

**FOREWORD:**  
**BEYOND MICROSOFT: ANTITRUST,  
TECHNOLOGY, AND INTELLECTUAL PROPERTY**

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The “New Economy,” characterized by rapid innovation, globalization of business, and reliance on information technology, has created a new legal challenge for courts and policymakers: balancing intellectual property protection with antitrust laws. A primary purpose of intellectual property rights is to provide creators and inventors with incentives to create. However, granting these rights and allowing those protected by them to limit the use of and control the price for their ideas promotes the often conflicting proposition that authors and inventors have an exclusive right to exclude competition in order to encourage their innovation.<sup>1</sup> Antitrust law, on the other hand, exists to ensure that free market competition will facilitate an efficient allocation of goods and prevent the development of a monopolistic power.

On June 7, 2000, U.S. District Court Judge Thomas Penfield Jackson ruled that the world’s largest software manufacturer, Microsoft Corporation, had violated federal and state antitrust laws.<sup>2</sup> The court’s opinion, which ordered the breakup of Microsoft into two smaller companies, marked the first federal antitrust decision involving a corporation dedicated to the “New Economy.”<sup>3</sup> The decision sent a clear message to the high-technology industry: emerging technology companies are not im-

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1. ROBERT MERGES ET AL., *INTELLECTUAL PROPERTY IN THE NEW TECHNOLOGICAL AGE* 1101-26 (2d ed. 2000).

2. *United States v. Microsoft Corp.*, 97 F. Supp. 2d 59 (D.D.C. 2000) (final judgment); *see also* *United States v. Microsoft Corp.*, 87 F. Supp. 2d 30 (conclusions of law); *United States v. Microsoft Corp.*, 84 F. Supp. 2d 9 (D.D.C. 1999) (findings of fact).

3. *Microsoft*, 97 F. Supp. 2d at 64-65 (ordering that Microsoft divest itself into an operating system business and an applications business).

mune to attacks on what the government perceives as monopolistic and predatory business conduct.

In the wake of *United States v. Microsoft*, industry analysts and legal scholars have struggled to assess the role of antitrust law as it applies to high technology. Since high technology often carries with it some degree of intellectual property protection, there exists a legal tension between preserving competition and promoting innovation. Striking the balance between these two goals proves especially difficult when dealing with pioneering technologies that do not always fit comfortably into traditional legal frameworks.

The Berkeley Center for Law & Technology and the *Berkeley Technology Law Journal* convened a Symposium this spring in order to examine closely the multiple instances in which antitrust, technology, and intellectual property intersect.<sup>4</sup> Rather than addressing the *Microsoft* case itself, the Symposium sought to go “Beyond Microsoft” and focus on issues of lasting importance to high-technology firms, policymakers, and judges. The Symposium brought together leading academics, practitioners, and government officials to discuss the application of current antitrust laws in a variety of high-technology industries and to analyze whether current antitrust laws ought to be modified to better serve the underlying policies of both antitrust and intellectual property laws.

In order to share the discussion with a wider audience, the *Berkeley Technology Law Journal* has published selected papers originally presented at the Symposium in this issue. The papers, which are summarized below, are representative of the intricate antitrust issues that arise in high-technology fields. This Symposium issue is designed to provide the legal community with a thoughtful overview of the potential complications that arise when applying long established antitrust law to the rapidly changing universe of technology and intellectual property.

## I. THE ROLE OF THE FEDERAL TRADE COMMISSION IN THE NEW ECONOMY

The New Economy is characterized by its dependence on intellectual property. Perhaps more than ever, the products that comprise our market-

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4. The full title of the Conference was “Beyond Microsoft: Antitrust, Technology, and Intellectual Property.” The authors would like to thank and recognize the generous support of the following sponsors: the Berkeley Center for Law & Technology, the Institute of Management, Innovation & Organization, and the Competition Policy Center (Institute of Business and Economic Research). For more information and details about the Conference, please visit <http://www.law.berkeley.edu/bclt/events/antitrust>.

place are embodiments of ideas and are protected by patent, copyright, and trade secret doctrines. In his Keynote Address, Federal Trade Commission Chairman Robert Pitofsky argues that the major challenge for conventional antitrust law and for the Federal Trade Commission ("FTC") is to pinpoint the enforcement policies that would best foster innovation and preserve competition in this high-technology renaissance.<sup>5</sup>

