] Roku serial number, without more, is not akin to identifying a particular person, and therefore, is not PII.” (quotations omitted)).

9. *See* Yershov v. Gannett Satellite Info. Network, Inc., 820 F.3d 482, 486 (1st Cir. 2016) (“PII can embrace information reasonably and foreseeably likely to reveal . . . videos [the plaintiff] has obtained.” (quotations omitted)); *see also In re* Vizio, Inc., Consumer Privacy Litig., 238 F. Supp. 3d 1204, 1225 (C.D. Cal. 2017).

10. *Infra* Part II.

the scope of PII with respect to digital identifiers.¹¹ Part V will compare my analysis of legislative intent with that of the courts discussed in Part IV.¹² Part VI then revisits the current approaches in light of the legislative history. Lastly, Part VII concludes.

II. DIGITAL IDENTIFIERS AND RE-IDENTIFICATION

Almost every interaction that a user makes on the Internet is collected, recorded, and stored as data.¹³ One reason an entity may collect data is to enhance the user’s experience on that site.¹⁴ For instance, Netflix analyzes user preferences to recommend movies, and Google reviews search queries to improve search results.¹⁵ Furthermore, some entities will also choose to sell or share their aggregated data with third parties, such as analytics or marketing companies.¹⁶ Services such as Live Ramp offer their clients a way to sort and analyze data in order to re-identify users to enable better marketing strategies.¹⁷ In a recent trend of VPPA cases, plaintiffs are suing defendants for alleged unauthorized sharing of their PII, in the form of digital identifiers, with third-party marketing firms.¹⁸

A. DIGITAL IDENTIFICATION

To best tailor marketing to individual consumers, companies must understand consumer behavior across various platforms. Thus, companies must find ways to link consumers to their many devices, services, websites, and applications. Companies can associate multiple devices with the same person using cross-device tracking, connecting a single user across multiple devices through the user of digital identifiers.¹⁹ Digital identifiers come in many forms and companies have adopted several techniques to use these identifiers to precisely identify a person and link his or her activities to specific services, devices or websites, and sometimes across devices and applications.²⁰

11. *Infra* Part IV.

12. *Infra* Part V.

13. Boris Lubarsky, *Re-Identification of “Anonymized Data”*, 1 GEO. L. TECH. REV. 202, 202 (2017).

14. *Id.*

15. *Id.*

16. *Id.*

17. *Applying Identity Link*, LIVE RAMP, <https://liveramp.com/applying-identitylink/> [<https://perma.cc/5ZDU-3LB4>] (last visited Feb. 20, 2019).

18. *See, e.g., In re Nickelodeon Consumer Privacy Litig.*, 827 F.3d 262, 281 (3d Cir. 2016), *cert. denied sub nom. C. A. F. v. Viacom Inc.*, 137 S. Ct. 624 (2017).

19. FEDERAL TRADE COMMISSION STAFF REP., *Cross-Device Tracking* (Jan. 2017) at 2.

20. *Id.* at 2–3.

Some digital identifiers are supplied by hardware manufacturers, such as Google or Apple.²¹ An example of a hardware manufacturer-supplied digital identifier is a device's Android ID, which is a "persistent unique identifier," meaning it is unique to a specific device and user.²² Another form of an assigned digital identifier is an Internet Protocol (IP) address, which is a designation that links all of your Internet activity to where you're using it from.²³ Generally, an IP address functions like a home address for a computer or device.²⁴ Other forms of digital identifiers can be created while browsing websites on the Internet, like a cookie.²⁵ A cookie is information saved by the web browser and is stored on the device by either the site visited, first party cookies, or someone else, third-party cookies.²⁶ A cookie's purpose is to allow the website to keep track of a user's identity over time in order to customize a user's browsing experience.²⁷ However, cookies, by the nature of their use, can be used to track users for other reasons.²⁸ Once an entity has access to multiple databases of identifiers, either through the collection of first-party services or third-party tracking on other platforms,²⁹ it can create individualized profiles of users that combine the data collected.³⁰ This allows marketing and analytic companies to develop an understanding of users' digital activities by collecting

21. *Yershov v. Gannett Satellite Info. Network, Inc.*, 104 F. Supp. 3d 135, 138 (D. Mass. 2015), *rev'd*, 820 F.3d 482 (1st Cir. 2016).

22. *User Data & Identity*, ANDROID DEVELOPERS, <https://developer.android.com/training/articles/user-data-ids.html> [<https://perma.cc/36KH-KPCA>] (last visited Feb. 20, 2019).

23. John-Michael Bond, *What Is an IP address—and How Do You Find It*, DAILY DOT, <https://www.dailydot.com/debug/what-is-an-ip-address/> [<https://perma.cc/WE84-H5BZ>] (last visited Feb. 20, 2019).

24. *Id.*

25. *Online Tracking*, FED. TRADE COMMISSION (June 2016), <https://www.consumer.ftc.gov/articles/0042-online-tracking> [<https://perma.cc/328L2T7W>].

26. *Id.*

27. *Id.*

28. *See id.*

29. *See* FED. TRADE COMM'N, CROSS-DEVICE TRACKING: A FEDERAL TRADE COMMISSION STAFF REPORT 1 (2017) ("Cross-device tracking is most easily performed by first-party services with a direct relationship with the consumer—for example, an email service that a consumer logs onto from different devices. However, third-party companies are tracking consumers with increasing accuracy, correlating user behavior across multiple platforms.").

30. *See id.* ("[C]ompanies can analyze an individual consumer's activities based not only on her habits on one browser or device, but on her entire 'device graph'—the map of devices that are linked to her, her household, or her other devices.").

detailed information about the consumer from a variety of sources.³¹ This incentivizes entities to aggregate increasingly more diverse data from users for a clearer picture of their habits.

B. LEVELS OF IDENTIFIABILITY

As discussed in *In re Nickelodeon Consumer Privacy Litigation* (“*Nickelodeon*”), information that may qualify as personally identifiable runs on a spectrum of identifiability.³² At one end of the spectrum lies direct identifiers—information such as a name, phone number, or physical address that can identify an individual on its own, or by reference to readily available databases.³³ Direct identifiers can be further divided into public direct identifiers and private direct identifiers. Information that identifies an individual via reference to a public source (public direct identifier) is considered more identifiable than information that requires reference to a private source, such as a credit reporting agency or government bureau (private direct identifier).³⁴ For example, a telephone number would be considered a public direct identifier and a social security number would be a private direct identifier. Under the VPPA, public direct identifiers are the most obvious cases of PII because an individual can be directly identified if this information was associated with publicly available video watching history.³⁵

Second, on the other end of the spectrum lie indirect identifiers—information that indirectly links back to an individual, but may be used together or in conjunction with other information to identify an individual. In the context of VPPA litigation, disputed forms of indirect identifiers include GPS coordinates, unique device identifiers, like an Android ID, and IP addresses.³⁶ Entities use these indirect digital identifiers to track users in lieu of directly identifiable information, even though directly identifiable information may be collected simultaneously. Therefore, digital identifiers function as pseudonyms.

Pseudonymization is the process of substituting data with alternative labels that may either be randomly assigned or determined by an algorithm.³⁷ For example, instead of assigning John Doe to a row of data, an entity will use an

31. *See id.* (After creating an analysis of an individual consumer’s activities, “[c]ompanies then can use this data for analytics or personalized advertising”).

32. *In re Nickelodeon Consumer Privacy Litig.*, 827 F.3d 262, 282–83 (3d Cir. 2016).

33. *Id.*

34. *See id.*

35. *See id.*

36. *See infra* Part III.

37. *See* Lubarsky, *supra* note 13, at 206.

identification (ID) number, such as 344032. Thus, pseudonymization allows an entity to preserve the usefulness of the data without revealing directly identifiable information.³⁸

Pseudonymization only acts as a superficial barrier to identification, as entities can re-identify a user by aggregating multiple datasets.³⁹ There are two instances where re-identification can occur. First, re-identification can occur when the recipient of pseudonymous data has access to additional information that can reveal a user's identity. Re-identification is less probable when the additional information is private, but there is a serious threat of re-identification when the information is publicly available. For instance, in order to connect a Facebook "User ID" with an individual, all one needs to do is enter the "User ID" after "facebook.com," and the resulting URL will take you to that individual's profile.⁴⁰

A common example of digital pseudonyms are device IDs, such as an "Android ID."⁴¹ An Android ID is randomly assigned, but remains constant for the lifetime of the device unless a factory reset is performed.⁴² While device IDs, like Android IDs, are not as public as Facebook IDs, this information can lead to re-identification if the holder of the information has already acquired and can cross-identify multiple databases. Therefore, regardless of whether the additional information is publicly available or privately acquired, the more databases an entity has access to, the more likely a person or entity will be able to re-identify data. The preceding information will be important to keep in mind when assessing the facts of the VPPA cases discussed in Part IV.

III. LEGISLATIVE HISTORY BACKGROUND

The House of Representatives and Senate both made efforts to enact a video privacy protection act following the Robert Bork disclosure. The House's first initiative was H.R. 3523, introduced by Representative Alfred McCandless in October of 1987.⁴³ This proposed version of the act did not use the term PII.⁴⁴ PII was first included in H.R. 4947, introduced by

38. *See id.*

39. *See id.* at 206–07.

40. For example, founder of Facebook Mark Zuckerberg's User ID is 4. Therefore, facebook.com/4 can be used to identify Zuckerberg.

41. Emily McLaughlin, *Device ID (Device Identification)*, SEARCHCIO, <http://searchcio.techtarget.com/definition/device-ID-device-identification> [https://perma.cc/8J7M-SBNS] (last visited Feb. 20, 2019).

42. *Id.*

43. H.R. 3523, 100th Cong. (1987).

44. *Id.*

Representative Robert W. Kastenmeier in June of 1988.⁴⁵ Senator Patrick J. Leahy simultaneously introduced S. 2361 to the Senate, which was ultimately enacted as the VPPA.⁴⁶

The purpose of the VPPA is clearly stated in Senate Report No. 100-599 (“the Senate Report”) as “[t]o preserve personal privacy with respect to the rental, purchase, or delivery of video tapes or similar audio visual materials.”⁴⁷ Congress was aware of, and concerned about, the broader trends in the digital economy. Specifically, that consumers were routinely subjected to ongoing data collection and data was increasingly disseminated for advertising and profiling purposes.⁴⁸

Congress feared that data collection without proper control could significantly erode privacy interests.⁴⁹ At the introduction of S. 2361, Senator Paul Simon warned that as “the computer age revolutionized our world . . . we must protect . . . our right to privacy.”⁵⁰ Senator Robert Kastenmeier expressed that the VPPA was “an effort to keep up . . . with changing technology and changing social patterns with respect to the use of materials which ought to be clearly private.”⁵¹ In addition, Senator Leahy stated that “information pools,” i.e., datasets, themselves created privacy interests that “directly affect the ability of people to express their opinions . . . and to enjoy the freedom and independence that the Constitution was established to safeguard.”⁵²

Congress wanted to use the VPPA to address concerns about the growth of routine disclosures during the then-evolving digital age. Congressional intent is important because it illustrates that the VPPA was meant to address not only Bork-like cases concerning individualized disclosure, but also more

45. H.R. 4947, 100th Cong. (1988).

46. S. 2361, 100th Cong. (1988).

47. S. Rep. NO. 100-599 (1988) at 1.

48. *See id.* at 6 (“The Act allows consumers to maintain control over personal information divulged and generated in exchange for receiving services from video tape service providers.”).

49. *See id.* (“[E]very day Americans are forced to provide to businesses and other personal information without having any control over where that information [is stored] . . . [T]he trail of information generated by every transaction that is now recorded and stored in sophisticated record-keeping systems is a new, more subtle and pervasive form of surveillance.”).

50. *See id.*

51. *Video and Library Privacy Protection Act of 1988: Hearing on H.R. 4947 & S. 2361 Before the Subcomm. on Courts, Civil Liberties & the Admin. of Justice of the H. Comm. on the Judiciary & the Subcomm. on Tech. & the Law of the S. Comm. on the Judiciary*, 100th Cong. (1988) at 19.

52. S. REP. NO. 100-599 at 6.

recent cases consisting of collective database disclosures.⁵³ Therefore, while the sponsors of the VPPA could not have anticipated the drastic changes in video rental and sharing methods, they did consider the practice of data collection generally, and its impact on privacy.

IV. CURRENT APPROACHES TO PII

This Part will describe current approaches that courts have adopted to define PII under the VPPA. Specifically, the two main issues that courts have addressed are: (1) what constitutes PII; and (2) how identification occurs. These two issues address the two statutory components of PII: (1) an *identifier* associated with personal information; and (2) a *link* between the identifier and the person. Courts generally agree that PII expands beyond just the users' names but are split over the exact scope of that expansion. The First and Third Circuit tests have emerged as dominant competing approaches.

A. THE NARROW APPROACH: THIRD CIRCUIT IN *NICKELODEON*

The Third Circuit in *In re Nickelodeon Consumer Privacy Litigation* (“*Nickelodeon*”) took a narrow approach for determining whether digital identifiers can constitute PII. In a multidistrict consolidated class action, Plaintiffs, children younger than 13, brought a VPPA claim against Defendants, Viacom and Google, for unlawfully collecting personal information about them on the Internet, including what videos they were watching on Viacom’s websites.⁵⁴ Plaintiffs all visited and used “Nick.com,” Defendant’s website, to watch videos.⁵⁵ In the registration process, Plaintiffs were told that personal information would not be collected.⁵⁶ Plaintiffs alleged

53. *Infra* Part V; *see* S. REP. NO. 100-599 at 5–6 (Senator Leahy denounced the disclosure of Judge Bork’s video-watching, stating,

[I]n an era of interactive television cables, the growth of computer checking and check-out counters, of security systems and telephones . . . it would be *relatively easy at some point* to give a profile of a person and tell what they buy in a store, what kind of food they like, what sort of television programs they watch, who are some of the people they telephone. I think that is wrong. I think that really is Big Brother, and I think it is something that we have to guard against.

(emphasis added).)

54. *In re Nickelodeon Consumer Privacy Litig.*, 827 F.3d 262, 267 (3d Cir. 2016), *cert. denied sub nom.* C. A. F. v. Viacom Inc., 137 S. Ct. 624 (2017).

55. *Id.* at 268.

56. *See id.* at 269.

that Defendants were unlawfully using “cookies⁵⁷ to track children’s web-browsing and video-watching habits on Viacom’s websites,” and sending the information to a third party, Google, without permission.⁵⁸ The court focused on the following information as relevant for its PII analysis: (1) a user’s IP address;⁵⁹ (2) a user’s browser and operating system settings;⁶⁰ and (3) the computing device’s “unique device identifier.”⁶¹ Plaintiffs alleged that Google could aggregate this data in order to determine the user by device and “track the same computer across time.”⁶²

The *Nickelodeon* court articulated a narrow approach for PII by ultimately concluding that PII covers only “the kind of information that would readily permit an ordinary person to identify a specific individual’s video-watching history.”⁶³ The court relied primarily on legislative history after determining that the text of the statute is ambiguous.⁶⁴ The court concluded that Congress had a narrow purpose in passing the VPPA with the intention of only preventing disclosure of information “that would, with little or no extra effort, permit an ordinary recipient to identify a particular person’s video-watching habits.”⁶⁵ The court also noted that it did not think Congress passed the Act intending “for the law to cover factual circumstances far removed from those that motivated its passage.”⁶⁶ The court found that since the Act was trimmed down from covering video and library material to only video, this hinted that Congress intended a narrow interpretation of PII.⁶⁷ Therefore, the court considered the legislators’ initial focus on both libraries and video stores to indicate that “the Act was meant to prevent disclosures of information capable

57. *Id.* (explaining that “[a]n Internet ‘cookie’ is a small text file that a web server places on a user’s computing device. Cookies allow a website to ‘remember’ information about a user’s browsing activities . . .”).

58. *Id.*

59. *Id.* at 281 (“[A] number assigned to each device that is connected to the Internet that permits computer-specific online tracking.”).

60. A user’s browser “comprises a so-called ‘browser fingerprint.’” *Id.* at 282 (“The plaintiffs claim that these [browser fingerprint] profiles are so detailed that the odds of two people having the same browser fingerprint are 1 in 286,777.”).

61. *Id.*

62. *Id.*

63. *Id.*

64. *Id.* at 284.

65. *Id.*

66. *Id.*

67. *Id.* at 284–85. (“This becomes apparent by tracing the Video Privacy Protection Act’s legislative history . . . [t]he then-extant Senate bill would have punished both disclosures relating to video tape service providers and disclosures relating to library borrowing records.”).

of identifying an *actual person's* reading or video-watching habits.”⁶⁸ Lastly, the court also found that since Congress did not amend the 1988 definition of PII during its 2013 amendment process, this illustrated that Congress preferred a narrow interpretation: “the Act serves different purposes, and protects different constituencies, than other, broader privacy laws.”⁶⁹

Two notable cases followed the *Nickelodeon* approach: *In re Hulu Privacy Litigation* and *Robinson v. Disney Online*.⁷⁰ In *Hulu*, Plaintiffs, Hulu users, brought a VPPA claim against Defendant Hulu, an online provider of on-demand video content through hulu.com.⁷¹ Plaintiffs alleged that Hulu violated the VPPA by wrongfully disclosing their video viewing selections and PII to Facebook, a third party.⁷²

Plaintiffs were all registered Hulu users.⁷³ Hulu assigned each new registered user a “User ID,” which is a unique numerical identifier.⁷⁴ Videos on hulu.com are displayed through a video player on a webpage that Hulu calls “watch pages.”⁷⁵ These watch pages included a “Like Button” feature provided by Facebook that allowed information to be transmitted to Facebook whenever the Like Button loaded on the page.⁷⁶ In fact, loading the Like Button prompted the user’s browser to send Facebook the “user’s numeric Facebook ID (from the c_user cookie),” and “the title of the video that the user was watching (contained in the Hulu watch-page address).”⁷⁷ Facebook could only identify the user by name if the “Hulu user had logged into

68. *Id.*

69. *See id.* at 288 (“Congress has recently revisited the Video Privacy Protection Act and, despite the passage of nearly thirty years since its enactment, left the law almost entirely unchanged.”).

70. *In re Hulu Privacy Litig.*, 86 F. Supp. 3d 1090 (N.D. Cal. 2015), *appeal dismissed* (Oct. 28, 2015); *Robinson v. Disney Online*, 152 F. Supp. 3d 176 (S.D.N.Y. 2015).

71. *In re Hulu Privacy Litig.*, 86 F. Supp. 3d at 1091–92.

72. *Id.* at 1091.

73. *Id.* at 1092 (“A Hulu user does not need to register for a Hulu account to watch videos on hulu.com using a personal computer To register for a Hulu account, the user enters a first and last name, birth date, gender, and an email address Users are not required to provide their legal first and last name during registration.”).

74. *Id.*

75. *Id.*

76. *Id.* at 1093–94 (“Hulu added a Facebook ‘Like’ button to each hulu.com watch page. . . . Certain information was transmitted from hulu.com to Facebook via the ‘Like’ button Hulu sent Facebook the watch page’s address the address for each watch page included the title of the video displayed on that watch page.”).

77. *Id.* at 1094.

Facebook using certain settings in the previous four weeks.”⁷⁸ Hulu did not send Facebook the Hulu User ID or the Hulu user’s name.⁷⁹

The court found that Defendant Hulu could not have transmitted PII to Facebook because there was an absence of evidence that “Hulu *actually knew* that Facebook might combine information that identified Hulu users with separate information specifying which video that user was watching” to identify the user.⁸⁰ The holding was based on the court’s multiple narrow interpretations of the VPPA. First, the court found that “the connection” between a person’s identity and video materials must be made before disclosure to a third party, and therefore must be “immediate” when a third party receives it, in order to constitute PII.⁸¹ In addition, the court placed emphasis on the connection element, finding that it is a “necessary element of the VPPA.”⁸² Lastly, the court found that unless a Plaintiff has evidence that the Defendant knew that the third party had “the code” to identify a person and would make “the connection,” it could not be held liable under the VPPA because it did not *knowingly* disclose PII.⁸³

The *Hulu* court made its finding based on the conclusion that the VPPA was enacted for Bork-like cases, characterized by an “obvious” connection between “a specific user and the material he requested.”⁸⁴ This led the court to conclude that the connection element distances “Internet-streaming case[s] from the situations for which the VPPA was enacted.”⁸⁵ Unlike in *Nickelodeon* and *Robinson*, the *Hulu* court did not conduct an analysis of the legislative

78.

If the Hulu user had logged into Facebook using certain settings within the previous four weeks, the Like button would cause a “c_user” cookie to be sent to Facebook; c_user contains (among other things) the logged-in user’s Facebook user ID expressed in a numeric format Facebook can identify this number as a particular Facebook user Hulu did not send Facebook the Hulu User ID or the Hulu user’s name when the user’s browser executed the code to load the Like button.

(emphasis added). *Id.* at 1094.

79. *Id.*

80. *Id.* at 1091 (emphasis added).

81. *Id.* at 1095.

82. *Id.* at 1096.

83. *Id.*

84. *Id.*

85. *Id.*

history and based its findings purely on the court's interpretation of the text and the Bork scenario.⁸⁶

The Southern District of New York also followed the narrow approach in *Robinson*.⁸⁷ Plaintiff James Robinson brought a VPPA claim against Defendant Disney Online for allegedly disclosing PII to Adobe, a third-party analytics company, without Plaintiff's consent.⁸⁸ Plaintiff watched Disney's video content through the Roku Channel Store, an "online digital media platform."⁸⁹ Plaintiff claimed that Disney's Roku channel was programmed to send Adobe users' PII, including "a record of every video clip viewed by the user" accompanied by a "hashed serial number" that was unique and constant for the lifetime of the user's device.⁹⁰ Plaintiff argued that this constituted PII because Adobe had the capability to use aggregated data to "personally identify . . . users and associate their video viewing selections with a personalized profile in its databases."⁹¹

The *Robinson* court held that information disclosed by Disney did not amount to PII because the "information [Disney] disclosed itself" could not have identified Plaintiff.⁹² The court defined PII as information which must *itself* identify a particular person as having viewed specific video materials.⁹³ The court rejected Plaintiff's argument that "Adobe's ability to identify Robinson by linking this disclosure with other information" should be considered as evidence that there was a disclosure of PII.⁹⁴ The court stated that it "agrees with the *Yershov* court that PII, in this statutory context, includes more than just names and addresses."⁹⁵ However, beyond this agreement, the court sided with the majority approach in *Yershov* that adopted a narrow

86. *See id.* at 1095–1105.

87. *Robinson v. Disney Online*, 152 F. Supp. 3d 176 (S.D.N.Y. 2015).

88. *Id.* at 177–78.

89. *Id.* at 178.

90. *Id.*

91. *See id.* ("Robinson does not argue that the information disclosed by Disney—a 'record of [his viewing] activities . . . along with the hashed serial number associated with [his] Roku device' . . . constitutes PII in its own right.").

92. *See id.* at 184.

93. *Id.* at 183.

94. *See id.*

95. *Id.* at 181 (finding "it would be difficult to read the language of the statute otherwise").

definition of PII, holding that disclosed information cannot constitute PII if it requires additional information to identify the person.⁹⁶

The *Robinson* court mainly relied on previous case law while conducting an analysis of legislative history. First, the court found that the legislative history clearly conveys that PII needs to identify a particular person in connection with his or her viewing history.⁹⁷ Second, the court found that the VPPA’s definition of “particularized” proved Congress intended to create a narrow scope for PII, critiquing *Yershov*’s definition as “overly expansive.”⁹⁸ The court emphasized that entities now, more than ever, have greater capabilities to identify users with “the impact of modern digital technologies.”⁹⁹

Next, the court refused to take into consideration third parties’ capabilities to manipulate disclosed data, finding that this would shift the purpose of the statute by imposing too much uncertain liability on entities.¹⁰⁰ The court found that since “nearly any piece of information can, with enough effort on behalf of the recipient, be combined with other information so as to identify a person,” a broad scope for PII would be “limitless.”¹⁰¹ Second, the court was concerned that considering third-party capabilities would create a knowledge requirement for entities removing “any real limitation of liability.”¹⁰² Lastly, the court was concerned that third-party context considerations would improperly create liability “even where the ability of third-party recipients to compile identifying information was unknown to them.”¹⁰³ Thus, the court found that these considerations are unsupported by the statutory text.¹⁰⁴

96. *See id.* at 180.

97. *See id.* at 179–80 (“As explained in the Senate Report issued in advance of the statute’s enactment, ‘personally identifiable information’ is intended to be transaction-oriented. It is information that identifies a particular person as having engaged in a specific transaction with a video tape service provider.”) (citing S. REP. NO. 100-599 at 12).

98. *Id.* at 18.

99. *Id.* at 181.

100.

It would render meaningless the requirement that the information identify a specific person as having rented or watched specific videos, as all information would, with some work, be identifying, and would transmute a statute focused on disclosure of specific information to one principally concerned with what third parties might conceivably be able to do with far more limited disclosures.

Id.

101. *Id.*

102. *Id.*

103. *Id.* at 180.

104. *Id.* at 181. The court wrote:

B. THE BROAD APPROACH: FIRST CIRCUIT IN YERSHOV

In *Yershov*, Plaintiff Alexander Yershov brought a VPPA claim against Defendant Gannett Satellite Information Network, Inc. (“Gannett”), a newspaper publisher, for allegedly disclosing information about the Plaintiff to a third party, Adobe Systems Incorporated (“Adobe”).¹⁰⁵ Plaintiff was watching videos from his phone on a “proprietary mobile software application” (“App”) offered by Gannett.¹⁰⁶ Gannett never sought Plaintiff’s consent to disclose his information associated with the App to third parties.¹⁰⁷ Plaintiff alleged that each time he viewed video content on the App, Gannett gave the following information to Adobe: (1) the title of the video viewed; (2) the GPS coordinates of the device at the time the view was viewed; and (3) certain identifiers associated with the user’s device, such as its unique Android ID.¹⁰⁸ An Android ID is a unique identifier that allows third parties “to identify and track specific users across multiple electronic devices, applications, and services.”¹⁰⁹ Adobe uses this collected information to provide Gannett with marketing analytics.¹¹⁰

The district court in *Yershov* criticized the narrow approach adopted by the Third Circuit in *Nickelodeon* for taking an “unrealistic view of the nature of personal identifiers, and how readily different databases or pieces of

But such a principle would necessarily either read into the VPPA a requirement that providers not only know the nature of the information actually disclosed by them, but also know the informational capabilities of any third-party recipient, or, to the extent ‘knowing’ is limited to knowledge of disclosure, hold providers liable even where the ability of third-party recipients to compile identifying information was unknown to them. Both constructions are unsupported by the statutory text.

Id.

105. *Id.* at 484.

106. *Id.* (“The App allows users to access news and entertainment media content, including videos, on their mobile devices.”).

107. *Id.*

108. *Id.* (emphasis added).

109. *Id.*

110. *Id.* For more context:

Adobe is an unrelated third party that offers data analytics and online marketing services to its clients by collecting information about consumers and their online behavior Adobe takes this and other information culled from a variety of sources to create user profiles comprised of a given user’s personal information, online behavioral data, and device identifiers.

Id.

information can be linked together.”¹¹¹ Similarly, the First Circuit concluded that “the language [of the statute] reasonably conveys . . . that PII is not limited to information that explicitly names a person.”¹¹² Therefore, the First Circuit affirmed the district court’s finding that information that does not identify a specific person can still constitute PII when a third party has access to information that might thereafter enable it to identify the user.¹¹³

In *Yershov*, the First Circuit adopted a broad approach for determining the scope of PII: PII can embrace “information reasonably and foreseeably likely to reveal . . . videos [the plaintiff] has obtained.”¹¹⁴ However, an identifier can fall outside the scope of PII when “the linkage of information to identity becomes too uncertain, or too dependent on too much yet-to-be-done, or unforeseeable detective work.” The First Circuit’s broad approach allows courts to use “reasonable inferences” based on evidence of a particular third party’s resources. Thus, the First Circuit considered evidence that Adobe, as opposed to an abstract reasonable person, had access to resources that would allow for re-identification of the transmitted data.¹¹⁵ These reasonable inferences were made in the plaintiff’s favor, potentially including the recipient of the data and what kind of resources they have available.¹¹⁶ For instance, the First Circuit recognized that Adobe has the capability “to link the GPS address and device identifier information to a certain person by name, address, phone number, and more.”¹¹⁷ This led the First Circuit to agree with the district court, finding that both the plaintiff’s phone GPS coordinates and Android ID constituted PII.¹¹⁸

The First Circuit focused primarily on the text of the statute.¹¹⁹ First, the court concluded that the language “reasonably conveys . . . that PII is not limited to information that explicitly names a person.”¹²⁰ Second, the court

111. *Yershov v. Gannett Satellite Info. Network, Inc.*, 104 F. Supp. 3d 135, 145–46 (D. Mass. 2015), *rev’d*, 820 F.3d 482 (1st Cir. 2016) (responding to the decision in *In re Nickelodeon Consumer Privacy Litig.*, MDL No. 2443 (SRC), 2014 WL 3012873 (D.N.J. July 2, 2014)).

112. *Yershov*, 820 F.3d 482 at 486.

113. *Id.* (finding that information “effectively revealing the name of the video viewer” is sufficient to constitute PII under the VPPA).

114. *Id.* at 486.

115. *Id.* at 486.

116. *Id.*

117. *Id.*

118. *Id.* at 486.

119. *See id.*

120. *Id.* at 486 (“[N]evertheless, the language reasonably conveys the point that PII is not limited to information that explicitly names a person. Had Congress intended such a narrow

found that Congress's use of the word "includes" also indicated a broad interpretation because "the proffered definition [of PII] falls short of capturing the whole meaning."¹²¹ Lastly, the court relied on legislative history, concluding that not only can "[m]any types of information other than a name [] easily identify a person," but context must be taken into consideration in the analysis of PII.¹²²

The Central District of California followed *Yershov's* broad approach to PII in *In re Vizio, Inc., Consumer Privacy Litigation* ("*Vizio*").¹²³ In *Vizio*, Plaintiffs, users of Vizio Smart TVs, brought a claim against Defendant Vizio, manufacturer of cutting edge televisions called "Smart TVs," for using software to automatically "collect and report consumer's content viewing histories" and then disseminating this information to third-parties without users' consent.¹²⁴ Vizio's Smart TVs used a software called "Smart Interactivity" to collect users' video watching practices and "detailed information about the consumers digital identity," including "consumers' IP addresses, zip codes, MAC addresses, product model numbers, hardware and software versions, chipset IDs, region and language settings."¹²⁵ Plaintiffs argued that this array of data falls within the statutory definition of PII, asserting that Vizio's disclosure constituted a "constellation of information" that provided a "'game plan' to associate individuals with their viewing habits."¹²⁶

The *Vizio* court held that "highly specific viewing behavior data on a massive scale with great accuracy" could lead to re-identification and thus

and simple construction, it would have had no reason to fashion the more abstract formulation contained in the statute.").

121. *See id.* ("[M]oreover, the language Congress did use to define PII begins with the word 'includes' That word normally implies that the proffered definition falls short of capturing the whole meaning.") (citing 18 U.S.C. § 2710(a)(3)) (citing *In re Fahey*, 779 F.3d 1, 5–6 (1st Cir. 2015)).

122. *Id.* ("[W]e also have the benefit of the Senate Report expressly stating that the drafters' aim was "to establish a minimum, but not exclusive, definition of personally identifiable information." (citing S. REP. NO. 100–599)); *see id.* (The *Yershov* court provides the following example to illustrate how an identifier can be linked back to a person and the importance of context when determining likelihood: "Revealing a person's social security number to the government, for example, plainly identifies the person. Similarly, when a football referee announces a violation by 'No. 12 on the offense,' everyone with a game program knows the name of the player who was flagged.").

123. *In re Vizio, Inc., Consumer Privacy Litig.*, 238 F. Supp. 3d 1204 (C.D. Cal. 2017).

124. *Id.* at 1212.

125. *Id.*

126. *Id.* at 1212, 1223.

qualifies as PII.¹²⁷ The court came to this conclusion adopting the *Yershov* court’s “reasonably and foreseeably likely to reveal” approach.¹²⁸ While the court did review statutory language and legislative history, it mostly relied on prior case law.¹²⁹ First, the court found that both statutory language and congressional intent illustrated that Congress intended PII to “encompass more than a person’s name and physical address.”¹³⁰ Next, in determining how to conduct the PII link analysis, the court turned to case law, weighing *Nickelodeon*’s narrow approach against *Yershov*’s broad approach and finding the latter more persuasive.¹³¹ First, the court criticized the *Nickelodeon* court for not spending enough time evaluating the statutory text.¹³² Second, the court found that the *Nickelodeon* court relied too heavily on “Congress’s decision *not* to amend the statute substantially in 2002.”¹³³ Lastly, the court critiqued *Nickelodeon*’s “ordinary person” approach as being too narrow, because excluding evidence regarding a person’s ability to consult additional materials would raise serious doubt about whether traditional identifiers, such as social security numbers, could constitute PII.¹³⁴

127. *Id.* at 1225.

128. *Id.*; see also *Yershov v. Gannett Satellite Info. Network, Inc.*, 820 F.3d 482, 486 (1st Cir. 2016).

129. See *In re Vizjo, Inc.*, 238 F. Supp. 3d at 1223–26.

130.

The suffix ‘able’ means ‘capable of,’ so ‘personally identifiable information’ plainly extends beyond a consumer’s name The statutory structure confirms that Congress intended ‘personally identifiable information’ to encompass more than a person’s name and physical address. In the original Act, Congress included both an opt-out and opt-in disclosure process. If a consumer opted in to a disclosure, a video tape service provider could reveal any type of personally identifiable information. But if the consumer had to opt out of the disclosure, the video tape service provider could disclose only the consumer’s name and address.

Id. at 1224 (citing Video Privacy Protection Act of 1988, S. 2361, 100th Cong. § 2 (1988)).

131. *Id.* at 1224–26

132. *Id.* at 1224–25.

133. *Id.* at 1225 (“*In re Nickelodeon* relied heavily on Congress’s decision not to amend the statute substantially in 2002. As the Supreme Court has instructed, this kind of [p]ost-enactment legislative history (a contradiction in terms) is not a legitimate tool of statutory interpretation.”) (citing *Brusewitz v. Wyeth LLC*, 562 U.S. 223, 242 (2011)).

134. *Id.* at 1225 (“[U]nder the Third Circuit’s ‘ordinary person’ test it would be highly questionable whether even social security numbers would constitute personally identifiable information because, as the Third Circuit itself recognized, this information ‘might not be easily matched to . . . persons without consulting another entity, such as a credit reporting agency or government bureau.’”) (citing *In re Nickelodeon Privacy Litig.*, 827 F.3d 262, 283 (3d Cir. 2016), *cert. denied sub nom.* *C. A. F. v. Viacom Inc.*, 137 S. Ct. 624 (2017)).

V. LEGISLATIVE HISTORY ANALYSIS

The courts in *Yershov* and *Nickelodeon* both found the VPPA to be ambiguous and turned to the legislative history, yet the courts reached opposite conclusions about the definition of PII.

The Supreme Court in *Twentieth Century Music Corp. v. Aiken* instructed that “[w]hen technological change has rendered its literal terms ambiguous, [a law] must be construed in light of [its] basic purpose.”¹³⁵ Since courts have consistently found the plain language of the VPPA to be ambiguous with regards to PII, a large part of this Note’s analysis centers on understanding the purpose of the statute as related to PII. In order to understand the purpose of the statute, this Part uses legislative history as an indicator of Congressional intent.

A. PII WAS INTENDED TO BE BROADLY INTERPRETED

Professor Huffman illustrates with multiple observations how the VPPA’s legislative history depicts that Congress did not want to limit what kind of information would qualify for protection under the statute.¹³⁶ First, the initial bill proposed by the House for adoption, H.R. 3523, merely prohibited disclosure of “the identity of the individual who rented or purchased” video materials.¹³⁷ The term PII was not implemented in this version of the Act.¹³⁸ However, in a succeeding proposal, H.R. 4947, the term PII was included without a definition.¹³⁹ S. 2361 broadened the scope of disclosed information by using the term PII along with the following definition, substantially similar to the one adopted in the VPPA: “[T]he term ‘personally identifiable information’ includes information which identifies a person as having requested or obtained specific materials or services from a video tape service provider or library.”¹⁴⁰

This definition of PII illustrates that Congress was unsatisfied with statutory language that would only protect direct unauthorized disclosure of a person’s identity without considering other avenues in which a person’s identity could be determined. It also shows Congress’s recognition of a logical difference between an identifier and a person’s identity, laying the foundation

135. *Twentieth Century Music Corp. v. Aiken*, 422 U.S. 151, 156 (1975) (interpreting the Copyright Act).

136. See Huffman, *supra* note 6.

137. H.R. 3523, 100th Cong. (1987).

138. *Id.*

139. H.R. 4947, 100th Cong. (1988).

140. S. 2361 § 2(a)(2), 100th Cong. (1988) (enacted).

for a potential link between the two. By using the word “includes,” the statute conveys that PII should not be limited to information that explicitly names a person.¹⁴¹ In fact, the Senate Report of the VPPA expressly states that “[u]nlike the other definitions . . . paragraph (a)(3) uses the word ‘includes’ to establish a minimum, but not exclusive, definition of personally identifiable information.”¹⁴² By establishing a minimum, Congress left the door open for not only defining what could qualify as identifiable information, but also how that information could identify a person. Failure to draw this key distinction creates confusion about the interpretation of the scope of PII.

B. HOW TO “IDENTIFY” UNDER THE VPPA IS UNCLEAR AND CREATES CONFUSION IN THE COURTS

While Congress intended the definition of PII to be broadly interpreted, it provided no guidance on what it means to “identify” an individual. Therefore, courts constructed their own rules for deciding what qualifies as a sufficient link between an identifier and a person’s identity, which has led to a circuit split as illustrated in Part IV.¹⁴³

The Senate Report states that “[t]he bill prohibits video stores from disclosing ‘personally identifiable information’—information that links the customer or patron to particular materials or services.”¹⁴⁴ This confirms again that Congress was less concerned with the form that the personal information was disclosed in—for example, a name versus a number ID—than with whether the information *actually linked* back to the person in a way that would reveal the person’s identity. The problem is that Congress did not instruct how to determine whether a link between a digital identifier and a person’s identity is certain enough to qualify as PII.¹⁴⁵ Meanwhile, technology has drastically changed the way individuals are identified and what identifiers are used.¹⁴⁶ Thus, the confusion over PII lies in the ambiguity of when a link between the specific digital identifiers disclosed and the person’s identity is sufficiently strong enough to qualify the disclosed information as PII.

141. See *infra* note 142.

142. S. REP. NO. 100-599, at 7 (1988).

143. See, e.g., *Robinson v. Disney Online*, 152 F. Supp. 3d 176, 180 (S.D.N.Y. 2015) (noting “Less clear is . . . how, precisely, this information[,] [discussed in the definition of PII,] must identify a person”).

144. *Id.* at 7.

145. *Yershov v. Gannett Satellite Info. Network, Inc.*, 820 F.3d 482, 486 (1st Cir. 2016) (finding “[t]he definition of that term (‘identifies a person as having [obtained a video]’) adds little clarity beyond training our focus on the question whether the information identifies the person who obtained the video” (quoting 18 U.S.C. § 2710(a)(3) (2012))).

