INTELLECTUAL PROPERTY POLICY AND COMPETITION POLICY

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I. INTRODUCTION

Discussions among antitrust specialists about the relationship between competition policy and intellectual property policy focus predominantly on the appropriate design and application of antitrust rules to the accumulation and exercise of intellectual property (IP) rights. For that reason, the term "antitrust" is typically equated with the enforcement of prohibitions against anticompetitive business practices. The traditional focus of most competition agencies, including the Federal Trade Commission (FTC), is to bring cases against such practices. Prosecuting antitrust cases is a vital element of a competition policy system. In devising a law enforcement strategy, a competition agency should direct its enforcement resources toward those practices that pose substantial dangers for consumers, and the cessation of which promises the largest rewards for society. Because the role that IP rights play in competitive processes varies substantially from industry to industry,

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^{1.} See, e.g., Herbert Hovenkamp et al., Unilateral Refusals to License in the US, in Antitrust, Patents and Copyrights 12 (Francois Leveque & Howard Shelanski eds., 2005) [hereinafter Leveque & Shelanski] (discussing antitrust implications of refusals to license intellectual property); John Temple Lang, The Application of the Essential Facility Doctrine to Intellectual Property Rights Under European Competition Law, in Leveque & Shelanski at 36.

^{2.} See William E. Kovacic, Institutional Foundations for Economic Legal Reform in Transition Economies: The Case of Competition Policy and Antitrust Enforcement, 77 Chil. Kent L. Rev. 265, 281 (2001) [hereinafter Kovacic, Institutional Foundations] (describing tendency by commentators to equate competition law and policy with prosecution of statutes that forbid various forms of business conduct).

^{3.} See William E. Kovacic, *The Modern Evolution of U.S. Competition Policy Enforcement Norms*, 71 Antitrust L.J. 377, 407–10 (2003) (discussing and criticizing casecentric conception of competition policy).

^{4.} See Interview, More Than Law Enforcement: The FTC's Many Tools—A Conversation with Tim Muris and Bob Pitofsky, 72 Antitrust L.J. 773, 778 (2005) (discussing appropriate priorities for FTC antitrust law enforcement).

identifying such practices often requires extensive study and industry-specific knowledge. 5

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Though important, prosecuting antitrust cases is not the only vital element of a competition policy system. For any specific issue, antitrust enforcement might not always be the sole or even best instrument to use.⁶ Properly understood, sound competition policy encompasses a larger collection of policy tools such as research, advocacy, and education.⁷ One of the most important contributions of a competition policy system is to serve as an advocate within the government, and the country at large, for reliance on pro-competition policies.8 This is true, for instance, when the root of an observed competition policy problem resides in other government regulatory programs that distort the competitive process.⁹ In that case, the competition agency's aim should be to identify first-best solutions, which may involve reforms to the other regulatory regimes. These considerations motivated the FTC's 2003 report on the patent system and its recommendations for judicial and legislative reforms and adjustments to the operations of the Patent and Trademark Office (PTO).¹⁰

The FTC undertook its study of the patent system at a time when the interdependency of competition policy and intellectual

^{5.} See William E. Kovacic & Andreas P. Reindl, An Interdisciplinary Approach to Improving Competition Policy and Intellectual Property Policy, 28 FORDHAM INT'L L.J. 1062, 1089–90 (2005) (discussing importance to competition agencies of pursuing research and analysis agenda concerning IP issues).

^{6.} For example, improving the rigor of the mechanism by which IP rights such as patents are granted may be a superior way to correct competition problems, rather than using lawsuits premised on theories of monopolization or attempted monopolization in order to mandate access to what are arguably improvidently granted IP rights. *See id.* at 1066–67 (2005) (arguing that improvements in rights-granting process is superior, first-best solution to problems sometimes addressed through litigation of antitrust monopolization cases).

^{7.} See William E. Kovacic, The Federal Trade Commission at 100: Into Our 2nd Century: The Continuing Pursuit of Better Practices 110–43 (2009) (discussing application of varied tools to solve competition policy problems); William E. Kovacic, Measuring What Matters: The Federal Trade Commission and Investments in Competition Policy Research and Development, 72 Antitrust L.J. 861 (2005) (discussing importance of policy instruments other than litigation).

