

BACKGROUND MATERIALS

ALIGNING COMPETITION POLICY AND PATENT POLICY: A PERSPECTIVE FROM THE FEDERAL TRADE COMMISSION STAFF

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These materials provide background on certain work undertaken by the Federal Trade Commission to examine the alignment between competition policy and patent policy. In recognition of the growing significance of patents in the knowledge-based economy, the FTC and the U.S. Department of Justice have conducted a series of hearings intended to study the relationships among innovation, competition policy, and patents. The FTC in October 2003 released the first of two reports derived from the hearings. *To Promote Innovation: The Proper Balance of Competition and Patent Law and Policy*¹ addresses the balance among competition and patent policies and makes recommendations for the patent system to maintain that balance. The FTC and DOJ have announced plans jointly to release a second report that will make recommendations for antitrust enforcement to maintain its balance with the patent system, so as to ensure that the application of antitrust law does not undermine the innovation that the patent system promotes.

* These views are those of the speaker and do not necessarily represent the position of the Federal Trade Commission or of any individual Commissioner.

¹ Federal Trade Commission, *To Promote Innovation: The Proper Balance of Competition and Patent Law and Policy* (October 2003), available at <http://www.ftc.gov/opa/2003/10/cpreport.htm> [hereinafter Report]. The transcripts of the hearings underlying the report and materials submitted by participants are available at <http://www.ftc.gov/opp/intellect/index.htm>.

Part I of these materials describes the objectives of the first Report and the process used to develop the Report. Part II summarizes the Report's basic findings and recommendations. Part III briefly reviews similar findings and recommendations issued by a panel of the National Academy of Sciences, and it then turns to a pending legislative proposal that incorporates key aspects of three recommendations made by the FTC and the NAS.

I. THE FTC'S REPORT ON THE PATENT SYSTEM

The FTC has a dual role: it is an enforcement agency, and it has a mandate to identify and study issues related to competition policy. The agency undertook the Report on the patent system, and the hearings underlying it, under both of these roles. The initiative was not unique; parallel reports and hearings examined the relationship between competition policy and other important areas of governmental policy.² Most of the United States economy is organized around the principle of competition through free enterprise and open markets, and our enforcement experience is that competition among firms generally provides the most suitable economic environment for delivering optimal prices, quantity, and quality of goods and services for the public.³

A. The Relationship between Competition and Patent Law and Policy

Both competition and patent policy can stimulate innovation. Innovation, in turn, benefits the public through the development of new and improved goods, services, and processes. An economy's capacity for invention and innovation helps to drive its economic growth and to increase its citizens' standard of living.

Competition among firms can spur the invention of new or better products or more efficient processes. Firms may race to be the first to invent and patent an innovative technology. In some industries, firms often innovate to exploit first-mover advantages. Companies may invent lower-cost manufacturing processes, thereby increasing their profits and enhancing their ability to compete. Competition can prompt firms to identify consumers' unmet needs and develop new products or services to satisfy them.⁴

² The Commission's 2002 study of delayed market entry by generic drugs, *Generic Drug Entry Prior to Patent Expiration*, provides another example of how the agency can shape the policy environment by bringing a competition perspective to bear on an area of government policy. Available at <http://www.ftc.gov/os/2002/07/genericdrugstudy.pdf>. The FDA promulgated regulations adopting some of the recommendations of that study, see *Applications for FDA Approval to Market a Drug*, 68 Fed. Reg. 36,675 (June 18, 2003), and Congress implemented other recommendations by amending the Hatch-Waxman Act through the Medicare Prescription Drug, Improvement, and Modernization Act of 2003, Pub. L. No. 108-172, §§ 1110-12.

³ Antitrust law, codified in the Sherman Act, the FTC Act, and other statutes, seeks "to maximize consumer welfare by encouraging firms to behave competitively." I PHILLIP E. AREEDA & HERBERT HOVENKAMP, *ANTITRUST LAW: ANALYSIS OF ANTITRUST PRINCIPLES AND THEIR APPLICATION* ¶100a, at 4 (2000).

⁴ Report, Ch. 2, at 9-12.