146. See *supra* Part III.

VI. REVISITING RECENT CASES IN LIGHT OF LEGISLATIVE HISTORY AND CURRENT TECHNOLOGICAL INSIGHT

How *should* the legislative history of the VPPA be used to interpret the definition of PII? Part VI compares the VPPA’s legislative history with current approaches, in order to illustrate what courts are getting right or wrong and why. As discussed above, courts generally agree that PII identifiers can be broadly interpreted to include more than just a person’s name, but the courts have split over what method of identification can be protected by the VPPA—what courts have called the “connection” or “link” required between the disclosure of information and the person.¹⁴⁷

The big picture divide among courts hinges on whether or not a court believes that an identifier must *itself* directly identify a person in order to constitute PII. Courts that follow a broad approach have held that data does not have to specify an individual if the third party can be found to have additional information that would “foreseeably and reasonably” enable it to identify the user.¹⁴⁸ On the other hand, courts following a narrow approach have held that data must immediately identify a person in order to constitute PII.¹⁴⁹ This Section will be organized based on principles that have divided the courts, leading to their respective approaches.

A. HOW A “CONNECTION” MUST OCCUR BETWEEN IDENTIFIER AND PERSON

Courts are divided on whether the identification of a person can occur after disclosure to a third party or whether it must occur before. Courts following a narrow approach hold that information can only qualify as PII if it can identify a person before the disclosure of data to the third party, making the PII disclosure immediate.¹⁵⁰ On the other hand, courts following a broad approach hold that information can qualify as PII, even if identification occurs after disclosure, if identification of a person is reasonable and foreseeable based on the third party’s capabilities.

This Section argues that, based on legislative intent, information should qualify as PII after disclosure. The legislative history heavily weighs in favor of

147. See, e.g., *In re Hulu Privacy Litig.*, 86 F. Supp. 3d 1090, 1095 (N.D. Cal. 2015).

148. See *In re Vizio, Inc., Consumer Privacy Litig.*, 238 F. Supp. 3d 1204, 1225 (C.D. Cal. 2017); *Yershon*, 820 F.3d at 486.

149. See, e.g., *In re Hulu*, 86 F. Supp. 3d at 1090; *Robinson v. Disney Online*, 152 F. Supp. 3d 176 (S.D.N.Y. 2015).

150. See, e.g., *In re Hulu*, 86 F. Supp. 3d.

courts taking a broad perspective on identification of PII. First, by introducing the VPPA with a discussion of how the advancement in data collection and related technology could seriously threaten the privacy of individuals in their daily lives, Congress illustrated that it wanted the VPPA to address incidents of collective disclosure, meaning instances where user data is aggregated and disclosed with other users' data.¹⁵¹ Second, in light of the Supreme Court's instruction, courts should interpret PII in light of the “basic purpose” of the VPPA, which is to prevent the unauthorized disclosure of a person's identity in connection with her video-watching history.¹⁵² Third, since Congress expressed that PII should not just include direct identifiers, such as a person's name, this illustrates an intent for courts to consider other avenues of identification.¹⁵³ Therefore, the basic purpose of the statute would be satisfied if a plaintiff plausibly pleaded that identification can occur in the hands of the third party, regardless of whether the identification occurs before or after disclosure.

In contrast, the courts that took the narrow approach had multiple flaws in their reasoning. First, they wrongly assumed that VPPA cases need to resemble the Bork case that incited the VPPA. The *Hulu* and *Nickelodeon* courts both argued that PII disclosure must be immediate because that is what occurred in the Bork case, and therefore Congress only intended for these types of cases to be protected.¹⁵⁴ However, as previously discussed, the legislative history illustrates that Congress wanted the VPPA to address instances of collective, not just individualized, disclosure, with an eye towards the expanding technological capabilities of information pooling.¹⁵⁵

Second, narrow approach courts, such as *Robinson*, argued that if the court evaluated the capabilities of third parties, this would impose too much uncertain liability on entities, because they would need to know the “informational capabilities” of third-party recipients.¹⁵⁶ However, while the

151. See *supra* Part V.

152. See *supra* note 135.

153. See Part V.

154. See *In re Nickelodeon Privacy Litig.*, 827 F.3d 262, 294 (3d Cir. 2016), *cert. denied sub nom.* C. A. F. v. Viacom Inc., 137 S. Ct. 624 (2017) (“The court does not think Congress passed the Act with the intention ‘for the law to cover factual circumstances far removed from those that motivated its passage.’ ”); see *In re Hulu*, 86 F. Supp. 3d at 1096, *appeal dismissed* (Oct. 28, 2015) (“The nature of the third element—the connection—distances this Internet-streaming case from the situations for which the VPPA was enacted. The paradigmatic case, the case that prompted the VPPA, involved a video store's giving a Washington Post [sic] reporter a list of the videos that Circuit Judge Robert Bork had rented.”).

155. See Part V; note 49.

156. See *Robinson v. Disney Online*, 152 F. Supp. 3d 176, 181 (S.D.N.Y. 2015).

Robinson court declined to “ascribe . . . an expansive intent to Congress in enacting the VPPA,”¹⁵⁷ it conceded that modern-day technology has likely made third-party identification more feasible. The *Robinson* court is correct in recognizing that expanding the scope of PII creates more uncertainty for defendants, but the court’s argument for defining a narrow approach does not align with Congressional intent. To the contrary, since Congress expressed fears that improvements in digital technology could threaten user privacy, courts would best follow Congressional intent by interpreting the VPPA broadly.¹⁵⁸ Therefore, instead of viewing the complexity of technology as too unforeseeable for Congress to have anticipated, this Note agrees with the *Vizio* court’s finding that the PII analysis should be a factual inquiry.¹⁵⁹

As discussed in Part II, the more access to different databases a company has, the higher the likelihood that a company will be able to re-identify a user. While re-identification of indirect identifiers is not guaranteed, it is possible, and particularly likely when the information is sent to third party analytics companies, such as many of the recent VPPA litigation defendants.¹⁶⁰ Therefore, the liability is not as unforeseeable as the *Robinson* court claims; if a company is sending user data to an analytics company that has more than ordinary access to multiple databases, the company should understand that re-identification is possible. Likewise, the company should be held liable for exposing its users to this risk. Courts should focus less on decreasing the risk of liability for defendants and more on whether there is a likelihood of re-identification for indirect digital identifiers. This analysis can only occur on a case-by-case basis. The following Section discusses some factors courts should consider when evaluating PII.

1. *What Factors Should Courts Consider in Determining the Disclosure of PII*

In *Nickelodeon*, the leading narrow approach case, the court set an “ordinary person” test, finding that only information that would readily permit an

157. *See id.*

158. *Video and Library Privacy Protection Act of 1988: Hearing on H.R. 4947 & S. 2361 Before the Subcomm. on Courts, Civil Liberties & the Admin. of Justice of the H. Comm. on the Judiciary & the Subcomm. on Tech. & the Law of the S. Comm. on the Judiciary*, 100th Cong. (1988) at 131 (“The advent of the computer means not only that we can be more-efficient than ever before, but that we have the ability to be more intrusive than ever before.”).

159. *In re Vizio, Inc., Consumer Privacy Litig.*, 238 F. Supp. 3d 1204, 1225–26 (C.D. Cal. 2017) (“The Court stresses the posture of this case: Ultimately, Plaintiffs will have to demonstrate that Vizio’s disclosures are ‘reasonably and foreseeably likely to reveal’ what video content Plaintiffs have watched. But this is a factual inquiry ill-suited for resolution on a motion to dismiss.”).

160. *See supra* Part II.

ordinary person to identify a specific individual qualifies as PII.¹⁶¹ On the other hand, the *Yershov* court, which took the broad approach, found that courts should take into consideration “reasonable interferences” based on third party capabilities in determining if information is “reasonably and foreseeably likely to reveal . . . videos [the plaintiff] has obtained.”¹⁶²

The narrow approach is too restrictive to capture the purposes intended by Congress. Since Congress wanted a broad interpretation of identifiers, supplemented by the fact the Congress never explicitly limited how PII should be identified, courts would be overstepping their power by setting an ordinary person standard.¹⁶³ If Congress wanted PII to only constitute information identifiable by an ordinary person, it could have easily established a reasonable person standard like it has in other statutes. In addition, this notion directly conflicts with Congress wanting the VPPA to address record-keeping technology and surveillance, which is not generally considered knowledge acquired by an ordinary person. In fact, the *Nickelodeon* court cites Representative Robert Kastenmeier, stating: “American citizens should not have to worry that a government agent, or a reporter, or anyone else, will be able to find out what they are reading These principles apply as much to customers of video stores as to patrons of libraries.”¹⁶⁴ This statement inherently expresses that users’ privacy ought to be protected not just from the capabilities of ordinary people, but also from more resourceful entities.

The *Nickelodeon* court argues that since Congress did not amend the definition of PII in 2013, this indicates that the Act “serves different purposes, and protects different constituencies, than other, broader privacy laws.”¹⁶⁵ However, as found in *Vizio*, this analysis was improper because post-enactment legislative history is not a legitimate tool of statutory interpretation.¹⁶⁶ Additionally, the *Vizio* court provides a strong illustration of how limiting the ordinary person standard can be, arguing that this standard

161. *See In re Nickelodeon Consumer Privacy Litig.*, 827 F.3d 262, 290 (3d Cir. 2016), *cert. denied sub nom.* C. A. F. v. Viacom Inc., 137 S. Ct. 624 (2017).

162. *Yershov v. Gannett Satellite Info. Network, Inc.*, 820 F.3d 482, 486 (1st Cir. 2016).

163. *See supra* Part III.

164. *See In re Nickelodeon*, 827 F.3d at 285, *cert. denied sub nom.* C. A. F. v. Viacom Inc., 137 S. Ct. 624 (2017) (citing *Video and Library Privacy Protection Act of 1988: Hearing on H.R. 4947 & S. 2361 Before the Subcomm. on Courts, Civil Liberties & the Admin. of Justice of the H. Comm. on the Judiciary & the Subcomm. on Tech. & the Law of the S. Comm. on the Judiciary*, 100th Cong. 21–22 (1988)).

165. *Id.* at 288.

166. *See supra* note 133.

would exclude social security numbers (SSN) from qualifying as PII because an ordinary person does not have access to a database of SSNs.¹⁶⁷

Courts such as *Nickelodeon* fail to grasp PII as Congress intended because they analyze PII in the abstract instead of looking at the specific facts of the case to determine whether the recipient of the information would have the capability to use the data in question to reveal the identity tied to the digital identifier. Identifying information means any data that uniquely distinguishes a person out of a group. Therefore, this Note finds that the “reasonably and foreseeably” approach established by the *Yershov* court mostly closely aligns with the purpose of the VPPA because it takes into consideration context surrounding the disclosure of information, rather than ignoring evidence simply because it falls outside the judicially created narrow standard.

For instance, in *Hulu*, the court set the standard that PII must be identifiable before disclosure, and therefore the disclosure of user’s viewing history along with Facebook IDs could not constitute PII under the statute. The courts found no PII even though the Facebook IDs were allegedly going to Facebook, which, as the source of the IDs, could easily identify users with its own databases. In addition, as this Note discussed in Part III, Facebook IDs are publicly accessible information, so even an ordinary user could theoretically re-identify the data.¹⁶⁸ This illustrates how taking into consideration context does not always mean entering a “limitless” scope of possibilities.¹⁶⁹

VII. CONCLUSION

In creating the VPPA, Congress intended to prevent the unauthorized disclosure of a person’s video-watching history.¹⁷⁰ As discussed in Part V, Congress wanted a broad interpretation of what could qualify as an identifier of personal information, because it recognized that a basic identifier, like name or telephone number, was not the only way that a person’s identity could be revealed.¹⁷¹ Thus, whether digital identifiers qualify as PII under the VPPA

167. *In re Vizio, Inc., Consumer Privacy Litig.*, 238 F. Supp. 3d 1225 (C.D. Cal. 2017).

168. *See supra* note 40.

169. *Robinson v. Disney Online*, 152 F. Supp. 3d 176, 181 (S.D.N.Y. 2015) (citing *In re Nickelodeon Consumer Privacy Litig.*, MDL No. 2443 (SRC), 2014 WL 3012873, at *11 (D.N.J. July 2, 2014)) (“Certainly, this type of information might one day serve as the basis of personal identification after some effort on the part of the recipient, but the same could be said for nearly any type of personal information.”).

170. *See supra* Part IV.

171. *Id.*

depends on how closely linked the digital identifiers are to the individual’s identity, which requires considering the re-identification capabilities of the party who receives the digital identifiers.

As discussed above, the confusion in the PII analysis is occurring because courts are unclear of what identifies a person under the definition of PII. Legislative history illustrates that Congress enacted the VPPA partially in an effort to address the technological advances occurring in information pooling and databased collections.¹⁷² Therefore, courts should not just brush off digital identifiers as too unclear to qualify as PII, especially since these cases consist of fact patterns similar to the fears expressed by Congress during the passing of the Act.¹⁷³

Under the Supreme Court’s instruction, courts should use the “basic purpose” of the VPPA in interpreting PII.¹⁷⁴ Therefore, since the purpose of the Act is to “preserve personal privacy” with respect to video materials and Congress intended a broad interpretation of PII, courts ought to take into consideration specific context in determining whether given the facts a person could be identified in connection to his or her video material.¹⁷⁵ The opposite approach of first trying to define PII in the abstract and then determining whether certain identifiers could fall into that scope, as some courts currently do, fails to address the heart of PII, which is this: can the person *actually* be identified? The ordinary person standard, by explicitly excluding a realm of factors from being considered, is in direct contradiction with the “not exclusive” definition of PII that Congress wanted.¹⁷⁶

To determine the identifiability of a particular digital identifier, courts may want to consider two factors: (1) the unauthorized recipient and its alleged resources; and (2) whether any additional information required to identify the user is publicly available, or private, but within the unauthorized recipient’s access.

During the introduction of the VPPA, Senator Robert W. Kastenmeier said that “[t]he advent of the computer means not only that we can be more-efficient than ever before, but that we have the ability to be more intrusive than ever.”¹⁷⁷ Almost thirty years later, this continues to be true, creating a

172. See *supra* Part III.

173. See *supra* Part IV.

174. See *supra* note 135.

175. See S. REP. NO. 100-599 (1988) at 1.

176. S. REP. NO. 100-599, at 7 (1988).

177. *Video and Library Privacy Protection Act of 1988: Hearing on H.R. 4947 & S. 2361 Before the Subcomm. on Courts, Civil Liberties & the Admin. of Justice of the H. Comm. on the Judiciary & the Subcomm. on Tech. & the Law of the S. Comm. on the Judiciary*, 100th Cong. 131 (1988).

balancing act between social utility and privacy concerns. With the VPPA, Congress intended to create a statute that would protect privacy interests regardless of technological advancements. Thus, in order to honor the purposes of the Act, courts should conduct case-by-case analyses that consider context and reasonable inferences. My name is Yarden Kakon, but you can call me User 101.

BPCIA UPDATE: ENTROPY IS THE PRICE OF AN ORDERED FRAMEWORK

Rithika Kulathila[†]

I. INTRODUCTION

The pharmaceutical industry has often relied on patent law to protect its investments, recoup costs associated with research and development (e.g., clinical trials), and encourage innovation.¹ Simultaneously, because of patent law's strong protections, a premium is added to drug prices—which limits accessibility and affordability to these life-saving therapies. In order to address this concern, Congress created the Hatch-Waxman Amendments in 1984 for small molecule drugs.² The Act sought to balance incentives for the pharmaceutical industry as well as increase accessibility and affordability of life-saving drugs for patients.³ Since the Hatch-Waxman Amendments were limited to the small molecule drug class,⁴ Congress enacted another regulatory

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1. See Matthew J. Higgins & Stuart J. H. Graham, *Balancing Innovation and Access: Patent Challenges Tip the Scales*, 326 SCIENCE, 370, 370 (2009); see also Dan L. Burk & Mark A. Lemley, *Policy Levers in Patent Law*, 89 VA. L. REV. 1575, 1580, 1676 (2003) (discussing the various policies in patent law as it applies to the pharmaceutical industry).

2. See 21 U.S.C. § 355(j) (2012); see also Margaret A. Hamburg, *Celebrating 30 years of Easier Access to Cost-Saving Generic Drugs*, FOOD & DRUG ADMIN.: FDA VOICE, (Sept. 24, 2014), <https://www.fda.gov/newsevents/newsroom/fdavoices/default.htm>

[<https://perma.cc/R99Z-YG93>] (“President Ronald Reagan signed into law the Drug Price Competition and Patent Term Restoration Act of 1984, better known today as the Hatch-Waxman Amendments.”).

3. Krista H. Carver, Jeffrey Elikan & Erika Lietzan, *An Unofficial Legislative History of the Biologics Price Competition and Innovation Act of 2009*, 65 FOOD & DRUG L.J. 671, 676–77 (2010) (“The Hatch-Waxman amendments were a compromise between innovator industry interests and generic industry interests. They represented the marriage of two strands of public policy thinking in the late 1970s and early 1980s indeed, the joining together of two bills, one restoring to innovators a portion of the patent life that lapsed during research, development, and FDA premarket review, and the other creating a generic drug approval pathway.”).

4. See *id.* at 699–704 (2010) (“[t]he question quickly arose whether the agency [FDA] already had sufficient statutory authority to approve biosimilars or at least abbreviated applications under the [Hatch-Waxman Act],” because the Hatch-Waxman Act was limited to approving generic versions of small molecule drugs and not generic versions of biologics); see also Donald E. Segal et al., *Regulatory Pathway for “Biosimilar” Products Debated* 22 WASH. LEGAL FOUND. 1, 2–3 (2007) (“[The] FDA explicitly stated that the 505(b)(2) approval pathway

scheme for biologics, the Biologics Price Competition and Innovation Act (BPCIA) in 2009.⁵ The major distinction between the two classes of drugs is that small molecule drugs are chemically synthesized whereas biologics are synthesized in a living system.⁶ As a result of the differences in manufacturing processes, biologics are often significantly larger, costlier, and harder to characterize than small molecule drugs.⁷

Because of the Hatch-Waxman Amendments' success in spurring the generic market, Congress wanted the BPCIA to embody similar principles. Thus, like the Hatch-Waxman Amendments, the BPCIA creates a pre-market patent dispute resolution process in order to settle patent-related disputes before the biosimilar, "generic version" of a biologic, is commercially manufactured or sold. Courts and the pharmaceutical industry have struggled to interpret the BPCIA. Nonetheless, biosimilar manufacturers and reference product sponsors are engaging in the process and are actively trying to understand how the statute works.

Part II of this Note provides background information about biosimilars, Congress's motivation for the BPCIA and a brief explanation of the statutory scheme of the BPCIA. Part III of this Note discusses the current cases in this area of the law and synthesizes the cases to provide guidance about the statutory scheme. Part IV of this Note argues that the Supreme Court's recent holding in *Sandoz, Inc. v. Amgen, Inc.* may have resulted in unintended consequences and seems to be inconsistent with the greater purpose and text of the BPCIA. Part V concludes this Note.

II. BACKGROUND

Section II.A provides preliminary information about the composition of a biosimilar to highlight the differences between the commonly known small molecule generics and biosimilars. Section II.B discusses Congress' primary motivations for enacting the BPCIA. Section II.C explains the statutory scheme of the BPCIA.

[statutory pathway created before the BPCIA that possibly allowed for very limited approval of biosimilars] cannot be utilized for products originally licensed under section 351 of the PHSA [section of the PHSA that concerned biologics] . . . Many in [generic] industry believe that FDA does not have the authority to approve a proposed product under the 505(b)(2) pathway . . .").

5. 42 U.S.C. § 262 (2012); 35 U.S.C. § 271 (2012). The BPCIA was enacted as part of the Affordable Care Act (ACA). Under the current administration, it is possible that the ACA may be repealed or modified, which may have an impact the BPCIA.

6. Thomas Morrow, *Defining the Difference: What Makes Biologics Unique*, 4 BIOTECHNOLOGY HEALTHCARE 24, 25–26 (2004).

7. *Id.*

A. WHAT IS A BIOSIMILAR?

A biosimilar is the generic version of a biologic drug.⁸ Biologics are drugs that are typically created in living cells using recombinant DNA.⁹ Essentially, researchers synthesize DNA responsible for producing the biologic and then insert the DNA into a bacterial or mammalian cell.¹⁰ The cell is then grown in a proprietary cell line, which will induce expression of the biologic as well as other proteins. In order to get the final product, the biologic has to be isolated through various purification techniques.¹¹ This manufacturing information: the vector the DNA is inserted into, the cell line, the properties of cell expression, and the purification techniques, are often protected by trade secret and not patent law.¹² The manufacturing process is key in characterizing the biologic because any modifications to the manufacturing process can result in a different product despite the biosimilar being structurally similar to the original biologic.¹³ This is because any variation to the manufacturing process may impact the safety and efficacy of the follow-on.¹⁴

8. See 42 U.S.C. § 262(i)(2) (2012) (“The term ‘biosimilar’ or ‘biosimilarity’, in reference to a biological product that is the subject of an application under subsection (k), means—(A) that the biological product is highly similar to the reference product notwithstanding minor differences in clinically inactive components”); Patient Protection and Affordable Care Act, Pub. L. No. 111-148, § 3139(a)(2), 124 Stat. 119 (2010) (“The term ‘biosimilar biological product’ means a biological product approved under an abbreviated application for a license of a biological product that relies in part on data or information in an application for another biological product licensed under section 351 of the Public Health Service Act.”).

9. See Benjamin P. Falit et al., *Biosimilar Competition in the United States: Statutory Incentives, Payers, and Pharmacy Benefit Managers*, 34 HEALTH AFFAIRS 294, 294–95 (2015); see also *The Law of Biologic Medicine: Hearing Before the Comm. on the Judiciary*, 108th Cong. 1–3 (2004).

10. Morrow, *supra* note 6, at 26.

11. Matthew J. Seamon, *Antitrust and the Biopharmaceutical Industry: Lessons from Hatch-Waxman and an Early Evaluation of the Biologics Price Competition and Innovation Act of 2009*, 34 NOVA L. REV. 629, 650–52 (2010).

12. Bruce S. Manheim, Jr., Patricia Granahan & Kenneth J. Dow, *Follow-On Biologics: Ensuring Continued Innovation in The Biotechnology Industry*, 25 HEALTH AFFAIRS 394 n.13 at 394–97 (2006).

13. W. Nicholson Price II & Arti K. Rai, *Manufacturing Barriers to Biologics Competition and Innovation*, 101 IOWA L. REV. 1023, 1035 (2016) (“This Article emphasizes these manufacturing details because final therapeutic proteins are influenced by each step in the manufacturing process. To take one well-studied example, the choice of organism from which to generate a cell line, and the culture conditions, can alter the pattern of carbohydrates attached to the surface of the protein, also known as the ‘glycosylation pattern.’ Changes in glycosylation can significantly impact the biologic in several ways, including the stability of the protein (both outside and inside the body), the length of time the protein remains with the bloodstream, the binding of the protein to its therapeutic targets, and the reaction of the body’s immune system to the protein.”).

14. *Id.* at 1035–36.

Biologics are used to treat cancer and can be used to manage and treat cystic fibrosis, diabetes, hemophilia, hepatitis, cancers, and autoimmune diseases (such as rheumatoid arthritis).¹⁵ Biologic drugs differ from well-known small molecule drugs, like Advil, in size, manufacturing process, cost, and composition.¹⁶ As a result of the differences, the FDA insisted on creating a separate statute from the Hatch-Waxman Amendments to govern the approval process for biosimilars.¹⁷

Since biosimilars are created without manufacturing data from the original biologic, there are inherent differences between the biosimilar and its corresponding biologic.¹⁸ As a result, the FDA approval process for highly similar biosimilar requires that the biosimilar is a “similar” to the biologic and

15. Morrow, *supra* note 6, at 24; see also Niti Goel & Kamali Chance, *Biosimilars in Rheumatology*, 56 RHEUMATOLOGY 187, 187 (2016); see also Seamon, *supra* note 11, at 640 (“Biologics represent the evolving future of prescription drug therapy. They have already revolutionized the treatment of cancer, diabetes, hemophilia, and rheumatoid arthritis, among other diseases. . .”).

16. See *Amgen Biosimilars*, AMGEN BIOSIMILARS, <https://www.amgenbiosimilars.com/expertise/discovery/> [https://perma.cc/P46Z-UXHR]; see also *Biologics and Biosimilars: Balancing Incentives for Innovation: Hearing Before the Subcomm. on Courts & Competition Policy of the H. Comm. on the Judiciary*, 111th Cong. 8 (2009) (statement of Rep. Anna Eshoo) (“Biologics are expensive, and they are risky to develop. A recently released study sponsored by the National Venture Capital Association analyzed the relative cost for investors in biotechnology and found that the cost of capital for startup biotech companies is more than double the costs that other companies must pay. These costs stem from long developmental timelines of typically 10 years or more and extraordinary levels of risk. Fewer than 1 percent of biologics make it to the market. Imagine that. Fewer than 1 percent. And the large amounts of capital required . . .”).

17. Carver et al., *supra* note 3, at 699–704 (2010).

18. Because of the likelihood of the biosimilar being different from the corresponding biologic, it represented a threat to RPS since the FDA may approve of biosimilars that are unlikely to infringe the patents on the biologic. Moreover, the biosimilar manufacturer could release the biosimilar before the RPS’s patents expired and offer a 10 and 30 discount. See *Assessing the Impact of a Safe and Equitable Biosimilar Policy in the United States: Hearing Before the Subcomm. on Health of the H. Comm. on Energy & Commerce*, 110th Cong. 183 (2007); see also *Biologics and Biosimilars: Balancing Incentives for Innovation: Hearing Before the Subcomm. on Courts & Competition Policy of the H. Comm. on the Judiciary*, 111th Cong. 221–22 (2009); FED. TRADE COMM’N, EMERGING HEALTH CARE ISSUES: FOLLOW-ON BIOLOGIC DRUG COMPETITION (2009) <https://www.ftc.gov/sites/default/files/documents/reports/emerging-health-care-issues-follow-biologic-drug-competition-federal-trade-commission-report/p083901biologics-report.pdf> [https://perma.cc/DT84-BFJ3] [hereinafter EMERGING HEALTH CARE ISSUES] (“These FOB entrants are unlikely to introduce their FOB products at price discounts any larger than between 10 and 30 percent of the pioneer products’ price”); see also Seamon, *supra* note 11 at 640 (“Within two months of losing patent protection, Prozac lost 70% of its multibillion dollar market share.”). To lessen the threat, Congress provided brand manufacturers a 12-year exclusivity period.

not the “same” (as it requires for generic small molecules).¹⁹ This is due to the complexity of creating biologics. Often, a biologic may appear in different isoforms, which impacts its stability, efficacy, and safety.²⁰ While biologics undergo extensive clinical trials, biosimilars are able to piggyback off of the clinical trial data so long as the follow-on manufacturer is able to demonstrate “similarity.”²¹

B. CONGRESS’S PRIMARY MOTIVATION FOR ENACTING THE BPCIA:
COST

In 2004, Congress began to consider legislation that would provide an approval process for biosimilars.²² Much of the congressional testimony alluded to the fact that many patents on biologics were about to expire, so Congress could act to create a pathway to approve biosimilars in a way that balanced incentives for both the RPS and the biosimilar manufacturer.²³ As

19. Manheim et al., *supra* note 12 at 397–98; Price & Rai, *supra* note 14, at 1036. Price and Rai note:

As discussed, biologics are highly variable, and such variability can have major impacts on a drug’s safety and efficacy. . . . In other words, even if manufacturing methods were different, the difference in manufacturing methods would matter less if the final products could be demonstrated to be identical. This approach works for small-molecule drugs. Indeed, the ease of proving product identity, independent of its manufacturing process, is what makes generic drugs under Hatch-Waxman possible. However, although the issue is somewhat disputed, in many cases analytical methods available to biosimilar firms are insufficient to verify identity. Although the analytical methods available are substantial, they cannot ensure that two proteins are identical. Therefore, in order for a follow-on manufacturer to be confident that it has duplicated an originator firm’s biologic, it must have knowledge of the originator firm’s manufacturing process and cell lines.

Price & Rai, *supra* note 14, at 1036.

20. Seamon, *supra* note 11 at 650–51.

21. See Erwin A. Blackstone & Joseph P. Fuhr, *The Economics of Biosimilars*, 6 AM. HEALTH & DRUG BENEFITS 469, 470 (2013).

22. See *The Law of Biologic Medicine: Hearing Before the Comm. on the Judiciary*, 108th Cong. (2004).

23. See, e.g., *The Law of Biologic Medicine: Hearing Before the Comm. on the Judiciary*, 108th Cong. (2004). Chairman Hatch stated:

Our society can ill afford to avoid a debate over the proper regulation of follow-on biologics. We simply cannot sustain over time programs such as Medicare unless we seriously explore what steps might prudently be taken to end an FDA regulatory system that effectively acts as a secondary patent for off-patent biological products [Statement on behalf of Generic Pharmaceutical Association, Washington D.C.] In 1984, we were at a crossroads. The brand industry was flourishing, and yet FDA had no regulatory pathway and no system which provided for generic versions of most of these brand products. So even after their patents expired, brand

was discussed during the 2007 Congressional hearings, biologics represented a \$18 billion industry in the US and \$56 billion industry globally in 2006.²⁴ By 2014, sales of biologics globally totaled \$200 billion.²⁵ Therefore, an approval process for biosimilars would prevent the pharmaceutical industry from continuing to reap outsized profits because a lack of competition from a generic market.²⁶

The high cost of biologics not only impacted patients, but also impacted Medicare and other retirement-related insurance providers.²⁷ Chairman Orrin Hatch stated that without a regulatory pathway for low-cost biosimilars, government programs such as Medicare and Medicaid could not continue to provide coverage for biologics.²⁸ In a 2007 House hearing, Priya Mathur, on behalf of a public employees retirement agency CALPers, spoke in favor of creating a regulatory pathway because the current system presented an “unsustainable challenge to CALPers” in providing drug coverage.²⁹

companies continued to sell their products at monopoly prices because they had monopolies. Congress responded and enacted the very successful Hatch-Waxman Act. Today, we are at a similar crossroads, Mr. Chairman, only this time it is for what we call biopharmaceuticals, as opposed to the traditional pharmaceuticals. As you said in your opening statement, biotechnology products account for something like \$33 billion in pharmaceutical sales, and the sales are growing. Many of the large-selling biotech drugs have come off patent already or they will soon. More important, in contrast to the traditional drugs, these have exceedingly high costs, in the thousands of dollars per patient per year. So the potential savings and the stakes for the health care system are enormous.

Id. at 2, 19.

24. Donald E. Segal et al., *Regulatory Pathway for “Biosimilar” Products Debated*, 22 WASH. LEGAL FOUND. 1, 1–4 (2007).

25. Lindsay Kelly, *Biologics in the Practice of Law*, 39 HARV. J. L. & PUB. POL’Y 21, 21 (2016).

26. See *The Law of Biologic Medicine: Hearing Before the Comm. on the Judiciary*, 108th Cong. 19 (2004).

27. *Id.*; see also *Assessing the Impact of a Safe and Equitable Biosimilar Policy in the United States: Hearing Before the Subcomm. on Health of the H. Comm. on Energy & Commerce*, 110th Cong. 140–41 (2007).

28. *The Law of Biologic Medicine: Hearing Before the Comm. on the Judiciary*, 108th Cong. 2 (2004) (“Our society can ill afford to avoid a debate over the proper regulation of follow-on biologics. We simply cannot sustain over time programs such as Medicare unless we seriously explore what steps might prudently be taken to end an FDA regulatory system that effectively acts as a secondary patent for off-patent biological products.”).

29. *Assessing the Impact of a Safe and Equitable Biosimilar Policy in the United States: Hearing Before the Subcomm. on Health of the H. Comm. on Energy & Commerce*, 110th Cong. 140–41 (2007).

C. STATUTORY SCHEME OF THE BPCIA

BPCIA has two aspects it, the BPCIA enables three major events and it enumerates remedies for violations to its various statutory provisions³⁰. First, the statute creates an artificial act of infringement when the biosimilar manufacturer submits its application to the FDA for initial approval.³¹ Second, the statute encourages the RPS and the biosimilar manufacturer to engage in a “patent dance” to determine which patents will be licensed, litigated, and/or expired before the biosimilar is commercially manufactured.³² Third, the statute forces the biosimilar manufacturer to provide the RPS with 180-day notice of when the biosimilar manufacturer intends to commercially market its product.³³ Each of these events are described in more detail below.

1. *Artificial Infringement*

The statute dictates that when the biosimilar manufacturer submits its application to the FDA for initial approval, the submission creates an artificial act of infringement.³⁴ That is, filing an application creates an act of infringement under the patent infringement statute.³⁵ As a result, the RPS has a right to sue for patent infringement.

2. *Patent Dance*

Once the biosimilar manufacturer receives notice from the Secretary of Health and Human Services that its application has been approved, the biosimilar manufacturer has 20 days to provide the RPS with its application and manufacturing information.³⁶ The RPS then provides the biosimilar manufacturer with a “patent list,” which lists the RPS’s patents that may be infringed and patents the RPS is prepared to license.³⁷ In response, the biosimilar manufacturer must provide a statement declaring whether it intends

30. 35 U.S.C § 271(e)(6) (2012); 42 U.S.C § 262(l)(9)(B) (2012).

31. 35 U.S.C. §§ 271(e)(2)(C)(i), (ii) (2012) (“It shall be an act of infringement to submit . . . an application seeking approval of a biological product for a patent.”); 42 U.S.C § 262(k) (2012) (“Any person may submit an application for licensure of a biological product under this subsection.”); *Sandoz Inc. v. Amgen Inc.*, 137 S. Ct. 1664, 1674 (2017) (“Submitting an application constitutes an act of artificial infringement”) (citing §§ 271(e)(2)(C)(i), (ii)).

32. 42 U.S.C § 262 (l)(2)–(5) (2012).

33. § 262 (l)(8)(A).

34. 35 U.S.C. §§ 271(e)(2)(C)(i), (ii) (2012) (“It shall be an act of infringement to submit . . . an application seeking approval of a biological product for a patent.”); 42 U.S.C § 262(k) (2012) (“Any person may submit an application for licensure of a biological product under this subsection.”); *Sandoz*, 137 S. Ct. at 1674 (“Submitting an application constitutes an act of artificial infringement”) (citing §§ 271(e)(2)(C)(i), (ii)).

35. 35 U.S.C. § 271(e)(2)(c) (2012).

36. 42 U.S.C § 262(l)(2) (2012).

37. *Id.* at § 262(l)(3)(A) (2012).

to assert a defense against the listed patent (e.g., invalidity, unenforceable, or non-infringement),³⁸ agree to commercially market the biosimilar only after the patent expires, or license the listed patent.³⁹ The biosimilar manufacturer may also provide a list of patents that the RPS could also assert against it, but the biosimilar manufacturer is under no obligation to do so.⁴⁰

After the RPS receives the detailed statement about the biosimilar manufacturer's defenses,⁴¹ both parties must engage in good-faith negotiations to discuss which patents to litigate.⁴² If the parties come to an agreement, the RPS "shall" bring an infringement suit on the agreed upon patents.⁴³ However, if, after 15 days of negotiations, both parties fail to agree on a final list, then the biosimilar manufacturer will decide the maximum number of patents the RPS can assert during litigation and both parties have to provide a list of patents, within that number, to litigate.⁴⁴ Once the parties compile the lists, the RPS "shall" bring an action for patent infringement on those patents.⁴⁵

3. 180-Day Notice

The statute dictates that the biosimilar manufacturer must provide the RPS with notice 180 days before the biosimilar manufacturer begins to commercially market its product.⁴⁶ 180-day notice can be provided at any time, even before the FDA officially approves the biosimilar for commercial use.⁴⁷ Once 180-day notice has been given, the RPS gains two substantive rights. First, the RPS may seek a preliminary injunction enjoining the biosimilar manufacturer from commercially marketing its biosimilar until the court settles patent disputes stemming from the patent list, as amended,⁴⁸ that were not litigated.⁴⁹ Second, the RPS may enter into a second phase of litigation where

38. The patents in which the biosimilar manufacturer intends to assert a defense against, the biosimilar manufacturer must provide a statement with respect to each patent on a claim by claim basis "the factual and legal basis" for the biosimilar manufacturer's defenses. *Id.* at § 262(l)(3)(B) (2012).

39. § 262(l)(3)(B)(ii)–(iii).

40. § 262(l)(3)(B)(i).

41. *See* § 262(l)(3)(B)(ii).

42. § 262(l)(4).

43. § 262(l)(6)(A).

44. § 262(l)(4)(B); § 262(l)(5)(A).

45. § 262(l)(6)(B).

46. § 262(l)(8)(A).

47. *Sandoz Inc. v. Amgen Inc.*, 137 S. Ct. 1664, 1677 (2017) ("Accordingly, the applicant may provide notice either before or after receiving FDA approval . . .").

48. The RPS may amend the original patent list to add newly issued or licensed patents that were issued or licensed after the patent list was created and the RPS "reasonably believes" that a claim for patent infringement can be asserted. 42 U.S.C. § 262(l)(7) (2012).

49. *Sandoz*, 137 S. Ct. at 1672 ("In addition, prior to the date of first commercial marketing, the sponsor may 'seek a preliminary injunction prohibiting the [biosimilar]

it can assert its patents that were listed on the amended list but had not yet been asserted.⁵⁰ If, however, the biosimilar manufacturer fails to provide 180-day notice, then the RPS is entitled to seek declaratory relief on the patents originating from the patent list.⁵¹

4. Remedies

For statutory violations of the BPCIA, 42 U.S.C. § 262(l)(9) enumerates the remedies.⁵² RPS manufacturers may also seek the traditional remedies for patent infringement under 35 U.S.C. § 271 and § 283.⁵³ Under the remedy provision of the BPCIA, if the biosimilar manufacturer provides its application to the RPS, then neither party can seek declaratory relief until 180-day notice has been given.⁵⁴ However, if the biosimilar manufacturer fails to provide its application, then the exclusive remedy⁵⁵ is that the RPS may immediately bring an action for declaratory judgment on “any patent that claims the biological product or a use of the biological product.”⁵⁶ The RPS may also seek relief

applicant from engaging in the commercial manufacture or sale of [the biosimilar] until the court decides the issue of patent validity, enforcement, and infringement with respect to any patent that was included on the § 262(l)(3) lists but not litigated in the first phase.” (citing § 262(l)(8)(B); *see also* § 262(l)(8)(B)).

50. § 262(l)(8)(A).

51. § 262(l)(9)(B).

52. *Sandoz*, 137 S. Ct. at 1675. The court stated:

The remedy provided by § 262(l)(9)(C) excludes all other federal remedies, including injunctive relief. Where, as here, “a statute expressly provides a remedy, courts must be especially reluctant to provide additional remedies.” The BPCIA’s “carefully crafted and detailed enforcement scheme provides strong evidence that Congress did *not* intend to authorize other remedies that it simply forgot to incorporate expressly.” The presence of § 262(l)(9)(C), coupled with the absence of any other textually specified remedies, indicates that Congress did not intend sponsors to have access to injunctive relief, at least as a matter of federal law, to enforce the disclosure requirement.