Pitofsky isolates several features of the New Economy that distinguish it from traditional markets and place new demands on antitrust enforcement. First, because the initial costs of research and development of a product are particularly high and the variable costs relatively low, providing incentives to innovate, such as the limited monopoly right of a patent, is especially important.<sup>6</sup> On the other hand, the importance of innovation necessitates preserving competition at the research and development stage.<sup>7</sup> Finally, the dynamic nature of high technology, as contrasted with other industries, makes it more difficult for any one firm to dominate a particular market share.<sup>8</sup> The unpredictability of how these and other factors drive the New Economy places new demands on antitrust enforcement officials. Consequently, antitrust enforcement must take special care to ensure that the right balance of competition and protection of innovation is maintained.

In assessing whether the FTC and other government bodies are equipped to handle the demands presented by the New Economy, Pitofsky examines several recent enforcement actions. In each of these actions, involving issues of patent dispute settlements, refusals to license, horizontal and vertical mergers, and private standard-setting agreements, Pitofsky concludes that the FTC has issued orders that are sensitive to the tension between encouraging competition among innovators and protecting the innovators' investments.<sup>9</sup> Thus, perhaps the dichotomy seen between antitrust and the New Economy is not as stark as some have predicted.

However, in addition to the legal tensions Pitofsky notes, the FTC is also faced with certain institutional challenges as a result of the New Economy. In particular, Pitofsky addresses two main administrative concerns related to the speed of the FTC review process in comparison to the speed of the fast-paced world of high technology and the ability of gov-

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5. See Robert Pitofsky, *Antitrust and Intellectual Property: Unresolved Issues at the Heart of the New Economy*, 16 BERKELEY TECH. L.J. 535 (2001).

6. *Id.* at 537.

7. *Id.* at 540-41.

8. *Id.* at 540.

9. *Id.* at 558.

ernment agencies to cope with the highly technical or scientific issues.<sup>10</sup> As such, the harm to consumers might be irreversible by the time a sufficient factual inquiry can even begin.

Pitofsky notes that the ability of the FTC to cope with the challenges of the New Economy is not without hope. With cooperation from other government agencies such as the National Institutes of Health and the Environmental Protection Agency, and by continued awareness of the special needs of an industry reliant on intellectual property protection, the FTC can remain an effective way to maintain the delicate balance between competition and innovation.<sup>11</sup>

## II. ANTITRUST AND E-COMMERCE

One high-technology area that is ripe for the issues Pitofsky outlines in his address is, not surprisingly, the Internet. In particular, the role that anti-trust law should play in regulating Internet transactions is a topic that underscores the competing concerns of preserving competition and encouraging innovation. In her article, Professor Maureen O'Rourke takes the specialized instance of comparison price and product information aggregation websites and assesses how the introduction of competition policy might add to the debate about the appropriate level of property protection the Internet should offer.<sup>12</sup>

The Internet is a global information and communications network that connects millions of computer users worldwide.<sup>13</sup> The structure of the Internet and the process of hyperlinking enables a consumer to link between different sites to access information through the simple click of a mouse. Further, data aggregators, or search engines, using "spider software," allow a consumer to go to a single website and obtain product and pricing information from several independent e-commerce websites.<sup>14</sup> By using this technology, O'Rourke notes, consumers benefit from not having to go from one site to another to comparison shop.<sup>15</sup> On the other hand, the

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10. *Id.* at 560.

11. *Id.* at 562.

12. See Maureen A. O'Rourke, *Property Rights and Competition on the Internet: In Search of an Appropriate Analogy*, 16 BERKELEY TECH. L.J. 561 (2001).

13. Webopedia, *Internet*, at <http://webopedia.internet.com/TERM/I/Internet.html> (last modified Sept. 1, 1996).

14. See Maureen A. O'Rourke, *Fencing Cyberspace: Drawing Borders in a Virtual World*, 82 MINN. L. REV. 609, 623-24 (1998).