^{8.} See generally James C. Cooper et al., Theory and Practice of Competition Advocacy at the FTC, 72 ANTITRUST L.J. 1091 (2005) (discussing accomplishments of FTC's competition advocacy program).

^{9.} See Kovacic & Reindl, supra note 5, at 1064–66 (discussing how imperfections in system for granting IP rights can distort competition).

^{10.} Fed. Trade Comm'n, To Promote Innovation: The Proper Balance of Competition and Patent Law and Policy (October 2003) [hereinafter FTC IP Report], available at http://www.ftc.gov/os/2003/10/innovationrpt.pdf.

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property regimes was becoming more apparent due to the growth and increasing commercial significance of high technology and other IP-intensive industries.¹¹ There is broad agreement that the two systems are complementary in their efforts to promote innovation and consumer welfare.¹² Most observers also agree that the two systems use different methods to promote these goals and are not always equally successful in their promotion.¹³ Better coordination is needed to ensure that both can more effectively encourage innovation and competition.

IP regimes (and in particular the patent system) and competition law and policy intersect—and therefore require coordination—in at least two areas. On the one hand, competition enforcement affects how patent owners can use their rights. Poorly functioning antitrust law at the patent interface can harm IP-driven innovation. The FTC and the Department of Justice Antitrust Division released a joint report in April 2007 that examined these issues. ¹⁴ On the other hand, systemic problems in the rights-granting process can also distort competition and chill innovation. This latter issue is the subject of the FTC report on the patent system on which I will focus in this Article.

II. THE NEED TO BALANCE PATENT AND COMPETITION POLICY

Patents stimulate innovation by providing incentives to develop and commercialize inventions. Without patent protection, innova-

^{11.} See Francois Leveque & Howard Shelanski, Introduction, in Leveque & Shelanski, supra note 1, at xvi–xvii (describing context in which FTC prepared report in 2003 about patent system).

^{12.} See Atari Games Corp. v. Nintendo of Am., Inc., 897 F.2d 1572, 1576 (Fed. Cir. 1990) ("[T]he aims and objectives of patent and antitrust laws may seem, at first glance, wholly at odds. However, the two bodies of law are actually complementary, as both are aimed at encouraging innovation, industry and competition.") (citing Loctite Corp. v. Ultraseal Ltd., 781 F.2d 861, 876–77 (Fed. Cir. 1985)).

^{13.} See, e.g., Michael A. Carrier, Resolving the Patent-Antitrust Paradox Through Tripartite Innovation, 56 Vand. L. Rev. 1047, 1049–53 (2003) (discussing different approaches to innovation taken by patent and antitrust law); Timothy J. Muris, Remarks before the American Bar Association Antitrust Section Fall Forum 2 (Nov. 15, 2001) (transcript available at http://www.ftc.gov/speeches/muris/intellectual.htm) (discussing limitations of antitrust and IP regimes as policy tools).

^{14.} U.S. Dep't of Justice & Fed. Trade Comm'n, Antitrust Enforcement and Intellectual Property Rights: Promoting Innovation and Competition 33, available at http://www.ftc.gov/reports/innovation/P040101Promoting InnovationandCompetitionrpt0704.pdf.

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tors who produce intellectual property may not be able to appropriate the full benefits of their innovation because competitors are able to "free ride" on the innovators' efforts. In the pharmaceutical industry, for instance, patents enable companies to cover their fixed costs and regain the high levels of capital they invest in research and development (R&D).¹⁵ Following the initial innovation, patent rights often allow inventors to attract funding and develop relationships needed to commercialize the invention. Many biotechnology companies, for example, conduct basic research to identify promising products and then partner with a pharmaceutical company to test and commercialize the product.¹⁶ Patent protection can be essential to attract funds from capital markets, and facilitate licensing and joint venture relationships.¹⁷ Moreover, the public disclosure of scientific and technical information made through a patent can stimulate further scientific progress.¹⁸

Competition also plays an important role in stimulating innovation and spurs invention of new products and more efficient processes. Competition drives firms to identify consumers' unmet needs and develop new products or services to satisfy them. In some industries, firms race to innovate in hopes of exploiting first-mover advantages. Companies strive to invent lower-cost manufacturing processes, thereby increasing their profits and enhancing their ability to compete. Pepresentatives of computer hardware and software companies reported that competition, more than patent protection, drives innovation in their industries. Pepresentatives.

