



HARVARD LAW SCHOOL
CAMBRIDGE • MASSACHUSETTS • 02138
JOHN M. OLIN PROGRAM IN LAW, ECONOMICS, AND BUSINESS

VIA FEDERAL EXPRESS AND EMAIL

December 20, 2001

Donald S. Clark
Office of the Secretary
Federal Trade Commission
600 Pennsylvania Avenue, N.W.
Washington, D.C. 20580
Phone: 202-326-2506

RE: Comments Regarding Competition & Intellectual Property, In Response To The Notice
For Public Hearings And Opportunity For Comment At 66 FR 58146-02 (Nov. 20, 2001)

Dear Mr. Clark:

Enclosed please find a summary of proposed testimony that is being submitted pursuant to the Notice for Public Hearings and Opportunity for Comment (hereinafter "Notice") recently published in the Federal Register by the Federal Trade Commission (hereinafter "Commission") at 66 FR 58146-02 (Nov. 20, 2001). Pursuant to the Notice, six hard copies of this cover letter and proposed testimony are submitted.

If the Commission would so request, the testimony summarized in the submission would be presented during the hearings or in writing. The Commission's views are solicited as to whether the proposed testimony would be of help, and what form it should take if viewed as helpful.

Respectfully submitted,

F. Scott Kieff
John M. Olin Senior Research Fellow in Law, Economics, & Business, Harvard Law School
Associate Professor of Law, Washington University School of Law

Enclosure: Summary of Proposed Testimony (six copies of letter and enclosure via FedEx only)

IN THE FEDERAL TRADE COMMISSION

IN RESPONSE TO THE
NOTICE FOR PUBLIC HEARINGS AND OPPORTUNITY FOR COMMENT
PUBLISHED AT 66 FR 58146-02 (Nov. 20, 2001)

COMMENTS REGARDING COMPETITION & INTELLECTUAL PROPERTY

SUMMARY OF PROPOSED TESTIMONY

BY
F. SCOTT KIEFF *

This summary of proposed testimony is submitted pursuant to the Notice for Public Hearings and Opportunity for Comment (hereinafter "Notice") recently published in the Federal Register¹ by the Federal Trade Commission (hereinafter "Commission"). If the Commission would so request, the testimony summarized here would be presented during the hearings or in writing. The Commission's views are solicited as to whether the proposed testimony would be of help, and what form it should take if viewed as helpful.

The Notice sets forth seven sets of general issues for consideration. This testimony would be most directed to the fifth set of issues, which relate generally to the legal rules for obtaining patents and their implications on competition and innovation. By their very nature, however, these issues also relate in important ways to each of the other sets of general issues outlined in the Notice.

The testimony would show how positive patent law can operate to minimize social costs, including those typically associated with information, administration, public choice, races for a common prize, and bargaining. This responds to the many critics of the patent system including those from academics, government, and the press, who argue that the U.S. Patent System may be in steep decline due to an increase in the number of patents issued by the Patent Office

* John M. Olin Senior Research Fellow in Law, Economics, and Business, Harvard Law School, and Associate Professor of Law, Washington University School of Law. Comments on this proposed testimony are welcome; and should please be sent to fskieff.91@alum.mit.edu (permanent address).

¹ Competition and Intellectual Property Law and Policy in the Knowledge-Based Economy, 66 FR 58146-02 (Nov. 20, 2001) (Notice for Public Hearings and Opportunity for Comment).

that these critics suggest do not meet the proper patentability standards, and as a result are too broad or too narrow, unduly tax and retard negotiations, or frustrate competition.²

The testimony will take many of the specific concerns raised by such critics as valid, and based on good understanding of actual facets of the present system. But because the question any evaluator of such a system must always ask is not whether that system is bad, but rather whether it is expected to be less bad than others,³ the testimony will focus on this later comparative analysis. In so doing, the testimony will explore the important tools the present system has developed to mitigate social costs. It also will show how social costs are likely to be worse if the system is changed in the ways suggested by many of the critics. The testimony will conclude by offering suggestions for modifying the system in ways that are expected to be successful in further mitigating social costs.