At the hearings underlying the FTC's Report, many participants representing computer hardware companies observed that competition, rather than patent protection, drives innovation in their industries.⁵ In the semiconductor industry, for instance, obtaining lead-time over rivals, which is a function of the competitive process, and trade secret protection provide the key mechanisms for appropriating returns on R&D investments.⁶ Representatives of software and internet companies made similar observations that competition to commercialize the most recent technological advance provides the primary driver of innovation.⁷ In the pharmaceutical industry also, the competition spurred by entry of a generic drug product has forced brand-name firms to invent new products to replenish their revenue streams.⁸

Patent policy also can stimulate innovation. To qualify for a patent, a product, process, machine, or composition of matter must be novel, non-obvious, and useful. Economists recognize that without patent protection, innovators that produce intellectual property cannot appropriate the full benefits of their innovation. Others may "free ride" on the innovator's efforts. Following the initial innovation, patent rights may make it easier for inventors to develop relationships with others to invest in the further development needed to commercialize the invention. Thus, like competition policy, patent policy serves to benefit the public by providing an incentive to develop and commercialize inventions with substantial utility. Moreover, the public disclosure of scientific and technical information through the patent system can stimulate further scientific progress.⁹

For example, at the hearings underlying the Report, representatives from the pharmaceutical industry stated that patent protection is indispensable in promoting pharmaceutical innovation for drug products containing new chemical entities. By preventing rival firms from free riding on the innovating firms' discoveries, patents can enable pharmaceutical firms to cover their fixed costs and regain the high levels of capital they invest in

⁵ Report, Ch. 3 at 31-32. *See, e.g., FTC/DOJ Hearings on Competition and Intellectual Property Law and Policy in the Knowledge-Based Economy* 673-74 (Feb. 28, 2002) (testimony of Robert Barr) ("[Cisco System's] growth was obviously not fueled by patents, it was fueled by competition and by open, nonproprietary interfaces.") [hereinafter, citations to transcripts of these hearings state the speaker's last name, the date of testimony, and relevant page(s)]; Rhoden 2/28 at 754 ("[C]ompetition is what drives ... innovation; patents have almost nothing to do with innovation."); Zanfagna 3/20 at 90 ("[I]nnovation is driven by competition in all of our markets."); Detkin 2/28 at 751 ("[T]he clear driving force behind innovation is competition.").

⁶ Report, Ch. 3 at 31 (*citing* W.M. Cohen et al., *Protecting Their Intellectual Assets: Appropriability Conditions and Why U.S. Manufacturing Firms Patent (Or Not)* (National Bureau of Econ. Research Working Paper No. 7552, 2000), *available at* <http://papersdev.nber.org/papers/27552>).

⁷ Report, Ch. 3 at 46. Kohn 2/27 at 350 ("[I]nnovation generally is promoted by competition."); *see also* Chaikovsky 2/27 at 385; Friedman 2/27 at 354; Musacchia 4/9 at 44-45; Stallman 4/9 at 17-18.

⁸ Report, Ch. 3 at 11 (*citing* Glover 3/19 at 146).

⁹ *See* Report, Ch.2 at 3-7.

research and development efforts.¹⁰ At the same hearings, representatives from the biotechnology industry explained that many biotechnology companies conduct basic research to identify promising products, and then partner with a pharmaceutical company to test and commercialize the product. They seek patent protection to attract investment from capital markets and to facilitate inter-firm relationships, such as licensing and joint ventures, necessary for commercial development of their inventions.¹¹

Although both competition and patent policy can foster innovation, each requires a proper balance with the other to do so. The Supreme Court recognized that the desire for balance is imbedded within the Constitution, when it explained, “The Patent Clause itself reflects a balance between the need to encourage innovation and the avoidance of monopolies which stifle competition without any concomitant advance in the ‘Progress of Science and useful Arts.’”¹² Failure to strike the appropriate balance can harm innovation. Errors or systematic biases in how one policy’s rules are interpreted and applied can harm the other policy’s effectiveness. For example, if patent law were to allow patents on “obvious” inventions, it could thwart competition that might have developed based on the obvious technology. Conversely, competition policy can undermine the innovation that the patent system promotes if overzealous antitrust enforcement restricts the procompetitive use of a valid patent. For these reasons, the Report and underlying hearings considered, among other things, how to foster recognition of the value of competition within the patent system.