To optimally foster innovation, patent and competition policy must work together. Errors or systematic biases in how one policy's rules are interpreted and applied disrupt the other policy's effectiveness. It is important to note that the FTC Report confirms that patents play an important role in promoting innovation.²¹ Nonetheless, it also raises concerns about the ability of those patents of questionable quality—those that are invalid or overly broad—to distort competition and harm innovation in several ways.

^{15.} FTC IP REPORT, supra note 10, Ch. 3 at 9.

^{16.} For example, the role of the patent system in attracting investment in the biopharmaceutical industry is examined in Fed. Trade Comm'n, Emerging Health Care Issues: Follow-On Biologic Drug Competition 28–30 (June 2009).

^{17.} FTC IP REPORT, supra note 10, Ch. 3 at 15, 17-18.

^{18.} Id. Ch. 2 at 3-7.

^{19.} *Id.* at 9–12.

^{20.} Id. Ch. 3 at 31-32, 46.

^{21.} Id. Executive Summary at 2.

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First, they may slow follow-on innovation by discouraging firms from conducting R&D in areas that the patent improperly covers.²² When firms fear that they will infringe a questionable patent, the substantial costs and risks of litigation may persuade them to direct their resources into other areas. For example, biotechnology firms reported that they avoid infringing questionable patents and therefore will refrain from entering or continuing with a particular field of research that such patents appear to cover.²³ Such conditions deter market entry and follow-on innovation by competitors and increase the potential for the holder of a questionable patent to suppress competition.

Second, patents that should not have been granted raise costs when they are challenged in litigation.²⁴ If a competitor chooses to pursue R&D in the area covered by the patent without a license, it risks expensive and time-consuming litigation with the patent holder that wastes resources.²⁵ Questionable patents may also raise costs by inducing unnecessary licensing. If a competitor chooses to negotiate a license and pay royalties to avoid costly and unpredictable litigation, the costs of follow-on innovation and commercial development increase due to the unjustified royalties and transac-

If litigation does take place, it typically costs millions of dollars and takes years to resolve. The median cost to each party of proceeding through a patent infringement suit to a trial verdict is at least \$500,000 when the stakes are relatively modest. When more than \$25 million is at risk in a patent suit, the median litigation cost for the plaintiff and the defendant is \$4 million each; and in the highest-stakes patent suit, costs can exceed this amount by more than fivefold.

A PATENT SYSTEM FOR THE 21st CENTURY 68 (Stephen A. Merrill et al. eds., 2004), available at http://www.nap.edu/html/patentsystem [hereinafter PATENT SYSTEM]; see also FTC IP REPORT, supra note 10, Ch. 3 at 21–22, Ch. 5 at 2–3.

^{22.} Carl Shapiro, *Navigating the Patent Thicket: Cross Licenses, Patent Pools, and Standard-Setting, in* Innovation Policy and the Economy 119, 126 (Adam B. Jaffe et al. eds., 2001).

^{23.} FTC IP REPORT, supra note 10, Ch. 3 at 21-22.