Many patent critics would begin their reform efforts by ratcheting up the level of scrutiny given to patent applications during examination to avoid the social costs due to patents that ultimately may be adjudicated invalid through federal court litigation. But sound normative theory supports the contrary view; that the level of scrutiny given to patent applications should be ratcheted down, if at all, because the cost of thorough examination would be higher than the costs of federal court litigation.

To best understand the intuition behind this view, it is helpful to explore as a model a hypothetical alternative system under which patent applications are registered, not examined. Study of this model reveals both how the social costs associated with a “hard-look” examination system are especially large and how the costs associated with a “soft-look” system – such as the present system and the model registration system – are especially small. The “hard-look” and “soft-look” terminology refers to the level of scrutiny given a patent upon filing. While at least some patents should get a hard look at some point, the social costs associated with providing a hard look through civil litigation are expected to be less, especially when accompanied by the other important features of the patent system discussed below.

² See, e.g., FTC Press Release: Muris Announces Plans for Intellectual Property Hearings, available at <http://www.ftc.gov/opa/2001/11/iprelease.htm> (last visited Nov 26, 2001) (including links to Federal Register Notice and to speech by Chairman Muris).

³ See, Harold Demsetz, *Information and Efficiency: Another Viewpoint*, 12 J.L. & ECON. 1, 1 (1969) (critiquing so-called nirvana approaches in favor of comparative institutional approaches).

The hypothetical model patent system differs from our present one in that patent applications would be merely registered by a government office rather than examined. Under the present system, patent applications are filed in the Patent Office and examined for compliance with the legal rules for patentability by technically and legally trained staff of that administrative agency. Under the examination process, also called patent prosecution, the *ex-parte* exchange between applicant and Patent Office Examiner typically lasts about three years before an application that has not been either finally rejected or abandoned issues as a patent.⁴ Having been examined, issued patents enjoy a procedural and substantive presumption of validity, which must be proven by the party challenging validity under the clear and convincing standard.⁵ Under the proposed registration model, patent applications would be filed with the Patent Office but not examined. The Office would maintain original files and make authentic copies publicly available, perhaps via the web for free, as is done with the EDGAR system for securities filings at the Securities and Exchange Commission.⁶ In addition, the presumption of validity would be eliminated, or at least relaxed so as to require proof by the preponderance standard ordinarily used in civil litigation.

Important recent work by Lemley sheds significant light on the strengths of soft-look systems – such as the present system and the proposed registration model – as compared with hard-look systems in which patents are examined under stricter scrutiny. Lemley shows that “[b]ecause so few patents are ever asserted against a competitor, it is much cheaper for society to make detailed validity determinations in those few cases than to invest additional re-sources examining patents that will never be heard from again.”⁷

⁴ See, e.g., DONALD S. CHISUM, CRAIG ALLEN NARD, HERBERT F. SCHWARTZ, PAULINE NEWMAN, & F. SCOTT KIEFF, *PRINCIPLES OF PATENT LAW*, 91-128, (2nd ed. 2001) (describing examination procedures under present system).

⁵ 35 U.S.C. § 282 (presumption of validity).

⁶ See SEC Filings & Forms (EDGAR), available at <http://www.sec.gov/edgar.shtml> (last visited Nov. 26, 2001) (“The SEC requires all public companies (except foreign companies and companies with less than \$10 million in assets and 500 shareholders) to file registration statements, periodic reports, and other forms electronically through EDGAR. Anyone can access and download this information for free.”).

⁷ Mark A. Lemley, *Rational Ignorance at the Patent Office*, 95 NW. U. L. REV. 1495, 1497 (2001). Merges makes this argument earlier in Robert P. Merges, *As Many As Six Impossible Patents Before Breakfast: Property Rights For Business Concepts And Patent System Reform*, 14 BERKELEY TECH. L.J. 577, 595 (1999).