B. How the FTC Developed the Report

To examine the current balance of competition and patent law and policy, the FTC and the DOJ held hearings from February through November 2002. The hearings took place over 24 days and involved more than 300 panelists, including business representatives from large and small firms and the independent inventor community; leading patent and antitrust organizations; leading antitrust and patent practitioners; and leading scholars in economics and antitrust and patent law. In addition, the FTC received about 100 written submissions. Business representatives were mostly from high-tech industries: pharmaceuticals, biotechnology, computer hardware and software, and the Internet. The Report discusses hearings testimony and independent research, and it explains the Commission’s conclusions about and recommendations for the patent system.

¹⁰ Report, Ch. 3 at 11-12.

¹¹ Report, Ch. 3 at 15, 17-18.

¹² *Bonito Boats v. Thunder Craft Boats, Inc.*, 489 U.S. 141, 146 (1989).

II. FINDINGS AND RECOMMENDATIONS OF THE REPORT

A. The Findings

The Report explains in detail the relationship between competition and patent law and policy, focusing on rapidly advancing industries such as biotechnology and the computer industry. As explained above, the FTC Report and the hearings underlying the Report confirmed that both competition and patent policy can foster innovation. Each requires a proper balance with the other to do so, however. For the most part, the patent system achieves a proper balance with competition policy. Nonetheless, many observers of the patent system expressed concern that certain attributes of the patent system are misaligned with competition policy.

One issue stood out at the hearings for the widespread agreement it generated among panelists: the importance of patent quality. Panelists repeatedly discussed patent quality and its fundamental determinants, such as the procedures through which patents are examined, reexamined, and litigated. They raised concerns about the number of questionable patents issued.¹³ Competition and consumers are not served if patents are undeservedly granted. An important goal of the patent system 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 patents only on those.¹⁴ Patents on obvious technology “hav[e no] social benefit[,] because . . . others would have developed the idea even without the incentive of a patent.”¹⁵ Patents of questionable validity or having overly broad claims can impair competition, innovation, and the economy. They present a significant concern because they can cause unwarranted market power, unjustifiably increase costs, and hamper competition that otherwise would stimulate innovation

Questionable patents can have at least three economic consequences. First, they may slow follow-on innovation by discouraging firms from conducting research and development in areas that the patent improperly covers.¹⁶ For example, firms in the biotech industry 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.¹⁷ Such effects

¹³ A poor quality or questionable patent is one that is likely invalid or contains claims that are likely overly broad. Software firms raised concerns about patents that they believed should not have been granted, because the inventions were obvious based on preceding work in the area. While praising patents as the basis for their industry, biotech firms also raised concerns that some overbroad patents may discourage further innovation in some biotech areas. Report, Ch. 3 at 20-21.

¹⁴ *Graham v. John Deere Co.*, 383 U.S. 1, 11 (1966).

¹⁵ MERGES & DUFFY, *PATENT LAW AND POLICY: CASES AND MATERIALS* 646 (3d ed. 2003).

¹⁶ Carl Shapiro, *Navigating the Patent Thicket: Cross Licenses, Patent Pools, and Standard-Setting*, in *INNOVATION POLICY AND THE ECONOMY* 119, 126 (Adam Jaffe et al. eds. 2001).

¹⁷ Report, Ch. 3 at 21; *see, e.g.*, Earp, 2/26 at 290-91, 238; Blackburn 2/26 at 296; Caulfield 3/19 at 161.

deter market entry and follow-on innovation by competitors and increase the potential for the holder of a questionable patent to suppress competition.

When firms fear they will infringe a questionable patent, the substantial costs of litigation or the absence of standing to challenge a questionable patent may persuade them to direct their resources into other areas. A lawsuit in federal court may not be an alternative because a competitor may not sue to challenge patent validity unless the patent holder has threatened the competitor with litigation. If the competitor is not on the verge of marketing an infringing product, the patent holder may be unaware of the infringement or choose not to threaten litigation. In these circumstances, as one biotech representative complained, “there are these bad patents that sit out there and you can’t touch them.”¹⁸ A potential infringer might attempt to invalidate the patent through a re-examination procedure in the Patent and Trademark Office, but this allows only limited participation by third parties, and most hearing participants did not believe it proved effective.¹⁹

Second, patents that should not have been granted raise costs when they are challenged in litigation. If a competitor chooses to pursue R&D in the area improperly covered by the questionable patent without a license, it risks expensive and time-consuming litigation with the patent holder. If litigation does take place, it typically costs millions of dollars and takes years to resolve.²⁰ This wastes resources.