15. O'Rourke, *supra* note 12, at 568.

owners of the original content collected by aggregators argue that their property rights in the content are violated.<sup>16</sup>

Recent cases, including *Ticketmaster Corp. v. Tickets.com, Inc.*<sup>17</sup> and *ebay, Inc. v. Bidder's Edge, Inc.*,<sup>18</sup> have addressed the issue of whether original content owners have a legitimate protectable property right in information appearing on a website. O'Rourke argues that attention must be paid to antitrust law in order to formulate the proper analytical framework for future litigation involving property rights of this new Internet technology; it is the choice of framework that determines the result of the case.<sup>19</sup> In particular, O'Rourke identifies a sentiment in antitrust law that leans in favor of consumers having unfettered access to price and product comparison information.<sup>20</sup> Relying on the theoretical foundation of antitrust law, along with other areas such as nuisance and First Amendment law, O'Rourke advocates for a balancing test that examines the pros and cons of allowing original content website owners to enjoin access from aggregators, including the effects on competition and consumers.<sup>21</sup>

### III. THE CASE OF BROADBAND INTERNET ACCESS

The technology that has emerged to collect and disseminate the content on the Internet brings antitrust law into new territory that does not necessarily fit neatly within conventional legal constructs. The same can be said of an even more fundamental aspect of the Internet—namely, the technology that allows access to the Internet in the first place. Indeed, an examination of Internet broadband access reveals how the underlying policies of antitrust and intellectual property laws can become drastically muddled when old laws are ill-fitted to tackle the challenges of new technologies.

The potential of cable broadband providers to undermine the policies of both antitrust and intellectual property law is highlighted in an article

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16. *E.g.*, *ebay, Inc. v. Bidder's Edge, Inc.*, 100 F. Supp. 2d 1058, 1064 (N.D. Cal. 2000).

17. No. 99-7654, 2000 U.S. Dist. LEXIS 4553 (C.D. Cal. Mar. 27, 2000).

18. 100 F. Supp. 2d 1058 (N.D. Cal. 2000).

19. O'Rourke, *supra* note 12, at 586. In *Ticketmaster*, for instance, the court focused on the "virtual" nature of a website to find that it could not be trespassed in a traditional legal sense. *Ticketmaster Corp. v. Tickets.com, Inc.*, No. CV99-7654, 2000 U.S. Dist. LEXIS 12987, at \*18 (C.D. Cal. Aug. 10, 2000) (unpublished minute order). In *ebay*, by comparison, the court focused on the tangible nature of a computer to find that the aggregator site could be held to trespass. *ebay*, 100 F. Supp. 2d at 1070.

20. O'Rourke, *supra* note 12, at 586.

21. *Id.* at 605.

by Professor Daniel Rubinfeld and Hal Singer.<sup>22</sup> In their analysis of the recently approved AOL/Time Warner merger, Rubinfeld and Singer describe the substantial advantage the companies stood to gain, before the FTC placed restrictions on the merged company, within the broadband market. Broadband Internet services require consumers to secure access to several inputs, including content, complementary services, connectivity to the Internet from a broadband service provider, and high-speed transport from the home to the Internet service provider.<sup>23</sup> Where AOL had previously faced prohibitive barriers in entering the broadband portal market because unregulated local broadband cable providers sold only their own portal service, it could now access Time Warner's substantial cable lines and exercise dominance.<sup>24</sup>

Rubinfeld and Singer argue that the potential for squashing competition through *conduit discrimination*, limiting distribution of affiliated content and services over rival platforms, and *content discrimination*, blocking or degrading the quality of outside content, in the AOL/Time Warner merger was high.<sup>25</sup> Indeed, Rubinfeld and Singer demonstrate how both companies have a history of discrimination against their rivals. Due to the potential for competitive harm posed by AOL Time Warner, both in terms of the company's ability to discriminate against competitors in all of the broadband inputs and in terms of the company's ability to take advantage of the FCC's unwillingness to regulate broadband cable providers, Rubinfeld and Singer conclude that the FTC's restrictions on the merger were appropriate.<sup>26</sup> Specifically, the FTC required that the combined company open its cable modem platform to unaffiliated portals on nondiscriminatory terms and prohibited the combined company from offering its portal service to any platform that is not already obligated to open access.<sup>27</sup> By issuing these conditions, Rubinfeld and Singer conclude that the underlying policies governing antitrust law were kept intact.