Lemley thereby demonstrates why the making of detailed validity determinations in litigation instead of in the Patent Office leads to lower net costs across all patents. The core insight he provides is that litigation and its threat operate to provide important information about society's level of interest in a given patent – only those patents that matter receive a hard look. But this information could be provided through other means, even perhaps directly to the Patent Office, which leaves open the issue of which method of providing this information is cheapest.

A more complete exploration of this open issue is therefore required to understand the many reasons why the costs of providing such information through litigation are less. One advantage of litigation is that because it comes later in time it allows more information about society's interest in the patent to accrue, thereby decreasing the likelihood of error associated with *ex ante* efforts to predict which patents should receive close attention. Another advantage is that *ex-post* selection of those patents that turn out to matter raises fewer public choice problems than would *ex ante* efforts because the attention of both proponents and opponents of a given patent are more likely both to be at peak in later litigation. Decision-making through litigation mitigates many of the well-known problems associated with making award-type decisions.⁸

Departing from the prior work in the field, it can be seen why even on a per-patent basis the costs of providing the information needed to decide validity and the costs of “correct” adjudication with that information are likely to be lower if done in litigation than if done in a patent office. This is because the information relating to validity in litigated cases is rarely in the hands of the government but rather is often obtainable by or in the hands of a private party who experiences a strong incentive to bring that information to the attention of a court.⁹ The information is more cheaply obtained and evaluated by private parties.

⁸ See, F. Scott Kieff, *Property Rights and Property Rules for Commercializing Inventions*, 85 MINN. L. REV. 697, 714, n. 77 (2001) (discussing the problems with allocating cash rewards, tax credits, or any other kind of kudos in comparison to those with allocating patents and showing why systems of cash rewards or tax credits would be poor substitutes for a patent system).

⁹ *Id.* at 712-714 (discussing the role of a patentee's competitors in policing the patent system by searching out and bringing to bear the best information regarding a patent's validity). A somewhat similar tool for bringing to bear this information is the bounty system proposed in John R. Thomas, *Collusion and Collective Action in the Patent System: A Proposal for Patent Bounties*, 2001 UNIV. ILLINOIS L. REV. 305. (2001). But such bounty systems present a number of problems. They may provide some help in cases where the validity-destroying information is in

To best understand the informational advantage of a soft-look patent system, like either the present system or the proposed registration model, it is necessary to grasp the theory and operation of the core positive law requirements for patentability. Each major statutory requirement for patentability must be studied to best understand how it can and does operate to help avoid social cost. A normative law and economics justification for patent-obtaining rules is thereby obtained.

The Section 101¹⁰ requirements of utility and statutory subject matter operate to minimize social cost in several ways. The utility requirement is low because a useless patent will not be infringed.¹¹ In addition, a patent of uncertain commercial utility provides incentives for the patentee to license broadly.¹² The statutory subject matter requirement is also low – fixed at “anything under the sun made by man” – to avoid both the public choice problems in setting categories of subject matter and the inevitable wasteful costs that would be spent by parties near the margins between categories. The charge that the law must change to accommodate the new subject matters for which patents are being sought makes little sense. Among the many legal regimes that might possibly face a charge of not being designed to deal with new technologies, the patent system must have the best defense precisely because it is the one system expressly designed with such unforeseen technologies in mind. Indeed, technologies that are so foreseeable as to be obvious are not patentable in view of the system’s most basic patentability requirement: that the claimed invention not be in the prior art. As a result, we should avoid adopting the suggestion by some critics that we develop special rules to accommodate particular areas of patentable subject matter.

the hands of someone other than the party seeking to invalidate the patent. But they may not be needed and raise further problems. To the extent the person having the information is subject to the jurisdiction of the courts, then that person is subject to the courts’ subpoena power and can be compelled to produce documents, testimony, or other evidence once uncovered by the party seeking to invalidate the patent. The creation of a side market for these people to “sell” their information will frustrate the operation of the present systems that courts have developed for obtaining such information through third-party discovery. To the extent third-party witness compensation practices are considered so stingy that they provide a disincentive to these people, they can be made more flush through modest amendment to the rules of procedure in such cases.