Third, questionable patents may induce unnecessary licensing, and the payment of royalties on an invalid patent distorts the incentives that the patent system was designed to provide. If a competitor chooses to negotiate a license and pay royalties to avoid that costly and unpredictable litigation, the costs of follow-on innovation and commercial development increase due to the unjustified royalties and increased transaction costs.²¹

¹⁸ Blackburn 2/26 at 295-96; Report, Ch. 3 at 21-22.

¹⁹ Report, Ch. 3 at 22-23; Ch. 5 at 16-18.

²⁰ The median cost to each party of proceeding through a patent infringement suit to a trial verdict are 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 costs for the plaintiff and the defendant average \$4 million each, and in the highest-stakes patent suit, costs can exceed this amount by more than fivefold. NATIONAL ACADEMIES BOARD ON SCIENCE, TECHNOLOGY AND ECONOMIC POLICY, A PATENT SYSTEM FOR THE 21ST CENTURY 68 (2004), *available at* <http://www.nap.edu/html/patentsystem> [hereinafter NAS REPORT]; *see also* Report, Ch. 2 at 7-8; Ch. 3 at 20-26, 33-41, 50-55; Ch.5 at 2-4.

²¹ Mark A. Lemley, *Rational Ignorance at the Patent Office*, 95 NW. L. REV. 1495, 1517 (2001) (noting that “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”); *id.* (royalties on improperly granted patents cause an inefficient allocation of society’s resources and a transfer that “encourages patenting and discourages competition to a greater extent than is socially optimal.”). An unjustified royalty may result in higher prices to consumers, inefficiently low use of the affected products, and deadweight loss. *See* Shapiro, *supra* note 16, at 125; Report, Ch. 2 at 7-8; Ch. 3 at 20-26, 33-41, 50-55; Ch.5 at 2-4.

Questionable patents contribute to problems of increased transaction costs and unjustified royalties particularly in industries associated with “patent thickets”²² and “defensive patenting.” In industries such as computer hardware and software, firms can require access to hundreds or even thousands of patents to produce just one commercial product. One panelist from the software industry noted that programs can contain millions of lines of code and include “potentially hundreds of thousands” of patentable inventions. Commentators described the computer-related industries as prime examples of “complex product industries,” in which relatively numerous patents protect individual commercial products. A single semiconductor product can be covered by thousands of patents.²³

Overlapping patent rights covering complex products create a “patent thicket.” With so many patents at issue, panelists suggested, infringing another firm’s patent can be inevitable, but there is often no economically feasible way, prior to making sunk investments, to identify and obtain rights to all the relevant patented technologies. Panelists observed that patent thickets make it virtually impossible to search all potentially relevant patents, review the claims, and evaluate the possibility of infringement or the need for a license. This is particularly true where the scope of patent coverage is ambiguous. Such uncertainty about the scope of legal rights can heighten the risks surrounding innovation investment decisions.²⁴

In some industries proliferation of patents creates thickets due partly to the nature of the technology at issue. Semiconductor, computer hardware, and software products can contain a large number of incremental innovations, those that build on existing technology in small, incremental ways. But patents have also proliferated in these industries due to “defensive patenting.” Firms 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 when faced with a patent thicket. These defensive patents, in turn, further contribute to the patent thicket.²⁵

Some hearing participants believe that companies spend too many resources on creating and filing these defensive patents, instead of focusing on developing new technologies.²⁶ Defensive patenting can waste resources, especially when conducted in response to, or resulting in, questionable patents. Moreover, in the context of a patent thicket, questionable patents can introduce licensing difficulties, such as royalties stacked one on top of another, and can increase

²² 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 16, at 120.

²³ Report, Ch. 2 at 25-28; Ch. 3 at 34-35, 52.

²⁴ Report, Ch. 2 at 28; Ch. 3 at 34-40, 52-53.

²⁵ Report, Ch. 3 at 34-40, 52-53.

²⁶ Report, Ch. 3 at 35-38; Greenhall 2/27 at 377, 420.

uncertainty about the patent landscape, thus complicating business planning. Because a manufacturer needs a license to all of the patents that cover its product, firms can use questionable patents to extract high royalties or to threaten litigation.²⁷ This may deter follow-on innovation and unjustifiably raise costs to businesses and, ultimately, to consumers.