^{24.} *Id.* Ch. 5 at 2. "Large and small companies are increasingly being subjected to litigation (or its threat) on the basis of questionable patents." *United States Patent and Trademark Office Fee Modernization Act of 2003: Hearing on H.R. 1561 Before the Subcomm. on Courts, the Internet, and Intellectual Prop. of the H. Comm. on the Judiciary, 108th Cong. 13 (2003) (statement of Michael K. Kirk, Executive Director, American Intellectual Property Law Association), available at http://www.aipla.org/Content/ContentGroups/Legislative_Action/108th_Congress1/Testimony2/Testimony_on_Fee_Legislation.htm.*

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tion costs. 26 Questionable patents particularly contribute to increased licensing costs in industries with "patent thickets." 27

Finally, firms facing patent thickets may spend resources obtaining "defensive patents," not to protect their own innovation from use by others, but to have "bargaining chips" to obtain access to others' patents through a cross-license, or to counter allegations of infringement. Some hearing participants believed that companies spend too many resources on creating and filing these defensive patents, instead of focusing on developing new technologies.²⁸ This is especially true when defensive patenting is conducted in response to, or results in, questionable patents.²⁹

III. RECOMMENDATIONS OF THE FTC IP REPORT

The FTC Report went beyond identifying ways in which flaws in the patent system undermine the ability of competition to promote innovation. It also recommended changes to help restore the balance of patent and competition policy. The courts have implemented some of these changes. Features of other recommendations have been incorporated into the pending patent reform legislation and rules changes proposed by the PTO.

Just as significant as the Report's specific recommendations, however, is its central theme on the need for patent policy to consider the value of competition in promoting innovation. Policymakers are increasingly incorporating that theme into the public debate on the appropriate scope of patent rights, as can be seen in a string of Supreme Court cases decided since the Report's release.

A. Recommendations to Minimize Issuance of Questionable Patents

The goal of the first group of recommendations was to minimize the issuance of questionable patents. In particular, the Report

^{26.} See Mark A. Lemley, Rational Ignorance at the Patent Office, 95 Nw. U. L. Rev. 1495, 1517 (2001) ("Patent owners might try to game the system by seeking to license even clearly bad patents for royalty payments small enough that licensees decide that it is not worth going to court."); Shapiro, supra note 22, at 125; FTC IP REPORT, supra note 10, Ch. 5 at 2–3.

^{27.} A "patent thicket" is a "dense web of overlapping intellectual property rights that a company must hack its way through in order to actually commercialize new technology." *See* Shapiro, *supra* note 22, at 120.

^{28.} FTC IP REPORT, supra note 10, Executive Summary at 6–7 (citing FTC/DOJ Hearings to Highlight Business and Economic Perspectives on Competition and Intellectual Property Policy, statement of R. Jordan Greenhall, CEO, Divx Networks, Feb. 27, 2002 at 377, 420).

^{29.} Id. Ch. 3 at 53-54.

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recommended a tightening of the legal standards used to judge when a patent is obvious. The Supreme Court's decision in *KSR International Co. v. Teleflex Inc.*³⁰ directly addressed this issue.

As the Supreme Court explained in a seminal case, *Graham v. John Deere Co.*,³¹ the goal of the statutory nonobviousness requirement is to provide a "means of weeding out those inventions which would not be disclosed or devised but for the inducement of a patent," and allow a patent only on those.³² Because the requirement serves a crucial role as the primary gatekeeper, preventing the issuance of trivial patents having negative effects on competition and innovation, it is essential that the obviousness standard not be compromised.

The FTC Report identified the Federal Circuit's "teaching, suggestion, or motivation test" as a doctrine that compromised the obviousness standard because it required concrete suggestions to make a patented invention beyond those actually needed by a person with ordinary skill in the art. For that reason, the Report recommended that the obviousness analysis should better take into account the creativity and problem-solving skills of that person, including the ability to combine and modify the prior art.³³

In KSR, the Supreme Court rejected the "teaching, suggestion or motivation test," calling it a "rigid rule that limits the obviousness inquiry" by overemphasizing the importance of published articles but failing to take account of the common sense and creativity of patent law's "person of ordinary skill in the art."³⁴ Affirming the role of the marketplace in promoting innovation, the Court stated that "[i]n many fields it may be that there is little discussion of obvious techniques or combinations, and it often may be the case that market demand, rather than scientific literature, will drive design trends."³⁵ Applying a common sense approach, the Court explained that if a person of ordinary skill in the art pursues a "predictable solution" and attains "anticipated success," the result is likely not the product of "innovation but of ordinary skill and common sense."³⁶

In reaching this holding, the Court discussed the detrimental effects of obvious patents on innovation and the need to maintain

^{30. 550} U.S. 398 (2007).