In his article, Professor Jim Chen describes the confusion that remains in the wake of the Telecommunications Act of 1996 with regard to broadband Internet access that enables users to navigate the World Wide Web

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22. See Daniel L. Rubinfeld & Hal J. Singer, *Open Access to Broadband Networks: A Case Study of the AOL/Time Warner Merger*, 16 BERKELEY TECH. L.J. 631 (2001).

23. *Id.* at 635.

24. *Id.* at 639.

25. *Id.* at 634.

26. *Id.*

27. See *In re Inquiry Concerning High-Speed Access to the Internet Over Cable and Other Facilities*, 155 F.C.C.R. 19287, ¶ 14 (2000).

with such speed that enables real-time streaming video.<sup>28</sup> Broadband Internet access is currently available through two different technologies, each carrying with it very different degrees of Federal Communications Commission (“FCC”) regulation. Digital Subscriber Line (“DSL”) service, which accounts for 28 percent of the market, is governed by the 1996 Act, while cable broadband, which accounts for 70 percent of the market, escapes any obligation under the 1996 Act.<sup>29</sup> As a result, cable broadband providers have gone relatively unregulated, increasing the possibility of monopolization and restraint on competition.<sup>30</sup>

While the FCC has passed by the opportunity to seize regulatory control over cable access in several media mergers, Chen argues that the authority to regulate this important technological medium can still be found. Chen looks to the language of the Communications Act of 1934, as amended by the 1996 Act, and federal court decisions to conclude that cable broadband should not be classified as a cable service or a telecommunications service, but as an information service.<sup>31</sup> This classification, along with the FCC’s reliance on its mandate to promote the nation’s “advanced telecommunications capability,” can give the FCC the necessary authority to harmonize the policy pertaining to both DSL and cable broadband.<sup>32</sup> Chen argues that this harmonization is essential to the preservation of competition, innovation, and the dynamic development of the New Economy.<sup>33</sup>

#### IV. ANTITRUST AND INTELLECTUAL PROPERTY LAWS: THEIR EFFECT ON INNOVATION

Another issue of increased concern within the legal community is the role of innovation in the New Economy and its relationship to antitrust and intellectual property law. In particular, while the policies underlying both antitrust and intellectual property support a desire to foster social welfare innovation, each takes a different approach to achieve that end. Whereas antitrust attempts to increase innovation and consumer benefits through the preservation of competition, intellectual property laws hope to increase

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28. See Jim Chen, *The Authority to Regulate Broadband Internet Access over Cable*, 16 BERKELEY TECH L.J. 677 (2001).

29. See Press Release, FCC, Federal Communications Commission Releases Data on High-Speed Data for Internet Access, at 8, tbl.3 (Oct. 31, 2001), [http://www.fcc.gov/Bureaus/Common\\_Carrier/Reports/FCC-State\\_Link/IAD/hspd1000.pdf](http://www.fcc.gov/Bureaus/Common_Carrier/Reports/FCC-State_Link/IAD/hspd1000.pdf).

30. Chen, *supra* note 28, at 682.

31. *Id.* at 708.

32. *Id.* at 712-13.

33. *Id.* at 715.

innovation by providing inventors with limited monopolies and exclusive control over their work. With renewed emphasis on spending money on research and development of new technologies, the proper way to use law to promote and protect innovation is under great scrutiny.

As Professor David McGowan points out in his article, *Innovation, Uncertainty, and Stability in Antitrust Law*,<sup>34</sup> determining the most effective way to apply antitrust and intellectual property laws to innovation is extremely difficult.<sup>35</sup> This is because the relationship between market structure and innovation is complicated and often imperfectly understood. McGowan begins his discussion by relaying the legislative history and intent behind the Sherman Antitrust Act<sup>36</sup> and the Cellar-Kefauver Amendments to the Clayton Act<sup>37</sup> and concludes that Congress failed to resolve conflicts among economic interests affected by the antitrust laws. As a result, courts were left to create a reliable standard.