(citations omitted). *Id.*

53. The remedies under 35 U.S.C. § 271(e)(4) dictates remedies for infringement but it does not dictate remedies for when either party violates provisions of the BPCIA. *See Sandoz Inc.*, 137 S. Ct. at 1674.

54. *Sandoz*, 137 S. Ct. at 1672 (“In this second phase of litigation [once 180-day notice has been given], *either* party may sue for declaratory relief”) (citing 42 U.S.C. § 262(l)(9)(A)).

55. *Id.* at 1675 (“The remedy provided by § 262(l)(9)(C) excludes all other federal remedies, including injunctive relief.”).

56. *Id.* at 1672, which states:

Under § 262(l)(9)(C), if an applicant fails to provide its application and manufacturing information to the sponsor—thus effectively pretermittting the entire two-phase litigation process—then the sponsor, but not the applicant, may immediately bring an action “for a declaration of

when the biosimilar manufacturer fails to take others action required by the statute.⁵⁷ For instance, the RPS may seek immediate declaratory relief on any patents on the amended patent list when the biosimilar manufacturer fails to (1) provide the RPS with a detailed statement of the legal and factual basis, claim-by-claim, of the biosimilar manufacturer's defenses against the patents on the patent list or amended version, or (2) provide 180-day notice.⁵⁸

Under the remedy provision of the Patent Act, § 271(e)(4), the RPS has a few additional options. The RPS may seek injunctive relief against the biosimilar manufacturer to prevent the biosimilar manufacturer from commercially marketing its biosimilar within the United States.⁵⁹ The RPS may also seek monetary relief if the biosimilar has been "commercial[ly] manufacture[d], use[d], offer[ed] to sell, or [sold] within the United States or import[ed] into the United States."⁶⁰ Under the BPCIA, if a patent on the patent list is found to be infringed, "the sole and exclusive remedy" is for the RPS to recoup is a reasonable royalty.⁶¹

III. HOW HAVE THE SUPREME COURT AND FEDERAL CIRCUIT INTERPRETED THE BPCIA?

This Part provides recent case law to help piece together an understanding of how the BPCIA operates.

infringement, validity, or enforceability of any patent that claims the biological product or a use of the biological product."

57. 42 U.S.C. § 262(l)(9)(B) (2012); *Sandoz*, 137 S. Ct. at 1672, where the Court noted: Similarly, when an applicant provides the application and manufacturing information but fails to complete a subsequent step, § 262(l)(9)(B) provides that the sponsor, but not the applicant, may bring a declaratory-judgment action with respect to any patent included on the sponsor's § 262(l)(3)(A) list of patents (as well as those it acquired later and added to the list).

58. § 262(l)(9)(B) (2016).

59. 35 U.S.C. § 271(e)(4)(B) (2012); *id.* § 283; *see also Sandoz*, 137 S. Ct. at 1675 n.2 ("[W]e express no view on whether a district court could take into account an applicant's violation of § 262(l)(2)(A) (or any other BPCIA procedural requirement) in deciding whether to grant a preliminary injunction under 35 U.S.C. § 271(e)(4)(B) or § 283 against marketing the biosimilar . . .").

60. 35 U.S.C. § 271(e)(4)(C) (2012).

61. § 271(e)(6)(B), which states:

In an action for infringement of a patent described in subparagraph (A) [BPCIA], the sole and exclusive remedy that may be granted by a court, upon a finding that the making, using, offering to sell, selling, or importation into the United States of the biological product that is the subject of the action infringed the patent, shall be a reasonable royalty.

A. FEDERAL CIRCUIT IN *AMGEN V. APOTEX*

After the Federal Circuit decided *Amgen, Inc. v. Sandoz, Inc.*⁶² (one of the first BPCIA cases), the Federal Circuit took up *Amgen v. Apotex* to determine whether 180-day notice was mandatory if both parties participated in the patent dance and if 180-day notice can be enforced by an injunction. Amgen (the RPS) and Apotex (the biosimilar manufacturer) engaged in the patent dance after Apotex's biosimilar application was approved.⁶³ After creating a patent list and negotiating which patents Amgen would assert against Apotex (but before receiving a license from the FDA), Apotex provided 180-day notice that it would begin commercially marketing its product.⁶⁴ Amgen then filed an infringement suit based on the agreed upon patent claims.⁶⁵ During the litigation, the Federal Circuit decided another BCPIA case, *Amgen v. Sandoz*, in which it held that 180-day notice could only be given after the biosimilar receives FDA approval (thus invalidating Apotex's pre-licensure notice).⁶⁶

After the Federal Circuit's decision in *Amgen v. Sandoz* issued, Amgen filed a motion for a preliminary injunction against Apotex to delay any commercial marketing until Apotex provided proper 180-day notice post-FDA licensure.⁶⁷ The district court granted Amgen the preliminary injunction because notice provides a "window" for the RPS to assess all of its patents prior to the biosimilar being commercially marketed.⁶⁸ Apotex disagreed and argued that granting the injunction would extend the market exclusivity period from 12 years to 12.5 years, and the BPCIA states that notice violations are remedied by declaratory judgement.⁶⁹ The district court rejected Apotex's arguments and instead held that the BPCIA does not establish that the remedy provision within the statute is the exclusive remedy, and declaratory judgement would only rush the courts.⁷⁰ Apotex appealed the district court's grant of a preliminary injunction.⁷¹

The Federal Circuit affirmed and held that injunctive relief is proper to enjoin the biosimilar manufacturer from commercially marketing its product until after it provides post-licensure 180-day notice, and declaratory relief was not the exclusive remedy when the biosimilar manufacturer fails to provide

62. 794 F.3d 1347 (Fed. Cir. 2015).

63. *Amgen Inc. v. Apotex Inc.*, 827 F.3d 1052, 1059 (Fed. Cir. 2016).

64. *Id.*

65. *Id.*

66. *Id.* at 1059–60, 1066.

67. *Id.* at 1060.

68. *Id.*; see also *Amgen Inc. v. Sandoz Inc.*, 794 F.3d 1347, 1360 (Fed. Cir. 2015).

69. *Apotex Inc.*, 827 F.3d at 1060; see also 42 U.S.C. § 262(l)(9)(B) (2012).

70. *Apotex Inc.*, 827 F.3d 1060.

71. *Id.*

180-day notice.⁷² This is because nothing in the statute makes declaratory relief an exclusive remedy for failure to comply with the patent dance and in “absence of a clear and valid legislative command” federal courts have equitable jurisdiction to provide relief.⁷³ Further, 180-day notice is mandatory, regardless of participation in the patent dance.⁷⁴ Therefore, 180-day notice is mandatory and can be enforceable via preliminary injunction.⁷⁵

The Federal Circuit envisioned the BPCIA having two rounds of potential litigation, litigation that occurs after the patent list is created (§ 1)(6)) and litigation that occurs after the biosimilar manufacturer provides 180-day notice (§ 1)(8)).⁷⁶ In support of this interpretation, the Federal Circuit explained that § 1)(9)(A) reinforced the two-stage litigation scheme because it prevented both the RPS and the biosimilar manufacturer from seeking declaratory relief on any patent on the patent list and patents that were asserted in a § 1)(6) action until 180-day notice was provided.⁷⁷ Because the Federal Circuit envisioned that the second-phase of litigation occurred after the FDA approved the biosimilar for commercial use, the RPS has a chance to bring claims that may have been weak, but are now strong.⁷⁸ This is because until the biosimilar is licensed, much of its “[therapeutic] uses, and [manufacturing] processes” have not yet been fixed, resulting in uncertainty about many of the RPS’s patent claims.⁷⁹ In the end the Supreme Court denied certiorari,⁸⁰ which made the Federal Circuit’s opinion final.

B. SUPREME COURT IN *SANDOZ INC. V. AMGEN INC.*

After the Federal Circuit decided *Apotex*, the Supreme Court granted certiorari on the case that laid the groundwork for the Federal Circuit’s reasoning: *Sandoz v. Amgen*.⁸¹ There, the Federal Circuit had decided that the 180-day notice is mandatory and must be provided after the FDA issues a license.⁸² The Federal Circuit also held in *Sandoz* that the failure to turn over

72. *Id.* at 1054–55.

73. *Id.* at 1063–64.

74. *Id.* at 1061 (“We ruled in *Amgen v. Sandoz* that this language is, indeed, ‘mandatory,’ and we did not say that it was mandatory only in no-(2)(A)-notice circumstances.”).

75. *Id.* at 1055.

76. *Id.* at 1056 (“Given the deadlines set in § 262(l), and the time commonly taken for FDA review, we may assume that the early litigation under paragraph (6) will be initiated before the FDA licenses the applicant’s biosimilar product.”).

77. *Id.* at 1057.

78. *See id.* at 1062.

79. *See id.*; *see also* *Amgen Inc. v. Sandoz Inc.*, 794 F.3d 1347, 1358 (Fed. Cir. 2015).

80. *Apotex Inc. v. Amgen Inc.*, 137 S. Ct. 591 (2016).

81. *Amgen Inc.*, 794 F.3d at 1347.

82. *Id.* at 1359 (“A question exists, however, concerning whether the ‘shall’ provision in paragraph (l)(8)(A) is mandatory. We conclude that it is.”).

its application and manufacturing information as required by the patent dance (§ 1(2)) cannot be enforced by an injunction.⁸³ The Supreme Court granted certiorari to reconsider both of these issues.

On June 12, 2017, the Supreme Court issued its first decision regarding the BPCIA. The Court settled two questions of interpretation, (1) whether the statutory requirement that the biosimilar manufacturer turn over its manufacturing information can be enforced by an injunction and (2) whether the biosimilar manufacturer must give 180-day notice after the FDA issues a license for the biosimilar.⁸⁴

First, the Supreme Court ultimately agreed with the Federal Circuit and held that under federal law, the biologic manufacturer cannot seek an injunction when the biosimilar manufacturer fails to provide its application and manufacturing information.⁸⁵ However, the Supreme Court's reasoning greatly differed from that of the Federal Circuit. Under the BPCIA, the Court found that submitting an application to the FDA creates an act of artificial infringement under §§ 271(e)(2)(C)(i), (ii).⁸⁶ However, unlike the Federal Circuit's reasoning, failing to disclose the application and manufacturing information to the biologic manufacturer under § 262(l)(2)(A) does not create an act of artificial infringement. The Court explained that §§ 271(e)(2)(C)(i), (ii) merely "assists in identifying which patents" may be asserted during future litigation.⁸⁷ This is because § 271(e)(2) defines the scope of what "shall be an

83. *Id.* at 1358. The court noted:

Requiring that a product be licensed before notice of commercial marketing ensures the existence of a fully crystallized controversy regarding the need for injunctive relief. It provides a defined statutory window during which the court and the parties can fairly assess the parties' rights prior to the launch of the biosimilar product. If a notice of commercial marketing could be given at any time before FDA licensure, the RPS would be left to guess the scope of the approved license and when commercial marketing would actually begin. Indeed, filing an aBLA only suggests that a subsection (k) applicant intends to commercially market its product someday in the future.

Id.

84. *Sandoz Inc. v. Amgen Inc.*, 137 S. Ct. 1664, 1669 (2017).

85. *Id.* at 1674. But, the question of whether Amgen can get injunctive relief under California law was remanded to the Federal Circuit. *Id.* at 1676–77.

86. *Id.* at 1674 ("Submitting an application constitutes an act of artificial infringement. *See* §§ 271(e)(2)(C)(i), (ii) ("It shall be an act of infringement to submit . . . an application seeking approval of a biological product . . .").

87. *Id.* at 1674–75. The court noted:

In this way, the two clauses of § 271(e)(2)(C) work in tandem. They both treat submission of the application as the act of artificial infringement for which § 271(e)(4) provides the remedies. And they both identify the patents subject to suit, although by different means depending on whether the biosimilar manufacturer disclosed its application and manufacturing

act of infringement” and § 271(e)(2)(C)(i) identifies the patents that can be asserted in future litigation.⁸⁸ Then, § 271(e)(2)(C)(ii) must also identify patents that can be asserted in future litigation in cases in which the biosimilar manufacturer fails to provide its application.⁸⁹ Therefore, § 271(e)(2)(C)(i) does not, by itself, create an “act of infringement” whose exclusive remedies are enumerated under § 271(e)(4).

The Federal Circuit reasoned that when a biosimilar manufacturer fails to provide its applications and manufacturing information under § 262(l)(2)(A), the act itself gave rise to a claim infringement.⁹⁰ The RPS would be thereby able to seek remedies under both § 271(e)(4) and § 262(l)(9), neither of which provide injunctive relief.⁹¹ The problem is, as the Supreme Court noted, this interpretation created confusion and uncertainty over the appropriate

information under § 262(j)(2)(A). If the applicant made the disclosures, clause (i) applies; if it did not, clause (ii) applies. In neither instance is the applicant’s failure to provide its application and manufacturing information an element of the act of artificial infringement, and in neither instance does § 271(e)(4) provide a remedy for that failure.

Id.

88. *Id.* at 1674, states:

[H]is conclusion follows from the structure of § 271(e)(2)(C). Clause (i) of § 271(e)(2)(C) defines artificial infringement in the situation where the parties proceed through the list exchange process and the patents subject to suit are those contained in the § 262(j)(3) lists, as supplemented under § 262(j)(7). That clause provides that it is an act of artificial infringement to submit, “with respect to a patent that is identified in the list of patents described in [§ 262(l)(3)] (including as provided under [§ 262(l)(7)]), an application seeking approval of a biological product.”

(citations omitted).

89. *Id.* at 1674, states:

Clause (ii) of § 271(e)(2)(C), in contrast, defines artificial infringement in the situation where an applicant fails to disclose its application and manufacturing information altogether and the parties never prepare the § 262(j)(3) lists. That clause provides that the submission of the application represents an act of artificial infringement with respect to any patent that *could* have been included on the list.

(citations omitted).

90. *Amgen Inc. v. Sandoz Inc.*, 794 F.3d 1347, 1356 (Fed. Cir. 2015) (“Under 35 U.S.C. § 271(e)(2)(C)(ii), filing a subsection (k) application and failing to disclose the required information under paragraph (j)(2)(A) is an artificial ‘act of infringement’ of ‘a patent that could be identified’ pursuant to paragraph (j)(3)(A)(i) . . .”).

91. *Id.* at 1357 (“[W]e ultimately conclude that when a subsection (k) applicant fails the disclosure requirement, 42 U.S.C. § 262(j)(9)(C) and 35 U.S.C. § 271(e) expressly provide the only remedies as those being based on a claim of patent infringement.”); *cf.* *Sandoz Inc. v. Amgen Inc.*, 137 S. Ct. 1664, 1674 (2017) (“The flaw in the Federal Circuit’s reasoning is that Sandoz’s failure to disclose its application and manufacturing information was not an act of artificial infringement, and thus was not remediable under § 271(e)(4).”).

remedy.⁹² Instead, the Supreme Court’s interpretation makes § 262(l)(9)(C), declaratory relief, the exclusive remedy when the biosimilar manufacturer fails to provide its application because “[t]he remedy provided by § 262(l)(9)(C) excludes all other federal remedies.”⁹³ Further, the Court recognized that this “punishment” for failure to provide manufacturing information is proper because it shifts control from the biosimilar manufacturer, who declined to follow the rules, to the RPS because “[i]t also deprives the applicant of the certainty it could have obtained by bringing a declaratory-judgment action prior to marketing its product.”⁹⁴

Second, the Court reversed the Federal Circuit and held that 180-day notice may be given “either before or after receiving FDA approval.”⁹⁵ The Federal Circuit had held that 180-day notice must be given after the biosimilar manufacturer receives licensure from the FDA, because “the statutory

92. *See Sandoz*, 137 S. Ct. at 1675, which states:

Stating that “[t]he remedy provided by § 262(j)(9)(C) excludes all other federal remedies, including injunctive relief. Where, as here, ‘a statute expressly provides a remedy, courts must be especially reluctant to provide additional remedies.’ The BPCIA’s ‘carefully crafted and detailed enforcement scheme provides strong evidence that Congress did *not* intend to authorize other remedies that it simply forgot to incorporate expressly.’”

(citations omitted). Therefore, the courts would struggle whether to provide relief under § 271(e)(4) or the enumerated remedy, declaratory relief under § 262(l)(9)(C).

93. *Id.* at 1675, states:

The remedy provided by § 262(j)(9)(C) excludes all other federal remedies, including injunctive relief. Where, as here, ‘a statute expressly provides a remedy, courts must be especially reluctant to provide additional remedies.’ The BPCIA’s ‘carefully crafted and detailed enforcement scheme provides strong evidence that Congress did *not* intend to authorize other remedies that it simply forgot to incorporate expressly.’ The presence of § 262(j)(9)(C), coupled with the absence of any other textually specified remedies, indicates that Congress did not intend sponsors to have access to injunctive relief, at least as a matter of federal law, to enforce the disclosure requirement.

(citations omitted).

94. *Id.*, which states:

When an applicant [biosimilar manufacturer] fails to comply with § 262(j)(2)(A), § 262(j)(9)(C) authorizes the sponsor, but not the applicant, to bring an immediate declaratory-judgment action for artificial infringement as defined in § 271(e)(2)(C)(ii). Section 262(j)(9)(C) thus vests in the sponsor the control that the applicant would otherwise have exercised over the scope and timing of the patent litigation. It also deprives the applicant of the certainty that it could have obtained by bringing a declaratory-judgment action prior to marketing its product.

95. *Id.* at 1677 (“Accordingly, the applicant [biosimilar manufacturer] may provide notice either before or after receiving FDA approval.”).

language compels such an interpretation.”⁹⁶ The Supreme Court disagreed.⁹⁷ The Court stated that by providing 180-day notice after licensure, the Federal Circuit created two “timing requirements” that most likely was not what Congress intended.⁹⁸ While the Court seemed to acknowledge Amgen’s policy arguments in favor of making 180-day notice come after the FDA issues final approval, Justice Thomas stated, “those arguments could not overcome the statute’s plain language, which is our ‘primary guide’ to Congress’ preferred

96. *Amgen Inc. v. Sandoz Inc.*, 794 F.3d 1347, 1357–58 (Fed. Cir. 2015), states: In subsection (j), only paragraph (j)(8)(A) refers to the product as “the biological product licensed under subsection (k).” In other provisions of subsection (j), the statute refers to the product as ‘the biological product that is the subject of’ the application, even when discussing its commercial marketing. If Congress intended paragraph (j)(8)(A) to permit effective notice before the product is licensed, it would have used the “subject of” language.

Id. (citations omitted).

97. Instead, the Supreme Court held that the meaning of a “licensed” biologic product in (l)(8)(A) is defined as the “date of the first commercial marketing” as opposed to the date the FDA issues a license for the biosimilar product. *See Sandoz Inc. v. Amgen Inc.*, 137 S. Ct. 1664, 1677 (2017), which states:

The applicant [biosimilar manufacturer] must give “notice” at least 180 days “before the date of the first commercial marketing.” “[C]ommercial marketing,” in turn, must be “of the biological product licensed under subsection (k).” § 262(j)(8)(A). Because this latter phrase modifies “commercial marketing” rather than “notice,” “commercial marketing” is the point in time by which the biosimilar must be ‘licensed.’ The statute’s use of the word “licensed” merely reflects the fact that, on the ‘date of the first commercial marketing,’ the product must be “licensed.” Accordingly, the applicant may provide notice either before or after receiving FDA approval.

(citations omitted).

98. *Sandoz*, 137 S. Ct. at 1677, states:

Statutory context confirms this interpretation. Section 262(j)(8)(A) contains a single timing requirement: The applicant [biosimilar manufacturer] must provide notice at least 180 days prior to marketing its biosimilar. The Federal Circuit, however, interpreted the provision to impose two timing requirements: The applicant must provide notice after the FDA licenses the biosimilar *and* at least 180 days before the applicant markets the biosimilar. An adjacent provision expressly sets forth just that type of dual timing requirement. But Congress did not use that structure in § 262(j)(8)(A). “Had Congress intended to” impose two timing requirements in § 262(j)(8)(A), “it presumably would have done so expressly as it did in the immediately following” subparagraph

(citations omitted).

policy.”⁹⁹ Interestingly, Justice Breyer’s concurrence opines that Congress “implicitly delegated” power to the FDA to interpret.¹⁰⁰ Therefore, if the FDA “determines that a different interpretation would better serve the statute’s objectives, it may well have authority to depart from, or to modify, today’s interpretation”¹⁰¹

C. FEDERAL CIRCUIT IN *AMGEN V. HOSPIRA*

Subsequent to the Supreme Court’s decision in *Sandoz*, the Federal Circuit returned to questions about how to obtain manufacturing information from the biosimilar pursuant to § (l)(2) and which remedies may the RPS seek under the BPCIA in *Amgen v. Hospira*.¹⁰²

In this case, Hospira (a biosimilar manufacturer) filed an application with the FDA seeking approval of its biosimilar in December 2014.¹⁰³ Hospira provided Amgen (the RPS) with its FDA application but it did not separately provide “information that describes the process or processes used to manufacture the biological product that is the subject of such application.”¹⁰⁴ Despite this, Amgen created a patent list of its patents that are allegedly infringed by Hospira’s biosimilar and exchanged it with Hospira.¹⁰⁵ Amgen

99. *Id.* at 1678 (“Even if we were persuaded that Amgen had the better of the policy arguments, those arguments could not overcome the statute’s plain language, which is our ‘primary guide’ to Congress’ preferred policy”).

100. *Id.*, states:

In my view, Congress implicitly delegated to the Food and Drug Administration authority to interpret those same terms. That being so, if that agency, after greater experience administering this statute, determines that a different interpretation would better serve the statute’s objectives, it may well have authority to depart from, or to modify, today’s interpretation, though we need not now decide any such matter.

(citations omitted)).

101. *Id.*, states:

In my view, Congress implicitly delegated to the Food and Drug Administration authority to interpret those same terms. That being so, if that agency, after greater experience administering this statute, determines that a different interpretation would better serve the statute’s objectives, it may well have authority to depart from, or to modify, today’s interpretation, though we need not now decide any such matter.

(citations omitted).

102. *Amgen Inc. v. Hospira, Inc.*, 866 F.3d 1355, 1360 (Fed. Cir. 2017) (“Under the BPCIA, there could be five potential avenues available to a sponsor seeking to secure process information pursuant to paragraph (l)(2)(A).”).

103. *Id.* at 1357.

104. *Id.*; 42 U.S.C. § 262(l)(2)(A) (2012).

105. *Hospira, Inc.*, 866 F.3d at 1358 (“Despite their disagreement over Hospira’s compliance with paragraph (l)(2)(A)—a disagreement that we do not resolve—the parties

noted that it could not provide a full list of its alleged infringed patents because it did not have information regarding Hospira's manufacturing process used to create its biosimilar, specifically information regarding the cell-culture medium.¹⁰⁶ Ultimately, Amgen filed suit asserting two of its patents, '349 and '298.¹⁰⁷

In reliance on the Federal Circuit's holding in *Amgen v. Sandoz*, that an RPS may obtain manufacturing information through discovery, Amgen sought discovery on Hospira's cell-culture medium through requests for production.¹⁰⁸ However, Hospira refused and Amgen filed a motion to compel production of documents related to Hospira's cell-culture medium.¹⁰⁹ The District Court of Delaware denied Amgen's motion to compel because "cell-culture information sought by Amgen 'had essentially, no relevance to the patents that are asserted.'" ¹¹⁰ Amgen appealed this decision to the Federal Circuit and the Federal Circuit requested briefing on whether the court had jurisdiction "pursuant to the collateral order doctrine or under the All Writs Act."¹¹¹ The Federal Circuit dismissed Amgen's appeal to compel discovery and denied Amgen's writ for mandamus.¹¹² The Federal Circuit lacked jurisdiction under the collateral order doctrine and Amgen did not "satisfy the prerequisites for mandamus."¹¹³ While the court refused to compel discovery on Hospira's cell-culture medium, the Federal Circuit provided some guidance on what Amgen and other similarly situated RPS's could do.

The Federal Circuit held that the RPS can obtain missing information from the biosimilar manufacturer's insufficient disclosure under § (l)(2) only by listing any and all patents relating to the insufficiency and asserting them in a subsequent patent infringement action.¹¹⁴ By doing this, the RPS can obtain discovery pursuant to Federal Rule of Civil Procedure 26(b) on the missing information.¹¹⁵

proceeded to the next phase of the BPCIA's information exchange by identifying patents subject to suit.").

106. *Id.* at 1358.

107. *Id.*

108. *Id.*

109. *Id.*

110. *Id.* (citing Transcript of Discovery Dispute Before the Honorable Richard G. Andrews at 37, *Amgen Inc. v. Hospira, Inc.*, 2016 U.S. Dist. LEXIS 102951 (D. Del. Aug. 5, 2016) (No. 1:15-cv-00839-RGA) [hereinafter Transcript of Oral Argument].

111. *Id.* at 1358.

112. *Id.* at 1356.

113. *Id.*

114. *Id.* at 1360–61.

115. *See id.* at 1361 (citing FED. R. CIV. P 26(b)(1)).

The Federal Circuit stated that Amgen could have asserted its cell-culture patents because of 35 U.S.C. § 271(e)(2)(C)(i), or (ii).¹¹⁶ 35 U.S.C. § 271(e)(2)(C)(ii) allows the RPS to assert patent claims that “*could*” have been identified on the patent list had the biosimilar manufacturer provided sufficient disclosures under § (l)(2).¹¹⁷ Alternatively, under 35 U.S.C. § 271(e)(2)(C)(i), Amgen is allowed to bring an action alleging infringement based on the patents on the patent list.¹¹⁸ As the Supreme Court noted, both §§ 271(e)(2)(C)(i) and (ii) define the scope of patents that can be asserted prior to the biosimilar entering the commercial market.¹¹⁹ Therefore, according to the Federal Circuit, the RPS has to assert its patents in order to get discovery on Hospira’s cell-culture medium or other aspects of the biosimilar manufacturer’s manufacturing process.¹²⁰ Amgen countered that if it were to bring an infringement action based on patent claims that it is unsure of, the RPS would be open to sanctions under Federal Rule of Civil Procedure 11 or antitrust liability.¹²¹ However, the Federal Circuit stated that the BPCIA “merely requires” the RPS to list patents on its patent list that it “believes . . . *could* reasonably be asserted.”¹²² Additionally, since the biosimilar manufacturer failed to provide information required under § (l)(2), the RPS would not be subjected to sanctions under Federal Rule of Civil Procedure 11.¹²³

D. CASE SYNTHESIS: WHAT ARE THE REMEDIES?

The Federal Circuit’s and Supreme Court’s most recent cases provide further interpretation of the BPCIA, specifically the remedies available when some of its many requirements are not satisfied. First, if the biosimilar manufacturer fails to provide its application, the RPS can seek declaratory relief under § (l)(9)(C), which is the exclusive remedy, and not injunctive relief.¹²⁴ However, if the biosimilar produced its application, but provided deficient or no information regarding its manufacturing process, the RPS may not seek declaratory relief under the BPCIA statute. This is because § (l)(9)(C) only provides declaratory relief when the biosimilar manufacturer does not

116. *Id.* at 1360–61.

117. *Id.* (“The sponsor could also sue on a patent that ‘*could* be identified’ under paragraph (l)(3), 35 U.S.C. § 271(e)(2)(C)(ii) . . .”).

118. *Id.* (“The sponsor could sue on ‘patents described in [paragraph (l)(3) of the BPCIA],’ 35 U.S.C. § 271(e)(2)(C)(i), i.e., the ‘list of patents for which the . . . sponsor believes a claim of patent infringement could reasonably be asserted . . .’”).

119. *See Sandoz Inc. v. Amgen Inc.*, 137 S. Ct. 1664, 1674 (2017).

120. *See Hospira, Inc.*, 866 F.3d at 1360–61.

121. *Id.* at 1361.

122. *Id.* at 1362.

123. *Id.* at 1362.

124. *Sandoz*, 137 S. Ct. at 1675.

provide the application.¹²⁵ Thus, if RPS wanted to obtain information about the biosimilar manufacturer's manufacturing process, the RPS may be able to obtain the information through discovery with requests for production and/or motions to compel in the context of an infringement suit over the relevant patents.¹²⁶ The Federal Circuit found that listing the RPS' patents that are potentially associated with the manufacturing process on the patent list will most likely allow the RPS to gain discovery on the manufacturing process.¹²⁷

125.

Under the Court's ruling, the BPCIA turns into a choose-your-own-adventure, with biosimilar makers in control of how the tale unfolds. The biosimilar maker can provide its aBLA and manufacturing information, only some of its information, or nothing at all, with the innovator unable to enforce the BPCIA's provisions requiring these disclosures under federal law. Regardless of whether the patent dance is initiated or bypassed, the biosimilar maker is free to provide its notice of commercial marketing either before or after FDA licensure.

See Irena Royzman & Nathan Monroe-Yavneh, *The Supreme Court's Interpretation of the Biosimilars Statute and the Value of Certainty*, 35 NATURE BIOTECHNOLOGY 916, 917 (2017).

126. See *Hospira, Inc.*, 866 F.3d at 1360–61.

127. See *id.* However, in doing so the RPS runs the risk that the biosimilar manufacturer may try and seek an *inter partes* review on the manufacturing process and invalidate those method and process patents. See Courtenay C. Brinckerhoff & Kristel Schorr, *Have the Biosimilar Floodgates Been Opened in the United States?*, 14 NATURE REVS. DRUG DISCOVERY 303, 303 (2015), which states:

Along with litigation, we anticipate an increasing number of patent challenges in the US Patent and Trademark Office, with biosimilar competitors bringing *inter partes* (between the parties) review (IPR) proceedings to invalidate patents on the grounds that the patent does not differ enough from prior art. We expect biosimilar competitors to use IPRs to attain earlier market entry, by invalidating core patents and later-expiring 'improvement' or 'selection' patents. Any would-be competitors may have an incentive to challenge core patents, which usually have earlier expiration dates, as such patents probably cover any product that could be approved as a biosimilar. Competitors who are furthest along in biosimilar product development may be most likely to bring IPRs, whereas those at earlier stages may wait for the patent landscape to be cleared before making substantial additional investments in their own product development and freedom-to-operate efforts. However, even if one biosimilar competitor has filed an IPR petition, another biosimilar competitor may want to file its own IPR petition to preserve its rights to challenge the patent on similar grounds and participate in any settlement discussions.;

see also Saurabh Vishnubhakat, Arti K. Rai, & Jay P. Kesan, *Strategic Decision Making in Dual PTAB and District Court Proceedings*, 31 BERKELEY TECH. L.J. 45, 68, 94 (2016), which states:

Beyond these basic PTAB filing trends, we find that a number of patents have been targets of serial challenges spread across both multiple petitions and multiple challengers in IPR petitions. Patents in the Chemical, CCM [computers and communications], and Electrical areas are particularly prone to multiple petitions [during the time period of September 16, 2012

As a result, the RPS should be able to obtain discovery on the biosimilar manufacturer's manufacturing information.¹²⁸

Second, caselaw now makes clear that the 180-day notice is mandatory, but may precede licensure.¹²⁹ Even if the biosimilar manufacturer did not provide its application and manufacturing information, the biosimilar manufacturer must still provide 180-day notice.¹³⁰ If 180-day notice is not given, the RPS may seek declaratory relief under § (l)(9)(B), but declaratory judgment is not the exclusive remedy, because courts still have equitable jurisdiction.¹³¹ The Federal Circuit may have contemplated injunctive relief as a possible remedy

and June 30, 2015]. As Figure 8 shows, a majority of patents in each of these fields were the subject of multiple IPR petitions: 60.6% of Chemical patents, 50.9% of CCM patents, and 58.4% of Electrical patents.

While IPR proceedings currently plays an instrumental role in the pharmaceutical context, the Supreme Court is considering “[w]hether inter partes review, an adversarial process used by the Patent and Trademark Office (PTO) to analyze the validity of existing patents, violates the Constitution by extinguishing private property rights through a non-Article III forum without a jury” in *Oil States Energy Serv., LLC v. Greene’s Energy Grp., LLC*. *Oil States Energy Services, LLC v. Greene’s Energy Group, LLC*, SCOTUSBLOG, <https://www.scotusblog.com/case-files/cases/oil-states-energy-services-llc-v-greenes-energy-group-llc/> [https://perma.cc/5H3T-RJ9X].

128. *Hospira, Inc.*, 866 F.3d at 1360–61.

129. *Sandoz Inc. v. Amgen Inc.*, 137 S. Ct. 1664, 1677 (2017).

130. See *Amgen Inc. v. Apotex Inc.*, 827 F.3d 1052, 1061 (Fed. Cir. 2016), which states:

Paragraph (8)(A) provides that “[t]he subsection (k) applicant [biosimilar manufacturer] shall provide notice to the reference product sponsor not later than 180 days before the date of the first commercial marketing of the biological product licensed under subsection (k).” The word ‘shall’ generally indicates that the directive is mandatory. We ruled in *Amgen v. Sandoz* that this language is, indeed, ‘mandatory’ and we did not say that it was mandatory only in no-(2)(A)-notice circumstances.

(citations omitted).

131. *Id.* at 1064, states:

We cannot infer such an exclusive-remedy conclusion from paragraph (9). The Supreme Court long ago ruled that the federal courts’ ‘equitable jurisdiction is not to be denied or limited in the absence of a clear and valid legislative command,’ whether ‘in so many words, or by a necessary and inescapable inference.’ Under that standard, or indeed under a straightforward understanding of paragraph (9) as it relates to (8)(A), we do not find that paragraph (9) establishes that a declaratory-judgment action is the sole remedy for violating (8)(A) (9)(A) bars certain declaratory-judgment actions, and (9)(B) & (C) state only that, in certain circumstances, the reference product sponsor ‘may bring’ such an action. There is no language that excludes other remedies for the conduct described.

(citations omitted). The Supreme Court has not confirmed this.

because it avoids the “rushed decision-making” that (l)(8)(A) is seems to circumvent.¹³²

Once 180-day notice is given, the RPS may seek a preliminary injunction enjoining the biosimilar manufacturer from engaging in “commercial manufacturer or sale” until the court decides the issues of patent validity or infringement for patents on the amended patent list that were not litigated.¹³³ Additionally, as the Supreme Court noted, the RPS can seek injunctive relief under 35 U.S.C. § 271 or § 283 to prevent the biosimilar manufacturer from commercially manufacturing its product.¹³⁴

IV. DISCUSSION: TIMING OF 180-DAY NOTICE

While the Supreme Court provided badly needed guidance on the remedies for statutory violations, the Court’s interpretation of the timing of 180-day notice may have been incorrectly decided. First, Sandoz’s holding allows 180-day notice to be given before the biosimilar “fixes,” which can lead to parties blindly litigating over controversies that may or may not “fully crystallize.”¹³⁵ Second, the purpose and the text of the BPCIA may not support *Sandoz*’s holding. Finally, by allowing the biosimilar manufacturer to provide notice “either before or after receiving FDA approval,”¹³⁶ the biosimilar manufacturer may use “notice” to encourage pay-for-delay schemes, i.e., reverse payments.

132. *See id.* at 1065, which states:

The 180-day period gives the reference product sponsor time to assess its infringement position for the final FDA-approved product as to yet-to-be-litigated patents. And if there is such litigation, it gives the parties and the district court the time for adjudicating such matters without the reliability-reducing rush that would attend requests for relief against immediate market entry that could cause irreparable injury In particular, relegating a reference product sponsor to a patent-merits declaratory-judgment action would introduce the very problem of rushed decision-making as to the patent merits that it is (8)(A)’s purpose to avoid.

133. 42 U.S.C. § 262(l)(8)(B) (2012).

134. *Sandoz*, 137 S. Ct. at 1675 n.2 (2017), states:

In holding that § 262(j)(9)(C) represents the exclusive remedy for an applicant’s [biosimilar manufacturer] failure to provide its application and manufacturing information, we express no view on whether a district court could take into account an applicant’s violation of §262(j)(2)(A) (or any other BPCIA procedural requirement) in deciding whether to grant a preliminary injunction under 35 U.S.C. § 271(e)(4)(B) or § 283 against marketing the biosimilar.

135. *Amgen Inc. v. Sandoz Inc.*, 794 F.3d 1347, 1358 (Fed. Cir. 2015).

136. *Sandoz*, 137 S. Ct. at 1677.

A. SANDOZ'S HOLDING MAY PRESSURE THE RPS TO ASSERT ALL OF ITS PATENTS AND "LITIGATE BLINDLY" TO PROTECT ITS RIGHTS

The Federal Circuit noted that until the biosimilar "fixes," or is approved by the FDA, patent disputes have yet to "fully crystallize."¹³⁷ Until the FDA "fixes" the biosimilar, "the RPS would be left to guess the scope of the approved" biosimilar.¹³⁸ Parties could therefore be litigating over the possibility of infringement, while neither party knows for sure if there is infringement. If the biosimilar manufacturer chooses to only provide its application and not its manufacturing information, the biosimilar manufacturer would further exacerbate the problem. This is because the RPS will be "litigating blind," since there is uncertainty around which process patents may be infringed.¹³⁹ In order for the RPS to protect its rights, it may have to assert all of its patents unnecessarily.¹⁴⁰

On the other hand, if 180-day notice is given post-licensure, there will no longer be uncertainty over the biosimilar product. It is at this point that the RPS is better situated to determine if it should assert patents that were not asserted during the first-phase of litigation because it may have been weaker, or to seek licenses for its other patents.¹⁴¹

Since many of these biosimilar were first approved in Europe, arguably, the biosimilar already "fixed" and controversies were "fully crystallized."¹⁴²

137. *Sandoz*, 794 F.3d at 1358 ("Requiring that a product be licensed before notice of commercial marketing ensures the existence of a fully crystallized controversy . . .").

138. *Id.*

139. Royzman & Monroe-Yavneh, *supra* note 128, at 918 ("Indeed, without the aBLA or manufacturing information, the innovator may be forced to litigate blind without knowing which patents to assert or when. *Amgen v. Hospira* illustrates why innovators may have little choice but to assert their patents blind in order to protect their rights.").

140. *Id.*

141. *Amgen Inc. v. Apotex Inc.*, 827 F.3d 1052, 1062 (Fed. Cir. 2016), states:

As this court explained in *Amgen v. Sandoz*, the purpose is to ensure that, starting from when the applicant's product, uses, and processes are fixed by the license, the necessary decision-making regarding further patent litigation is not conducted under time pressure that will impair its fairness and accuracy. At the least, the reference product sponsor needs time to make a decision about seeking relief based on yet-to-be litigated patents, and a district court needs time for litigants to prepare their cases, in a complicated area, to provide a reliable basis for judgment.

(citation omitted).

142. See Mark McCamish & Gillian Woollett, *Worldwide Experience with Biosimilar Development*, 3 MABS 209, 211 ("Europe has led in the approval of biosimilars because EMA was the first regulatory authority to be given the mandate to review and approve biologic products that explicitly referred to a previously approved product and because patents on key products expired in Europe sooner than in the US."); see also Jacob F. Siegel & Irena Royzman, *2017 Biosimilar Approvals in Europe*, BIOLOGICS BLOG (Dec. 21, 2017),

Therefore, there is no uncertainty about the final approved biosimilar product. However, if the biosimilar manufacturer does not provide manufacturing data, the RPS cannot glean which of its process patents may be infringed from the final approved European biosimilar. Therefore, not all the controversies will be “fully crystallized.” Second, at some point, biosimilar manufacturers will submit applications simultaneously to both the EMA and the FDA. It is at this point, where controversies may not “fully crystallize” and much of the approved biosimilar is unknown.