^{31. 383} U.S. 1 (1966).

^{32.} Id. at 11.

^{33.} FTC IP Report, supra note 10, Executive Summary at 11–12, Ch. 4 at 15.

^{34.} KSR, 550 U.S. at 418-20.

^{35.} Id. at 419.

^{36.} Id. at 421.

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the proper balance of patent and competition policy. An obvious patent withdraws from the public what is already known and diminishes the resources available to support innovation.³⁷ The Court warned that "the results of ordinary innovation are not the subject of exclusive rights under the patent laws. Were it otherwise patents might stifle, rather than promote, the 'progress of useful arts' contemplated in our Constitution."³⁸

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Two other FTC recommendations that sought to minimize the issuance of questionable patents focused on the PTO. The first was to provide adequate funding for the PTO.³⁹ This recommendation, more than any other, received universal support from the patent community. The second recommendation suggested modifying PTO rules to help get additional and better information to patent examiners.⁴⁰ The basis for the recommendation recognized the time constraints under which patent examiners must work and the fact that patent applicants often have more knowledge of the technology and prior art than do examiners. Finding more efficient procedures for sharing that information with examiners would improve patent quality, to the benefit of everyone.

B. Recommendations Supporting the Elimination of Questionable Patents

A second group of recommendations sought to bolster a challenger's ability to eliminate questionable patents after they issue. 41 A key recommendation in this category suggested legislation to create a new administrative procedure for post-grant review and opposition to patents. 42

- 37. Id. at 415–16.
- 38. Id. at 427.
- 39. FTC IP REPORT, supra note 10, Executive Summary at 12.
- 40. Id. at 13.
- 41. One recommendation falling within this category proposed legislation specifying that validity challenges be decided based on a "preponderance of the evidence" rather than "clear and convincing evidence." Although that controversial proposal has not been considered in legislation, challengers have raised it in court. See Petition for Writ of Certiorari, Microsoft Corp. v. z4 Techs., Inc., 507 F.3d 1340 (Fed. Cir. 2007) (No. 07-1243), cert. dismissed, 128 S. Ct. 2107 (No. 07-1243); see also KSR Int'l Co. v. Teleflex Inc., 550 U.S. 398, 426 (2007) (finding it "appropriate to note" that rationale underlying Federal Circuit's "clear and convincing" standard—"that the PTO, in its expertise, has approved the claim—seems much diminished" when defense of invalidity rests on evidence that PTO never considered).
 - 42. FTC IP Report, *supra* note 10, Executive Summary at 7.

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The Report argued that existing means for challenging questionable patents are inadequate. Patent prosecution is ex parte, involving only the PTO and the patent applicant, even though third parties in the same field as a patent applicant may have the best information and expertise with which to assist in the evaluation of a patent application. To enhance third-party involvement, Congress established limited *inter partes* reexamination procedures that allow third parties to participate in patent reexaminations.⁴³ Recent amendments have improved those procedures, but they still contain important restrictions and disincentives for their use.⁴⁴ Once a questionable patent has issued, the most effective way to challenge it is through litigation, but that path is extremely costly and lengthy. It is not an option unless the patent owner has asserted the patent against the potential challenger.