Analogizing innovation cases of today to the merger cases of the 1960s,<sup>38</sup> McGowan reasons that the uncertainty inherent in applying antitrust and intellectual property law to innovation requires skepticism and a delicate hand on the part of courts.<sup>39</sup> Specifically, he argues that courts should not attempt to use antitrust law to limit the economic protections implicit in intellectual property laws and that they should be guided by total, rather than consumer, surplus.<sup>40</sup> A policy that exercises this caution, McGowan argues, avoids the inherent conflicts in antitrust and intellectual property laws and avoids the unfair favoring of small firms over large firms.<sup>41</sup>

In her article on innovation in the biopharmaceutical industry, Professor Arti Rai echoes McGowan's sentiment about the uncertainty concerning the roles of antitrust and intellectual property in promoting innova-

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34. David McGowan, *Innovation, Uncertainty, and Stability in Antitrust Law*, 16 BERKELEY TECH. L.J. 729 (2001).

35. *Id.* at 733.

36. 15 U.S.C. §§ 1-7 (1994).

37. Clayton Act, ch. 323, 38 Stat. 730 (1914) (codified as amended in scattered sections of 15 U.S.C.); Cellar-Kefauver Act, ch. 1184, 64 Stat. 1125 (1950) (codified as amended in 15 U.S.C. § 18 (1994)).

38. *Brown Shoe Co. v. United States*, 370 U.S. 294 (1962); *United States v. Phila. Nat'l Bank*, 374 U.S. 321 (1963); *United States v. Von's Grocery Co.*, 384 U.S. 270 (1966); *United States v. Pabst Brewing Co.*, 384 U.S. 546 (1966).

39. McGowan, *supra* note 34, at 765.

40. *Id.* at 773.

41. *Id.* at 769.

tion.<sup>42</sup> Limiting her analysis to the specialized area of the biopharmaceutical industry and focusing primarily on patent protection, Rai identifies as a major point of debate the optimal conditions for encouraging innovation. On one side of the debate are theorists who maintain that allowing concentration in the industry most effectively allocates resources. Granting broad intellectual property rights that provide for monopoly power over a particular area of research enables the rightsholder to coordinate efficient development of the invention.<sup>43</sup> On the other side of the debate, competition proponents believe that encouraging the race among competing researchers will yield results that would not occur in a monopolistic environment.<sup>44</sup>

Rai argues that while there is an appeal to the concentration argument, there is a need for the preservation of competition. This is particularly true when the research at issue is far removed, or upstream, from the commercial end product.<sup>45</sup> However, rather than using antitrust law as the primary enforcer of competition, Rai maintains that patent law is competent to serve in this capacity.<sup>46</sup> By using the patent laws to restrict the scope of patents on upstream inventions, competition in research innovation can be protected.<sup>47</sup> Antitrust law can take a secondary role under the “innovation markets theory,” stepping in when there is a threat that a single entity will take control over a fundamental platform technology.<sup>48</sup>

## V. CONCLUSION

A recurring theme at the Symposium and throughout the papers published in this issue is the need to revisit the underlying philosophical foundations from which antitrust and intellectual laws have emerged. Specifically, walking the fine line between antitrust and intellectual property demands that academics, legal practitioners, and government officials keep in mind that the two areas of law often have divergent policy justifications, applications of which vary by and within the same industry. When new types of technology are scrutinized within the context of antitrust and intellectual property laws, careful attention should be paid to the proper role of each area of law. Some types of technology might map appropriately onto a conventional combination of antitrust and intellectual property

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42. See Arti K. Rai, *Fostering Cumulative Innovation in the Biopharmaceutical Industry: The Role of Patents and Antitrust*, 16 BERKELEY TECH. L.J. 813 (2001).

43. *Id.* at 820-21.

44. *Id.* at 825-26.

45. *Id.* at 817.

46. *Id.* at 854.

47. *Id.*

48. *Id.*

laws to achieve the appropriate balance between preserving competition and promoting innovation. Other types of technology might require modification of conventional laws in order to reset the correct balance. As the authors emphasize, and discussion at the Symposium echoed, this evaluation is an enormously difficult task, but one that must be undertaken to ensure the viability of our legal system and the nature of groundbreaking technologies.