B. SANDOZ’S DECISION IS INCONSISTENT WITH THE PURPOSE AND THE TEXT OF THE BPCIA

Justice Thomas’s textual interpretation that 180-day notice may occur before or after licensing,¹⁴³ seems to conflict with the greater purpose the statutory scheme lays out. If 180-day notice can be given as soon as biosimilar manufacturer submits its application, there would be no need for a patent dance, § (l)(4)–(5), and the distinction between the first-phase and second-phase of litigation that Congress seems to draw would be futile.

As the Solicitor General pointed out in its amicus brief and the Federal Circuit noted in *Apotex*, Congress created a statutory scheme in which the biosimilar manufacturer controls the first-phase of litigation and the RPS controls the second-phase of litigation.¹⁴⁴ Thus, 180-day notice is seen to mark the second-phase of litigation.¹⁴⁵ Once 180-day is given and the second-phase

<https://www.biologicsblog.com/2017-biosimilar-approvals-in-europe> [<https://perma.cc/Z93D-4HXR>] (showing that as of December 2017, the European Medicines Agency (EMA) in Europe has approved of thirty-three biosimilars in Europe, dating back as early as 2007, whereas the FDA in the United States has approved of eleven biosimilars).

143. *Sandoz*, 137 S. Ct. at 1677.

144. See *Apotex Inc.*, 827 F.3d at 1062–63, which states:

Moreover, as we have described, § 262(l) affirmatively contemplates two stages of litigation (under paragraphs (6) and (8)), and it contemplates that the first stage of litigation may omit patents the reference product sponsor has good grounds to assert, whether patents already in the hands of the reference product sponsor or patents newly in its hands under paragraph (7). It gives the applicant substantial authority to force such a limitation on the scope of the first-stage litigation.

See Brief for United States as Amicus Curiae at 18, *Sandoz Inc. v. Amgen Inc.*, 137 S. Ct. 1664 (2017) (No. 15-1195) (“Congress concluded that a sponsor should be given a fair chance to litigate the Round 2 patents prior to actual marketing, since the applicant controls the scope of the earlier Round 1 litigation.”).

145. *Apotex Inc.*, 827 F.3d at 1056 (“But the Biologics Act—having provided for a narrowing of the scope of the paragraph (6) litigation, including by allowing the applicant to exclude potentially meritorious patents from that litigation—provides, in paragraph (8), for a second stage of patent litigation.”).

is initiated, the RPS has “a fair chance to litigate” patents it could not assert in the first-phase.¹⁴⁶ Additionally, Congress intended to create the “patent dance” to streamline the patent litigation process. In fact, Representative Anna G. Eshoo testified that the house version of the bill envisioned the parties would engage in negotiations six to eight months before litigation to discuss litigation and resolve issues, i.e., the patent dance.¹⁴⁷ The bill envisioned that this discussion would occur after the application is submitted to the FDA and before the RPS’s data-exclusivity period expires in order.¹⁴⁸

The first-phase of litigation is controlled by the biosimilar manufacturer because the biosimilar manufacturer can limit the number of patents that will be litigated in this phase. Under § (l)(4), the parties must negotiate to determine which patents to litigate in the first-phase. However, if the parties are unable to reach consensus, the biosimilar manufacturer sets the maximum number of patents that will be litigated, thereby limiting the scope of the first-phase of litigation.¹⁴⁹ For example, in *AbbVie v. Amgen*, Amgen (biosimilar manufacturer) limited the first phase of litigation to ten patents instead of the sixty-one patents AbbVie (RPS) wanted to assert.¹⁵⁰ Thus, AbbVie had to wait until it received 180-day notice to initiate the second-phase of litigation to assert its remaining fifty-one patents.¹⁵¹

However, if 180-day notice can be given before licensure, the first-phase and the second-phase collapse together. Once the parties engage in the patent dance, the RPS brings an infringement suit under § (l)(6). But, if 180-day notice is given simultaneously, patents not asserted during § (l)(6) can be asserted immediately under § (l)(8) and the narrow scope of § (l)(6) would be

146. Brief for United States as Amicus Curiae at 18, *Sandoz Inc. v. Amgen Inc.*, 137 S. Ct. 1664 (2017) (No. 15-1195) (“Subsection (l)(8)(A)’s notice requirement therefore is properly viewed as affording the sponsor an adequate opportunity to commence litigation on the Round 2 patents that it previously was prevented from bringing while the applicant was following the process for controlling patent litigation.”).

147. *Biologics and Biosimilars: Balancing Incentives for Innovation: Hearing Before the Subcomm. on Courts & Competition Policy of the H. Comm. on the Judiciary*, 111th Cong. 9, 218 (2009), Rep. Anna G. Eshoo states:

H.R. 1548 also establishes a simple, streamlined patent resolution process. This process would take place within a short window of time, roughly 6 to 8 months after the biosimilar application has been filed with the FDA. It will help ensure that litigation surrounding relevant patents will be resolved expeditiously and prior to the launch of the biosimilar product, providing certainty to the applicant, the reference product manufacturer, and the public at large

148. *Id.*

149. 42 U.S.C. § 262(l)(5)(A) (2012).

150. *AbbVie, Inc. v. Amgen, Inc.*, No. 16-cv-666-SLR (D. Del. Aug. 4, 2016), Dkt. No. 1 at 6 ¶ 20.

151. *Id.*

eliminated.¹⁵² This therefore begs the question, why did Congress create the patent dance, §§ (l)(4)–(5), if all patents can be asserted pre-licensure and immediately after 180-day notice is given. Further, if Congress created a pre-market dispute resolution process that created two rounds of litigation, having both rounds collapse into one seems to conflict with the purpose the statute lays out.

By contrast, as Apotex pointed out, 180-day notice occurring post-licensure would cause a 180-day delay and extend the reference product's exclusivity that Congress enacted by six months.¹⁵³ The Federal Circuit disposed of this argument because a biosimilar applicant can begin the process enumerated under the BPCIA “four years after licensure of the reference product, § 262(k)(7)(B)” and the FDA is permitted to issue a license on the biosimilar during the reference product's exclusivity period.¹⁵⁴ The Solicitor General also agreed and found that Congress permitted litigation on all relevant patents to occur seven years before licensing.¹⁵⁵ Therefore, 180-day notice given post-licensure may not delay the biosimilar from being commercially marketed. Further, this analysis supports that *Sandoz's* holding is in conflict with the purpose and greater scheme of the BPCIA.

C. SANDOZ'S HOLDING INCENTIVIZES PAY-FOR-DELAY SETTLEMENTS
BECAUSE 180-DAY NOTICE CAN BE USED AS A BOUNTY

If 180-day notice can be given at any time, then the trigger for the second-phase of litigation can be bought off or leveraged between the parties.¹⁵⁶ The biosimilar manufacturer controls whether to provide notice immediately and settle patent disputes early-on, or it can wait and use the 180-day notice as leverage for a “pay for delay” settlement. The latter option may seem more lucrative for the RPS because it could avoid pending *inter partes* reviews, post-grant reviews and litigation that may invalidate its patents, and the RPS can negotiate to protect its investments and revenue. This is a very important

152. *Amgen Inc. v. Apotex Inc.*, 827 F.3d 1052, 1056 (Fed. Cir. 2016) (“But the Biologics Act—having provided for a narrowing of the scope of the paragraph (6) litigation, including by allowing the applicant to exclude potentially meritorious patents from that litigation—provides, in paragraph (8), for a second stage of patent litigation.”).

153. Brief for Petitioner at 10, *Amgen Inc. v. Apotex Inc.*, 827 F.3d 1052 (Fed. Cir. 2016) (No. 16-332) (“The Federal Circuit threw up a roadblock in the abbreviated-pathway by mandating that biosimilar provide a notice of commercial marketing . . . it functionally extended the 12-year exclusivity by an extra six months.”).

154. *Apotex Inc.*, 827 F.3d at 1062.

155. Brief for United States as Amicus Curiae at 16, *Sandoz Inc. v. Amgen Inc.*, 137 S. Ct. 1664 (2017) (No. 15-1195) (“Accordingly, Congress itself chose to permit patent litigation on all relevant patents to commence more than seven years before such licensing.”).

156. See Darren S. Tucker & Gregory F. Wells, *Emerging Competition Issues Involving Follow-On Biologics*, 29 ANTITRUST 100, 103 (2014).

consideration for the RPS because a single biosimilar may implicate 30 to 40 patents at a time.¹⁵⁷ This may also be a better option for the biosimilar manufacturer because it can avoid lengthy litigation that could delay the launch of its biosimilar,¹⁵⁸ avoid expenses related to litigation, and prevent releasing confidential information regarding its manufacturing process through discovery.¹⁵⁹ However, these considerations must be weighed against the fact that the average price discount for a biosimilar is estimated to be ten to thirty percent and may not serve as strong factor to encourage negotiations in comparison to the price discount was for generic small molecule drugs.¹⁶⁰

In *AbbVie v. Amgen*, Amgen created a biosimilar for AbbVie's biologic, Humira. AbbVie's product, Humira, "recorded more than \$16 billion in global sales [in 2016]."¹⁶¹ According to AbbVie's complaint, the two parties engaged in creating a patent list and the patent dance.¹⁶² However, Amgen (the biosimilar manufacturer) provided AbbVie with its application but not its manufacturing information.¹⁶³ AbbVie then created a patent list identifying 61 patents and five pending patents.¹⁶⁴ While the parties were supposed to engage in negotiations over which patents to assert during the first-phase, AbbVie

157. *Assessing the Impact of a Safe and Equitable Biosimilar Policy in the United States: Hearing Before the Subcomm. on Health of the H. Comm. on Energy & Commerce*, 110th Cong. 116 (2007).

158. Alice Yuen-Ting Wong, Martha M. Rumore & Albert Wai-Kit Chan, *Biosimilars in the United States: Emerging Issues in Litigation*, *BIODRUGS*, 31, 189, 201 (2017) ("In addition to BPCIA interpretation, patent infringement issues are also being litigated. Since biologics have a 'patent thicket', the infringement litigation in the second round of litigation could delay market entry for the biosimilar for years.")

159. *See Amgen Inc. v. Hospira, Inc.*, 866 F.3d 1355 (Fed. Cir. 2017) (holding that it is likely that the biosimilar manufacturer's manufacturing process information is discoverable. Therefore, a settlement may be in the biosimilar manufacturer's best interest because then it does not have to reveal its process and can protect its process under trade secret). This is particular important because it prevents the RPS from learning about the biosimilar's manufacturing process to introduce a bio-better product that could directly compete with the biosimilar.

160. Ameet Sarpatwari et al., *Progress and Hurdles for Follow-on Biologics*, *NEW ENGLAND J. MED.* 2380, 2380–81 (2015) ("The introduction of generic versions of small-molecule drugs can reduce prices by 90% from the brand-name version In the European Union, where 22 follow-on biologics are available, the median price savings for biosimilar epoetin alfa is just 35%"); *EMERGING HEALTH CARE ISSUES*, *supra* note 18 ("These FOB entrants are unlikely to introduce their FOB products at price discounts any larger than between 10 and 30 percent of the pioneer products' price.")

161. Jeff Overley, *AbbVie, Amgen End Patent Fight Over Humira Biosimilar*, *LAW360* (Sept. 28, 2017), <https://www.law360.com/articles/968996/abbvie-amgen-end-patent-fight-over-humira-biosimilar> [<https://perma.cc/SQ8W-9VGR>].

162. *AbbVie, Inc. v. Amgen, Inc.*, No. 16-cv-666-SLR (D. Del. Aug. 4, 2016), Dkt. No. 1 at 11 ¶¶ 38, 39.

163. *Id.* at 11 ¶ 38.

164. *Id.* at 11 ¶ 39.

claims Amgen did not engage in negotiations under § (l)(4).¹⁶⁵ As a result, § (l)(5) was triggered and Amgen determined that AbbVie could only assert ten of its sixty-one patents against Amgen in the first phase of litigation.¹⁶⁶ AbbVie noted in its complaint that it explicitly asked Amgen to assert all 61 patents in the first-phase to avoid two phases of litigation and for judicial economy, but Amgen did not engage.¹⁶⁷ Instead, as AbbVie noted, AbbVie would need to wait until Amgen provides 180-day notice in order to assert the rest of its patents.¹⁶⁸ In the end, the two parties settled their patent disputes and agreed to “delay” Amgen’s release of its biosimilar to until 2023 in U.S. pharmacies and until 2018 in European pharmacies.¹⁶⁹ In exchange, Amgen would license AbbVie’s patents and pay a royalty on other patents.¹⁷⁰ While both parties denied that this was a “pay for delay” settlement, it raises an interesting issue of “pay for delay” settlements.¹⁷¹ Congress envisioned a pre-market litigation process to resolve patent disputes before the biosimilar is commercially manufactured, prior congressional proposals were introduced that aligned with “the FTC and DOJ’s requests and [would have] made reverse payment settlements presumptively illegal.”¹⁷² Interestingly, after AbbVie’s settlement

165. *Id.* at 15 ¶¶ 46, 47.

166. Under (l)(5), Amgen (biosimilar manufacturer) can cap the number of patents that can be asserted in the first round of litigation. Amgen capped the number at six patents, which meant that the two parties had to create a list of six patents that could be litigated. Therefore, the total number of patents that could have been asserted was twelve. In this case, since both parties identified the same patent, the total number of patents that could be litigated in the first-phase was ten. *See* Dani Kass, *Amgen’s Humira Biosimilar Infringes 61 Patents, AbbVie Says*, LAW360 (Aug. 5, 2016), <https://www.law360.com/articles/825393/amgen-s-humira-biosimilar-infringes-61-patents-abbvie-says> [<https://perma.cc/D652-Y5BE>].

167. *AbbVie, Inc. v. Amgen, Inc.*, No. 16-cv-666-SLR (D. Del. Aug. 4, 2016), Dkt. No. 1 at 15 ¶ 46.

168. *Id.* at 6 ¶ 20.

169. Jeff Overley, *AbbVie, Amgen End Patent Fight Over Humira Biosimilar*, LAW360 (Sept. 28, 2017), <https://www.law360.com/articles/968996/abbvie-amgen-end-patent-fight-over-humira-biosimilar> [<https://perma.cc/SQ8W-9VGR>].

170. *Id.*

171. *Id.*, states:

The settlement does not include provisions that could make it resemble a “pay-for-delay” deal in which copycat drugs are delayed in exchange for financial compensation, AbbVie spokeswoman Mary Kathryn Steel told Law360. “This is absolutely not a ‘pay for delay,’” Steel said by email. “While the terms of the agreement are confidential, I can tell you that AbbVie is not paying Amgen anything. This is a straightforward patent license.”

172. *See* Brenna E. Jenny, *Pay For Delay, There For The Taking?*, LAW360 (Mar. 14, 2012), <https://www.law360.com/articles/314750/pay-for-delay-there-for-the-taking> [<https://perma.cc/C8NS-4MFV>], which states:

Previous congressional proposals, including one introduced last year by Sen. Herb Kohl, D-Wis., would have granted the FTC and DOJ’s requests and made reverse payment settlements presumptively illegal. Rush’s bill

with Amgen, the President closed a loophole in the statute to now require biosimilar settlements to be reviewed by the FTC and DOJ.

V. CONCLUSION

While the Supreme Court settled questions about remedies for statutory violations, the Court's interpretation of the timing of 180-day notice may have some unintended consequences. First, 180-day pre-licensure can lead to parties blindly litigating over controversies that may or may not "fully crystallize."¹⁷³ Second, by giving the biosimilar manufacturer flexibility on when it can provide 180-day notice, the biosimilar manufacturer may use "notice" to encourage pay-for-delay settlements. Arguably, the Supreme Court's holding that 180-day notice may be provided "either before or after receiving FDA approval,"¹⁷⁴ seems to be in conflict with the purpose and the text of the BPCIA. For instance, if 180-day notice can be given as soon as biosimilar manufacturer submits its application, there would be no need for the congressionally created patent dance and Congress's possible distinction between the first-phase and second-phase of litigation would be futile.

Further, the Supreme Court's ruling seems to leave open some questions, and the district courts will have to reconcile the spirit and the policies of the BPCIA with the modern realities of patent litigation. For instance, how should the RPS propound discovery to determine which of its process patents are infringed when the biosimilar manufacturer fails to turn over its manufacturing information.¹⁷⁵ Since 180-day notice marks a significant transition from the first-phase of litigation to the second-phase of litigation and provides the RPS with injunctive relief remedy and both parties with declaratory relief remedy, and 180-day notice hinges on the FDA's licensure process, should the FDA have a role in interpretation of the BPCIA?¹⁷⁶ Since much of the BPCIA is not settled, the district courts will need to struggle with the bounds of gap-filling and its role in developing this area of law.

goes a step further: any settlement involving a generic drug filer receiving something of value and agreeing not to research, develop or sell a drug that is the subject of an infringement claim would be an 'unfair method of competition,' in violation of Section 5 of the FTC Act.

173. *Amgen Inc. v. Sandoz Inc.*, 794 F.3d 1347, 1358 (Fed. Cir. 2015).

174. *Sandoz Inc. v. Amgen Inc.*, 137 S. Ct. 1664, 1677 (2017).

175. As Judge Richard G. Andrews noted: "[R]egardless of what Congress might have thought, and I'm sure they never contemplated the intersection of this with the Discovery Rules, or the actual -- I mean maybe they did, actually. But in terms of how you get these things if people didn't do what the statute envisioned." Transcript of Oral Argument at 13.

176. As Justice Breyer stated in his concurrence: "if [the FDA], after greater experience administering this statute, determines that a different interpretation would better serve the statute's objectives, it may well have authority to depart from, or to modify, today's interpretation." *Sandoz*, 137 S. Ct. at 1678.

Finally, borrowing from the third law of thermodynamics, entropy or disorder, is at zero when a system achieves perfect order. Currently, disorder is at a maximum because much of the BPCIA remains an open question and it requires more interpretation. But, as the courts wrestle with these questions and issues that arise under the BPCIA, the framework will move closer to a perfectly ordered system where entropy will achieve zero. Therefore, entropy is the price of an ordered framework.

ALGORITHMIC AUDITING AND COMPETITION UNDER THE CFAA: THE REVOCATION PARADIGM OF INTERPRETING ACCESS AND AUTHORIZATION

Annie Lee[†]

I. INTRODUCTION

Congress enacted the Computer Fraud and Abuse Act (CFAA) as an anti-hacking statute in 1984, seven years before the invention of the world-wide web.¹ Through a single statute, the CFAA today serves as the legal centerpiece for all computer-related offenses,² governing how we share and protect information on the Internet. For years, the scope of the CFAA has been hotly debated.³ Congress has repeatedly broadened the statute to encompass wide ranges of computer behavior,⁴ while commentators have consistently criticized the statute for being overly broad and vague.⁵ Today, the CFAA is again at the forefront of legal discourse because it meets a wave of new technology: artificial intelligence and the rise of Internet platform power.

Consider the following scenario. Ellen and Michelle are new graduates looking for jobs on MBAHired, an online hiring website where MBA graduates can create personal profiles and search for job opportunities posted by

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1. The worldwide web was invented by a Swiss computer programmer in 1991. *The Invention of the Internet*, HISTORY (July 30, 2010), <https://www.history.com/topics/inventions/invention-of-the-internet> [<https://perma.cc/WS7J-TM5D>].

2. See S. REP. NO. 104-357, at 5 (1996) (stating that the intent of the original Act was to address “in a single statute the problem of computer crime, rather than identifying and amending every potentially applicable statute affected by advances in computer technology”).

3. See, e.g., Kim Zetter, *The Most Controversial Hacking Cases of the Past Decade*, WIRED (Oct. 26, 2015), <https://www.wired.com/2015/10/cfaa-computer-fraud-abuse-act-most-controversial-computer-hacking-cases/> [<https://perma.cc/4YAM-PPWT>].

4. See Orin S. Kerr, *Vagueness Challenges to the Computer Fraud and Abuse Act*, 94 MINN. L. REV. 1561, 1563–71 (2010) [hereinafter Kerr, *CFAA Vagueness*] (describing 6 amendments that broadened the “ever-expanding CFAA”).

5. See, e.g., Tim Wu, *Fixing the Worst Law in Technology*, NEW YORKER (Mar. 18, 2013), <https://www.newyorker.com/news/news-desk/fixing-the-worst-law-in-technology> [<https://perma.cc/P7Z4-J543>]; Grant Burningham, *The Most Hated Law on the Internet and Its Many Problems*, NEWSWEEK (Apr. 6, 2016), <http://www.newsweek.com/most-hated-law-internet-and-its-many-problems-cfaa-448567> [<https://perma.cc/2CB2-CHD8>]. See generally Kerr, *CFAA Vagueness*, *supra* note 4, at 1571–87 (advocating for courts to limit the Act using the constitutional vagueness doctrine).

recruiters. Ellen performs a search and receives a list of opportunities ranked in order of “relevance.” When Michelle performs the same search on the same website, she also receives a list of opportunities. But the two lists are not the same.

This scenario is not uncommon on the Internet today. Online giants such as Amazon, Google, and Facebook regularly use artificial intelligence algorithms to provide each user a customized experience with the most relevant information.⁶ Thus, often for good reason, one user will have a different experience than another on the same website.⁷ On a hiring website with millions of opportunities,⁸ this ability to provide individual users with curated search results can be critical to helping candidates find the right jobs.

However, this powerful new tool can also be a dangerous channel for discrimination. Imagine that Ellen and Michelle have similar work experience, but Ellen has identified herself as white, and Michelle has identified herself as black. Artificial intelligence algorithms are often “trained” to make decisions that follow patterns found in historic data.⁹ Thus, if data show that black candidates historically have had lower success rates applying for management positions, the website may omit those higher-paying positions from Michelle’s search results purely because she has listed her race.¹⁰

Today the Internet is undergoing wildfire adoption of these types of algorithms.¹¹ Unfortunately, as demonstrated in Michelle’s situation, the

6. See Erik Brynjolfsson & Andrew McAfee, *The Business of Artificial Intelligence*, HARV. BUS. REV. (July 2017), <https://hbr.org/cover-story/2017/07/the-business-of-artificial-intelligence> [<https://perma.cc/A5RY-G5RK>].

7. The Facebook Newsfeed is perhaps one of the most illustrative examples of the customized user experience. See *How News Feed Works*, FACEBOOK, <https://www.facebook.com/help/327131014036297/> [<https://perma.cc/J99R-6ZES>] (last visited Feb. 21, 2018) (explaining that the News Feed is meant “to keep you connected to the people, places, and things that you care about, starting with your friends and family”).

8. At the time this Note was written, a quick search on Indeed.com for all available jobs in the United States returned 2,985,526 results.

9. See Lauren Kirchner, *When Discrimination Is Baked into Algorithms*, ATLANTIC (Sep. 6, 2015), <https://www.theatlantic.com/business/archive/2015/09/discrimination-algorithms-disparate-impact/403969/> [<https://perma.cc/4BCZ-N2LJ>] (explaining how “[s]oftware making decisions based on data can reflect, or even amplify, the results of historical discrimination”).

10. See *id.*

11. In a study run by Harvard professor Latanya Sweeney, Sweeney showed that across 2000 name searches on Google, those associated with black people were 25 percent more likely to generate an arrest-related ad. Latanya Sweeney, *Discrimination in Online Ad Delivery*, 56 COMMS. ACM 44, 44 (May 2013). In another incident, Google mistakenly tagged two black people as “gorillas.” Maggie Zhang, *Google Photos Tags Two African-Americans As Gorillas Through Facial Recognition Software*, FORBES (July 1, 2015), <https://www.forbes.com/sites/mzhang/>

tremendous ability of these algorithms to make our online marketplaces more efficient also creates incredible potential for troubling business practices to lurk in the shadows.¹²

External pressures from third parties are necessary because businesses are failing to self-regulate.¹³ This Note identifies two groups of third parties that have emerged to promote online integrity in response to the rise of artificial intelligence: algorithmic auditors and online competitors. Algorithmic auditors largely consist of academics,¹⁴ computer scientists from nonprofits,¹⁵ and journalists¹⁶ who scrutinize online websites powered by algorithms for bias and

2015/07/01/google-photos-tags-two-african-americans-as-gorillas-through-facial-recognition-software/#50867719713d [https://perma.cc/E5MN-YQUJ]. See Gillian B. White, *When Algorithms Don't Account for Civil Rights*, ATLANTIC (Mar. 7, 2017), https://www.theatlantic.com/business/archive/2017/03/facebook-ad-discrimination/518718/ [https://perma.cc/YS75-CUCX] (describing how Facebook's advertising platform gives advertisers the option to target users based on their assigned "ethnic affinity"); Julia Angwin et al., *Machine Bias: There's Software Used Across the Country to Predict Future Criminals. And It's Biased Against Blacks*, PROPUBLICA (May 23, 2016), https://www.propublica.org/article/machine-bias-risk-assessments-in-criminal-sentencing [https://perma.cc/RHR2-CBZA].

12. See Ray Fisman & Michael Luca, *Fixing Discrimination in Online Marketplaces*, 94 HARV. BUS. REV. 88, 88 (Dec. 2016) (discussing the emergence of "digital discrimination"); see also Michael Todisco, *Share and Share Alike? Considering Racial Discrimination in the Nascent Room-Sharing Economy*, 67 STAN. L. REV. ONLINE 121, 121 (Mar. 14, 2015) ("Airbnb and other housing-focused companies of the new 'sharing economy' facilitate virtually unregulated discrimination—both implicit and intentional—in housing and accommodations.").

13. Instead, under Section 230 of the Communications Decency Act, Internet businesses have often asserted immunity to avoid liability for discrimination on their platforms by characterizing themselves as mere "passive conduits" through which users engage with one another. See Karen Levy & Solon Barocas, *Designing Against Discrimination in Online Markets*, 32 BERKELEY TECH. L.J. 1183 (2017).

14. The MBAAHired hypothetical was inspired by a study being conducted by Associate Professor Alan Mislove and Assistant Professor Christopher Wilson at Northeastern University. Their study tests whether the ranking algorithms on major online hiring websites produce discriminatory outputs by systematically ranking specific classes of people below others. Complaint for Declaratory and Injunctive Relief at 6, Sandvig et al. v. Sessions, No. 1:16-cv-01368 (D.D.C. June 29, 2016) [hereinafter Complaint for Declaratory and Injunctive Relief]. For more on this case, see discussion, *infra* Part III.C.2.

15. See, e.g., Michael Tschantz, *Accountable Information Use: Privacy and Fairness in Decision-Making Systems*, INT'L COMPUT. SCI. INST. (2017), https://www.icsi.berkeley.edu/icsi/projects/networking/accountable-information-use [https://perma.cc/48PU-3GJV] (navigate to "Projects" tab). The International Computer Science Institute (ICSI) is a nonprofit center for research in computer science affiliated with, but independent of the University of California, Berkeley. Many of ICSI's scientists hold faculty appointments at the university. See *id.* (navigate to "About" tab).

16. See, e.g., Cathy O'Neil, *The Ivory Tower Can't Keep Ignoring Tech*, N.Y. TIMES (Nov. 14, 2017) (calling for more social research on online discrimination).

discrimination.¹⁷ Online competitors similarly promote fair online practices by providing users with a choice between competitive products: if Michelle suspects that MBAHired is not giving her the right opportunities, she should be able to switch to a different hiring platform.

Under the CFAA, however, both of these third parties face the threat of litigation and prosecution¹⁸ because their need for information from online platforms clashes with the CFAA's prohibition on unauthorized access to a computer or website. An algorithmic auditor who needs information about a website's inner workings to determine whether the website's algorithms are providing discriminatory results may run afoul of the CFAA while obtaining such information. Similarly, a competitor who needs to understand an incumbent's online product in order to provide a comparable or complementary product is also at risk.

The CFAA can be especially troubling for these parties because courts have struggled to adopt a national standard for interpreting the meaning of "unauthorized access" on the Internet.¹⁹ Instead, courts have adopted a patchwork of competing paradigms for interpretation, creating a legal minefield for algorithmic auditors and competitors who look to the law to inform their online behavior.²⁰ In *Facebook v. Power Ventures* and *United States v. Nosal (Nosal II)*, the Ninth Circuit articulated yet another paradigm for interpretation: Once an online service provider revokes a user's access to their website, any subsequent attempt to access that website—regardless of the method employed—is considered unauthorized under the CFAA.²¹

By allowing courts to adopt a patchwork of paradigms for interpreting authorization on the Internet, Congress has enabled incumbent website owners to use the CFAA to exclude algorithmic auditors and competitors from accessing information they need to encourage online integrity. Indeed, the newest revocation paradigm provides some legal clarity; but in exchange, it grants a troubling amount of power to the online service provider, who

17. The first national Conference on Fairness, Accountability, and Transparency (FAT) was held in February 2018. *See Conference on Fairness, Accountability, and Transparency*, ACM FAT CONF. (Dec. 20, 2017), <https://fatconference.org/index.html> [<https://perma.cc/WZ58-WRJ2>]. The conference's steering committee included over 40 members consisting of academics and individuals from private companies such as Microsoft, Google, and Spotify. *See id.* (navigate to "Organization" tab).

18. The CFAA contains both a criminal cause of action and a civil cause of action for private parties. *See infra* note 23.

19. *See* discussion, *infra* Part III ("Existing Paradigms of Unauthorized Access").

20. *Id.*

21. *See* discussion, *infra* Part III ("Revocation as a New Paradigm"); *Facebook, Inc. v. Power Ventures, Inc.*, 844 F.3d 1058 (9th Cir. 2016), *cert. denied*, 138 S. Ct. 313 (2017); *United States v. Nosal*, 844 F.3d 1024 (9th Cir. 2016), *cert. denied*, 138 S. Ct. 314 (2017).

becomes the de facto enforcer of the CFAA's prohibition on unauthorized access.

Part II of this Note gives an overview of current paradigms for interpreting unauthorized third-party access under the CFAA and how each paradigm has discouraged algorithmic auditors from exposing questionable business practices and fostered a hostile market for new competitors. Part III proposes that two recent Ninth Circuit cases, *Facebook* and *Nosal II*, have created a new revocation paradigm for interpreting authorization that may create more clarity for courts. Part IV then identifies the dangers of the singling-out power created by the revocation paradigm and discusses the implications of this phenomenon for algorithmic auditors and competitors. Finally, Part V sets forth a normative legislative proposal to narrow the scope of the CFAA, encourage algorithmic accountability, and foster healthy competition.

II. EXISTING PARADIGMS OF UNAUTHORIZED ACCESS

The CFAA was originally a criminal statute that aimed to protect a narrow scope of computers owned by government and financial institutions from outside hackers.²² Since its enactment, however, the CFAA has been amended several times to reach its modern-day form: the CFAA now regulates behavior on almost any device connected to the Internet and includes a private civil cause of action.²³

22. The original Counterfeit Access Device and Computer Fraud and Abuse Act (CADCFAA) focused on three forms of improper access: government information for national defense, financial information from financial institutions, and information from government computers. Pub. L. 98-473, ch.21, sec. 2101, § 1030, 98 Stat. 2190, 2190–91 (1984). The legislative history shows that Congress was particularly concerned about “the advent of activities of so-called ‘hackers’ who have been able to access (trespass into) both private and public computer systems, sometimes with potentially serious results.” H.R. REP. No. 98-894 (1984), as reprinted in 1984 U.S.C.C.A.N. 3689, 3695. The House report also referenced the cautionary tale of *WarGames*, a 1983 film in which a teenager unknowingly hacks into the government’s nuclear arsenal while searching for an online video game. *Id.* at 3696; Scott Brown, *Wargames: A Look Back at the Film that Turned Geeks and Phreaks into Stars*, WIRED (July 21, 2008), <https://www.wired.com/2008/07/ff-wargames/> [https://perma.cc/H99P-LJEM].

23. See Kerr, *CFAA Vagueness*, *supra* note 4, at 1563–71. Under section 1030(g), any person who “suffers damage or loss by reason of a violation of [the CFAA] may maintain a civil action against the violator.” 18 U.S.C. § 1030(g) (2012). The scope of the civil provision is nearly as broad as the criminal statute itself. Of the six enumerated types of culpable conduct under the Act, there is only one where *only* a criminal case may be brought: where the plaintiff alleges “damage affecting 10 or more protected computers during any 1-year period.” See *id.* (excluding section 1030(c)(4)(A)(i)(VI) in the civil provision).

The two broadest provisions of the CFAA, sections (a)(2)(C) and (a)(4), each create liability for anyone who “accesses a protected computer without authorization” or “exceeds authorized access.”²⁴ Yet, since the inception of the Act, Congress has refrained from defining the meanings of “without authorization” and “exceeds authorized access” in terms of specific online behaviors.²⁵ In response, courts and commentators have taken it upon themselves to formulate their own standards of what types of online behavior constitute unauthorized access under the CFAA.

This Part surveys the three leading paradigms for interpreting unauthorized third-party access under the CFAA: agency theory,²⁶ the code-based approach,²⁷ and the text-based approach.²⁸ This Part describes how each of these paradigms attempts to distinguish between authorized and unauthorized access to a computer and how that distinction affects third-party algorithmic auditors and competitors.

A. AGENCY THEORY

1. *Agency Theory and Its Critiques*

Some courts use the commercial law theory of agency to set the boundary between authorized and unauthorized access.²⁹ These cases often involve a disloyal employee acting in conflict with his or her employer’s interests.³⁰ In an

24. 18 U.S.C. §§ 1030(a)(2)(C), (a)(4).

25. The CFAA does not include a definition of “without authorization.” 18 U.S.C. § 1030(e). It does define “exceeds authorized access” to mean “to access a computer with authorization and to use such access to obtain or alter information in the computer that the accessor is not entitled so to obtain or alter.” 18 U.S.C. § 1030(e)(6). However, there is a fundamental circuit split as to whether the definition prohibits only unauthorized *access* to information or also unauthorized *use* of information that a defendant was authorized to access only for specific purposes. *See* Memorandum Opinion at 24–25, *Sandvig et al. v. Sessions*, No. 1:16-cv-01368 (D.D.C. Mar. 30, 2018) (describing a split between the *access* interpretation adopted by the Second, Fourth, and Ninth Circuits, and the *use* interpretation adopted by First, Fifth, and Eleventh Circuits). Recently, the District Court of Columbia in *Sandvig* joined the latter circuits by adopting the narrower *access* interpretation, in part by applying the constitutional avoidance doctrine. *Id.* at 29–31.

26. *See* discussion, *infra* Part III.A.

27. *See* discussion, *infra* Part III.B.

28. *See* discussion, *infra* Part II.C.

29. *See, e.g.,* *International Airport Centers, LLC v. Citrin*, 440 F.3d 418 (7th Cir. 2006); *United States v. Rodriguez*, 628 F.3d 1258 (11th Cir. 2010); *Amedisys Holding, LLC v. Interim Healthcare of Atlanta, Inc.*, 793 F. Supp. 2d 1302, 1315 (N.D. Ga. 2011); *NCMIC Fin. Corp. v. Artino*, 638 F. Supp. 2d 1042, 1061 (S.D. Iowa 2009); *Shurgard Storage Centers, Inc. v. Safeguard Self Storage, Inc.*, 119 F. Supp. 2d 1121 (W.D. Wash. 2000).

30. Professor Orin Kerr first discussed the agency paradigm as “employee misconduct cases.” Orin S. Kerr, *Cybercrime’s Scope: Interpreting “Access” and “Authorization” in Computer Misuse*

agency relationship, the principal authorizes the agent to act on their behalf.³¹ The agent in return owes a fiduciary duty of loyalty to advance the principal's interests over their own.³² Applied to the CFAA in the employment context, the agency relationship terminates and an employee's access to an employer's computer becomes unauthorized if the employee "acquires adverse interests" or is in a "serious breach of loyalty" to the employer.³³

For example, in *International Airport Centers, LLC v. Citrin*, the Seventh Circuit applied the agency theory to the CFAA where an employee installed a software program onto his employer's laptop to permanently delete company data before quitting and starting a competing business.³⁴ The court held that even though the defendant was still employed and had physical access to the computer at the time of deletion, he was nonetheless "without authorization" because his authority to access his employer's laptop terminated the moment he decided to quit and destroy files "in violation of the duty of loyalty."³⁵

Aside from the Seventh Circuit, courts have largely rejected the agency theory.³⁶ Commentators have likewise criticized the agency theory as making the CFAA overly broad and susceptible to constitutional challenges under the void-for-vagueness doctrine.³⁷ Professor Orin Kerr argues that the agency theory provides insufficient notice to employees because it fails to outline specifically what types of behavior fall outside the duty of loyalty in the employment context: "Is mere waste of the employer's time enough?"³⁸

Statutes, 78 N.Y.U. L. Rev. 1596, 1632–37 (Nov. 2003) [hereinafter Kerr, *Cybercrime's Scope*]; see also *Petition for Writ of Certiorari, Facebook, Inc. v. Power Ventures, Inc.*, 844 F.3d 1058 (No. 16-01105), *denied* at 24 ("[M]ost CFAA cases arise in the context of an employee or ex-employee accessing an employer's computers or database.").

31. Restatement (Second) of Agency § 112 (1958).

32. *Id.*

33. See *id.*; *Shurgard Storage Centers, Inc. v. Safeguard Self Storage, Inc.*, 119 F. Supp. 2d 1121, 1124–25 (W.D. Wash. 2000) (holding under principles of agency that employees lost access to the employer's computers when they allegedly became agents of a competitor to appropriate trade secrets).

34. *Citrin*, 440 F.3d 418.

35. *Id.* at 420.

36. See, e.g., *United States v. Nosal*, 676 F.3d 854, 862 (9th Cir. 2012) (rejecting "decisions of . . . sister circuits that interpret the CFAA broadly to cover . . . violations of a duty of loyalty"); *WEC Carolina Energy Solutions LLC v. Miller*, 687 F.3d 199, 206 (4th Cir. 2012) ("reject[ing] any interpretation that grounds CFAA liability on a cessation-of-agency theory").

37. See Kerr, *CFAA Vagueness*, *supra* note 4, at 1586.

38. *Id.* at 1586.

2. *Agency Theory for Algorithmic Auditors and Competitors*

Although the agency theory is typically reserved for employment cases where an employee uses a work computer against the employer's best interests, it is also pertinent to algorithmic auditors and competitors because algorithmic bias research and online competition can stem from the employment context.

In the research setting, employers can use the agency theory against internal employees whose work aims to encourage online integrity. For example, organizations often assign internal employees to sniff out potential discrimination in their proprietary algorithms.³⁹ If the employment relationship is terminated, however, the organization could use the agency theory to accuse the now-prior employee of engaging in unauthorized access during their employment—the legal hook being that the employee's method of conducting the research was not in the employer's best interests.

Such was the case of Scott Moulton. In *Moulton v. VC3*, a Georgia city police department hired Moulton, the network administrator for the county 911 center, under a service contract to set up a router and connect the city police department with the county 911 center.⁴⁰ Before connecting the two, Moulton became concerned for the security of the networks and performed a remote port scan⁴¹ to assess the vulnerability of the police department's network. When the police department noticed the unusual network behavior, it immediately terminated its service contract with Moulton and contacted the Georgia Bureau of Investigation to arrest Moulton for criminal computing trespass.⁴² Under the agency theory, if a jury found that Moulton's specific decision to perform the port scan was not in the best interests of the police department, he could be held liable under the CFAA.⁴³ Therefore, even though the police department hired Moulton to work on their network, a CFAA claim

39. See, e.g., Jessi Hempel, *For Nextdoor, Eliminating Racism Is No Quick Fix*, WIRED (Feb. 16, 2017), <https://backchannel.com/for-nextdoor-eliminating-racism-is-no-quick-fix-9305744f9c6> [<https://perma.cc/5UDX-PBTU>] (describing Nextdoor's consultations with racial justice groups and government officials in their efforts to mitigate user bias on the platform).