For these reasons, the FTC Report recommended institution of a meaningful post-grant review and opposition procedure and identified several characteristics that might contribute to its success. To be meaningful, post-grant review should be allowed to address important patentability issues, including novelty, nonobviousness, written description, enablement, and utility. An administrative patent judge should preside over the proceeding, which should allow cross-examination and carefully circumscribed discovery. Proceedings should be subject to a time limit and the use of appropriate sanctions authority. Patent applicants must be protected against undue delay in requesting post-grant review and against harassment through multiple petitions for review. The review petitioner should be required to make a suitable threshold showing. Finally, settlement agreements resolving post-grant proceedings should be filed with the PTO and, upon request, made available to other government agencies.⁴⁵

The recommendation to institute a post-grant review process received broad support throughout the patent community, even though there is some disagreement on the details of how the process should work.46 Patent reform legislation pending in both the

^{43.} Optional Inter Partes Reexamination Procedure Act of 1999, Subtitle F (Optional Inter Partes Reexamination Procedures) of Tit. IV (American Inventors Protection Act of 1999), §§ 4601-08 of Intellectual Property and Communications Omnibus Reform Act of 1999, Pub. L. No. 106-113, Division B, Appendix I (S.1948), 106th Cong., 1st Sess., 113 Stat. 1501A-521, 1501A-567 to 1501A-572 (Nov. 29, 1999), inter alia, adding 35 U.S.C. Ch. 31, §§ 311–318.

^{44.} FTC IP REPORT, *supra* note 10, Ch. 5 at 15–17.

^{45.} *Id.* at 17–24.

^{46.} See United States Patent and Trademark Office, Action Paper on Post-Grant Review of Patent Claims (2003), available at http://www.uspto.gov/

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House and the Senate contains provisions establishing post-grant review.⁴⁷

Although not related to a specific FTC recommendation, a second development is worth mentioning because it demonstrates the Supreme Court's awareness of the need to consider competition principles in forming patent policy. Just as the Court's KSR decision emphasized the importance of avoiding the issuance of questionable patents, the Court's decision in MedImmune v. Genetech⁴⁸ recognized the harm caused by those that do issue and the need to eliminate them. *MedImmune* allows a patent licensee to challenge a patent's validity through a declaratory judgment action because the harm of paying royalties on an invalid patent generates a "substantial controversy between parties having adverse legal interests," and so satisfies the Constitutional standing requirement.⁴⁹ As the Court explained in Lear v. Adkins,50 an earlier case allowing a licensee to challenge patent validity, allowing such challenges to questionable patents vindicates "the important public interest in permitting full and free competition in the use of ideas which are in reality a part of the public domain."51

C. Recommendations Supporting the Disclosure Function of Patents

A third group of recommendations sought to promote the disclosure, teaching, and notice functions of patents. Providing reliable and early notice of the subject matter a patent covers enhances business certainty for competitors who wish to avoid infringement. The Report recommended that Congress enact legislation to require publication of all patent applications eighteen months after filing.⁵² Both the House and Senate versions of patent reform legislation contain such a provision.⁵³

web/offices/com/strat21/action/sr2.htm (comparing pros and cons of various approaches to twelve different review process issues); American Intellectual Prop Ass'n, AIPLA Response to the October 2003 Federal Trade Commission Report 2–4 (2004), available at http://www.aipla.org/Content/ContentGroups/Issues_and_Advocacy/Comments2/Patent_and_Trademark_Office/2004/ResponseToFTC.pdf; Patent System, supra note 25, at 96–101.

- 47. Patent Reform Act, H.R. 1908, 110th Cong. § 6 (2007); S. 1145, 110th Cong. (2007).
 - 48. 549 U.S. 118 (2007).
- 49. *Id.* at 127 (quoting Maryland Casualty Co. v. Pacific Coal & Oil Co., 312 U.S. 270, 273 (1941)).
 - 50. 395 U.S. 653 (1969).
 - 51. Id. at 670.
 - 52. FTC IP Report, supra note 10, Executive Summary at 15.
 - 53. H.R. 1908; S. 1145.