Thus, the FTC Report found that questionable patents can pose a significant competitive concern and harm innovation. As described more fully below, the agency was not alone in reaching these conclusions.²⁸

B. The FTC Recommendations

Based upon its findings that questionable patents are a significant competitive concern and can harm innovation, the FTC Report makes ten recommendations for changes to the patent system.²⁹

A first set of recommendations aims to increase a challenger's ability to eliminate questionable patents after issuance:

- enact legislation to create a new administrative procedure to allow post-grant review of and opposition to a patent immediately after issuance by the PTO, and
- enact legislation to specify that challenges to the validity of a patent are determined based on a "preponderance of the evidence," rather than "clear and convincing evidence."

A second group of recommendations has the goal of minimizing the issuance of questionable patents:

- tighten certain legal standards used to evaluate whether a patent is "obvious,"
- provide adequate funding for the PTO, and

²⁷ Report, Ch. 36-41. "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 Before the Subcomm. on Courts, the Internet, and Intellectual Property of the H. Comm. on the Judiciary*, 108th Cong. 2 (2003) (statement of Michael K. Kirk, Executive Director, American Intellectual Property Law Association), available at [http://www.aipla.org/html/Legislative/108/testimony/Fee Leg.htm](http://www.aipla.org/html/Legislative/108/testimony/Fee%20Leg.htm).

²⁸ See *infra* notes 30-33 and accompanying text.

²⁹ Report, Executive Summary at 7-17. The American Intellectual Property Law Association (AIPLA) issued a detailed response to each of the FTC Report's recommendations. AIPLA Response to the October 2003 Federal Trade Commission Report, available at http://www.aipla.org/Content/ContentGroups/Issues_and_Advocacy/Comments2/Patent_and_Trademark_Office/2004/ResponseToFTC.pdf. AIPLA agreed with many of the recommendations and gave its view of how to best implement the proposals. In particular, AIPLA supported the recommendations regarding creation of a post-grant review procedure, adequate funding for the PTO, publication of all applications 18 months after filing, and imposing limitations on the doctrine of willful infringement.

- modify certain PTO rules so as to encourage patent examiners to request additional information from patent applicants and to expand PTO’s “second-pair-of-eyes” review.

A third group of recommendations seeks to promote the disclosure, teaching, and notice function of patents. Providing reliable and early notice of a patent’s coverage enhances business certainty for competitors who wish to avoid infringement. Those recommendations are –

- modify the doctrine of willful infringement by enacting legislation to require, as a predicate for liability for willful infringement, either actual, written notice of infringement from the patentee or deliberate copying of the patentee’s invention, knowing it to be patented,
- enact legislation to require publication of all patent applications 18 months after filing, and
- enact legislation to create intervening or prior user rights to protect parties from infringement allegations that rely on certain patent claims first introduced in a continuing application or other similar application.

The final set of recommendations encourages consideration of competition and economics in shaping patent policy:

- consider possible harm to competition and innovation, along with other possible benefits and costs, before extending the scope of patentable subject matter. and
- expand consideration of economic learning and competition policy concerns in patent law decision making.

III. OTHER RECENT AUTHORITY

A. The NAS Report’s Recommendations

A panel affiliated with the National Academy of Sciences in April 2004 released a report that reached conclusions substantially similar to those of the FTC’s first Report. *A Patent System for the 21st Century*³⁰ concluded –

- that poor patent quality can hinder innovation and that patents on trivial innovations may confer market power without consumer benefit,
- that charges of infringement and litigation based on low-quality patents unduly raise transaction costs,
- that the proliferation of low-quality patents in a technology raises the cost of licensing or avoiding infringement, and

³⁰ NAS REPORT, *supra* note 20.