40. *Moulton v. VC3*, No. 1:00CV434-TWT, 2000 WL 33310901, at *1 (N.D. Ga. Nov. 7, 2000).

41. *Id.* at *2. A port scan is a "common network security test that sends a query to each open port on the target computer to see if that port is open and ready to receive incoming traffic." Kerr, *Cybercrime's Scope*, *supra* note 30, at 1626.

42. *Id.* at *2.

43. Moulton's case was dismissed because the damages did not meet the statutory \$5000 requirement. *Id.* at *7.

could still be available for specific decisions Moulton made while performing assigned tasks.⁴⁴

Although Moulton was a network security professional rather than an algorithmic auditor, his case closely resembles the auditing context and therefore raises similar concerns. Moulton's worry about the integrity of the network led him to independently decide to perform a remote port scan. This is analogous to the work of a software employee, who may worry about the integrity of a website's algorithm and similarly choose to address the issue in a manner that has not been explicitly approved by the employer.⁴⁵ If the employee is terminated, the employer—as in Moulton's case—could feasibly use the agency theory to bring a CFAA claim.

Similarly, the agency theory can provide the legal hook for businesses to sue their competitors. If an employee leaves to start a competing business, the employer can use the agency theory to attach CFAA liability to the now-prior employee's actions before they left the company. The case of *LVRC Holdings LLC v. Brekka* provides an illustrative example.⁴⁶ In *Brekka*, a business sued a former employee under the CFAA for emailing company documents to himself and his wife before departing and starting a competing business.⁴⁷ The business argued that the employee accessed the company's computers "without authorization" because he acted against the best interests of the business and breached the agency relationship.⁴⁸ Although the Court eventually rejected this argument,⁴⁹ the case illustrates how interpreting authorization under the agency paradigm can empower a business to sue a competing business by clawing back at the actions of prior employees.

44. Security analyst Stefan Puffer had a similar fate. Puffer worked for the Harris County technology department. In a "war driving" exercise, Puffer demonstrated to a county official and a newspaper reporter how easy it was to access the county's court system using only a laptop and a wireless LAN card. Puffer was indicted by a grand jury for violating the CFAA. He was acquitted by a jury in fifteen minutes. Matthew Bierlein, *Policing the Wireless World: Access Liability in the Open Wi-Fi Era*, 67 OHIO ST. L.J. 1123, 1159 n.187 (2006).

45. For example, to address racial profiling on their mobile application, Nextdoor assembled a small team consisting of a communications director, a product manager, a designer, a data scientist, and an engineer. See Hempel, *supra* note 39. Though they may not be aware, this team could be vulnerable to the CFAA under the Moulton rationale if they choose to make decisions not explicitly approved by upper management.

46. *LVRC Holdings LLC v. Brekka*, 581 F.3d 1127 (9th Cir. 2009).

47. *Id.* at 1129–30.

48. *Id.* at 1133–34.

49. The Court refused to apply the agency paradigm as articulated in the Seventh Circuit's *Citrin* opinion. Invoking the rule of lenity, the Court held that Brekka was not liable under the CFAA because he had permission to access the documents at the time he emailed them to himself and his wife. See *id.* at 1134.

As demonstrated by *Moulton* and *Brekka*, the agency theory of interpreting authorization generates significant legal uncertainty for algorithmic auditors and competitors whose work stems from a prior employment relationship. Because the exact scope of the agency relationship is undefined, when the agency relationship is used as a proxy for the outer boundaries of authorized computer behavior, employees cannot be certain that they will not inadvertently run afoul of the CFAA while performing their jobs. Thus, if employees are involved in investigating algorithmic bias or leave to join a competing business, the malleability of the agency relationship makes it particularly easy for employers to allege CFAA violations before their departure.

B. CODE-BASED APPROACH

1. *The Code-Based Approach and Its Critiques*

A number of leading scholars have advocated for courts to adopt a code-based approach, which attempts to define the boundary between authorized and unauthorized conduct by examining whether the defendant circumvented technological barriers.⁵⁰ This approach requires a fact-intensive examination into the specific technical manner by which the defendant obtained access. Past cases have turned on a range of technological tactics used by defendants, such as whether the defendant exploited vulnerabilities in a software program,⁵¹ bypassed an Internet Protocol (IP) block by changing IP addresses

50. See, e.g., Patricia L. Bellia, *A Code-Based Approach to Unauthorized Access Under the Computer Fraud and Abuse Act*, 84 Geo. Wash. L. Rev. 1442 (2016) (endorsing the code-based approach because a user will always encounter a code-based barrier which provides clear notice that the system owner did not consent); David J. Rosen, *Limiting Employee Liability Under the CFAA: A Code-based Approach to "Exceeds Authorized Access"*, 27 BERKELEY TECH. L.J. 737, 740 (2012) (explaining how the code-based approach is "consistent with the text and purpose of the CFAA"); Kerr, *Cybercrime's Scope*, *supra* note 30, at 1600 (proposing that courts adopt a code-based approach to draw "a workable line between privacy and openness"). *But see* Orin S. Kerr, *Norms of Computer Trespass*, 116 COLUM. L. REV. 1143 (2016) (arguing that "trying to figure out when access circumvented a code-based restriction" is too difficult). Professor Kerr instead proposed that courts look to whether the defendant circumvented an authentication gate, such as a password terminal. *See id.*

51. In the first ever conviction under the CFAA, the Second Circuit in *United States v. Morris* convicted graduate student Robert Tappan Morris at Cornell for exploiting security vulnerabilities in a computer at the Massachusetts Institute of Technology (MIT) to spread a computer "worm," causing many university machines around the country to become "catatonic." 928 F.2d 504 (2d Cir. 1991). The Court held that Morris had acted "without authorization" because he used the university system's features "not in any way related to their intended function." *Id.* at 510. Morris would later return to graduate school to earn a doctorate from Harvard, join the faculty of MIT as a tenured engineering professor researching

or using a server proxy,⁵² or sent repeated public queries (“GET requests”) to retrieve user information from a company’s database.⁵³

The code-based approach bears close resemblance to the language of the anti-circumvention provision in the Digital Millennium Copyright Act (DMCA),⁵⁴ so the legal community’s reactions and concerns in the copyright context are relevant to the code-based paradigm here. Section 1201(a)(1)(A) of the DMCA prohibits circumventing “a technological measure that effectively controls access” to a copyrighted work.⁵⁵ In response, an array of technological protection measures (TPMs) have emerged, including password protection, dongles, encryption, and watermarking, to name a few.⁵⁶ Courts have adopted several competing legal standards to assess the legal efficacy of these TPMs and to determine what constitutes circumvention of these TPMs in the copyright infringement context.⁵⁷ Nevertheless, because many of the legal standards are in disagreement with each other, it can be difficult for a copyright

computer networks, and co-founded the renowned startup-funding firm Y Combinator. *See* Timothy B. Lee, *How a Grad Student Trying to Build the First Botnet Brought the Internet to Its Knees*, WASH. POST (Nov. 1, 2013), https://www.washingtonpost.com/news/the-switch/wp/2013/11/01/how-a-grad-student-trying-to-build-the-first-botnet-brought-the-internet-to-its-knees/?utm_term=.26e48191fbf8 [<https://perma.cc/T2WB-D846>].

52. In *Craigslist Inc. v. 3Taps Inc.*, Craigslist alleged that 3Taps had “scraped,” or copied, all content posted on Craigslist to provide a “Craigslist API” for third parties and to operate *websitescraiggers.com*, a website which “essentially replicated the entire craigslist website” including all of the scraped content. 964 F. Supp. 2d 1178, 1180 (N.D. Cal. 2013). To stop 3Taps’ actions, Craigslist configured the website to block access from IP addresses associated with 3Taps and sent 3Taps a cease and desist letter prohibiting 3Taps’ access to the website. *Id.* at 1181. The Northern District of California denied 3Taps’ motion to dismiss, holding that 3Taps was without authorization in part because the average person would not use anonymous proxies to bypass an IP block. *Id.* at 1184.

53. In *United States v. Auernheimer*, security researcher Andrew “Weev” Auernheimer was sentenced to 41 months of prison for exposing a technical hole in AT&T’s iPads. 748 F.3d 525 (3d Cir. 2014). Auernheimer wrote a program to repeatedly access AT&T’s website in a “brute force” attack and ultimately collected 114,000 customer email addresses. *Id.* at 531. When he publicized his exploits to media members, they notified AT&T, who immediately fixed the breach. *Id.* at 531.

54. Digital Millennium Copyright Act of 1998, S. 2037, 105th Cong. § 1 (1998) (stating that the purpose of the DMCA was to “brin[g] U.S. copyright law squarely into the digital age”).

55. 17 U.S.C. § 1201(a)(1)(A) (2012).

56. *See* Ryan Iwahashi, *How to Circumvent Technological Protection Measures Without Violating the DMCA: An Examination of Technological Protection Measures Under Current Legal Standards*, 26 BERKELEY TECH. L.J. 491, 500–10 (2011) (explaining seven common TPMs).

57. *Id.* at 494–500 (explaining four different tests adopted by courts to interpret technical circumvention under the DMCA).

owner to know whether their TPM “effectively control[s] access” within the meaning of section 1201.⁵⁸

The code-based paradigm of interpreting the CFAA suffers from even more lack of clarity than the DMCA. While courts have already developed some legal standards to assess circumvention of a TPM within the meaning of section 1201 of the DMCA, courts have yet to develop *any* legal standards that define what kinds of conduct amount to “technological circumvention” under the CFAA. Critics of the code-based approach such as the Electronic Frontier Foundation (EFF) argue that the paradigm is impossible for courts to administer in a consistent manner.⁵⁹ Without statutory guidance, courts will be forced to make the oft-difficult determination of whether certain technological maneuvers, such as IP address changes, are done with or without authorization within the meaning of the statute—leaving users with little guidance as to what types of computer behavior fall safely outside the reaches of the CFAA.⁶⁰ As one example, the EFF points out that a user changes IP addresses every time he or she changes devices, logs into an online account from a new location, or uses a Virtual Private Network (VPN).⁶¹ Under the code-based paradigm, such commonly benign and standard practices could expose the regular Internet user to CFAA liability.⁶²

The tragic case of Aaron Swartz demonstrates the issues of notice and the difficulties of consistent administration under the code-based paradigm. In 2011, Internet activist Aaron Swartz was indicted after allegedly downloading 2.7 million academic papers that were freely available to any campus visitor through the JSTOR service.⁶³ To obtain the papers, Swartz dodged several defensive tactics employed by the school. He changed his IP address multiple times, changed his MAC address, and finally accessed the school’s wiring and

58. *Id.* at 491–92.

59. *See* Brief for Electronic Frontier Foundation as Amici Curiae Supporting Defendants-Appellants at 4–9, *Facebook, Inc. v. Power Ventures, Inc.*, 844 F.3d 1058 (2016) (No. 01-17154).

60. *Id.* at 16 (“A user often has no way of knowing why a block is in place, or whether that block is aimed at them specifically.”). *But see* Bellia, *supra* note 50, at 1474 (arguing that code-based barriers provide “better notice of the system owner’s consent” than text-based restrictions because the user “must confront and overcome a code-based limitation in order to use the system, but he or she will not always encounter [text-based] limitations when using the system”).

61. *Id.* at 13.

62. *Id.* at 14–16 (“[T]here is nothing inherently improper or unlawful about switching IP addresses to avoid an IP block”).

63. Indictment, *United States v. Swartz*, No. 1:11-cr-10260-NMG (D. Mass. July 14, 2011).

telephony closet to “hard-wire” his laptop directly to the network for uninterrupted downloads.⁶⁴ Under the code-based paradigm, the question becomes, at what point in dodging the school’s technological defenses did Swartz cross the line of authorization? And how would a user know when they have crossed the line?⁶⁵

2. *The Code-Based Approach for Algorithmic Auditors and Competitors*

The code-based approach has been problematic for algorithmic auditors and competitors because it exposes them to the threat of CFAA liability for engaging in technological measures necessary for their work. For example, one technique used in both contexts is commonly referred to as “data scraping,” where a user “scrapes” information from a website in bulk by sending repeated queries to the website’s server.⁶⁶ In such instances, an online platform—especially a dominant one that controls the majority of data in a certain field—can effectively thwart third parties from gathering data from their website by asserting a violation of the CFAA under the code-based approach.

In *hiQ Labs v. LinkedIn*, LinkedIn did just that: It relied on the code-based approach to sue a competitor for scraping information from LinkedIn’s public user profiles.⁶⁷ Data analytics company hiQ had used bots⁶⁸ to automatically scrape information from public LinkedIn profiles, including any changes made by users.⁶⁹ It then analyzed that information for its Keeper product, which told employers which of their employees were at the greatest risk of being recruited away.⁷⁰ In an attempt to stop hiQ’s actions, LinkedIn alleged that hiQ had violated the CFAA under the code-based paradigm by circumventing IP address blocks, scraping data from their website using high frequency queries, and avoiding measures LinkedIn had adopted to prevent the use of automated

64. *Id.*

65. Three months before Aaron Swartz was set to go to trial, in which he faced up to thirty-five years in prison, Swartz committed suicide. In the weeks after his death, Congress members introduced “Aaron’s Law,” a bill inspired by Aaron’s life’s work in online activism. David Amsden, *The Brilliant Life and Tragic Death of Aaron Swartz*, ROLLING STONE (Feb. 15, 2013), <https://www.rollingstone.com/culture/news/the-brilliant-life-and-tragic-death-of-aaron-swartz-20130215> [<https://perma.cc/U8EJ-9N2T>].

66. Christian Sandvig et al., *Auditing Algorithms: Research Methods for Detecting Discrimination on Internet Platforms* 12–13 (May 22, 2014) (unpublished manuscript).

67. 273 F. Supp. 3d 1099 (N.D. Cal. 2017).

68. A “bot” refers to a computer which automatically follows instructions in a script written by a person. For example, thousands of “bots” can be generated and instructed to visit websites and click links automatically to gather information about how the website works. *See* Complaint for Declaratory and Injunctive Relief, *supra* note 14, at 27.

69. *hiQ Labs*, 273 F. Supp. 3d at 1104.

70. *Id.*

bots.⁷¹ The court ultimately rejected LinkedIn's reliance on the code-based approach by distinguishing between public and private data, holding that hiQ had not been "without authorization" when it accessed and scraped information from LinkedIn's *public* user profiles.⁷² The court expressed concern that because hiQ was "wholly dependent" on data available only on LinkedIn's website, LinkedIn was "unfairly leveraging its power in the professional networking market for an anticompetitive purpose."⁷³

Analogous situations arise in the algorithmic auditing context, where dominant online platforms can use the code-based approach to thwart auditors from scrutinizing their websites. In fact, in response to this concern, the American Civil Liberties Union (ACLU) recently filed a lawsuit, *Sandvig v. Sessions*, on behalf of several professors and a media organization challenging the constitutionality of the CFAA.⁷⁴ Two of the plaintiffs, professors Christian Sandvig and Kyratso Karahlios, planned to run a "sock puppet" study in which they would generate automated bots to simulate users of different races and scrape data from residential real estate websites to examine the websites' algorithms for racial discrimination.⁷⁵ The plaintiffs alleged that the CFAA chilled their ability to uncover and report on harmful discriminatory practices because they were "placed in reasonable fear of being prosecuted" for engaging in their work.⁷⁶

Similar to the *LinkedIn* court, the District Court for the District of Columbia at the motion-to-dismiss stage adopted a narrow version of the code-based approach based on a distinction between public and private data. It dismissed the government's motion as applied to the plaintiffs' study, holding that scraping is "merely a technological advance that makes information collection easier;"⁷⁷ therefore scraping "from a site that is

71. *Id.*

72. *Id.* at 1108.

73. *Id.* at 1103, 1117.

74. *See* Complaint for Declaratory and Injunctive Relief, *supra* note 14. At the time of this writing, the court had recently released its opinion at the motion-to-dismiss stage. Subsequent developments in the case are therefore not incorporated in this Note.

75. *Id.* at 22–25. These "sock puppet" studies mimic the paired-testing methodology employed by the U.S. Department of Housing and Urban Development (HUD) to enforce the Fair Housing Act (FHA), which prohibits discrimination in the housing market. In those studies, HUD sent white and black "testers" to pose as equally qualified homeseekers to determine whether ethnic homeseekers were shown fewer homes than white homeseekers. *Id.* at 9–11.

76. *Id.* at 33.

77. Memorandum Opinion at 15, *Sandvig et al. v. Sessions* (D.D.C. Mar. 30, 2018) (No. 1:16-cv-01368).

accessible to the public is merely a particular use of information that plaintiffs are entitled to see.”⁷⁸

At the same time, the Court’s holding also reaffirmed that there are certain circumstances where the code-based approach is enforceable. It reasoned that “code-based restrictions which ‘carve[] out a virtual private space . . . that require[] proper authentication to gain access,’ remove those protected portions of a site from the public forum,” and therefore enjoy stronger CFAA enforceability.⁷⁹

The court’s decision in *Sandvig v. Sessions* will likely be perceived as a victory for the ACLU and algorithmic auditors generally because it adopted a narrow interpretation of the CFAA under the code-based approach.⁸⁰ But it is important to recognize that it also maintains significant ambiguity in the interpretation of authorization on the Internet. The Court seems to suggest that certain forms of technological savvy are permitted by law while others are prohibited with the force of the CFAA: It permits scraping and similar techniques of automatically gathering information in public forums but prohibits trespassing into virtual private spaces carved out of the public forum by “code-based restrictions.” Yet it does not provide specific guidance as to how parties should navigate the difficult question of what online information is technically “in the public forum” and consequently freely accessible. For instance, is the meta-data of a publicly available website “in the public forum”? Thus, even after the *Sandvig* court’s opinion, the concerns of notice and consistent administration under the code-based approach will continue to persist for algorithmic auditors. It is also still yet to be seen how other jurisdictions will react to the *Sandvig* decision and subsequently interpret the law.

Finally, as algorithmic auditors and competing online businesses develop new computational techniques, the question of what specific types of computer behavior constitute “technological circumvention” will continue to be a moving target. Without more guidance from the courts, third parties will continue to lack certainty in determining whether they have crossed the line

78. *Id.* at 32.

79. *Id.* at 11 (quoting Kerr, *Norms of Computer Trespass*, *supra* note 50, at 1171).

80. As a logical prior to holding that the CFAA does not reach scraping or other means of automated data collection in an online public forum, the Court adopted the narrower “access” interpretation of the circuit split discussed *supra* note 25. *Id.* at 26. (“The Court finds the narrow interpretation adopted by the Second, Fourth, and Ninth Circuits—and by numerous other district judges in this Circuit—to be the best reading of the statute.”).

from authorized to unauthorized behavior, and therefore may refrain from even embarking on projects in the first place.

C. TEXT-BASED APPROACH

1. *The Text-Based Approach and Its Critiques*

Under the text-based approach, the distinction between authorized and unauthorized access turns on whether a user has violated a written policy, such as a website terms of use (TOU) that attempts to limit the boundaries of permitted computer behavior.⁸¹ In *United States v. Drew*, the government invoked the text-based approach in bringing a CFAA claim against Lori Drew.⁸² The government contended that Drew, a mother who had created a false Myspace account to harass her 13-year-old neighbor, had violated the site's TOU and therefore had violated the CFAA.⁸³

Courts and commentators have largely rejected this approach, focusing on the outsized authority the paradigm places on website TOUs. Indeed in *Drew*, though the jury found Drew guilty of a misdemeanor violation of the CFAA for violating Myspace's TOU, the Court eventually vacated the jury's conviction.⁸⁴ In *United States v. Nosal (Nosal I)*, the Ninth Circuit also rejected the text-based approach because "most people are only dimly aware of and virtually no one reads or understands [TOUs]."⁸⁵ The Court pointed out that because "website owners retain the right to change the terms at any time and without notice . . . behavior that wasn't criminal yesterday can become criminal today without an act of Congress, and without any notice whatsoever."⁸⁶

81. Other commentators have described similar judicial approaches as paradigms based in "contract" or "policy." See, e.g., Bellia, *supra* note 50, at 1451–57 (dividing the text-based approach into the "contract paradigm" and the "policy paradigm"); Rosen, *supra* note 50, 752–56 ("employer-policy approach"); Katherine M. Field, *Agency, Code, or Contract: Determining Employees' Authorization Under the Computer Fraud and Abuse Act*, 107 MICH. L. REV. 819, 827–29 (2009) ("contract-based interpretation").

82. *United States v. Drew*, 259 F.R.D. 449 (C.D. Cal. 2009).

83. *Id.* at 452. Unfortunately, before trial, the young girl committed suicide, which the prosecution alleged was directly caused by Drew's harassment through the false Myspace account. *Id.* See also *U.S. v. Lawson*, No. CRIM. 10-114 KSH, 2010 WL 9552416, at *7–8 (D.N.J. Oct. 12, 2010) (finding liability under the CFAA for defendants who had purchased more than one million event tickets for subsequent resale because they had violated website TOUs and code-based restrictions).

84. *Drew*, 259 F.R.D. 449.

85. *United States v. Nosal*, 676 F.3d 854, 861 (9th Cir. 2012).

86. *Id.* at 862. In *United States v. Drew*, Judge Wu explained in dicta that when applied to TOUs, the CFAA is vulnerable to the void-for-vagueness doctrine due to "actual notice deficiencies" because website owners can "unilaterally amend . . . the terms with minimal notice to users." *Drew*, 259 F.R.D. at 463–65; see also Bellia, *supra* note 50, at 1472–73 (criticizing

Professor Orin Kerr similarly critiqued the use of a website TOU as a proxy for the bounds of authorization under the CFAA. In his seminal article *Norms of Computer Trespass*, Kerr argued that a website TOU should not control your access to online information.⁸⁷ Kerr reasoned that a TOU should be given similar legal authority as the standard waiver of rights on the back of a baseball game ticket, which may determine your legal rights to sue, but does not control your rights to enter the ballpark.⁸⁸

Though the Department of Justice has publicly stated to Congress that it has no intention of prosecuting harmless terms of service violations that are not in furtherance of other criminal activity,⁸⁹ commentators have argued that this type of prosecutorial discretion cannot be trusted.⁹⁰

2. *The Text-Based Approach for Algorithmic Auditors and Competitors*

Of the three paradigms, the text-based approach gives the computer owner the most power to control third-party interactions and ward off algorithmic auditors and competitors. Terms are unilaterally drafted without negotiation and do not require extensive technological savvy beyond changing the language of the terms, so they can go well beyond the bounds of agency relationships or code-based restrictions with fairly minimal efforts.⁹¹ TOUs can—and often do—explicitly prohibit conduct commonly used by algorithmic auditors and competitors, even if the conduct would not violate the CFAA under the agency or code-based paradigms of interpretation.⁹² As a

the text-based approach because “[w]hen a court treats a policy or a contract as the basis for liability under the CFAA, it permits private parties to dictate the contours of the state” and raises constitutional concerns about whether defendants are given “fair notice of the basis for criminal sanctions”).

87. Kerr, *Norms of Computer Trespass*, *supra* note 50, at 1165–67.

88. *Id.*

89. Government’s Brief in Support of Defendant’s Motion to Dismiss at 21, Sandvig et al. v. Sessions (D.D.C. Jun. 29, 2016) (No. 1:16-cv-01368).

90. See Complaint for Declaratory and Injunctive Relief, *supra* note 14, at 4; see also Jamie Williams, *New Federal Guidelines for Computer Crime Law Do Nothing to Reign in Prosecutorial Overreach Under Notoriously Vague Statute*, ELECTRONIC FRONTIER FOUND. (Oct. 31, 2016), <https://www.eff.org/deeplinks/2016/10/what-were-scared-about-halloween-prosecutorial-discretion-under-notoriously-vague> [<https://perma.cc/A7L9-V5BJ>]; *United States v. Valle*, 807 F.3d 508, 528 (2d Cir. 2015) (“While the Government might promise that it would not prosecute an individual for checking Facebook at work, we are not at liberty to take prosecutors at their word in such matters.”).

91. See, e.g., Snap Inc. Terms of Service, <https://www.snap.com/en-US/terms/> [<https://perma.cc/62JU-P3BX>] (last modified Feb. 18, 2019) (“You will not solicit login credentials from another user.”).

92. See, e.g., Complaint for Declaratory and Injunctive Relief, *supra* note 14, at 37 (“The online research that Plaintiffs wish to conduct includes accessing websites using artificial tester

result, even though courts, commentators, and the DOJ have all publicly rejected a purely text-based approach, the uncertainty surrounding the enforceability of TOUs still serves as a deterrent for investigative work and free competition on the Internet.

In *Sandvig v. Sessions*,⁹³ the plaintiffs alleged that standard TOUs often prohibit the use of “the very research tools and methods that are necessary to determine whether discrimination is taking place.”⁹⁴ While the complaint did not state specific TOU provisions from the targeted real estate websites in the professors’ study, it did state that scraping is prohibited by TOUs of “virtually all real estate websites,” and that the plaintiffs “are aware that [their] experimental design will violate websites’ [TOUs].”⁹⁵ The plaintiffs alleged that without court relief, they “must refrain from conducting research or testing” that violates website TOUs to “avoid the risk of prosecution.”⁹⁶

Researcher and computer scientist Michael Tschantz ran into a similar problem when designing experiments to study Google ads and LinkedIn algorithms.⁹⁷ Tschantz and other researchers planned to run studies similar to those alleged in *Sandvig v. Sessions*, one of which would have involved placing purchased ads on Google, the other of which would have involved collecting ads shown to actual users on LinkedIn.⁹⁸ But after reading through the websites’ TOUs and an article about the expansive scope of the CFAA, Tschantz put both projects on pause.⁹⁹

Online competitors face similar legal uncertainty under the text-based approach because they commonly engage in the same technological techniques. Instead of harvesting data for investigative purposes, competitors may use scraping techniques to learn about an incumbent online service

profiles, in violation of terms of service that prohibit providing false information.”); *see also Terms of Service*, FACEBOOK, <https://www.facebook.com/terms.php> [<https://perma.cc/Y3R2-9MG8>] (last modified Apr. 19, 2018) [hereinafter *Facebook Terms of Service*] (“You will not provide any false personal information on Facebook, or create an account for anyone other than yourself without permission. . . . You will not create more than one personal account.”).

93. For a refresher on the background of the case, *see* discussion, *supra* Part III.B.2.

94. Complaint for Declaratory and Injunctive Relief, *supra* note 14, at 18.

95. *Id.* at 24.

96. *Id.* at 33.

97. Interview with Michael Tschantz, Principal Investigator, International Computer Science Institute, in Berkeley, Cal. (Dec. 4, 2017).

98. *Id.*

99. *Id.*; *see also* Quinn Norton, *We Should All Step Back from Security Journalism – I’ll Go First*, MESSAGE (Jan. 23, 2015), <https://medium.com/message/we-should-all-step-back-from-security-journalism-e474cd67e2fa> [<https://perma.cc/8X7J-K33U>].

provider's offerings¹⁰⁰ or to create add-on products.¹⁰¹ These behaviors lead competitors to run into common TOU terms that categorically prohibit data scraping and use of website information for third-party products.¹⁰² Because of the inevitable clash between incumbent businesses and their incoming competitors, ambiguity surrounding the enforceability TOUs can give the incumbent a significant legal advantage and even thwart competitors from entering the market in the first place.¹⁰³

III. REVOCATION AS A NEW PARADIGM

The agency theory, the code-based approach, and the text-based approach create a patchwork of legal standards for interpreting unauthorized access under the CFAA. In two recent cases, *Nosal II* and *Facebook*, the Ninth Circuit established yet another paradigm of interpretation: revocation.¹⁰⁴ Under the revocation paradigm, a user runs afoul of the CFAA if he or she continues to obtain access to a computer after his or her authorization has been explicitly revoked.

This new standard does provide some clarity for determining when a user loses the authorization because it rests on a simple concept that is easy to apply.¹⁰⁵ That is, to determine whether a user has accessed a computer

100. See, e.g., Aaron Gordon, *How Southwest Airlines Kills Startups that Monitor Its Prices*, OUTLINE (Dec. 1, 2017), <https://theoutline.com/post/2554/swmonkey-southwest-airlines-kills-startups> [<https://perma.cc/ZK8S-QHZG>] (describing how Southwest used cease and desist letters and CFAA allegations to shut down multiple software start-ups that scraped Southwest fares to alert customers of price drops).

101. See, e.g., discussion of *hiQ v. LinkedIn*, *supra* Part III.B.2.

102. See, e.g., *Statement of Rights and Responsibilities*, FACEBOOK, <https://www.facebook.com/terms.php> [<https://perma.cc/3N5L-ZC44>] (last updated Apr. 19, 2018) (prohibiting data scraping); Gordon, *supra* note 100 (describing Southwest's policy, which forbids use of information on its website "for or in connection with offering any third-party product or service not authorized or approved by Southwest"); Complaint at 6, *Craigslist v. 3Taps Inc.*, 964 F. Supp. 2d 1178 (N.D. Cal. 2013) (prohibiting "any program, application or service that enables or provides access to, use of, operation of or interoperation with craigslist is prohibited").

103. A common concern in mergers and acquisitions and venture capital funding deals is whether the company is likely to be engaged in future litigation. Even if a competitor is not deterred from pursuing a product by a TOU under the text-based approach, investment and acquisition may still depend on potential exposure to CFAA allegations. See Jeffrey Estes et al., *Venture Capital Investment in the United States: Market and Regulatory Overview*, Westlaw Practical Law Country Q&A 7-501-0057 (database last updated Mar. 1, 2015) (listing "disputes and potential litigation" as one area VC funds review in legal due diligence after a term sheet has been signed).

104. See discussion, *infra* Part III.A ("Revocation in *Nosal II* and *Facebook*").

105. See discussion, *infra* Part III.B ("Clarity and Notice Under a New Paradigm").

“without authorization,” a court need only look into two inquiries: (1) whether the computer owner revoked authorization; and (2) whether the user continued to obtain access knowing their authorization had been revoked. Thus, in cases where the computer owner has clearly taken action to revoke a user’s access, these bright-line rules do away with the hard questions that arise under the agency theory, the code-based approach, and the text-based approach.¹⁰⁶

The losing parties in both *Nosal II* and *Facebook* petitioned for writ of certiorari to the Supreme Court.¹⁰⁷ Both petitions were denied, meaning that authorization under the CFAA will remain a national debate. Even though the Ninth Circuit in *Facebook* and *Nosal II* explicitly rejected the text-based approach¹⁰⁸ and some aspects of the code-based approach,¹⁰⁹ the existing paradigms will continue to play a role in interpreting authorization in other jurisdictions.¹¹⁰

A. REVOCATION IN *NOSAL II* AND *FACEBOOK*

In an amended opinion in *United States v. Nosal (Nosal II)*, the Ninth Circuit articulated the revocation paradigm in a classic employer-employee case.¹¹¹ David Nosal was a senior executive who resigned from his position with executive search firm Korn/Ferry International (K/F).¹¹² Upon Nosal’s resignation, K/F revoked Nosal’s employee credentials and negotiated a one-year non-compete agreement in exchange for one million dollars.¹¹³ During that year under contract, however, Nosal started a competing business with

106. See discussion, *supra* Part III.

107. Petition for Writ of Certiorari, *Facebook, Inc. v. Power Ventures, Inc.*, 844 F.3d 1058 (9th Cir. 2016) (No. 16-01344), *denied* [hereinafter Facebook Writ Petition]; Petition for Writ of Certiorari, *United States v. Nosal*, 844 F.3d 1024 (9th Cir. 2016) (No. 16-01105), *denied* [hereinafter Nosal Writ Petition].

108. See *Facebook*, 844 F.3d at 1067 (“[A] violation of the terms of use of a website—without more—cannot establish liability under the CFAA.”); *Nosal*, 844 F.3d at 1028 (“[W]e have held that authorization is not pegged to website terms and conditions . . .”).

109. See *Facebook*, 844 F.3d at 1068 n.5 (“Simply bypassing an IP address [block], without more, would not constitute unauthorized use.”).

110. However, largely due to its proximity to the Silicon Valley, the Ninth Circuit has traditionally exercised disproportionate influence in issues of technology law. Facebook Writ Petition, *supra* note 107 at 11. (“Ninth Circuit precedents are often *de facto* the law of the land on cutting-edge social media issues owing to the circuit’s hegemony over Silicon Valley.”).

111. *Nosal*, 844 F.3d 1024 (amended opinion). The original *Nosal II* opinion was reported on July 5, 2016. See *United States v. Nosal*, 828 F.3d 865 (9th Cir. 2016).

112. *Nosal*, 844 F.3d at 1030–31.

113. *Id.*

two prior K/F employees.¹¹⁴ The team enlisted another K/F employee who stayed on with the firm and used her credentials to continue to access the firm's database.¹¹⁵ When K/F caught wind of Nosal's conduct, it notified him by email, launched a private investigation, and contacted government authorities.¹¹⁶

The government sued Nosal in a criminal case, claiming that Nosal had violated the CFAA by accessing K/F's internal system "without authorization."¹¹⁷ Nosal argued that he had neither circumvented any technological barriers under the code-based approach nor was he otherwise "without authorization" because he had borrowed an employee's valid credentials with her full consent.¹¹⁸ The Court was unpersuaded by Nosal's technical interpretations of authorization.¹¹⁹ Instead, it relied on an "unambiguous, non-technical" interpretation to hold that Nosal had acted "without authorization" because he had obtained access without "permission."¹²⁰ His credentials had been revoked when he resigned from his job and signed the non-compete agreement.¹²¹ Thus, he no longer had permission to access the firm's database, even if he had done so with the help of an employee with valid credentials.¹²² In the Ninth Circuit's words, "[u]nequivocal revocation of computer access closes both the front door and the back door."¹²³

One day after the Ninth Circuit released its amended opinion in *Nosal II*, it released its amended opinion in *Facebook v. Power Ventures*.¹²⁴ In *Facebook*,

114. *Id.*

115. *Id.*

116. *Id.*

117. *Nosal*, 844 F.3d at 1031–32.

118. *Id.* at 1038–39.

119. *Id.* The Court rejected Nosal's code-based interpretation of authorization, reasoning that the statute made no mention of technological circumvention and that even if it did, "a password requirement is designed to be a technological access barrier." *Id.*

120. *Id.* at 1035–36. The Court held that Nosal needed permission from both the employee and K/F to use the employee's credentials to access the database. *Id.*; see also *United States v. Valle*, 807 F.3d 508, 524 (2d Cir. 2015) (interpreting "without authorization" as "without permission"); *WEC Carolina Energy Solutions LLC v. Miller*, 687 F.3d 199, 204 (4th Cir. 2012) (interpreting authorized access as when an employer "approves or sanctions" the access).

121. *Nosal*, 844 F.3d at 1035–36.

122. *Id.*

123. *Nosal*, 844 F.3d at 1028.

124. *Facebook, Inc. v. Power Ventures, Inc.*, 844 F.3d 1058 (9th Cir. 2016) (amended opinion). The original *Facebook* opinion was reported on July 12, 2016. See *Facebook, Inc. v. Power Ventures, Inc.*, 828 F.3d 1068.

Power Ventures (“Power”) operated a social networking website that enabled individuals to aggregate social media from multiple accounts—for example a Facebook, a Twitter, and a LinkedIn—and view all of their information from a single Power account.¹²⁵ In December 2008, Power began a promotional campaign to attract new users to join. It placed new buttons on the website, allowing Power users with Facebook accounts to “Share with friends” by selecting from a list of connected friends and clicking, “Yes, I do!” When the button was clicked, Facebook’s website automatically generated an internal message inviting the selected recipients to create Power accounts.¹²⁶

Facebook became aware of the campaign and responded with a cease and desist letter. The letter demanded that Power terminate the campaign and enroll in Facebook’s Connect program for developers, where it would be required to assent to Facebook’s Developer Terms of Use. Power ignored Facebook’s demands. Facebook then instituted an Internet Protocol (IP) block to prevent Power from accessing the Facebook website. Power sidestepped the block by changing its code to routinely monitor whether its IP addresses had been blocked and using proxy servers to change those IP addresses in the event of a block.¹²⁷

Within weeks, Facebook filed a civil suit against Power and its CEO Steve Vachani under the CFAA for accessing its website “without authorization.” The Northern District Court of California granted summary judgment in Facebook’s favor.¹²⁸ Invoking the code-based approach, the district court held that Power had accessed Facebook’s website “without authorization” because it had specifically designed its code to be immune to IP blocks by third-party servers.¹²⁹ By routinely monitoring whether its IP addresses had been blocked and using proxy servers to change the IP address in the event of a block, Power had “circumvented technical barriers” and acted “without authorization” within the meaning of the CFAA.¹³⁰

Power appealed in the Ninth Circuit, arguing that changing an IP address should not lead to liability under the CFAA.¹³¹ The Court was persuaded and distilled two “general rules” for interpreting authorization. First, once a defendant’s permission to access a computer has been “revoked explicitly,”

125. *Facebook*, 844 F.3d at 1062–64.

126. *Id.*

127. *Id.*

128. *Facebook, Inc. v. Power Ventures, Inc.*, 844 F. Supp. 2d 1025, 1038–39 (N.D. Cal. 2012).

129. *Id.*

130. *Id.*

131. *Facebook*, 844 F.3d 1058 (9th Cir. 2016).

“technological gamesmanship or the enlisting of a third party to aid in access” will not excuse liability.¹³² Second, “a violation of the terms of use of a website—without more—cannot establish liability.”¹³³

Judge Graber, writing for the Court, also rejected the district court’s reliance on the code-based approach, holding that “[s]imply bypassing an IP address, without more, would not constitute unauthorized use.”¹³⁴ Instead, the Court held under the new revocation paradigm that Power had run afoul of the CFAA earlier in the dispute: the moment it continued its promotional campaign after receiving the cease and desist letter.¹³⁵ Once it received Facebook’s cease and desist letter, Power could not continue accessing Facebook’s website through “technological gamesmanship” or the “enlisting of” Facebook’s users’ consent.¹³⁶

Just as Nosal argued that he had accessed K/F’s computers with authority by borrowing an employee’s legitimate access credentials with her consent,¹³⁷ Power also argued that it was shielded from liability because it had obtained its users’ explicit consent to send messages through their Facebook accounts.¹³⁸ But again, the Court was unpersuaded by the narrow interpretation of unauthorized access.¹³⁹ The Court held that Facebook had in fact acted “without authorization” and that consent from Facebook users to send automated messages through their accounts was insufficient.¹⁴⁰

B. CLARITY AND NOTICE UNDER A NEW PARADIGM

The Ninth Circuit’s two closely successive opinions seem to be a deliberate attempt to articulate the revocation paradigm as a new standard, distinct from the existing paradigms. Even though the facts in *Nosal II* and *Facebook* resemble past cases—making them ripe to invoke existing notions of authorization—

132. *Id.*

133. *Id.*

134. *Id.* at 1068 n.5.