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To promote the disclosure function of patents, the FTC Report also recommended that Congress establish two alternative predicates for finding willful infringement. The patentee must show either actual written notice of infringement from the patentee sufficient to support declaratory judgment jurisdiction or deliberate copying of the patentee's invention. This recommendation was necessary because some firms complained that they do not read their competitors' patents out of concern for treble damage liability.⁵⁴ Failure to read competitors' patents can harm innovation and competition by undermining one of the primary benefits of the patent system—the public disclosure of new inventions. This encourages wasteful duplication of effort, delays follow-on innovation that could derive from patent disclosures, and discourages the development of competition. Failure to read competitors' patents also thwarts rational and efficient business planning and can jeopardize plans for a non-infringing business or research strategy. The FTC's recommendation would permit firms to read patents for their disclosure value and to survey the patent landscape to assess potential infringement issues, yet retain a viable willfulness doctrine that protects both wronged patentees and competition.⁵⁵ Both the House and Senate versions of patent reform legislation contain such a provision.⁵⁶

In recent years, the Federal Circuit has raised the threshold for willful patent infringement. In *In re Seagate Technologies, Inc.*,⁵⁷ the court abandoned the nearly 25-year-old "duty of due care" standard and held that proof of willful infringement requires "at least a showing of objective recklessness." To establish entitlement to treble damages, a patentee must show that accused infringer knew or should have known of an objectively high likelihood that its actions constituted infringement of a valid patent. This case significantly decreases the likelihood that any firm will be found liable for willful infringement. Whether legislation is still needed will depend on whether firms are now sufficiently comfortable that they will read patents for their disclosure value.

Another recommendation of the FTC Report that related to the disclosure function of patents and rational business planning addressed continuation applications. By filing a continuation application, a patent applicant literally "continues" the prosecution of an

^{54.} FTC IP Report, supra note 10, Executive Summary at 16-17.

^{55.} Id. Ch. 5 at 31.

^{56.} H.R. 1908; S. 1145.

^{57. 497} F.3d. 1360 (Fed. Cir. 2007).

^{58.} Id. at 1371.

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application after an examiner either finally rejects or allows a patent application. Patent applicants frequently use continuation applications to pursue additional patents having claims of different scope than those previously allowed or rejected by the examiner. But some applicants have used multiple continuations as a strategy to continue patent prosecution so that they can later add claims based on new products discovered in the marketplace. The FTC proposed legislation to establishing prior user rights to protect the manufacturer of the new product in that situation.⁵⁹

D. Recommendation to Consider Economics in Setting Policy

The final recommendation encouraged consideration of competition and economics in shaping patent policy. Many of the changes and proposed changes to the patent system that I have mentioned do exactly that. Although it does not relate to a more specific FTC recommendation, another important example of an analysis that considers economics stems from the Supreme Court's decision in *eBay v. MercExchange*. In *eBay*, as in *KSR* and *MedImmune*, the Court again demonstrated a concern for the balance between patents and competition as the best means to promote innovation.

In *eBay*, the Court rejected the prevailing rule that courts must issue permanent injunctions against patent infringement except in exceptional circumstances. The Court held that instead "these familiar principles [of equity] apply" in patent cases.⁶¹ Those principles require that a patent owner seeking a permanent injunction satisfy the traditional four-factor equitable test that examines irreparable injury, the adequacy of money damages, the balance of hardships, and the public interest.⁶²

The content and flexibility of this test plays directly to the central theme of the FTC Report—the need to restore balance between competition and patent policy. The test allows consideration of the role of exclusivity and competition in promoting innovation, and the need to appropriately compensate patentees in order to provide incentives to innovate without unduly burdening competition. Analyzing these issues requires understanding the place of patents in the economic landscape faced by the parties, a topic that the FTC Report examines in depth.

^{59.} FTC IP REPORT, supra note 10, Executive Summary at 16.

^{60. 547} U.S. 388 (2006).

^{61.} Id. at 391.

^{62.} Id.

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In many cases, the patent owner's right to maintain control over the invention by obtaining an injunction is critical to its ability to appropriate the invention's value. A patent owner's goal may be to exclusively commercialize its own invention, as is often the case in the pharmaceutical industry.⁶³ Alternatively, a patent owner's goal may be to license its patent to another firm exclusively so that the licensee will have sufficient incentives to develop and commercialize the invention, as is more common in the biotechnology industry.⁶⁴