- that the uncertainty about the validity of previously issued patents may deter investment in innovation or distort its direction.³¹

Like the FTC Report, the NAS Report contained specific recommendations for patent reform aimed at improving patent quality and increasing the efficient operation of the patent system:

- preserve an open-ended, unitary, flexible patent system;
- reinvigorate the non-obviousness standard;
- institute a post-grant review procedure;
- strengthen PTO capabilities, including through increased financial resources;
- shield some research uses of patented inventions from infringement liability;
- limit the subjective elements of patent litigation, including inequitable conduct and willful infringement;
- harmonize the U.S., European, and Japanese patent examination systems by converting the U.S. to a “first-to-file” system, eliminating the U.S.’s best mode requirement, and publishing all patent applications at 18 months; and
- broaden consideration of relevant economic and technical analyses in the courts and PTO.³²

Although the NAS Report suggests some changes not addressed by the FTC Report, the recommendations that address similar issues are largely consistent. The NAS Report directly comments on this overlap:

Although some of our recommendations parallel those of previous commissions and reports, the most relevant comparison is with the proposals of the Federal Trade Commission (FTC) in its report released in October of [2003]. Although we approach the operation of the patent system from different perspectives, addressed somewhat different topics, and employed quite different methodologies, there are several areas of agreement.³³

B. Pending Legislation

Pending legislation introduced last year would amend the patent laws by, among other things, adopting key aspects of three recommendations made by the FTC and the NAS – to establish a post-grant opposition procedure, to change the standards for willful infringement, and to require publication of all patent applications at 18 months. Known as the Patent Act of 2005 or H.R. 2795, the legislation has been characterized by its sponsor as “the most comprehensive

³¹ *Id.* at 95.

³² *Id.* at 5-8, 83.

³³ *Id.* at 83.

change to U.S. patent law since Congress passed the 1952 Patent Act.”³⁴ The provision for 18-month publication requirement is straightforward. The provisions addressing post-grant review and willful infringement are more complex, so I will elaborate briefly here on the treatment of those issues in the FTC Report.

1. Post-Grant Review

The Report recommended creation of a new administrative procedure for post-grant review and opposition so as to allow for meaningful challenges to patent validity short of federal court litigation. Existing means for challenging questionable patents are proving to be inadequate. Patent prosecution is *ex parte*, involving only the PTO and the patent applicant. To enhance third-party involvement, Congress in 1999 established limited *inter partes* reexamination procedures that allow third parties to participate in patent reexaminations, and amendments in 2002 improved those procedures, but they still contain important restrictions and disincentives for their use.³⁵ Once a questionable patent has issued, the most effective way to challenge it is through litigation. That path is extremely costly and lengthy, and it is not an option unless the patent owner has threatened the potential challenger with patent infringement litigation.

For these reasons, the Report recommended institution of a meaningful post-grant review and opposition procedure. To be meaningful, the post-grant review should be allowed to address important patentability issues, including novelty, non-obviousness, written description, enablement, and utility. The review petitioner should be required to make a suitable threshold showing. 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.³⁶

2. Willful Infringement

The Report also made a recommendation concerning the availability of treble damage liability for willful infringement. Some hearings participants explained that they deliberately fail to read their competitors’ patents out of concern for such potential treble damage liability. Such failure can harm innovation and competition in a number of ways – by jeopardizing plans for a non-infringing business or research strategy, by encouraging wasteful duplication of effort, by

³⁴ *Patent Act of 2005: Hearing on H.R. 2795 before the Subcomm. on Courts, the Internet, and Intellectual Property of the H. Comm. on the Judiciary*, 109th Cong. 1 (2005) (statement of Rep. Lamar Smith, Chairman), available at <http://judiciary.house.gov/media/pdfs/printers/109th/21655.pdf>.

³⁵ Report, Ch. 5 at 15-17.

³⁶ Report, Ch. 5 at 17-24.

delaying follow-on innovation that could derive from patent disclosures, and by discouraging the development of competition. Few panelists defended the current state of the willfulness doctrine.

Based on the hearing testimony, the FTC recommended the enactment of legislation under which liability for willful infringement would be predicated on either (a) actual, written notice of infringement from the patentee or (b) deliberate copying of the patentee's invention, knowing it to be patented. 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.³⁷

CONCLUSION

Both patents and competition contribute to innovation, public welfare, and national prosperity. There is broad consensus on the significant role that patents play in spurring innovation and encouraging the disclosure and commercial development of inventions. The importance of competition in spurring innovation also should be recognized. A questionable patent can raise costs and prevent competition and innovation that otherwise would benefit the public. The recommendations in the FTC's Report are designed to increase the likelihood that valid patents are issued and upheld as an important step towards aligning the shared objectives of patent and competition policy.

³⁷ Report, Ch. 5 at 38-41.