135. *Id.* at 1068. The Court went on to explain that Power’s circumvention of IP barriers merely “further demonstrated that Facebook had rescinded permission.” *Id.*

136. *See id.* at 1067.

137. *United States v. Nosal*, 844 F.3d 1024, 1038–39 (9th Cir. 2016) (arguing that Nosal had not circumvented any technical barriers because he had borrowed an employee’s credentials with her consent).

138. *Facebook*, 844 F.3d at 1068.

139. *Id.*

140. *Id.* (“The consent that Power had received from Facebook users was not sufficient to grant continuing authorization to access Facebook’s computers after Facebook’s express revocation of permission.”).

the Court refused to rely on the agency theory, the text-based approach, or the code-based approach.

For example, the Court could have found that the employee who lent her credentials to Nosal violated her duty of loyalty to the firm under the agency theory by using her authority to aid a competing business.¹⁴¹ Alternatively, the Court could have held that Power acted “without authorization” by using proxy servers to sidestep an IP block, a tactic previously held to violate the CFAA under the code-based approach.¹⁴² Or under the text-based approach, the Court could have found that Nosal and his compatriots were “without authorization” when they downloaded confidential information in violation of the firm’s computer use policy.¹⁴³

As a distinct standard of its own, the revocation paradigm does provide some clarity under the CFAA. It draws a hard line in the sand based on a rather simple concept—if I explicitly tell you to stop accessing my website, you can no longer access my website. Thus, in cases where a computer owner has taken action to revoke authorization by sending something as simple as a cease and desist letter, the revocation paradigm provides a two-step framework for courts to apply: (1) whether the computer owner revoked authorization;¹⁴⁴ and (2) whether the user continued to obtain access knowing the authorization had been revoked.¹⁴⁵ This bright-line framework provides clarity for the courts by removing the need to delve into the ill-defined scope of an agency relationship, the technical mechanics of IP blocks and data scraping, or the tough question of when TOUs should be enforceable under the CFAA.

Aside from providing a bright-line framework for courts, the revocation paradigm also provides clarity for the user. The second inquiry of the revocation paradigm introduces a notice requirement: whether the defendant accessed the computer system *knowing* that their authorization had been revoked. In *Nosal II* and *Facebook*, the Court answered yes. Power had acted

141. *Cf.* *International Airport Centers, LLC v. Citrin*, 440 F.3d 418 (7th Cir. 2006) (holding that an employee had acted “without authorization” under the CFAA when he permanently deleted leaving to start a competing business).

142. *Cf.* *Craigslist Inc. v. 3Taps Inc.*, 964 F. Supp. 2d 1178, 1180 (N.D. Cal. 2013) (holding that a competitor had scraped the Craigslist website “without authorization” in part because it used anonymous proxies to bypass an IP block).

143. *Cf.* *United States v. Drew*, 259 F.R.D. 449 (C.D. Cal. 2009) (holding that a mother who created a false Myspace account to harass her neighbor had accessed the site “without authorization” because the site’s TOU prohibited the creation of false accounts).

144. *See Facebook*, 844 F.3d at 1067 (“Facebook expressly rescinded that permission when Facebook issued its written cease and desist letter to Power . . .”).

145. *See id.* (“The record shows unequivocally that Power knew that it no longer had authorization to access Facebook’s computers, but continued to do so anyway.”).

“without authorization” when it “deliberately disregarded” the cease and desist letter and continued to run its promotional campaign through Facebook’s website, “knowing that it was not authorized to do so.”¹⁴⁶ Similarly in *Nosal II*, K/F had revoked Nosal’s login credentials, “unequivocally convey[ing] to Nosal that he was an ‘outsider’” by giving him “particularized notice of his revoked access.”¹⁴⁷

This focus on notice is unseen in the existing paradigms of interpretation. Under the agency theory in *Citrin*, the Court’s analysis turned on whether the defendant’s decision to permanently delete company data was in the best interests of the company, regardless of whether the defendant knew he had exceeded the bounds of his employment relationship.¹⁴⁸ The code-based approach similarly revolves around the technicalities of when unusual computer behavior amounts to “technological circumvention” without inquiring into a user’s knowledge of when they have crossed the line of authorization.¹⁴⁹ Finally, the text-based approach provides perhaps the least amount of attention to notice by giving legal force to TOUs and other text-based documents, which are seldom read by the computer user.¹⁵⁰

Thus, the revocation paradigm adds some clarity to the authorization debate. It provides a framework that is easy for courts to apply and requires that users are given some explicit notice that their permission has been revoked, both of which are entirely lacking in the existing assemblage of paradigms for interpreting authorization.

Despite this promise of clarity for the courts and for users, the revocation paradigm does not provide clarification on when or how authorization is established in the first place. In *Facebook*, the Court stated, “we need not decide whether websites such as Facebook are presumptively open to all comers, unless and until permission is revoked expressly.”¹⁵¹ The Court lightly suggested that initial authorization rests in part on the defendant’s intent rather than any technical standard by stating that Power was not initially “without authorization” under the CFAA because it had “at least arguable permission” from the Facebook users; that is, Power “reasonably could have thought” that consent from the users alone was sufficient to run its campaign.¹⁵² By speaking

146. *Id.* at 1068–69.

147. *United States v. Nosal*, 844 F.3d 1024, 1036 (9th Cir. 2016)

148. *See* discussion, *supra* Part III.A.

149. *See* discussion, *supra* Part III.B.

150. *See* discussion, *supra* Part III.C.

151. *Facebook*, 844 F.3d at 1067 n.2.

152. *Id.* at 1067.

only in terms of “arguable permission,” the Court left the question open of when authorization is established in the first place.

IV. IMPLICATIONS OF THE REVOCATION PARADIGM

This Note’s analysis of the revocation paradigm thus far has been positive rather than normative, focusing on what the revocation paradigm is and how it is applied in courts. But in addition to adding judicial clarity to the CFAA, the revocation paradigm also dramatically alters the landscape of the Internet by giving computer owners the power to single out any user for revocation. More specifically, a computer owner can revoke any individual’s access at a moment’s notice, without rhyme or reason. This singling-out power is unlike any of the existing paradigms. Employer-employee agency relationships are typically governed by boilerplate language in policies that apply to *all* employees of a company.¹⁵³ Technological barriers such as password gates or firewalls are generally erected to stop the masses from accessing a specific part of a website.¹⁵⁴ And TOUs are addressed to the general public.¹⁵⁵ Therefore, the revocation paradigm is the first of its kind to create a new powerful ability to single out an individual and revoke their access with the force of the CFAA.

This Part is dedicated to exploring the implications of this dramatic shift in power for algorithmic auditors and online competitors. As this Note will explain, algorithmic auditors and competitors are in a uniquely vulnerable position under the revocation paradigm because they both have inherently adversarial relationships with incumbent website owners. Website owners will naturally guard their data from third parties who seek to scrutinize their websites or create competing products that may draw away users. The revocation paradigm simply provides the website owner with the scalpel to single out an unwanted third party with the force of law.

153. For example, the employer in *Nosal I* had a singular computer use policy that granted “certain rights” regarding computer use to all their employees. *United States v. Nosal*, 676 F.3d 854, 857 (9th Cir. 2012).

154. IP blocks are perhaps the technological defense closest to providing a computer owner the ability to single out an individual. But unlike revocation by a cease-and-desist letter which is addressed to an individual, IP blocks are targeted at an IP address, which are not tied to an individual’s identity. Additionally, IP blocks can be easily side-stepped intentionally or unintentionally.

155. *See, e.g., Facebook Terms of Service*, *supra* note 92 (setting forth the rights and responsibilities that govern Facebook’s relationship with “[all] users and others who interact with Facebook, as well as Facebook brands, products and services”).

A. DANGERS OF THE SINGLING-OUT POWER

Under the revocation paradigm, the computer owner has extraordinary power to single out a user and revoke their access. This singling-out power is uniquely troubling for Internet users because of the convergence of three factors: the computer owner may single out anyone; revoke their access for any reason; and do so with minimal effort.

First, the computer owner may revoke any individual or entity's access. They may revoke access to multiple parties or just one—in one fell swoop or in succession.¹⁵⁶ Most importantly, they may revoke access to *any* person, regardless of the underlying reason.¹⁵⁷ On one hand, this makes sense. Much like a store is able to reserve the right to refuse service to a customer,¹⁵⁸ a computer owner should be able to control who accesses their website. On the other hand, however, when a store owner begins rejecting patrons who behave very similarly to other patrons, we begin to be concerned about underlying discrimination or unfairness.¹⁵⁹ In the context of the CFAA, the ability to choose any individual for revocation gives incumbent online service providers extraordinary power over the distribution of information. For instance, in *Facebook*, Facebook could have chosen to revoke Power's access, but maintain access for another social media aggregator. In the research context, a website like Google could choose to revoke access from an auditor looking at algorithmic bias against black users but maintain access for an auditor looking at discrimination against white users. Judge Chen put his finger on the issue in *biQ v. LinkedIn*, where he found the potential arbitrariness of singling out

156. An example of this is Oracle's effort to sue third-party support suppliers. In the third-party support industry, which consists of at least eight main players, Oracle has chosen to sue only three (including Rimini). See *Secondary Software Market Providers*, CLEARLICENSING.ORG, <http://www.clearlicensing.org/secondary-market/> [<https://perma.cc/M9QJ-Y9B9>] (listing eight Third Party Support Specialist companies); see also *Oracle America, Inc. v. Terix Computer Company, Inc., et al.*, 2015 WL 1886968 (N.D. Cal. 2015) (suing two other third-party support suppliers, Terix and Maintech).

157. An example of this is the case of *Rimini Street v. Oracle*, in which Oracle sent Rimini a cease and desist letter with allegations of CFAA violations for accessing Oracle's support websites to provide third-party support to Oracle's software customers, even after Rimini had changed its manner of access to comply with prior court summary judgment orders. *Rimini Street, Inc. v. Oracle Intl. Corp.*, 2017 WL 5158758, at *2–4 (D. Nev. 2017).

158. See, e.g., *Dress Code*, NEWPORT BEACH COUNTRY CLUB (2017), <http://www.newportbeachcc.com/dress-code> [<https://perma.cc/F3J5-NEEP>] (stating that “[m]anagement reserves the right to refuse privileges to anyone found in violation of the dress code. Management in its sole discretion will determine attire in good taste”).

159. The main limitation on the right to refuse service is Title II of the Civil Rights Act of 1964, which prohibits a “place of public accommodation” from discriminating on the basis of race, color, religion, or national origin. 42 U.S.C. §§ 2000a(a)–(b) (2012).

“deeply concerning,” especially where 1) website owners could block access “on the basis of race or gender;” 2) political campaigns could block “selected news media, or supports of rival candidates;” and 3) companies “could prevent competitors or consumer groups from visiting their websites to learn about their products or analyze pricing.”¹⁶⁰

Second, revocation is non-negotiated: the computer owner has complete control over how much access to revoke and when to do so, putting users entirely at the whim of website owners.¹⁶¹ Algorithmic auditors and competitors are particularly vulnerable to this factor because a website owner could choose to shut down a project at a moment’s notice.¹⁶² Facebook had full authority to determine if and when to cease Power’s promotional campaign.¹⁶³ Even if Power had already invested significant financial resources or if its entire success was dependent on the campaign, under the revocation paradigm, Facebook’s decision had the force of the CFAA.¹⁶⁴ More troubling, this asymmetrical balance of power can deter algorithmic auditors and competitors from even embarking on projects if they suspect that a certain website owner will be less sparing.¹⁶⁵

160. *hiQ Labs, Inc. v. LinkedIn Corp.*, 273 F. Supp. 3d 1099, 1110 (N.D. Cal. 2017).

161. The unilateral nature of cease and desist letters under the CFAA is analogous to that of cease and desist letters used to enforce trademarks. For an in-depth discussion of abusive trademark letters, see generally Leah Chan Grinvald, *Policing the Cease-and-Desist Letter*, 49 U.S.F. L. REV. 411 (2015) (discussing the implications of abusive cease and desist letters and their particularly coercive effect on small businesses and individuals).

162. This problem is exacerbated by the fact that the vast majority of websites reserve “the right to modify their [TOU] at any time.” Complaint for Declaratory and Injunctive Relief, *supra* note 14, at 20 (emphasis added) (stating that of twenty commonly used housing and employment websites, eighteen explicitly reserved this right). Therefore, even a user who did read the complete TOU at the time she first used the website “could be subjected to criminal liability for conduct that was not prohibited in the [TOU] at the time she read them.” *Id.*

163. On the same day that Facebook first became aware of Power’s promotional campaign, it sent the cease and desist letter instructing Power to terminate its activities. *Facebook, Inc. v. Power Ventures, Inc.*, 844 F.3d 1058, 1063 (9th Cir. 2016).

164. Facebook sent the cease and desist letter on December 1, 2008—two years after Power began developing its product. *Id.* In April 2011, during the peak of litigation before the district court, Power ceased doing business altogether, see *id.*, and Steve Vachani attempted to file for bankruptcy. Aarti Shahani, *The Man Who Stood Up To Facebook*, NPR (Oct. 13, 2016), <https://www.npr.org/sections/alltechconsidered/2016/10/13/497820170/the-man-who-stood-up-to-facebook> [<https://perma.cc/4534-N9ZQ>].

165. See Grinvald, *supra* note 161, at 414 (“[W]hen abusive cease-and-desist letters are sent to small businesses and individuals, it is almost certain that such targets will immediately capitulate[.]”). See also William McGeeveran, *Four Free Speech Goals for Trademark Law*, 18 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 1205, 1206–07 (2008) (noting that cease and desist letters are frequently effective).

Finally, revoking authorization is cheap and easy to execute. In *Facebook*, Facebook needed only send a cease and desist letter.¹⁶⁶ In *Nosal II*, K/F simply removed Nosal from the company database of authorized users.¹⁶⁷ Both of these options are much cheaper and quicker than preventative measures under the code-based theory, where computer owners must erect technological barriers to protect their information.¹⁶⁸ This feature of revocation also raises concerns about encouraging overprotective behavior in the form of boilerplate revocation letters. That is, because cease and desist letters are minimally burdensome to send, computer owners can generously send form letters to potentially problematic users. Then, if they decide to bring a CFAA claim against a user *ex post*, the form cease and desist letter can serve as the legal hook under the revocation paradigm.¹⁶⁹

B. DETERRING ALGORITHMIC AUDITORS

The dangers of singling-out are exacerbated for algorithmic auditors because the computer owner has an inherent incentive to guard against external scrutiny. In the same way that any organization might be wary of auditors or journalists poking around, a website owner will naturally want to discourage an auditor from examining their business practices.

Consider our introductory hypothetical. If an algorithmic auditor discovered that MBAHired was giving users like Michelle systematically inferior results because of her race, they could tarnish MBAHired's reputation in the online hiring industry by publicly disclosing that data. Naturally, to maintain control over its public relations, MBAHired has an incentive to protect its data.

Compounded with the dangers of singling-out, these misaligned incentives create an intimidating deterrent for algorithmic auditors. Even if an auditor's study is almost complete, the website owner can revoke that auditor's access with a simple cease and desist letter. This can be detrimental for a research

166. *Facebook*, 844 F.3d at 1068.

167. *United States v. Nosal*, 844 F.3d 1024, 1035–36 (9th Cir. 2016).

168. The Software Alliance has expressed its disapproval of any legislation that would narrow the scope of the CFAA because “it would compel many companies to erect new technical protection measures throughout their networks and support systems, reversing a trend that has contributed the growth of cloud computing, software as a service, and on-demand support.” Press Release, BSA, ‘Aaron’s Law’ is Flawed, Says BSA (June 20, 2013).

169. The Ninth Circuit in *Facebook* explicitly refrained from grappling with this question. *Facebook*, 844 F.3d at 1067 n.1 (“One can imagine situations in which . . . for example, an automatic boilerplate revocation follows a violation of a website’s terms of use—but we need not address or resolve such questions on the stark facts before us.”).

organization that invests significant financial resources or a PhD candidate whose academic career may depend on completion of the study. Upon receiving a cease and desist letter, both would be out of luck with no legal recourse. As a result, the revocation paradigm forces researchers to think hard about the chances of having their access revoked before committing to a project.¹⁷⁰

Indeed, under the patchwork of existing paradigms, the lack of clarity in the meaning of “access without authorization” was a deterring factor for algorithmic auditors.¹⁷¹ The revocation paradigm seems to solve that problem in part by providing a clear and easily administrable framework rooted in actual notice for the user. But when viewed from a policy perspective, the revocation paradigm may simply be switching out one deterrent for an even clearer, stronger one.

C. REVOCATION AS ANTI-COMPETITIVE BEHAVIOR

Similar issues arise in the online competition context. Perhaps even more so, businesses are incentivized to guard rather than share their information with competitors. Data on users and their browsing behavior is becoming increasingly important in the wake of artificial intelligence algorithms. To survive in today’s online market, platforms must be able to understand their users and provide information specifically relevant to them. Thus, an incumbent company like Facebook has a strong incentive to prevent competitors from gleaning information about Facebook’s platform or its users.

This phenomenon is borne out in the case law. For years, large online platform providers have used the CFAA as a legal hook to sue competitors for scraping information on their websites. In 2013, online platform Craigslist sued 3Taps under the CFAA for scraping and reproducing the contents of its website into a new user interface.¹⁷² Similarly, in 2006 and 2007, Southwest Airlines sued BoardFirst.com and LoveCheckIn.org, two apps that provided automated check-in services built on top of Southwest’s online platform.¹⁷³ In 2016, Southwest eradicated yet another competitor by sending a cease and

170. See note 99 and accompanying text.

171. See discussion, *supra* Parts III.A.2, III.B.2 and III.C.2 (discussing agency theory, the code-based approach, and the text-based approach for researchers and competitors).

172. *Craigslist Inc. v. 3Taps Inc.*, 964 F.Supp.2d 1178, 1180 (N.D. Cal. 2013); see also Clark Splichal, *Recent Development: Craigslist and the CFAA: The Untold Story*, 67 FLA. L. REV. 1845, 1845–46 (2016) (describing how Craigslist has used CFAA litigation to “tak[e] on its would-be competitors in court” and prevent these competing companies from “trying to enhance and augment the Craigslist model”).

173. See Gordon, *supra* note 100.

desist letter to Dragon Fare Scanner.¹⁷⁴ Dragon Fare immediately shut down their online tool, which scraped Southwest flight fares and notified customers if prices dropped for a flight they had booked.¹⁷⁵ In 2017, LinkedIn filed its claim against hiQ for scraping information from public LinkedIn profiles to build an analytics product.¹⁷⁶

In most of these cases, the revocation paradigm would give the plaintiff's claims even more strength.¹⁷⁷ In *Craigslist* and *LinkedIn*, both companies sent cease and desist letters to the defendants demanding that they terminate their products.¹⁷⁸ Therefore, under the revocation two-step,¹⁷⁹ a court could have found that 3Taps and hiQ violated the CFAA when they continued to scrape data from the public websites after they had received the cease and desist letters.

The problems that the revocation paradigm brings are admittedly more sympathetic in the algorithmic auditing context. As a society, we are intimately familiar with the value of journalism and academic research as a way to expose and deter questionable behavior. Put simply, it does not seem blatantly unfair to give journalists and academics access to online information in order to root out discrimination. In the competition context, however, the parallel argument that businesses should not be able to use the CFAA to stop their competitors from accessing their computers seems less convincing. The revocation paradigm makes more sense in the competition context because a business should be able to protect their information from their competitors. Undoubtedly, the revocation paradigm enables a business to do so easily, cheaply, and efficiently.¹⁸⁰ Instead of spending resources to erect technological barriers—the cyber equivalent of purchasing locks, installing an alarm system,

174. *Id.*

175. *Id.*

176. *hiQ Labs, Inc. v. LinkedIn Corp.*, 273 F. Supp. 3d 1099 (N.D. Cal. 2017); *see also* Jennifer Granick, *Is Oracle Using Computer Crime Law to Squelch Competition?*, WIRED (Mar. 28, 2017), <https://www.wired.com/2007/03/circuitcourt-0328/?currentPage=all> [<https://perma.cc/5A7R-9H3G>].

177. *See* discussion, *supra* Part IV.A (discussing how the revocation paradigm dramatically shifts power from the user to the website owner).

178. *Craigslist Inc. v. 3Taps Inc.*, 964 F. Supp. 2d 1178, 1180 (N.D. Cal. 2013); *hiQ Labs*, 273 F. Supp. 3d at 1099.

179. The revocation two-step consists of two inquiries: 1) whether the computer owner revoked authorization; and 2) whether the user continued to obtain access knowing their authorization had been revoked. *See* discussion, *supra* Part III.B (“Clarity and Notice Under a New Paradigm”).

180. *See* discussion *supra* Part IV.A (“Dangers of the Singling-Out Power”).

or building a fence to protect a home—businesses can rest easy knowing they can revoke an unwanted user’s access with a definitive cease and desist letter.

This Note does not attempt to argue that businesses should be forced to leave their information open for competitors to seize. Rather, it aims to persuade the reader that the CFAA is not the right tool to address these concerns. Our legal system has established ways of addressing business competition through unfair competition law and intellectual property law, among others. For a claim under unfair competition law, the plaintiff must prove that the defendant engaged in some unlawful, unfair, fraudulent, or misleading business practice.¹⁸¹ In all forms of intellectual property law, the court cannot find liability unless there is an act of infringement or misappropriation of another’s intellectual property.¹⁸² But under the CFAA interpreted by the revocation paradigm, it becomes unnecessary for businesses to prove any wrongdoing under these other areas of law.¹⁸³ Instead, as long as they send a cease and desist letter explicitly revoking authorization, they can bring their claims under the CFAA—simply because there is a computer involved.

V. PROPOSAL: ADDING A SCIENTER REQUIREMENT

Thus far, the discussion in this Note has revolved around court-formulated paradigms for interpreting authorization. This patchwork of standards has created legal uncertainty and fear of prosecution amongst algorithmic auditors and competitors who need access to information to promote fair decision-making on the Internet. The Ninth Circuit’s newly-articulated revocation paradigm now puts researchers and competitors in uniquely vulnerable positions to be singled out by incumbent online service providers looking to quash bad press or competing products that may lure users away.¹⁸⁴ This Note highlights that the simultaneous adoption of the revocation paradigm and transformation of the Internet through artificial intelligence algorithms calls

181. *See, e.g.*, CAL. BUS. & PROF. CODE § 17200 (“[U]nfair competition shall mean and include any unlawful, unfair or fraudulent business act or practice and unfair, deceptive, untrue or misleading advertising.”).

182. 17 U.S.C. § 501 (2012) (copyright infringement), 35 U.S.C. § 271 (2012) (patent infringement), 15 U.S.C. § 1114 (2012) (trademark infringement), 18 U.S.C. § 1832 (2012) (trade secret misappropriation).

183. *See supra* notes 161–162 (discussing the “deeply concerning” arbitrariness of the singling out power and the potential for abusive behavior under the revocation paradigm analogous to that found in the use of trademark enforcement cease and desist letters).

184. *See* discussion, *supra* Part IV (“Implications of the Revocation Paradigm”).

for legislative definition and reform to the meaning of authorization under the CFAA.

Several Congress members have attempted to reform the CFAA through a bill known as Aaron's Law, in honor of Internet activist Aaron Swartz.¹⁸⁵ Their bill calls for a definition of "access without authorization" as "knowingly circumventing one or more technological or physical measures that are designed to exclude or prevent unauthorized individuals from obtaining that information"¹⁸⁶—drawing an almost direct resemblance to the code-based theory.¹⁸⁷ Thus, as discussed, Aaron's Law brings the familiar difficulty of determining what types of conduct constitute "circumvent[on]" of a "technological or physical measure."¹⁸⁸

Instead, this Note proposes that Congress add an additional scienter requirement to section 1030(a)(2)(C), the CFAA's catch-all provision.¹⁸⁹ Instead of proscribing any intentional access "without authorization," this Note proposes that intentional access must be done *in furtherance of a larger criminal endeavor* to give rise to CFAA liability. This additional scienter requirement would ensure that algorithmic auditors and competitors would be able to pursue their work with legal certainty and return the statute to its original intention of prosecuting and thwarting malicious hackers.

If the proposed scienter requirement had been applied in *Facebook* and *Nosal II*, Facebook would not have been able to target Power for its promotional campaign, but K/F would likely still have been able to hold Nosal liable for accessing confidential company information through another employee's credentials—both of which would have been the appropriate outcomes. Facebook would not have been able to assert claims of access without authorization under the CFAA because Power's promotional campaign was clearly not "in furtherance of a larger criminal endeavor," but rather to promote its own alternative social media website. The outcome in *Nosal* would have been less certain. To assert a CFAA claim, K/F could not have shown merely that it had revoked Nosal's authorization by removing his

185. See *supra* note 65; Kaveh Waddell, 'Aaron's Law' Reintroduced as Lawmakers Wrestle Over Hacking Penalties, ATLANTIC (Apr. 21, 2015), <https://www.theatlantic.com/politics/archive/2015/04/aarons-law-reintroduced-as-lawmakers-wrestle-over-hacking-penalties/458535/> [<https://perma.cc/274S-8Q82>].

186. S. 1030, 114th Cong. § 2 (2015); H.R. 1918, 114th Cong. § 2 (2015).

187. See discussion, *supra* Part III.B ("Code-Based Approach").

188. See *id.*

189. 18 U.S.C. § 1030(a)(2)(C) (2012) (encompassing whoever "intentionally accesses a computer without authorization or exceeds authorized access, and thereby obtains information *from any protected computer*") (emphasis added).

employee credentials from its internal systems. It would also have needed to prove that Nosal's access through another employee's credentials was "in furtherance of a larger criminal endeavor." Though this may sound like a tall order for K/F, it would likely have been able to prove its case because trade secret theft for commercial or economic purposes is already captured under criminal law.¹⁹⁰ Therefore, even with an added scienter requirement, K/F could have asserted that Nosal was engaged in a "larger criminal endeavor" to steal the company's trade secrets and economically advance his own company at the commercial expense of K/F.

A legitimate concern with adding the proposed scienter requirement is that it would result in an under-inclusive statute that fails to reach all malicious hackers—specifically by letting those who intentionally access a computer without authorization get off scot-free, as long as they are not engaged in a larger criminal endeavor. But even if the proposed scienter requirement were adopted, this would not be the case. The CFAA's other provisions already address the most egregious forms of computer hacking. For example, section 1030(a)(2)(A) and section 1030(a)(3) prohibit hacking into computers owned by financial institutions or the federal government.¹⁹¹ Section 1030(a)(5) prohibits damaging computers or transmitting harmful software.¹⁹² Section 1030(a)(6) prohibits password trafficking.¹⁹³

Additionally, we have other laws in place to address many of the bad behaviors underlying CFAA claims. For example, trade secret law's prohibition on theft and misappropriation reaches CFAA claims where the behavior underlying the computer access involves theft of confidential information.¹⁹⁴ Other intellectual property and unfair competition laws provide similar legal footings. With these redundancies in place both within and without the CFAA, adding a scienter requirement to the catch-all provision of the CFAA will not

190. *See* Economic Espionage Act, 18 U.S.C. § 1832 (2012) (criminalizing theft of trade secrets for commercial or economic purposes, punishable by fines and up to 10 years in prison).

191. 18 U.S.C. § 1030(a)(2)(A) (encompassing whoever "intentionally accesses a computer without authorization or exceeds authorized access, and thereby obtains . . . information contained in a financial record of a financial institution); § 1030(a)(3) (encompassing whoever "intentionally, without authorization to access any nonpublic computer of a department or agency of the United States, accesses such [] computer").

192. § 1030(a)(5) (encompassing whoever, "knowingly causes the transmission of a program . . . and as a result . . . intentionally causes damage without authorization").

193. § 1030(a)(6) (encompassing whoever, "knowingly and with intent to defraud traffics . . . in any password or similar information through which a computer may be accessed without authorization").

194. *See* 18 U.S.C. § 1832 (2012).

render the statute under-inclusive. Instead, computer owners will simply no longer be able to abuse the CFAA and use it as a legal hook when nothing else will stick, simply by virtue of having a computer involved.¹⁹⁵

Another response to the concern of under-inclusiveness is that the reach of the CFAA will not change significantly because the DOJ already considers the proposed scienter requirement in its charging decisions. In fact, the specific language proposed is taken almost directly from the Attorney General's 2014 memorandum, which included the proposed scienter requirement as one of the factors to be considered before initiating CFAA prosecutions.¹⁹⁶ In the ACLU's case challenging the CFAA, the government's reply brief states that "the Department of Justice (DOJ) has expressly stated that it has no intention of prosecuting harmless terms of service violations that are not in furtherance of other criminal activity or tortious conduct."¹⁹⁷

One might ask then why this additional scienter requirement needs to be added to the face of the statute. After all, if the DOJ is not prosecuting harmless violations that are not in furtherance of a larger criminal endeavor, then auditors and competitors should not fear liability under the CFAA. However, this Note has shown that a primary concern for algorithmic auditors and competitors under the CFAA is not always criminal prosecution itself, but legal uncertainty and the threat of civil liability. Under the existing paradigms for interpreting authorization, it is nearly impossible for a user to confidently know whether their behavior is culpable under the CFAA. The agency theory, the code-based approach, and the text-based approach all fail to provide clear notice of what types of behavior fall outside the bounds of the law.¹⁹⁸

195. Before the Defend Trade Secrets Act was passed in 2016, litigators often used the CFAA as a legal hook to bring otherwise state claims of trade secret misappropriation to federal court. See Peter Toren, *Computer Fraud and Abuse Act*, 9 No. 5 LANDSLIDE 42, 46–47 (2017) (suggesting under "IP Practice Pointers" that the CFAA "may provide a cause of action even where the information that was misused does not qualify as a trade secret under the DTSA"). See, e.g., *WEC Carolina Energy Solutions LLC v. Miller*, 687 F.3d 199, 204, 206 n.4 (4th Cir. 2012) (plaintiffs brought a case to federal court with 9 state-law claims and 1 federal CFAA claim).

196. Government's Reply Brief in Support of Defendant's Motion to Dismiss at 14, *Sandvig v. Sessions* (D.D.C. Dec. 24, 2016) (No. 1:16-cv-01368) (citing Mem. from the Att'y Gen. to U.S. Att'ys and Assistant Att'ys Gen. for the Criminal and Nat'l Sec. Divs. (Sept. 11, 2014)).

197. *Id.* at 13.

198. See discussion, *supra* Parts III.A.2, III.B.2, III.C.2 (discussing agency theory, the code-based approach, and the text-based approach for researchers and competitors).

With the Ninth Circuit's decisions in *Nosal II* and *Facebook*, the revocation paradigm does add some clarity as to where that line is drawn.¹⁹⁹ But even if revocation provides absolutely clear notice to the user, granting complete power of revocation to the computer owner replaces the uncertainty of the existing paradigms with an even stronger uncertainty of when the computer owner will exercise that power.²⁰⁰

For these reasons, the proposed scienter requirement should be lifted from the DOJ's internal policies and included in the face of the statute. Such a provision would provide the necessary notice to the public and ensure that the government sticks to its word.

VI. CONCLUSION

Today's shift towards artificial intelligence algorithms on the Internet makes it a particularly vulnerable time for the courts to adopt the revocation paradigm. The revocation paradigm brings some clarity to the legal minefield of access and authorization by imposing a bright-line concept: if I tell you to stop visiting my website, you can no longer visit my website. At the same time, it creates a powerful ability to single out third parties for revocation, which is particularly dangerous for algorithmic auditors and competitors who need access to information to promote fair decision making on the Internet. As a result, this Note calls for renewed interest in legislative reform of the CFAA. An additional scienter requirement that CFAA claims must be "in furtherance of a larger criminal endeavor" would help ensure that the Internet stays an open exchange of ideas, where bias and unfairness can be rooted out by research or defeated in healthy competition.

199. See discussion, *supra* Part III.B ("Clarity and Notice Under a New Paradigm").

200. See discussion, *supra* Part IV.A ("Dangers of the Singling-Out Power").

SURVEY OF ADDITIONAL IP AND TECHNOLOGY LAW DEVELOPMENTS

I. PATENT DEVELOPMENTS

A. HELSINN HEALTHCARE S.A. v. TEVA PHARMS. USA, INC., 855 F.3D 1356 (FED. CIR. 2017)

The United States Court of Appeals for the Federal Circuit held (1) that the asserted claims of the patents-in-suit were subject to an invalidating contract for sale prior to the critical date, (2) that the Leahy-Smith America Invents Act (AIA) did not change the statutory meaning of “on-sale” of the on-sale bar provision of 35 U.S.C. § 102 of the Patent Act, and (3) that public disclosure of the existence of the sale of a patented item may suffice to invalidate a patent under the on-sale bar, even if “the details of the invention” are not “publicly disclosed in the terms of sale.”¹

In 2011, Teva Pharmaceuticals USA, Inc. and Teva Pharmaceutical Industries, Ltd. (collectively, “Teva”) filed an Abbreviated New Drug Application (ANDA) seeking FDA approval to market a generic 0.25 mg palonosetron product. Teva’s ANDA filing included a Paragraph IV certification that the claims of the patents-in-suit were invalid and/or not infringed. Helsinn Healthcare S.A. (“Helsinn”) then brought suit under the Hatch-Waxman Act, 35 U.S.C. § 271(e)(2)(A), alleging infringement of the patents-in-suit by the ANDA filing. The four patents-in-suit are directed to intravenous formulations of palonosetron for reducing or reducing the likelihood of chemotherapy-induced nausea and vomiting (CINV), a serious side effect of chemotherapy treatment.²

At trial, Teva argued, *inter alia*, that the asserted claims were invalid under the on-sale bar provision of 35 U.S.C. § 102.³ The district court found that the patents-in-suit were not invalid.⁴ With respect to three of the patents, which are governed by the pre-AIA version of § 102, the district court concluded that there was a commercial offer for sale before the critical date, but that the

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1. *Helsinn Healthcare S.A. v. Teva Pharms. USA, Inc.*, 855 F.3d 1356, 1360, 1375 (Fed. Cir. 2017).

2. *Id.* at 1360, 1363.

3. *Id.* at 1360.

4. *Id.*

invention was not ready for patenting before the critical date.⁵ With respect to the fourth patent, which is governed by the AIA version of § 102, the district court concluded that there was no commercial offer for sale because the AIA changed the relevant standard and that the invention was not ready for patenting before the critical date.⁶ The district court found that the patents-in-suit were not invalid.⁷

The Federal Circuit decided that the asserted claims of the patents-in-suit were subject to an invalidating contract for sale prior to the critical date, and that the AIA did not change the statutory meaning of “on sale” in the circumstances involved.⁸ The asserted claims were also ready for patenting prior to the critical date.⁹ The district court’s decision was reversed.¹⁰

The court first addressed the three pre-AIA patents and whether the inventions were subject to a sale or offer for sale prior to the critical date. The court explained that the question must be “analyzed under the law of contracts as generally understood” and “must focus on those activities that would be understood to be commercial sales and offers for sale ‘in the commercial community.’”¹¹ A sale occurs when there is a “contract between parties to give and to pass rights of property for consideration which the buyer pays or promises to pay the seller for the thing bought or sold.”¹²

The court noted that while certain details were redacted from the publicly disclosed copy of the Supply and Purchase Agreement, Helsinn commercially marketed its invention before the critical date.¹³ It publicly sought “marketing partners for its patented [palonosetron] product,” and ultimately contracted with MGI “to distribute, promote, market, and sell” the claimed invention.¹⁴ The absence of FDA or other regulatory approval before the critical date does not prevent a sale or offer for sale from triggering the on-sale bar.¹⁵ The court found that the Supply and Purchase Agreement constituted a commercial sale or offer for sale for purposes of § 102(b) as to the three pre-AIA patents.¹⁶

5. *Id.*

6. *Id.*

7. *Helsinn Healthcare S.A. v. Teva Pharms. USA, Inc.*, 855 F.3d 1356, 1360 (Fed. Cir. 2017).

8. *Id.*

9. *Id.*

10. *Id.*

11. *Id.* at 1364.

12. *Id.* (citing *Trading Techs. Int’l, Inc. v. eSpeed, Inc.*, 595 F.3d 1340, 1361 (Fed. Cir. 2010)) (internal quotation marks omitted).

13. *Helsinn Healthcare S.A. v. Teva Pharms. USA, Inc.*, 855 F.3d 1356, 1364 (Fed. Cir. 2017).

14. *Id.*

15. *Id.* at 1365.

16. *Id.* at 1367.

Turning to the post-AIA patent. The AIA changed the on-sale bar provision by adding “the otherwise available to the public” phrase.¹⁷ In congressional floor statements, it was mentioned that due to the change of language, the on-sale bar now does not encompass secret sales and requires that a sale make the invention available to the public in order to trigger application of the on-sale bar.¹⁸ However, the Federal Circuit deemed congressional floor statements to be at most intent to overrule precedent involving a public use where the invention was not, as a result of the use, disclosed to the public.¹⁹ According to the court, if Congress had intended to work such a sweeping change to on-sale jurisprudence, it would have done so by clear language.²⁰ Accordingly, after the AIA, “if the existence of the sale is public, the details of the invention need not be publicly disclosed in the terms of the sale.”²¹

The court also noted that the invention would work for its intended purpose and was ready for patenting because it was reduced to practice before the critical date.²² The district court had erred by applying a more rigorous standard that governs FDA approval of new drugs, including the various stages of clinical trials.²³

Regarding the three pre-AIA patents in suit, the court concluded that the supply and purchase agreement, which obligated purchaser to buy owner’s claimed invention once the solution was approved by FDA, constituted a “sale” of the claimed invention prior to critical date, as required for pre-AIA on-sale bar to patentability to apply.²⁴ Regarding the fourth post-AIA patent in suit, the court concluded that the supply and purchase agreement constituted a “sale” of the claimed invention prior to critical date, as required for AIA on-sale bar to patentability to apply.²⁵ The court also noted that the claimed invention was “reduced to practice” before the critical date, and thus was ready for patenting, as required for the on-sale bar to patentability to apply.²⁶

Therefore, the court found the three pre-AIA patents and the post-AIA

17. *Id.* at 1368.

18. *Id.*

19. *Helsinn Healthcare S.A. v. Teva Pharms. USA, Inc.*, 855 F.3d 1356, 1368–69 (Fed. Cir. 2017).

20. *Id.* at 1371.

21. *Id.*

22. *Id.* at 1373.

23. *Id.*

24. *Id.* at 1367.

25. *Helsinn Healthcare S.A. v. Teva Pharms. USA, Inc.*, 855 F.3d 1356, 1371 (Fed. Cir. 2017).