In other cases, however, the threat of an automatic, permanent injunction can cause "hold-up." Hold-up typically arises when a patentee asserts its patent after the accused infringer has sunk substantial costs into design, development, and commercialization without knowledge of the patent. The threat of an automatic injunction following expensive patent litigation increases the patentee's leverage in the licensing negotiations beyond the value of the patent's inventive contribution and leads to higher royalties. This dynamic can be especially problematic when the patented invention is only a small component of the infringing product.⁶⁵ Justice Kennedy's concurrence, joined by three others, noted these problems and cited the FTC Report in support.⁶⁶ The concurrence explains that, for patent owners proposing nonexclusive licenses, "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."67

Since the Supreme Court issued its *eBay* decision, district courts have applied its equitable test in deciding whether to award a permanent injunction to a patent owner more than forty times.⁶⁸ They have taken variable approaches to the analysis, and the law in this area is still developing.⁶⁹

^{63.} FTC IP REPORT, supra note 10, Ch. 3 at 11-12.

^{64.} Id. at 15, 17-18.

^{65.} Id. Ch. 2 at 29, Ch. 3 at 37-38, 40.

^{66.} *eBay Inc.*, 547 U.S. at 396 (Kennedy, J., concurring). The United States' amicus brief, prepared with input from FTC staff, iterated these points. Brief for the United States as Amicus Curiae Supporting Respondent at § I.C. *eBay Inc. v. MercExchange L.L.C.*, 547 U.S. 388 (2006) (No. 05-130), 2006 WL 622120.

^{67.} eBay Inc., 547 U.S. at 396 (Kennedy, J., concurring).

^{68.} See Joseph Miller, Injunctions, The Fire of Genius (Nov. 8, 2010, 12:00 PM), http://www.thefireofgenius.com/injunctions/ (listing court decisions to grant or deny injunctions in patent cases).

^{69.} In some cases, courts have simply held that irreparable harm exists, without further discussion, where a firm offers an infringing product in direct competition with the patent holder. *See, e.g.*, O2 Micro Int'l Ltd. v. Beyond Innovation Technology Co., No. 2-040CV-32 (TJW), 2007 WL 869576, at *2 (E.D. Tex. Mar.

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IV. CONCLUSION

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Much has changed in the world of patent law and policy since the FTC released its Report in 2003. More changes seem likely. Perhaps the most significant change, however, is the increased awareness that to promote maximum levels of innovation, we must understand the complex mechanisms through which patents and competition work together to drive innovation, consumer welfare, and our nation's prosperity. Policymakers seem to have reached a consensus that allowing more patents having greater breadth in more industries is not the best way to achieve our common goals.

But the questions raised by the quest to achieve the optimal balance of patent and competition policy are complex and always changing. They require continual study as industry dynamics shift, new business models emerge, and the law evolves. For that reason, the FTC has continued to study the role of patents and competition in promoting innovation, for the dual purposes of informing our antitrust enforcement actions and identifying opportunities for advocacy on patent issues. In 2008, the FTC held a workshop to examine the changes to the patent system since the Report's release and the implications of those changes for the Report's recommendations. Only by carefully considering the road we have traveled can we formulate the best plan for moving forward.

^{21, 2007),} rev'd on other grounds, 521 F.3d 1351, 1366 (Fed. Cir. 2008) (granting permanent injunction). Without further explanation, the court stated that "[t]he availability of the infringing products leads to loss of market share for plaintiff's products." Id. (quoting Tivo v. EchoStar Communications Corp., 446 F. Supp. 2d 664, 669 (E.D. Tex. 2006) (internal quotation marks omitted)). In others, they demand a full showing of harm, complete with economic analysis. See, e.g., Praxair, Inc. v. ATMI, Inc., 479 F. Supp. 2d 440, 443–44 (D. Del. 2007) (denying injunction because plaintiff did not provide any "specific sales or market data to assist the court, nor has it identified precisely what market share, revenues, and customers Praxair has lost to ATMI").

^{70.} See Press Release, Federal Trade Commission, FTC Announces First in Series of Hearings on Evolving Intellectual Property Marketplace (Nov. 6, 2008), http://www.ftc.gov/opa/2008/11/ipmarketplace.shtm.