26. *Id.* at 1375.

patent of Helsinn invalid.²⁷

B. GOOGLE LLC v. NETWORK-1 TECHS. INC., 709 F. APP'X 705 (FED. CIR. 2018)

In a closely-watched case, the Federal Circuit affirmed the Patent Trial and Appeal Board's (PTAB) decision that Network-1 Technologies' patent for a method of identifying online media was valid.²⁸ The dispute attracted industry attention because it implicated a technology giant's profitable code.²⁹

In 2013, Network-1 received Patent No. 8904464 for a "Method for Tagging an Electronic Media Work to Perform an Action."³⁰ The '464 Patent covers a method for identifying media linked over the Internet.³¹ It is commercially valuable because it can support e-commerce or audience engagement without increasing hardware demands on computer systems, thus lowering the user's operating costs.³²

Shortly thereafter, Network-1 sued Google and its subsidiary YouTube in the United States District Court for the Southern District of New York, claiming that YouTube's Content ID system infringed upon the '464 Patent.³³ YouTube's Content ID system compares uploaded videos in its media library in order to identify potential copyright infringement.³⁴ The Content ID system was allegedly generating significant revenue for YouTube.³⁵ Google responded to Network-1's infringement suit by attacking the validity of the '464 Patent as obvious and indefinite.³⁶ Google went on with the offensiveness and petitioned the PTAB for a covered business method (CBM) review of the contested patent, seeking to invalidate it.³⁷ In its petition, Google attacked the validity of all claims of the '464 Patent for violating 35 U.S.C. § 103 by being

27. *Id.*

28. Google LLC v. Network-1 Techs., 709 F. App'x 705, 705 (Fed. Cir. 2018).

29. Steve Brachmann, *Google Suffers IPR Defeat on Patent Asserted Against YouTube by Network-1*, IPWATCHDOG (Jan. 30, 2018), <http://www.ipwatchdog.com/2018/01/30/google-ipr-defeat-youtube-network-1/id=92866/> [<https://perma.cc/J4XH-XMJW>].

30. U.S. Patent App. No. 8,904,464 (issued Dec. 2, 2014).

31. *Id.*

32. *Id.*

33. Brief for Appellant, Google LLC v. Network-1 Techs., No. 17-1379, 2017 WL 1520288, at *4 (Fed. Cir. Apr. 14, 2017) [hereinafter Brief for Appellant].

34. *How Content ID Works*, GOOGLE (Mar. 18, 2018), <https://support.google.com/youtube/answer/2797370?hl=en> [<https://perma.cc/CDL8-98TF>].

35. Complaint Against Google, at ¶ 23, Google LLC v. Network-1 Techs., No. 17-1379, 709 F. App'x 705 (Fed. Cir. 2018).

36. Answer by Google, at ¶ 37, Google LLC v. Network-1 Techs., No. 17-1379, 709 F. App'x 705 (Fed. Cir. 2018).

37. Google LLC v. Network-1 Techs., CBM2015-00113, 2016 Pat. App. LEXIS 13333 (P.T.A.B. October 18, 2016).

obvious.³⁸

But Google's arguments proved unsuccessful.³⁹ The PTAB entered a final decision in the CBM review that the '464 Patent was nonobvious and that it was not anticipated by prior technology.⁴⁰ The PTAB found that Google failed to prove that any of the '464 Patent's claims were unpatentable for obviousness, specifically focusing on the meaning of "machine-readable instructions" in claims 1 and 18.⁴¹ While Google argued for a broader understanding of the phrase as one referring to instructions that could be read by either a human or a computer, pointing to a Network-1 expert's testimony stating that changing computer code could change the message read by humans, the PTAB accepted Network-1's narrower construction to understand the phrase as referring to instructions that *must* be readable by machine.⁴² By construing the pivotal term "machine-readable instructions" in a narrow fashion, the PTAB found that the '464 Patent was nonobvious and thus valid.

Having lost at the PTAB, Google appealed to the Federal Circuit on the grounds that the PTAB erred in its construction of the term "machine-readable instructions."⁴³ Google primarily argued that because subsequent dependent claims state that "machine-readable instructions comprise a hyperlink or URL," and there is no submitted evidence showing that hyperlinks or URLs are readable exclusively by machines, that the PTAB's construction was incorrect.⁴⁴ Network-1 defended the PTAB's construction by arguing that (1) these dependent claims are not contradictory to a narrow understanding of "machine-readable instructions" because this term of art is supported by expert testimony and objective sources; (2) Google was attempting to re-litigate facts; and (3) Google was asserting a baseless new theory.⁴⁵

The Federal Circuit affirmed the PTAB's decision in a short, non-precedential opinion in January 2018.⁴⁶ Specifically, the court held that PTAB's narrow construction of "machine-readable instructions" was correct and that Google failed to produce sufficient evidence establishing obviousness.⁴⁷ The

38. *Id.*

39. *Id.*

40. *Id.*

41. *Id.*

42. *Id.*

43. Google LLC v. Network-1 Techs., 709 F. App'x 705, 705 (Fed. Cir. 2018).

44. Brief for Appellant, *supra* note 33.

45. Brief for Appellee, Google LLC v. Network-1 Techs., No. 17-1379, 2017 WL 2801084, at *13–18 (Fed. Cir. June 16, 2017).

46. *Network-1*, 709 F. App'x at 705.

47. *Id.*

court found “no error” in the PTAB’s construction of “machine-readable instructions” because of the substantial supporting evidence in the record, including Google’s own explicit assertions in its Petition.⁴⁸ Network-1’s patent infringement suit against Google and YouTube can now proceed.⁴⁹

C. LIFETIME INDUS., INC. v. TRIM-LOK, INC., 869 F.3D 1372 (FED. CIR. 2017)

The United States Court of Appeals for the Federal Circuit held that a patent infringement complaint meeting the pleading standard set in *Ashcroft v. Iqbal*, 129 S. Ct. 1937 (2009), and *Bell Atl. Corp. v. Twombly*, 127 S. Ct. 1955 (2007), was enough to survive a motion to dismiss within the meaning of Federal Rule of Civil Procedure 12(b)(6).⁵⁰ The Court found that the plaintiff adequately pleaded direct and indirect infringement by specifying where the alleged infringement occurred, when it occurred, who performed the allegedly infringing act, and why.⁵¹

On August 12, 2013, Lifetime Industries, Inc. (“Lifetime”) brought an action against Trim-Lok, Inc. (“Trim-Lok”), alleging that Trim-Lok both directly and indirectly infringed U.S. Patent 6,966,590 (“the ’590 patent”) under 35 U.S.C. § 271 of the Patent Act.⁵² The ’590 patent describes a two-part seal for use in a mobile living quarter (a “recreational vehicle”) with a slide-out room which is formed by extending a portion of the side wall of the RV outwards to create extra interior space.⁵³

Lifetime argued that in the months before it filed the original complaint, two of its engineers, who participated in the design of Lifetime’s seals and who had knowledge of the ’590 patent, left Lifetime and began working at Trim-Lok.⁵⁴ Lifetime alleged that Trim-Lok was offering for sale a two-part seal for an RV with a slide-out room, soon after the two engineers began working.⁵⁵ Lifetime further alleged that they discovered a two-part Trim-Lok seal installed on an RV with a slide-out room at a plant run by Forest River, an RV manufacturer.⁵⁶

Accordingly, Lifetime alleged that since Trim-Lok visited the Forest River plant while “acting on behalf of” Trim-Lok, and directly installed Trim-Lok’s

48. *Id.*

49. Network-1 Techs., Inc. v. Google Inc., Case No. 1:14-cv-09558 (S.D.N.Y. Dec. 3, 2014).

50. Lifetime Indus., Inc. v. Trim-Lok, Inc., 869 F.3d 1372, 1376–77 (Fed. Cir. 2017).

51. *Id.* at 1379, 1381.

52. *Id.* at 1375, 1381.

53. *Id.* at 1373–74.

54. *Id.* at 1375.

55. *Id.*

56. Lifetime Indus., Inc. v. Trim-Lok, Inc., 869 F.3d 1372, 1375 (Fed. Cir. 2017).

two-part seal onto an RV having a slide-out room, there was direct infringement of the '590 patent.⁵⁷

For induced infringement, Lifetime alleged that Forest River's "making . . . and selling of an RV having the two-part seal constitutes infringement," and that Trim-Lok "influenced Forest River" to include the seal in their RVs, "knowing that such combination would fulfill all elements of at least one claim of the '590 patent" and that "[Trim-Lok] assisted in the installation, [or] directed the installation" of the seals.⁵⁸ Thus, Lifetime alleged that Trim-Lok induced Forest River to infringe.⁵⁹

For contributory infringement, Lifetime alleged that the seal sold by Trim-Lok had only one purpose (use on RVs with slide-out rooms), that Trim-Lok assisted in or directed the installation of the seal on an RV, and that the seals were not staple articles of commerce suitable for non-infringing use.⁶⁰

Trim-Lok moved to dismiss the complaint, arguing that Lifetime had not adequately identified the accused product and had not adequately pleaded direct or indirect infringement.⁶¹ Although the district court determined that Lifetime had adequately identified the accused product, it concluded that Lifetime had not adequately pleaded its case.⁶²

The court determined that, Lifetime did not adequately plead direct infringement because Trim-Lok only manufactures the two-part seals without the RV.⁶³ The court determined that Lifetime's argument of Trim-Lok's assistance in installation of the seal was confusing liability for direct infringement with liability for contributory infringement, and dismissed Lifetime's direct infringement allegations.⁶⁴ Regarding indirect infringement, the court concluded that Lifetime had not alleged any facts from which intent to infringe could be inferred in this case, and accordingly dismissed Lifetime's indirect infringement allegations.⁶⁵

In determining the standard to survive a motion to dismiss under Rule 12(b)(6), the Federal Circuit concluded that a complaint must "contain sufficient factual matter, accepted as true, to 'state a claim to relief that is plausible on its face.'"⁶⁶ A plaintiff meets this requirement if it "pleads factual

57. *Id.*

58. *Id.*

59. *Id.*

60. *Id.*

61. *Id.* at 1375–76.

62. *Lifetime Indus., Inc. v. Trim-Lok, Inc.*, 869 F.3d 1372, 1376 (Fed. Cir. 2017).

63. *Id.*

64. *Id.*

65. *Id.*

66. *Id.* (citing *Ashcroft v. Iqbal*, 129 S. Ct. 1937 (2009); *Bell Atl. Corp. v. Twombly*, 127 S. Ct. 1955 (2007)).

content that allows the court to draw the reasonable inference that the defendant is liable for the misconduct alleged.”⁶⁷

Further, the court noted that direct infringement is a strict liability offense that does not require knowledge of the patent or intent to infringe.⁶⁸ The court also noted that “one who ‘makes’ a patented invention without authorization infringes the patent.”⁶⁹ That is, limited internal manufacture and use can also infringe.⁷⁰

Since Lifetime adequately alleged that Trim-Lok created an infringing combination by installing its seal onto an RV at the Forest River plant, these facts draw reasonable inferences in Lifetime’s favor, making it plausible that a Trim-Lok agent installed the seal onto the Forest River RV.⁷¹ The court concluded that Lifetime adequately alleged direct infringement.⁷²

The court noted that for an allegation of induced infringement to survive a motion to dismiss, a complaint must plead facts plausibly showing that the accused infringer “specifically intended [another party] to infringe [the patent] and knew that the [other party]’s acts constituted infringement.”⁷³ The court concluded that since Lifetime specifically alleged that two engineers had knowledge of the patent and its scope when they joined Trim-Lok, these facts make it plausible that Trim-Lok had knowledge of the ’590 patent.⁷⁴ After Trim-Lok gained that knowledge, Lifetime alleged that it then assisted in or directed the installation of exactly the same type of seal as the one described in the patent onto an RV at the Forest River plant.⁷⁵ Thus, Lifetime plausibly pleaded that Trim-Lok had the intent to infringe.⁷⁶

The Court then noted that contributory infringement occurs, *inter alia*, when a party sells in a manner set forth in 35 U.S.C. § 271(c).⁷⁷ Further, contributory infringement requires “only proof of a defendant’s knowledge, not intent, that his activity cause infringement.”⁷⁸ Because it is reasonable to

67. *Id.*

68. *Lifetime Indus., Inc. v. Trim-Lok, Inc.*, 869 F.3d 1372, 1376 (Fed. Cir. 2017) (citing *Commil USA, LLC v. Cisco Sys., Inc.*, 135 S. Ct. 1920, 1926 (2015)).

69. *Id.* at 1378 (citing *Siemens Med. Sols. USA, Inc. v. Saint-Gobain Ceramics & Plastics, Inc.*, 637 F.3d 1269, 1290 (Fed. Cir. 2011)).

70. *Id.*

71. *Id.* at 1379.

72. *Id.*

73. *Id.* (citing *R+L Carriers, Inc. v. DriverTech LLC (In re Bill of Lading Transmission & Processing Sys. Patent Litig.)*, 681 F.3d 1323, 1339 (Fed. Cir. 2012)).

74. *Lifetime Indus., Inc. v. Trim-Lok, Inc.*, 869 F.3d 1372, 1380 (Fed. Cir. 2017).

75. *Id.*

76. *Id.*

77. *Id.* at 1381.

78. *Id.* (citing *Hewlett-Packard Co. v. Bausch & Lomb Inc.*, 909 F.2d 1464, 1469 (Fed. Cir. 1990)).

infer that Lifetime plausibly pleaded that Trim-Lok knew of the patent and knew of infringement,⁷⁹ the Federal Circuit concluded that Lifetime has adequately pleaded both direct and indirect infringement.⁸⁰

II. COPYRIGHT DEVELOPMENTS

A. BMG RIGHTS MGMT. V. COX COMM'NS, INC., 881 F.3D 293 (4TH CIR. 2018)

The United States Court of Appeals for the Fourth Circuit held that an Internet Service Provider (ISP) cannot claim protection under the Digital Millennium Copyright Act (DMCA) safe harbors if it does not enforce its policies against repeat infringers in a meaningful way.⁸¹ Such infringement need not be an adjudicated infringement and the ISP cannot willfully blind itself to the knowledge of infringement by its users.⁸²

BMG Rights Management v. Cox Communications, Inc. is largely guided by the principle that in order to avail DMCA safe harbor protection, an ISP needs to implement its repeat infringer policy that provides for termination of services for subscribers who are repeat infringers in a “meaningful and consistent way.”⁸³ The court rejected the argument that “infringer” under the DMCA refers to an “adjudicated infringer.”⁸⁴ The court reasoned that the Copyright Act uses the term “infringer” to mean those who engage in infringing activity and is not limited to a narrow category of adjudicated infringers.⁸⁵ The court further referred to § 501(a) of the Copyright Act, which states that “anyone who violates any of the exclusive rights of the copyright owner” provided for in the statute “is an infringer of the copyright or right of the author,” which implies that the term infringer is not restricted to adjudicated infringers.⁸⁶

The plaintiff in the case, BMG Rights Management LLC (BMG) is a copyright holder in several musical compositions and the defendant, Cox Communications, is an ISP. Some of Cox’s users shared and received copyrighted music files using a peer to peer file sharing mechanism called BitTorrent.⁸⁷ Cox’s agreement with its subscribers stipulated a thirteen-strike policy for suspension and termination of user accounts as a deterrent to

79. *Id.*

80. *Lifetime Indus., Inc. v. Trim-Lok, Inc.*, 869 F.3d 1372, 1381 (Fed. Cir. 2017).

81. *BMG Rights Mgmt. v. Cox Commc’ns, Inc.*, 881 F.3d 293, 300 (4th Cir. 2018).

82. *Id.*

83. *Id.*

84. *Id.* at 303.

85. *Id.* at 301.

86. *Id.* at 301, 302 (citing 17 U.S.C. § 501(a) (2012)) (emphasis added).

87. *BMG Rights Mgmt. v. Cox Commc’ns, Inc.*, 881 F.3d 293, 299 (4th Cir. 2018).

copyright infringement.⁸⁸ Cox had an automated system to process notifications from copyright owners alleging infringement.⁸⁹ The response to such activities was dependent on the number of acts of infringement alleged against a user and it ranged from sending warning e-mails to suspension of the account and consideration for termination.⁹⁰

BMG, in order to address infringement of its rights, hired a third-party company, Rightscorp, Inc., to monitor BitTorrent activity and share infringement notices with Cox.⁹¹ These notices, *inter alia*, contained information about the title of the copyrighted work, its owner, the infringer's IP address, and a settlement offer for the infringer.⁹² Cox, upon receiving such notices notified Rightscorp that it would forward these notices to its users only if Rightscorp removed the settlement language from the notices.⁹³ Rightscorp refused to do so and Cox subsequently blacklisted Rightscorp and deleted all its notices without viewing or acting on them.⁹⁴ BMG subsequently brought an action alleging vicarious and contributory infringement against Cox.⁹⁵

The United States District Court for the Eastern District of Virginia granted judgment against Cox after a jury found it liable for willful contributory infringement. The district court held that Cox was unable to produce evidence that its repeat infringer policy entitled it to a statutory safe harbor defense under the DMCA.⁹⁶ The court reasoned that BMG offered evidence that Cox knew that certain subscribers were using their accounts "repeatedly for infringing activity yet failed to terminate those accounts."⁹⁷ The district court instructed the jury that in order to prove contributory infringement, BMG had to show direct infringement by Cox's subscribers, that BMG "knew or should have known of such infringing activity" and that "Cox induced, caused, or materially contributed to such infringing activity."⁹⁸ It further instructed that such knowledge of the infringing activity could be proven by demonstrating willful blindness, that is, Cox "was aware of a high probability that [its] users were infringing BMG's copyrights but consciously avoided confirming that fact."⁹⁹

88. *Id.*

89. *Id.*

90. *Id.*

91. *Id.*

92. *Id.* at 300.

93. *BMG Rights Mgmt. v. Cox Commc'ns, Inc.*, 881 F.3d 293, 300 (4th Cir. 2018).

94. *Id.*

95. *Id.*

96. *Id.*

97. *Id.*

98. *Id.*

99. *BMG Rights Mgmt. v. Cox Commc'ns, Inc.*, 881 F.3d 293, 300 (4th Cir. 2018).

In order to assess the district court's action, the court of appeals examined the meaning of the term "repeat infringer" under the DMCA, if Cox had actual knowledge of infringement activity by its users, and whether the district court erred in giving instructions to the jury. The court stated that the term infringer did not mean adjudicated infringer since Congress had referred to adjudicated infringers specifically in other parts of the Act.¹⁰⁰ It looked at legislative history, which indicated that Congress intended to punish those who abuse Internet access by disrespecting intellectual property of others with a "realistic threat of losing" their Internet access.¹⁰¹ This wasn't restricted to deterring adjudicated infringers only.¹⁰² The court also referred to *EMI Christian Music Grp., Inc. v. MP3tunes, LLC*, which defined repeat infringer to mean "someone who interferes with one of the exclusive rights of a copyright" "again or repeatedly."¹⁰³

While assessing whether Cox had actual knowledge of infringement, it found that internal communications indicated that Cox did not terminate subscribers that its employees regarded as repeat infringers.¹⁰⁴ Cox always reactivated the accounts of its customers after termination regardless of its knowledge of actual infringement; its termination policy was merely a "symbolic gesture" to avail protection under the DMCA.¹⁰⁵ According to the court, their decision to disregard Rightscorp's notices indicated that it did not reasonably implement its policy.¹⁰⁶

Cox argued that the instructions given to the jury were erroneous; according to Cox, the jury should have been instructed that it could not be liable for contributory infringement if its technology could be employed for substantial non-infringing use.¹⁰⁷ The court rejected this argument.¹⁰⁸ However, it agreed with Cox on the jury instructions related to the intent necessary to prove contributory infringement.¹⁰⁹ The district court had instructed the jury that it could impose liability if Cox "knew or should have known" of the infringing activity.¹¹⁰ The court relied on *Metro-Goldwyn-Mayer*

100. *Id.* at 303.

101. *Id.* at 302 (citing H.R. REP. NO. 105-551, pt. 2, at 61 (1998); S. REP. NO. 105-190, at 52 (1998)).

102. *Id.*

103. *Id.* (citing *EMI Christian Music Grp., Inc. v. MP3tunes, LLC*, 844 F.3d 79, 89 (2d Cir. 2016)).

104. *Id.* at 303.

105. *BMG Rights Mgmt. v. Cox Commc'ns, Inc.*, 881 F.3d 293, 303, 304 (4th Cir. 2018).

106. *Id.* at 304.

107. *Id.* at 305.

108. *Id.* at 305.

109. *Id.* at 307.

110. *Id.*

Studios, Inc. v. Grokster Ltd., which stated that “one infringes contributorily by *intentionally* inducing or encouraging direct infringement.”¹¹¹ The formulation “should have known” reflected negligence.¹¹² Therefore, the court stated that Cox could be held liable for contributory infringement if there was willful blindness, not merely negligence.¹¹³ The instruction given to the jury that Cox “should have known” was erroneous and too low a standard.¹¹⁴ Cox also contended that the aforementioned jury instructions sought to make it liable for generalized knowledge of infringing activity, which according to Cox was not sufficient to establish liability.¹¹⁵ The court agreed that an intent to cause infringement could only be established with specific knowledge of infringement or due to willful blindness to such instances of infringement.¹¹⁶ Although, the court agreed with Cox that the district court erred in granting certain instructions, it rejected the argument that Cox was entitled to judgment as a matter of law.¹¹⁷

The court, therefore, affirmed the grant of summary judgment to BMG on the DMCA safe harbor defense.¹¹⁸ It further reversed in part, vacated in part, and remanded for a new trial due to errors in jury instructions.¹¹⁹

Although many believe that this decision does not have any dramatic implications in terms of DMCA safe harbor provisions, Mitch Stoltz, a senior staff attorney with the Electronic Frontier Foundation, has expressed concerns that it will further encourage ISPs to act in an overly cautious manner and act on unverified complaints and accusations against their users.¹²⁰ He points out that Cox, in not forwarding Rightscorp’s money demands to its customers, had reasonably stood by its customers.¹²¹ Stoltz argues that the courts should treat secondary liability doctrines more thoughtfully considering the impact they have on the design of Internet services and ability of users to interact with

111. *BMG Rights Mgmt. v. Cox Commc’ns, Inc.*, 881 F.3d 293, 307 (4th Cir. 2018) (citing *Metro-Goldwyn-Mayer Studios, Inc. v. Grokster Ltd.*, 380 F.3d 1154, 1162 (9th Cir. 2004) (emphasis added)).

112. *Id.* at 308.

113. *Id.* at 309.

114. *Id.* at 310.

115. *Id.* at 311.

116. *Id.*

117. *BMG Rights Mgmt. v. Cox Commc’ns, Inc.*, 881 F.3d 293, 312 (4th Cir. 2018)

118. *Id.* at 314.

119. *Id.*

120. Mitch Stoltz, *BMG v. Cox: ISPs Can Make Their Own Repeat-Infringer Policies, but the Fourth Circuit Wants A Higher “Body Count”*, ELECTRONIC FRONTIER FOUND. (Feb. 5, 2018), <https://www.eff.org/deeplinks/2018/02/bmg-v-cox-isps-can-make-their-own-repeat-infringer-policies-fourth-circuit-wants> [<https://perma.cc/2WLU-DM74>].

121. *Id.*

these services and use them.¹²²

B. MALONEY V. T3 MEDIA, INC., 853 F.3D 1004 (9TH CIR. 2017)

The United States Court of Appeals for the Ninth Circuit held that college basketball players' right of publicity claim for a company's sale of their photos for personal use was preempted by the Copyright Act. Such claims are preempted because they seek "to hold a copyright holder liable for exercising his exclusive rights under the Copyright Act."¹²³

This case is largely guided by the principle that a "publicity-right claim is not preempted when it targets non-consensual use of one's name or likeness on merchandise or in advertising."¹²⁴ However, if such likeness is captured in a copyrighted artistic visual work and the work itself is being distributed for personal use, a publicity-right claim is preempted for impinging on exclusive rights of the copyright holder.¹²⁵

Plaintiffs here were former National Collegiate Athletic Association (NCAA) student athletes whose performance in a basketball game was placed in the NCAA's photo library. The NCAA owned and controlled the copyright in those photographs.¹²⁶ Subsequently, T3 Media Inc. (T3 Media) contracted with the NCAA to store, host, and license the images in the NCAA photo library.¹²⁷ T3 Media then sold non-exclusive licenses on its website, permitting consumers to download photographs from NCAA's photo library for non-commercial use.¹²⁸ Before downloading the photographs, users were required to agree to a license agreement that stipulated using a single copy of the image solely for non-commercial use.¹²⁹

The district court held that the federal Copyright Act preempted Plaintiffs' claims, finding that the asserted rights fell under copyright and their names or likenesses could not be identified "independent of the display, reproduction, and distribution of the copyrighted material in which they are depicted."¹³⁰

The Ninth Circuit applied a two-part test to determine when a right to publicity claim is preempted, considering first if the subject matter of State law falls within the scope of copyright, and then, if it does, whether the publicity rights under state law are equivalent to the rights granted by the Copyright

122. *Id.*

123. *Maloney v. T3 Media, Inc.*, 853 F.3d 1004, 1020 (9th Cir. 2017).

124. *Id.* at 1013.

125. *Id.*

126. *Id.* at 1007.

127. *Id.*

128. *Id.*

129. *Maloney v. T3 Media, Inc.*, 853 F.3d 1004, 1007 (9th Cir. 2017).

130. *Id.*

Act.¹³¹ The court stated that the right of publicity seeks to prevent commercial exploitation of an individual's identity without that person's consent.¹³² It looked to *Hilton v. Hallmark Cards*, 599 F.3d 894, 910 (9th Cir. 2009), where a central tenet of the right of publicity was preventing "merchandising [of] a celebrity's image without that person's consent."¹³³ The court also relied on *Toney v. L'Oreal USA, Inc.*, 406 F.3d 905, 910 (7th Cir. 2005), which held that the "basis of a right of publicity claim was whether the plaintiff endorses, or appears to endorse the product in question."¹³⁴ The Ninth Circuit found that Plaintiffs did not identify any use of their likenesses which did not relate to display, reproduction, and distribution of the copyrighted material.¹³⁵ Therefore, Plaintiffs' claims were not considered qualitatively different from claims under the Copyright Act¹³⁶ and it was held that the federal Copyright Act preempted their right to publicity claim.¹³⁷

The decision has attracted criticism for vastly expanding the preemption defense in copyright law.¹³⁸ In particular, some have argued that establishing a "Merchandise vs. Personal Use dichotomy" can lead to confusion and uncertainty on what constitutes merchandise.¹³⁹ If Defendants delivered physical copies of photographs to its customers to be used as posters, would that be classified as merchandise? Would the distinction merely lie in physical or digital reproduction of the photograph?¹⁴⁰ Some further argue that the decision could potentially be read to mean that wholesalers and retailers are subject to different standards.¹⁴¹ For instance, a wholesaler selling posters or photographs containing the likenesses of college athletes to retail outlets would be more vulnerable to right of publicity claims than the retailer selling it for personal use.¹⁴² Thus, the *Maloney* court has raised more questions than it has answered regarding copyright preemption, creating uncertainty for future

131. *Id.* at 1011–18.

132. *Id.*

133. *Id.* at 1010.

134. *Id.*

135. *Maloney v. T3 Media, Inc.*, 853 F.3d 1004, 1018 (9th Cir. 2017).

136. *Id.*

137. *Id.* at 1020.

138. Jennifer E. Rothman, *Copyright Law Blocks Student-Athlete Suit over Sale of Game Photos*, ROTHMAN'S RIGHT OF PUBLICITY ROADMAP (Apr. 5, 2017), <http://www.rightofpublicityroadmap.com/news-commentary/copyright-law-blocks-student-athlete-suit-over-sale-game-photos> [<https://perma.cc/4SMH-K2LH>].

139. Simon Frankel & Neema Sahni, *9th Circ. Ruling Generates Copyright Preemption Confusion*, LAW360 (Apr. 20, 2017), <https://www.law360.com/articles/914891/9th-circ-ruling-generates-copyright-preemption-confusion> [<https://perma.cc/CU57-9ZQL>].

140. *Id.*

141. *Id.*

142. *Id.*

decisions.

C. GOLDMAN V. BREITBART NEWS NETWORK, LLC., 2018 WL 911340
(S.D.N.Y. FEB. 15, 2018)

In *Goldman v. Breitbart News Network, LLC*, the Southern District Court of New York held that in-line linking violates a copyright holder's right of exclusive display.¹⁴³ In doing so, the court rejected the Ninth Circuit's server test, which freed websites from copyright infringement liability if the infringing content was not on their servers.¹⁴⁴

On July 2, 2016, Justin Goldman, a photographer, took a well-timed photo of Tom Brady and other celebrities in the Hamptons.¹⁴⁵ Goldman posted the photo on his Snapchat Story, a service that publicly broadcasts the image to his followers for a limited time.¹⁴⁶ The photo was reproduced and distributed on several social media platforms, including Twitter, where it went viral as users posted the photo along with articles speculating that Brady was helping the Boston Celtics recruit.¹⁴⁷ Several news websites, including Breitbart and Vox, embedded tweets containing the photo on their websites via a process called in-line linking, whereby content is not directly copied but rather referenced via a link to the original content.¹⁴⁸ Goldman then brought this suit for use of his photograph without his permission.¹⁴⁹ Defendants filed for summary judgment.¹⁵⁰

The right to exclusive display comes from § 106(5) of the Copyright Act, which specifically grants copyright holders the exclusive right to “display [their] copyrighted work publicly.”¹⁵¹ Defendants argued that they did not display the copyrighted photo. By embedding, they claimed that the computer code embedding Goldman's photo merely presents instructions to Twitter's server for public display, as the embedding code pulls the tweets from Twitter, never storing the photo at issue on the news site's servers.¹⁵²

Defendant's arguments were based on the “server test,” first outlined in *Perfect 10 v. Amazon.com*, an influential test regarding public display where third

143. *Goldman v. Breitbart News Network, LLC*, 2018 WL 911340, at *10 (S.D.N.Y. Feb. 15, 2018).

144. *Id.*

145. *Id.* at *1.

146. *Id.*

147. *Id.*

148. *Id.* at *2.

149. *Goldman v. Breitbart News Network, LLC*, 2018 WL 911340, at *2 (S.D.N.Y. Feb. 15, 2018).

150. *Id.* at *1.

151. 17 U.S.C. § 106(5) (2012).

152. *Goldman*, 2018 WL 911340, at *7.

party servers are present.¹⁵³ In *Perfect 10*, the Ninth Circuit explicitly rejected appellant's so-called "incorporation test," which would have held appellee liable for merely incorporating copyrighted content on its servers in favor of a server test, which held that the right of public display is only violated if the file is actually held on the alleged copyright violator's server.¹⁵⁴ While *Perfect 10* has never been accepted in its entirety anywhere else, the Seventh Circuit in *Flava Works, Inc. v. Gunter* explicitly accepted the server test for contributory infringement while rejecting it more generally.¹⁵⁵ Recent district court cases have split on whether to accept the server test.¹⁵⁶

The key persuasive authority for the *Goldman* court is the Supreme Court case *American Broadcasting Cos. v. Aereo*.¹⁵⁷ Aereo was a then-promising startup with tens of thousands of subscribers and \$97 million in funding, including from Diller IAC, that promised Internet streaming of live television.¹⁵⁸ Aereo assigned users an antenna in one of Aereo's warehouses which was tuned to the user's requested on-air programming, thus streaming it on the user's computer at around the same time as the live broadcast.¹⁵⁹ The *Aereo* Court held that, although Aereo only provided switching technology, it provided the technology that reacted to users' choices, thus enabling them to infringe.¹⁶⁰ In essence, the *Goldman* court noted that the *Aereo* decision implied that infringement should not hinge on the presence of a particularly clever technology undetected by end users.¹⁶¹

The *Goldman* court further noted that the Copyright Act was explicitly enacted to cover infringement by devices "now known or later developed," thus presumably including new, serverless display methods.¹⁶² In fact, the

153. *Perfect 10, Inc. v. Amazon.com, Inc.*, 508 F.3d 1146 (9th Cir. 2007).

154. *Id.* at 839, 844.

155. *Flava Works, Inc. v. Gunter*, 689 F.3d 754, 759, 761 (7th Cir. 2012).

156. *See, e.g.*, *The Leader's Institute, LLC v. Jackson*, 2017 WL 5629514, at *10 (N.D. Tex. Nov. 22, 2017) (rejecting the server test, stating that "framing" copyrighted content is infringement); *Capitol Records, L.L.C. v. ReDigi Inc.*, 934 F. Supp. 2d 640, 652 (S.D.N.Y. 2013) (acknowledging the server test's existence); *Live Face on Web, LLC v. Biblio Holdings LLC*, 2016 WL 4766344, at *4 (S.D.N.Y. Sept. 12, 2016) (sidestepping the server test by noting that actual issue is distribution, not display right); *Live Face on Web, LLC v. Smart Move Search, Inc.*, 2017 WL 1064664, at *4 (D.N.J. Mar. 21, 2017) (seemingly rejecting the server test on the basis that defendant's website caused copies of software to be distributed).

157. *Am. Broad. Cos., Inc. v. Aereo, Inc.*, 134 S. Ct. 2498, 2508 (2014).

158. Emily Steel, *Aereo Concedes Defeat and Files for Bankruptcy*, N.Y. TIMES (Nov. 21, 2014), <https://www.nytimes.com/2014/11/22/business/aereo-files-for-bankruptcy.html> [<https://perma.cc/L4AE-8GLS>].

159. *Aereo*, 134 S. Ct. at 2503.

160. *Id.* at 2507.

161. *Goldman v. Breitbart News Network, LLC.*, 2018 WL 911340, at *9 (S.D.N.Y. Feb. 15, 2018).

162. *Id.* at *3 (citation omitted).

Copyright Act “contemplates infringers who would not be in possession of copies” of copyrighted material, meaning that the server test doesn’t even fit into the intellectual framework of the Copyright Act.¹⁶³

The court found that the facts supported an infringement ruling once it rejected the server test.¹⁶⁴ Unlike in *Perfect 10*, Defendants were not passive search engines but destination websites intentionally embedding the tweets to attract traffic and displaying the tweets without any further user intervention.¹⁶⁵ Furthermore, Defendants made an explicit embedding choice, which even the dissent in *Aereo* admitted might lead to liability.¹⁶⁶

If Defendants appeal, they may create a circuit split, thus inviting Supreme Court’s guidance. The Second Circuit has issued decisions that cut in favor of online infringement defendants and in favor of looser standards for online copyright infringement.¹⁶⁷

In-line linking is commonplace on the Internet. At issue in this case was a type of content that is common on the Internet: a picture of unknown providence with clear newsworthiness, which in today’s 24-hour news cycle required a response from online news properties. Rejecting the server test opens up nearly every Internet user, from websites using links in place of footnotes to social media users retweeting a silly photo, potentially at risk of significant liability. Thus, Internet culture would be undermined for the sake of opportunism. On the other hand, affirming the server test on appeal could make it nearly impossible for copyright holders like Goldman to assert their rights against the parties that accelerate and profit most from appropriation of copyrighted material, as there is no feasible way for copyright holders to force Twitter to take down thousands of tweets using his work. Thus, a backdoor for infringement would be created.

D. COPYRIGHT OFFICE REPORT ON SOFTWARE-ENABLED CONSUMER PRODUCTS

On December 15, 2016, the Copyright Office published a report analyzing the impact of copyright law on software-enabled consumer products, as requested by Senate Judiciary Committee Chairman Chuck Grassley and Ranking Member Patrick Leahy.¹⁶⁸ The report focused on how copyrighted

163. *Id.* at *9.

164. *Id.* at *7.

165. *Id.*

166. *Am. Broad. Cos., Inc. v. Aereo, Inc.*, 134 S. Ct. 2498, 2514 (2014) (Scalia, J., dissenting).

167. *See, e.g., Cartoon Network, L.P., LLLP v. CSC Holdings, Inc.*, 536 F.3d 121 (2d. Cir. 2008); *Viacom Int’l, Inc. v. YouTube, Inc.*, 676 F.3d 19 (2d. Cir. 2012).

168. U.S. COPYRIGHT OFFICE, SOFTWARE-ENABLED CONSUMER PRODUCTS: A REPORT ON THE REGISTER OF COPYRIGHTS i (2016) [hereinafter SOFTWARE-ENABLED CONSUMER

software in consumer products has impacted privacy, cybersecurity, and intellectual property rights.¹⁶⁹ It concluded that existing law adequately protects consumer usage and encourages industry innovation and thus recommended no policy changes.¹⁷⁰

First, the Office found that current law sufficiently addresses new implications posed by software in the inherent tension between incentivizing innovators to create new work and enabling consumers to fully utilize their property.¹⁷¹ These new implications include user resale, research, and repair.¹⁷² While the technology may be new, existing case law adequately addresses copyright issues in software-enabled products.¹⁷³

Second, the Office lacked evidence that copyright holders were preventing consumers from reselling their devices and thus concluded that device resale was not impacted by current law.¹⁷⁴ However, the Office acknowledged that this was happening to commercial grade products.¹⁷⁵

Similarly, the Office concluded that a consumer's "tinkering and repair" of a software-enabled device is likely fair use, although it may affect the copyright owner's exclusive rights regarding reproduction, derivative works, distribution, and public display.¹⁷⁶ The Office found it difficult to specifically define fair use in tinkering and repair because the technology is rapidly advancing.¹⁷⁷ It is clear, however, that tinkering is fair use because current law allows device owners to make functional changes to their devices—a "tinkerer" alters the device to change how the device functions without benefiting from the copyrightable, inherently creative elements of the code.¹⁷⁸ There are some limitations on the subsequent lease, sale, or transfer of lawfully altered devices,¹⁷⁹ but while consumer advocates may worry about aggressive enforcement, market forces may discourage manufacturers from preventing device repair.¹⁸⁰

Additionally, the Office concluded that it is fair use for the public to conduct non-commercial cybersecurity research on software-enabled

PRODUCTS REPORT].

169. *Id.*

170. *Id.* at iii.

171. *See id.* at i–iii.

172. *Id.* at i.

173. *See id.*; *see also* H.R. 862, 114th Cong. (2015) (You Own Devices Act, aimed at curbing end-user license agreements and allowing consumers to reclaim ownership rights in purchased software-enabled devices).

174. SOFTWARE-ENABLED CONSUMER PRODUCTS REPORT, *supra* note 168, at 29–30.

175. *Id.*

176. *Id.* at 31–33.

177. *See id.* at 33.

178. *See id.* at 37 and 40.

179. *Id.* at 38.

180. SOFTWARE-ENABLED CONSUMER PRODUCTS REPORT, *supra* note 168, at 33.

consumer products.¹⁸¹ This includes protecting public individuals who search for technical vulnerabilities in software and then notify the copyright owner of these weaknesses.¹⁸² Notably, some copyright holders are effectively preventing cybersecurity research through aggressive DMCA takedown notices and license terms.

Next, the Office determined that current law enables interoperability between copyrighted devices and industry competition, even if emerging technologies create legal uncertainties.¹⁸³ Courts have repeatedly held that it is fair use to reverse-engineer a competitor's device to produce a new, compatible product.¹⁸⁴

Finally, the Office addressed concerns that increasingly common software license agreements expressly narrow the permissible usage of consumer devices.¹⁸⁵ Under such end-user license agreements (EULAs), the owner of the device does not own the copy of the software, but is merely a licensee.¹⁸⁶ Some courts refuse to enforce EULAs on the grounds that they are unconscionably one-sided, or that state law requirements for contract formation are not met by "clickwrap" agreements.¹⁸⁷ However, when enforced, licensors have full control over the rights consumers can exercise over their devices.¹⁸⁸ While the Office acknowledges that consumers would benefit if EULAs were more clear, it found existing law adequate to protect consumer interests. The Office declined to comment on when the Copyright Act preempts software license agreements.¹⁸⁹

Acknowledging that any policy recommendations would quickly become outdated due to the fast-paced nature of technology industry, the Office did not recommend any legislative changes.¹⁹⁰ While the ubiquity of software in consumer products does raise new questions, the Office concluded that the existing law is flexible enough to provide adequate protection to both

181. *Id.* at 49.

182. *Id.* at 45.

183. *Id.* at 52.

184. *See id.* at 54; *see also* *Sega Enters. v. Accolade, Inc.*, 977 F.2d 1510 (9th Cir. 1992) (holding that it was fair use for a competitor to copy Sega's software to reverse-engineer the code and determine how to make game cartridges interoperable with Sega's console); *Sony Computer Entm't, Inc. v. Connectix Corp.*, 203 F.3d 596 (9th Cir. 2000) (holding that the making of intermediate copies of video game console's operating system to create a console emulator that did not duplicate the copyrighted code in the new work, but allowed a PC to play console games, was a fair use).

185. SOFTWARE-ENABLED CONSUMER PRODUCTS REPORT, *supra* note 168, at 62–64.

186. *Id.* at 21.

187. *Id.* at 63.

188. *See id.* at 64.

189. *Id.* at 64–65.

190. *Id.* at 69.

copyright owners and consumers of software-embedded products.¹⁹¹

III. PRIVACY DEVELOPMENTS

A. *IN RE SUPERVALU, INC.*, 870 F.3D 763 (8TH CIR. 2017)

The United States Court of Appeals for the Eighth Circuit held that customers whose financial information became compromised could not recover for possible future identity theft.¹⁹²

Customers brought a putative class action against the owners and operators of the grocery stores SuperValu, AB Acquisition, and New Albertsons for their poor cybersecurity, which resulted in perpetrators stealing customers' financial information.¹⁹³ Perpetrators twice hacked into the store networks and installed malicious software to access credit card information in July 2014, compromising 1,045 stores.¹⁹⁴ The perpetrators accessed the names, account numbers, expiration dates, card verification value (CVV) codes, and personal identification numbers (PINs) of credit cards used in those stores.¹⁹⁵

Operators issued a press release notifying customers of the first hack in August 2014.¹⁹⁶ The release acknowledged that the attack "may have resulted in the theft" of information, but could not definitively confirm stolen cardholder data or misuse of such data.¹⁹⁷ After the second data breach, operators issued another press release in September 2014 stating they could only confirm a breach but not whether the perpetrators actually stole the information and used it.¹⁹⁸

Customers brought claims of negligence, breach of implied contract, negligence per se, and unjust enrichment, citing state consumer protection and data breach notification statutes.¹⁹⁹ Customers alleged that the two breaches stemmed from the same security failures.²⁰⁰ According to them, operators failed to take adequate security measures by not installing firewalls, segregating their network, using more advanced passwords, and locking out users after unsuccessful login attempts.²⁰¹

However, customers encountered legal issues when they could not

191. SOFTWARE-ENABLED CONSUMER PRODUCTS REPORT, *supra* note 168, at 69.

192. *In re Supervalu, Inc.*, 870 F.3d 763, 773 (8th Cir. 2017).

193. *Id.* at 766.

194. *Id.*

195. *Id.*

196. *Id.*

197. *Id.*

198. *In re Supervalu, Inc.*, 870 F.3d 763, 766 (8th Cir. 2017).

199. *Id.* at 767.

200. *Id.* at 766.

201. *Id.*

demonstrate actual harms.²⁰² Only one plaintiff, David Holmes, discovered a fraudulent charge on his credit card statement.²⁰³ The district court held that, because the customers alleged only an “isolated single instance of an unauthorized charge,” customers did not sufficiently show a general misuse of information for all customers.²⁰⁴ Customers argued on appeal that they will likely suffer identity theft in the future, and that perpetrators can use their information to siphon money from accounts, make unauthorized card charges, open new accounts, or sell information on the black market.²⁰⁵

The Court of Appeals sided with the grocery stores. The court found that the customers must prove their threatened injuries to be: (1) certainly impending; and (2) of substantial risk.²⁰⁶ Customers did not meet this standard since only one plaintiff experienced fraudulent charges.²⁰⁷ The customers did not present any evidence of certainly impending threats of substantial risk, only speculations.²⁰⁸ The court pointed out that most identity theft occurs with other personally identifiable and sensitive information such as Social Security numbers, dates of birth, or driver license numbers.²⁰⁹ Not only that, but within the twenty-four largest data breaches reported between 2000–2005, only four resulted in identity theft.²¹⁰ All of these facts implied a low probability of future identity theft in the near-future.

The court subsequently affirmed the district court ruling that customers did not establish a substantial risk of identity theft.²¹¹ These holdings reflect that the burden for plaintiffs may be high in similar cases unless plaintiffs experience actual harms. This has implications both for fairness to customers as well as the effectiveness of deterring poor cybersecurity within businesses.

B. STANDING AND CYBERSECURITY

Almost 2 billion files containing US citizens’ personal data were reported leaked in 2017.²¹² And yet, despite the frequency of data breaches, courts have struggled to reach consensus on whether their occurrence give victims

202. *Id.* at 773.

203. *Id.* at 767.

204. *In re Supervalu, Inc.*, 870 F.3d 763, 773 (8th Cir. 2017).

205. *Id.* at 766–67.

206. *Susan B. Anthony List v. Driehaus*, 134 S. Ct. 2334, 2341 (2016).

207. *In re Supervalu*, 870 F.3d at 774.

208. *Id.* at 770.

209. *Id.*

210. *Id.*

211. *Id.* at 774.

212. Tara Seals, *Two Billion Files Leaked in US Data Breaches in 2017*, INFOSECURITY (Feb. 15, 2018), <https://www.infosecurity-magazine.com/news/two-billion-files-leaked-in-us-data> [<https://perma.cc/6LJF-EU4S>].

standing to sue.

Modern-day confusion traces back to Article III of the Constitution, delimiting federal judicial power to “cases” and “controversies.” To have standing to sue, the Supreme Court set out three requirements: the plaintiff must have “(1) suffered an injury in fact (2) that is fairly traceable to the challenged conduct of the defendant (3) that is likely to be redressed by a favorable judicial decision.”²¹³

Data breach victims typically struggle to meet the first prong—an injury in fact. For an injury in fact, plaintiffs must show either an actual harm that the violation of the statute amounts to injury in itself or that there will be imminent future harm.²¹⁴ Of course, if plaintiffs can prove actual harm through showing real dollars lost, then standing is a slam dunk. However, data breach victims typically struggle to bring evidence of actual harm, since the consequences of stolen data do not necessarily equate to monetary damages. Moreover, harm via data theft is often temporally far-removed and difficult to trace. Thus, plaintiff attorneys are left with statutory claims or a showing of imminent future harm.

In *Spokeo, Inc. v. Robins*, the Supreme Court said “a bare procedural violation, divorced from any concrete harm” is not enough to establish standing.²¹⁵ But just what constitutes a concrete harm is still up for debate. Circuits have split over whether a statutory violation confers de facto standing, or if a more particularized showing of injury is necessary.²¹⁶ The Eleventh and Third Circuits have found that an allegation of a statutory violation sufficiently supports an inference of concrete injury.²¹⁷ The Eighth Circuit and District of Columbia, however, ground their analysis on how the violation allegedly affected the plaintiff.²¹⁸

In lieu of a relevant statute, plaintiffs fall back on the theory of future harm. Circuits’ receptivity to this argument turns on their estimate of whether a data

213. *Spokeo, Inc. v. Robins*, 136 S. Ct. 1540 (2016).

214. Merritt Baer & Chinmayi Sharma, *Your Voter Records Are Compromised. Can You Sue? Theories of Harm in Data-Breach Litigation*, LAWFARE (Aug. 7, 2017), <https://lawfareblog.com/your-voter-records-are-compromised-can-you-sue-theories-harm-data-breach-litigation> [<https://perma.cc/5AWJ-2HMY>].

215. *Spokeo, Inc.*, 136 S. Ct. at 1549.

216. Andrew C. Glass, et al., *Federal Courts Follow Two Approaches Post-Spokeo When Analyzing Standing*, WASH. LEGAL FOUND. (Jan. 27, 2017), http://www.wlf.org/upload/legalstudies/legalbackgrounder/012717LB_Glass.pdf [<https://perma.cc/Q4ST-VBUT>].

217. *Church v. Accretive Health, Inc.*, 654 F. App’x 990 (11th Cir. 2016) (per curiam); *In re Horizon Healthcare Servs. Inc. Data Breach Litig.*, 846 F.3d 625, 639 (3d Cir. 2017) (holding any such data breach is an injury in fact, “whether or not the disclosure . . . increased the risk of . . . future harm.”).

218. *Braitberg v. Charter Communications, Inc.*, 836 F.3d 925 (8th Cir. 2016); *Hancock v. Urban Outfitters, Inc.*, 836 F.3d 925 (8th Cir. 2016).

breach's risk of harm is considered sufficiently injurious to give plaintiffs standing. The Supreme Court has dismissed multiple cases involving potential future injury from data breach because there was insufficient showing of particularized harm.²¹⁹ The Third Circuit has rejected future harm as a justiciable theory for standing.²²⁰ Most other circuits have operated in shades of gray, neither embracing nor rejecting the theory of future harm.²²¹ Within this spectrum, there is substantial variability: the Sixth, Seventh, and D.C. Circuits have found standing in data breach actions on the risk of future harm;²²² the Second, Fourth, and Eighth have denied standing on the same theory.²²³

With the Circuits in conflict and data breaches on the rise, judges and scholars must consider how to reconcile the competing approaches. On the one hand, awarding damages on the basis of per se statutory violation or a theory of future harm recognizes a need to deter sloppy cybersecurity and provide plaintiffs a legal remedy for lost data. On the other hand, society wants to ensure that defendants are punished, and plaintiffs compensated, only when harm is substantial. Indeed, it would seem unfair to “blame the victim” by sanctioning businesses for a data breach in all cases, especially when some data centers are under siege by sophisticated actors and even nation states.

In any event, time will tell how this plays out. The Supreme Court recently denied cert on the D.C. Circuit's *Attias v. CareFirst*.²²⁴ The question was whether a plaintiff has Article III standing based on a substantial risk of harm that is not imminent and where the alleged future harm requires speculation about the choices of third-party actors not before the court. Undoubtedly, a similar issue will come to the Court again, the answer to which may well determine the future of cybersecurity litigation.

C. EUROPEAN DATA ENFORCEMENT AGAINST U.S. COMPANIES

United States technology companies doing business in the European Union (EU) render their services to roughly 500 million consumers, making

219. *Clapper v. Amnesty Int'l*, 133 S. Ct. 1138 (2013); *Spokeo, Inc. v. Robins*, 136 S. Ct. 1540 (2016).

220. *Reilly v. Ceridian Corp.*, 664 F.3d 38 (3d Cir. 2011).

221. Catherine Padhi, *Standing in Data-Breach Actions: Injury in Fact?*, LAWFARE (Dec. 18, 2017), <https://www.lawfareblog.com/standing-data-breach-actions-injury-fact> [<https://perma.cc/PTP7-G8F5>].

222. *Galaria v. Nationwide Mut. Ins. Co.*, 663 F. App'x 384 (6th Cir. 2016); *Remijas v. Neiman Marcus Grp., LLC*, 794 F.3d 688 (7th Cir. 2015); *Attias v. Carefirst, Inc.*, 865 F.3d 620 (D.C. Cir. 2017), *cert. denied*, 138 S. Ct. 981 (2018).

223. *Beck v. McDonald*, 848 F.3d 262 (4th Cir.), *cert. denied sub nom. Beck v. Shulkin*, 137 S. Ct. 2307 (2017); *In re Supervalu, Inc.*, 870 F.3d 763, 773 (8th Cir. 2017).

224. *Attias v. Carefirst, Inc.*, 138 S. Ct. 981 (2018).

this region one of the most important overseas markets for such companies.²²⁵ Yet policy makers in the 28-member European Union stringently scrutinize the data collection, transfer, and processing mechanisms of these corporations. Each member state of the EU operates under the 1995 Data Protection Directive (Directive) and has its own national laws.²²⁶ National Data Protection Authorities (DPAs) established under the Directive are appointed to implement and enforce data protection laws in the EU.²²⁷

In 2016, the French data protection authority, CNIL, fined Google \$115,000 for failing to extend beyond the borders of EU the “right to be forgotten” mandate which removes inadequate or irrelevant information from web results under searches for people’s names.²²⁸ While the French DPA argued that the removal must be global to uphold Europeans’ rights to privacy because experienced users could circumvent the domestic domain of Google, Google defended itself by saying that such removal should not go beyond Europe and into countries with different laws on the subject.²²⁹ To prevent a dangerous precedent on the territorial reach of national, Google argued that each country should be able to balance freedom of expression and privacy in the way that it chooses, not in the way that another country chooses.²³⁰ Google filed an appeal against CNIL’s decision before France’s Conseil d’État, the country’s highest administrative court, which further referred the matter to the Court of Justice of the European Union (ECJ) to determine whether search engines must apply the “right to be forgotten” decision to their search domains outside of the European Union. As of publication, the matter is currently pending before the ECJ.²³¹

Similarly, the data protection commissioner of Hamburg, Germany

225. Mark Scott, *What US Tech Giant Face in Europe in 2017*, N.Y. TIMES (Jan. 1, 2017), <https://www.nytimes.com/2017/01/01/technology/tech-giants-europe-2017.html> [<https://perma.cc/B6ZK-ZYR5>].

226. Directive 95/46/EC, of the European Parliament and of the Council of 24 October 1995 on the Protection of Individuals with Regards to the Processing of Personal Data and on the Free Movement of Such Data, 1995 OJ (L 281) 31, 45–46.

227. *Id.*

228. Commission Nationale de L’informatique et des Libertés [French National Commission of Computing and Freedoms], decision no. 2016-054SANCTION, Mar. 10, 2016, LEGIFRANCE, <https://www.legifrance.gouv.fr/affichCnil.do?oldAction=rechExpCnil&id=CNILTEXT000032291946&fastReqId=273825503&fastPos=1> [<https://perma.cc/48XQ-45B4>].

229. *France’s Fight Over Google Search Results Was Kicked to Europe’s Top Court*, FORTUNE (July 19, 2017), <http://fortune.com/2017/07/19/france-google-right-forgotten-eu-court> [<https://perma.cc/P39Q-U3UH>].

230. *Id.*

231. *See* CE, July 19, 2017, CONSEIL D’ÉTAT, <http://www.conseil-etat.fr/Decisions-Avis-Publications/Decisions/Selection-des-decisions-faisant-l-objet-d-une-communication-particuliere/CE-19-juillet-2017-GOOGLE-INC> [<https://perma.cc/B7VB-WGEJ>] (Fr.).

ordered Facebook to stop collecting and storing data on WhatsApp users when the latter announced that it will start to share some of its users' online information with Facebook. The regulator made user consent compulsory before such data could be shared between the two companies. It also called on the social network to delete all information already forwarded from WhatsApp on roughly 35 million German users.²³² In September 2017, the Spanish data protection regulator (AEPD) issued a \$1.4 million fine against Facebook for violations regarding its data harvesting activities.²³³ The AEPD claimed that when Facebook collects, stores, and uses data for advertising purposes, it does so without obtaining adequate user consent.²³⁴

In a similar situation, the Hague Administrative Court in the Netherlands upheld a decision by the Dutch Data Protection Authority that WhatsApp was in breach of the Dutch Data Protection Act on account of its alleged failure to identify a representative within the country responsible for compliance with the Act, despite the processing of personal data of Dutch WhatsApp users on Dutch smartphones.²³⁵ The DPA concluded that WhatsApp must appoint a representative in the Netherlands within three months, subject to a penalty of €10,000 per day with a maximum of €1,000,000.²³⁶

In light of these events and to bring about an effective regulation, the U.S. Department of Commerce and the EU recently signed a trans-Atlantic data transfer agreement, the EU-US Privacy Shield Framework, which imposes strong obligations on U.S. technology companies handling data.²³⁷ The EU-US Privacy Shield Framework enforces clear safeguards and transparency obligations on U.S. government access, effective protection of individual rights, and an annual joint review mechanism. Earlier, many U.S. companies engaging in cross-border transfers of personal data between Europe and the

232. Mark Scott, *Facebook Ordered to Stop Collecting Data on WhatsApp Users in Germany*, N.Y. TIMES (Sept. 27, 2016), <https://www.nytimes.com/2016/09/28/technology/whatsapp-facebook-germany.html> [<https://perma.cc/SDM8-DQT7>].

233. *Resolution R/01870/2017*, Spanish Data Protection Agency (Mar. 8, 2016), http://www.agpd.es/portalwebAGPD/resoluciones/procedimientos_sancionadores/ps_2017/common/pdfs/PS-00082-2017_Resolucion-de-fecha-21-08-2017_Art-ii-culo-4-5-6-7-LOPD.pdf.

234. *Id.*

235. *Court Decides WhatsApp Data Protection Case*, LEXOLOGY (Nov. 28, 2016), <https://www.lexology.com/library/detail.aspx?g=0c58295a-0d8f-4252-aa7f-35c5a8ad3fd6> [<https://perma.cc/A6CM-A22X>].

236. *WhatsApp Inc. v. Authority Personal Data*, No. SGR 15/9125, Court of the Hague (Nov. 22, 2016), <https://uitspraken.rechtspraak.nl/inziendocument?id=ECLI:NL:RBDHA:2016:14088> [<https://perma.cc/3X6K-8K8D>].

237. Dep't of Commerce, *EU-U.S. Privacy Shield Framework Principles*, <https://www.privacyshield.gov/servlet/servlet.FileDownload?file=015t00000004qAg> [<https://perma.cc/6ZQ2-NM5Y>].

U.S. relied on the EU-US Safe Harbor program, as well as on the validity of other mechanisms for transfers to the U.S. such as standard contractual clauses (SCCs) and binding corporate rules (BCRs).²³⁸ However, in 2015, the ECJ struck down the Safe Harbor framework in the *Schrems v. Facebook* ruling.²³⁹ The “safe harbor” arrangement enabled Facebook, for example, to store the profiles of its Spanish and Italian users on the same facilities it uses for customers in New York.²⁴⁰ In *Schrems*, the plaintiff complained that Facebook Ireland was transferring his data via SCCs to servers located in the US, where it was being processed, without ensuring sufficient protection for it as required under the Charter of Fundamental Rights of the EU.²⁴¹ In light of the ruling, companies could no longer rely on self-certification to establish compliance with EU privacy laws.²⁴²

To tighten the noose around data processing, data storage and protection practices of companies which offers goods and services to EU individuals, the European Parliament adopted the General Data Protection Regulation (GDPR) in April 2016, replacing the outdated data protection Directive. As a unified data protection law, the GDPR will do away with the current fragmentation and costly administrative burdens of companies doing business in EU. The Regulation will be enforced not only against companies that are located within the EU, but upon all organizations regardless of their physical location. To ensure strict compliance, the GDPR allows for steep penalties of up to €20 million or 4 percent of global annual turnover.²⁴³

Organizations and companies that are currently subject to the EU DPAs and that are either ‘controllers’ or ‘processors’ of personal data and sensitive personal data will be covered by the GDPR. Personal data will include any

238. Mark Young et al., *EU DPA Enforcement Guidance Post-Schrems*, INSIDE PRIVACY (Feb. 18, 2016), <https://www.insideprivacy.com/international/european-union/eu-dpa-enforcement-guidance-post-schrems> [<https://perma.cc/3HEQ-2DM2>].

239. *Data Protection Commissioner v. Facebook Ireland Ltd. & Maximilian Schrems*, [2016] IEHC 414 (Ir.).

240. *How European Privacy Concerns Could Hurt U.S. Tech Firms*, L.A. TIMES (Oct. 8, 2015), <http://www.latimes.com/opinion/editorials/la-ed-europe-data-privacy-20151007-story.html> [<https://perma.cc/XRA9-8KCZ>].

241. Mary Carolan, *Irish Data Protection Case ‘of The Utmost Importance’ to US*, IRISH TIMES (June 27, 2016), <https://www.irishtimes.com/business/technology/irish-data-protection-case-of-the-utmost-importance-to-us-1.2701891> [<https://perma.cc/G2JM-6DPA>].

242. Leun Jolly, *Data protection in the United States: Overview*, WESTLAW (July 1, 2017), [https://content.next.westlaw.com/Document/I02064fbd1cb611e38578f7ccc38dcbee/View/FullText.html?contextData=\(sc.Default\)&transitionType=Default&firstPage=true&bhcp=1](https://content.next.westlaw.com/Document/I02064fbd1cb611e38578f7ccc38dcbee/View/FullText.html?contextData=(sc.Default)&transitionType=Default&firstPage=true&bhcp=1).

243. *See* Regulation (EU), of the European Parliament and of the Council of 27 April 2016 on the Protection of Natural Persons with Regard to the Processing of Personal Data and on the Free Movement of Such Data, and Repealing Directive 95/46/EC (General Data Protection Regulation), 2016 OJ (L 119) 1, 1–88.

information that can be used to identify a person, e.g., name, address, IP address, etc.²⁴⁴ Sensitive personal data encompasses genetic data, information about religious and political views, sexual orientation, and more. Where the GDPR differentiates from current data protection laws is that pseudonymized personal data can fall under the law if it is possible that a person could be identified by a pseudonym.²⁴⁵

Privacy advocates have welcomed the GDPR because it will not only improve transparency and certainty, but it will also empower individuals to understand the privacy implications of the data they share with companies. However, there are a few fundamental loopholes in the regulation that might dampen its effectiveness. The rules allow private companies to collect personal data for “legitimate interests,” the definition of which has not been provided in the text. The regulations also allow governments and law enforcement agencies to retain great leeway in collecting data through provisions that allow data collection for national security purposes. For some of these reasons, there is quite a bit of uncertainty in how the regulations will be enforced. Moreover, U.S. technology companies doing business in Europe have very little time to finalize their implementation mechanisms to ensure full compliance with the rules.

D. CHINA’S NEW CYBERSECURITY LAW

China’s new Cybersecurity Law, which went into effect on June 1, 2017,²⁴⁶ imposes regulations on both network operators and Critical Information Infrastructure (CII) sectors to protect their networks.²⁴⁷ CII includes telecommunications, information services, and governmental agencies.²⁴⁸ The law requires CIIs to conduct security inspections, appoint cybersecurity management, and complete “disaster recovery backups.”²⁴⁹

One of the law’s greatest impacts is on cross-border data transfers. The law mandates a new data localization policy, which requires CIIs to store all

244. Matt Burgess, *GDPR Will Change Data Protection—Here’s What You Need to Know*, WIRED (Nov. 7, 2017), <http://www.wired.co.uk/article/what-is-gdpr-uk-eu-legislation-compliance-summary-fines-2018> [https://perma.cc/3MKG-449B].

245. *Id.*

246. Jack Wagner, *China’s Cybersecurity Law: What You Need to Know*, DIPLOMAT (June 1, 2017), <https://thediplomat.com/2017/06/chinas-cybersecurity-law-what-you-need-to-know/> [https://perma.cc/D94X-5X9N].

247. *Id.*

248. *Id.*

249. Jeff C. Dodd, Jerry Jie Li, Dora Luo & Ross Campbell, *People’s Republic of China Cybersecurity Law: A Preliminary Overview of Western Companies*, NAT’L L. REV. (July. 17, 2017), <https://www.natlawreview.com/article/people-s-republic-china-cybersecurity-law-preliminary-overview-western-companies> [https://perma.cc/6TUE-ZBBX].

“personal data” and “important data” within Chinese borders.²⁵⁰ Therefore, if network operators or CIIs want to transfer personal data or information outside of China, Chinese national authorities must first conduct a security assessment according to its national security, economic, and social welfare concerns.²⁵¹ Network operators who want to transfer more than one terabyte of data or collect data on more than 500,000 subjects need to both obtain permission of subjects and pass the security assessment.²⁵²

The law grants enforcement agencies considerable discretion in blocking any transfer they believe will endanger China’s political, economic, or security systems.²⁵³ Consequently, data localization policies can create market uncertainty and increase costs for U.S. and multi-national corporations operating in China by: (1) unpredictability due to ambiguous definitions and China’s decentralized data protection systems; and (2) the importance of data analytics and cloud computing.²⁵⁴

With regards to (1), the law regulates “personal data” or “important data” without explicitly defining what those terms mean.²⁵⁵ In addition, different data regulators work in different industries.²⁵⁶ Each industry will conduct security assessments separately, resulting in inconsistent and “patchy” results.²⁵⁷ For instance, regulators in the banking industry will conduct assessments differently compared to the health care industry, sending mixed signals and fostering uncertainty for U.S. firms. Corporations may be fined or forced to suspend operations if they violate the law.²⁵⁸ Therefore, corporations that necessitate data storage and collection may find it too risky to operate in China.

With respect to (2), corporations rely on data for numerous functions: from monitoring supply chains and production systems to managing global

250. Rong Cheng, *China’s Cyberspace Body Issues Draft on Cross-Border Data Flow Controls*, FORBES (Apr. 26, 2017), <https://www.forbes.com/sites/roncheng/2017/04/26/chinas-cyberspace-body-issues-draft-on-cross-border-data-flow-controls/#4929da6e5880> [<https://perma.cc/N8RA-NCDF>].

251. *Id.*

252. *Id.*

253. See Dodd et al., *supra* note 249.

254. Nigel Cory, *Cross-Border Data Flows: Where Are the Barriers, and What Do They Cost*, INFO. TECH. & INNOVATION FOUND. (May 1, 2017), <https://itif.org/publications/2017/05/01/cross-border-data-flows-where-are-barriers-and-what-do-they-cost> [<https://perma.cc/SP2F-N2AZ>].

255. Carly Ramsey & Ben Wootliff, *China’s Cyber Security Law: The Impossibility Of Compliance?*, FORBES (May 29, 2017), <https://www.forbes.com/sites/riskmap/2017/05/29/chinas-cyber-security-law-the-impossibility-of-compliance/#74a8e085471c> [<https://perma.cc/2CWV-WPUJ>].

256. Cheng, *supra* note 250.

257. Ramsey & Wootliff, *supra* note 255

258. See Cheng, *supra* note 250.

workforces.²⁵⁹ Furthermore, corporations use personal data to understand consumer preferences and willingness to pay in order to modify advertising strategies. Companies will need to complete mandatory assessments any time they want to transfer data from China back to the U.S. or to third parties such as data processing contractors. However, due to the tremendous discretion Chinese law enforcement possesses in denying transfer requests, U.S. corporations may give up on these data transfers altogether.

In order to hedge against these concerns, the U.S. can try striking a bilateral trade agreement or “data-services agreement” to work around the localization policies.²⁶⁰ For example, in February 2016, the European Commission and the U.S. negotiated the “EU-US Privacy Shield,” a framework to permit transatlantic transfers of personal data in which the U.S. agreed to limited access to data for law enforcement and national security purposes.²⁶¹ A similar agreement could be reached with China should the Cybersecurity Law bring significant harm to U.S. firms.

IV. OTHER DEVELOPMENTS

A. FTC CRACKDOWN ON SOCIAL MEDIA INFLUENCERS

Brands are increasingly relying on social media for advertising and marketing their goods and services.²⁶² As a result, companies are turning to social media influencers (with built-in audiences) to get their products and messages out to consumers. Aside from their large following, influencers themselves are considered a brand such that followers consider influencers’ opinions and endorsements to be credible.

The Federal Trade Commission (FTC) requires social media influencers to clearly disclose any blog or social media post sponsored by a company.²⁶³ In fact, in spring of 2017 the FTC sent out more than ninety letters addressed to influencers and marketers reminding them that, when promoting or endorsing a brand, the relationship with the brand must be clearly disclosed to the audience.²⁶⁴ The FTC Endorsement Guides state that a “material connection”

259. Cory, *supra* note 254.

260. *See id.*

261. Markus Evans, Adam Smith & Christoph Zieger, *EU and US Reach Agreement on Cross-Border Data Transfer Framework, But Uncertainty Remains*, DATA PROT. REPORT (Feb. 2, 2016), <http://www.dataprotectionreport.com/2016/02/2809> [https://perma.cc/WS5A-TEG5].

262. *A Brand New Game*, ECONOMIST (Aug. 27, 2015), <https://www.economist.com/news/business/21662543-people-spend-more-time-social-media-advertisers-are-following-them-brand-new-game> [https://perma.cc/JY79-H6GK].

263. FTC, THE FTC’S ENDORSEMENT GUIDE: WHAT PEOPLE ARE ASKING (2017), [hereinafter FTC ENDORSEMENT GUIDE].

264. Press Release, Fed. Trade Comm’n, FTC Staff Reminds Influencers and Brands to

needs to be clearly communicated.²⁶⁵ Material connections are defined as a business or family relationship, gift or free product, or monetary payment.

The FTC's intent is to warn social media influencers and marketers that it is monitoring their activities, and that proper disclosures are required. The FTC also provided guidelines for proper disclosure formats.²⁶⁶ As it pertains to Instagram posts, users are only able to view the first three lines of the post unless they click "more." The FTC has concluded that most consumers do not click the "more" button and rather only look at the first three lines.²⁶⁷ Thus, any disclosure as to an endorsement needs to be made above the "more" button.²⁶⁸

The FTC's efforts to regulate social media posts is not a new phenomenon: in 2015, the FTC warned Kim Kardashian about an Instagram post for a morning sickness drug wherein she failed to disclose that it was a paid advertisement.²⁶⁹ In fact, in September of 2017, one of the first FTC cases against social media influencers was settled. In *In re CSGOLOTTO, Inc.*, the FTC filed a complaint against two YouTubers for failing to disclose their connection with the brand being promoted.²⁷⁰ The YouTubers in question, Trevor "TmarTn" Martin and Thomas "Syndicate" Cassell, are social media influencers widely followed in the online gambling community.²⁷¹ The two regularly made videos and published tweets promoting a gambling website, Counter-Strike: Global Offensive. The YouTubers would post videos of themselves winning large amounts of money while gambling on the Counter Strike site.²⁷² However, the YouTubers failed to disclose that they were also owners of the website Counter Strike.²⁷³ Ultimately, the FTC settled the charges by requiring Martin and Cassell to clearly and conspicuously disclose any material connection with an endorser and any promoted product.²⁷⁴

The FTC works to promote competition as well as to protect and educate consumers. To this end, consumers should be informed and be able

Clearly Disclose Relationship (Apr. 19, 2017) [hereinafter FTC Press Release on Disclose Relationship].

265. FTC ENDORSEMENT GUIDE, *supra* note 263.

266. *Id.*

267. FTC Press Release on Disclose Relationship, *supra* note 264.

268. *Id.*

269. Jeff John Roberts, *The FTC Says Celebrity Social Media Ads Are Still Too Sneaky*, FORTUNE (Apr. 20, 2017), <http://fortune.com/2017/04/20/ftc-instagram> [<https://perma.cc/MXK5-BVDB>].

270. Press Release, Fed. Trade Comm'n, CSGO Lotto Owners Settle FTC's First Ever Complaint Against Individual Social Media Influencers (Sept. 7, 2017).

271. *Id.*

272. *Id.*

273. *Id.*

274. *Id.*

differentiate when they are being presented with a paid advertisement as opposed to an unsolicited opinion on a product or a service.

B. OCCUPATIONAL LICENSING AND THE “SHARING ECONOMY”

The Supreme Court’s 1889 decision in *Dent v. West Virginia*, concluding a state may adopt a physician licensing scheme to protect public health and safety, introduced government gatekeeping to a narrow set of occupations via licensing requirements.²⁷⁵ This power was exercised only moderately in the past, as less than five percent of American jobs demanded a license in the 1950s.²⁷⁶ However, the floodgates have since opened: recent labor market analysis estimates 25 to 29 percent of American occupations require licenses, making it one of the fastest growing institutions in the US labor market.²⁷⁷

Today, technological innovation—particularly the “sharing economy”²⁷⁸—has come into conflict with extant occupational licensing law.²⁷⁹ While proponents of licensing requirements advocate their ability to assure quality services for consumers,²⁸⁰ detractors contend these barriers create artificial supply-side scarcity that raises the cost of services and stifles competition from emerging service platforms. This impacts the development not only of tech giants like Uber and Airbnb, but also lesser-known startups in sectors ranging from food-sharing²⁸¹ to cosmetology.²⁸²

275. *Dent v. West Virginia*, 129 U.S. 114 (1889); see Morris M. Kleiner, *A License for Protection*, 29 REG. 17, 17 (2006).

276. M. Kleiner & Alan B. Krueger, *The Prevalence and Effects of Occupational Licensing*, 48 BRIT. J. INDUS. REL. 676, 678 (2010).

277. *Id.*

278. Though there is no consensus definition, the “sharing economy” can be defined generally as an economic system in which assets or services are shared between private individuals, either free or for a fee, typically by means of the Internet. See generally Vanessa Katz, *Regulating the Sharing Economy*, 30 BERKELEY TECH. L.J. 1067 (2015).

279. See, e.g., *Wallen v. St. Louis Metro. Taxicab Comm’n*, No. 4:15CV1432 HEA, 2016 WL 5846825 (E.D. Mo. Oct. 6, 2016) (Uber’s suit against the St Louis Taxi Commission); *Teledoc, Inc. v. Texas Med. Bd.*, 112 F. Supp. 3d 529 (W.D. Tex. 2015) (telemedicine provider Teledoc’s suit against the Texas Medical Board).

280. See Austin Raynor, Note, *Economic Liberty and the Second-Order Rational Basis Test*, 99 VA. L. REV. 1065, 1085 (2013) (“The most common public justification for imposing licensing requirements on a profession is to provide protection to consumers against ‘unethical or incompetent practitioners.’”) (quoting Michael J. Phillips, *Entry Restrictions in the Lochner Court*, 4 GEO. MASON L. REV. 405, 411 (1996)).

281. Sarah Kessler, *The Food-Sharing Economy is Delicious and Illegal—Will It Survive?*, FAST COMPANY (July 7, 2016), <https://www.fastcompany.com/3061498/the-food-sharing-economy-is-delicious-and-illegal-will-it-survive> [<https://perma.cc/BFU2-NHW5>].

282. Brittany Hunter, *“Sharing Economy” Reveals that Licensing Laws Are Really About Shutting Down the Competition*, MISES INST. (Oct. 7, 2016), <https://mises.org/blog/sharing-economy-reveals-licensing-laws-are-really-about-shutting-down-competition> [<https://perma.cc/87DN-Q5AR>].

The mechanism of occupational licensing regulation is well established. States are generally empowered to tailor their economies as they see fit, with power to impose occupational requirements, regulate market entry, or otherwise limit competition as deemed appropriate in pursuit of public policy goals.²⁸³ Thus, in most situations, “federal antitrust laws are subject to supersession by state regulatory programs.”²⁸⁴

Specifically, State regulation is granted “*Parker* immunity” (establishing federal antitrust oversight is inappropriate because state agencies are politically accountable to elected officials and voters) where the challenged restraint is “clearly articulated and affirmatively expressed as state policy” and is “actively supervised by the State itself.”²⁸⁵

Practically, this means licensing requirements can vary by state and even by municipality, often drafted by a board of professionals.²⁸⁶ This dynamic makes regulatory or legislative reform difficult, as public choice theory predicts laws with concentrated benefits (for the occupation), diffused costs (for consumers), and cohesive professional organizations incentivized to defend the status quo are unlikely candidates for reform.²⁸⁷

Nonetheless, some of the larger companies in the space have successfully lobbied the government against enforcing licensing restrictions for their particular service. For example, Uber was forced to launch a campaign in 2015 after New York Mayor Bill de Blasio threatened to curb the company’s expansion.²⁸⁸ Similarly, Airbnb defeated a San Francisco ballot measure restricting short-term rentals after spending \$8 million lobbying against it.²⁸⁹ However, for smaller companies with limited resources, lobbying can be an

283. N.C. State Bd. of Dental Exam’rs v. F.T.C., 135 S. Ct. 1101 (2015).

284. F.T.C. v. Ticor Title Ins. Co., 504 U.S. 621, 632 (1992).

285. *Parker v. Brown*, 217 U.S. 341 (1943); *California Retail Liquor Dealers Ass’n v. Midcal Alum., Inc.*, 445 U.S. 97, 105 (1980).

286. Austin Raynor, Note, *Economic Liberty and the Second-Order Rational Basis Test*, 99 VA. L. REV. 1065, 1086 (“[O]ccupational licensing boards are frequently composed of members of the regulated occupation, thereby endowing established producers with the discretion to exclude their own potential competitors.”).

287. See Milton Friedman, *Occupational Licensure*, in CAPITALISM AND FREEDOM 137, 142 (1962); see also John Blevins, *License to Uber: Using Administrative Law to Fix Occupational Licensing*, 64 UCLA L. REV. 844 at 868–69 (2017); Robert J. Thornton & Edward J. Timmons, *The De-Licensing of Occupations in the United States*, MAY MONTHLY LAB. REV. 1, 13 (2015)

288. Josh Dawsey, *Uber Targets Mayor Bill de Blasio on Proposed Curbs on Growth*, WALL ST. J. (July 16, 2015), <http://www.wsj.com/articles/uber-targets-mayo-bill-de-blasio-on-proposed-curbs-on-growth-1437096154> [<https://perma.cc/QL9L-DPX2>].

289. Heather Somerville, *Airbnb Wages \$ 8 Million Campaign to Defeat San Francisco Measure*, REUTERS (Nov. 1, 2015), <http://www.reuters.com/article/us-airbnb-election-sanfrancisco/airbnb-wages-8-million-campaign-to-defeat-san-francisco-measure-idUSKCN0SQ2CJ20151101> [<https://perma.cc/7ULF-SWGS>].

expensive route, making litigation the only practical means by which to challenge and reform occupational licensing schemes.²⁹⁰ Indeed, the friction between upstart startups and established occupational license regimes has increasingly sparked litigation that typically takes two forms: antitrust and constitutional challenges.²⁹¹

The constitutional case against occupational licensing relies on the violation of rights to economic liberty under due process and equal protection clauses of federal and/or state constitutions;²⁹² antitrust cases generally swing on whether occupational licensing amounts to anticompetitive regulatory capture.²⁹³ But startup services differ in kind, so the outcome and implication of any single lawsuit may well vary. For example, startup Teladoc is currently being sued by Texas' medical board for connecting physicians with patients without in-person consultations.²⁹⁴ But it is unclear how this suit relates to companies like Your.MD, who use chatbots to answer healthcare issues.

At a time when people can be seamlessly connected by the Web and ratings systems can sometimes substitute for occupational licenses in controlling for service quality, which professional fields remain appropriate for state-sponsored occupational protection? What sorts of legal arguments are available for startups affected by licensing regimes? Is the current “ask for forgiveness, not permission” approach (and the binary, litigate-or-leave-it choice this presents to professionals and regulators) pursued by many startups the best way to address these challenges, or is a more cohesive approach tenable? The jury is still out.

290. Blevins, *supra* note 287, at 870.

291. *Id.* at 870–84. Note that Blevins suggests a novel approach—using administrative law as a means to challenge extant licensing regulations.

292. *Id.* at 870; *see, e.g.*, Complaint for Declaratory and Injunctive Relief, at 15–18, Eck v. Battle, No. 1:14-CV-00962-MHS (N.D. Ga. Apr. 1, 2014).

293. Ilya Shapiro, *Protecting Economic Liberty by Other Means*, 10 N.Y.U. J.L. & LIBERTY 118, 118 (2016).

294. *Teladoc Inc. v. Tex. Med. Bd.*, 112 F. Supp. 3d 529 (W.D. Tex. 2015).