¹⁰ 35 U.S.C. § 101 (statutory subject matter and utility).

¹¹ Kieff, *supra* note 8 at 721-22 (showing why the utility requirement is itself useless).

¹² *Id.* at 712-714 (discussing the powerful incentive to license broadly that is caused by risks of commercialization, such as those that would obtain where commercial utility is uncertain).

Patent law's prior art requirements – the Section 102¹³ and Section 103¹⁴ requirements that an invention be novel and non-obvious – are also important because they can operate to protect investments, including of those other than the patentee. The novelty requirement serves to protect those investments that have matured into actual technical activities. The nonobviousness requirement serves as a proxy to protect those investments that are about to mature into actual technical activities. These requirements ensure that all verifiable investments are considered.¹⁵ They also work together to ensure that each such investment must be evaluated under both requirements: novelty and nonobviousness.¹⁶ Moreover, the patent system even protects the inventor's own investments to some extent through the statutory one-year grace period in which to file a patent application.¹⁷

The Section 112¹⁸ disclosure requirements decrease social costs by serving to give clear notice about the property right, and to decrease the chance of duplicative efforts towards the same invention. The Federal Circuit's strong reading of the written description requirement to put the public on clear notice of what will infringe and what will not makes sense because the patentee as the drafter is the least cost avoider of such ambiguities. This legal development was controversial to be sure – it has been the subject of extensive criticism by many considered to be pro-patent and even some considered to be anti-patent – yet it marks an important weapon in the system's arsenal for fighting social cost.

¹³ 35 U.S.C. § 102 (novelty and statutory bars).

¹⁴ 35 U.S.C. § 103 (nonobviousness).

¹⁵ See, e.g., CHISUM ET AL., *supra* note 4, at 441-451 (describing evolution of case law treating 35 U.S.C. § 102(g) as a provision under which prior use may count as prior art even if not public, as long as it is not abandoned suppressed or concealed, and the amount of evidence needed to satisfy that provision).

¹⁶ *Id.* at 554-584 (prior art that triggers any subsection of §102 is available for analysis under §103); see also, *In re Foster*, 343 F.2d 980 (CCPA 1965) (*reversing In re Palmquist* 319 F.2d 549 (CCPA 1963) to hold that despite plain meaning of the statute, art qualifying only under §102(b) may support an analysis under § 103). For the reasons discussed more thoroughly by Parchomovsky and Lichtman *et al.*, the result in *Foster* is important to mitigate the costs associated with strategic disclosure. Douglas Lichtman *et al.*, Strategic Disclosure in the Patent System, 53 VAND. L. REV. 2175 (2000); Gideon Parchomovsky, Publish or Perish, 98 MICH. L. REV. 926 (2000).

¹⁷ 35 U.S.C. § 102(b). Often described as a statutory bar to the patenting of inventions publicized for more than a year, this provision operates to provide a one-year grace period for publicity that will not bar patentability.

¹⁸ 35 U.S.C. § 112 ¶¶ 1-2 (setting forth the disclosure requirements of patent law: (1) written description; (2) enablement; (3) best mode; and (4) definiteness, which is also stated as the requirement that the claims particularly point out and distinctly claim).

Therefore, pro-patent arguments that are against this development because it leads to the invalidation of particular patents should be ignored because this requirement helps to minimize the social cost of the system. In addition, anti-patent arguments that particular patents – such as those on gene fragments, for example – should also be ignored because such patents are much less likely to cause the pernicious clogging of downstream innovation than feared¹⁹ since under this case law many such downstream activities would not infringe most such valid claims.²⁰

The new statutory requirement for publication of applications eighteen months after filing²¹ can operate similarly to improve the important signaling

¹⁹ See Arti Kaur Rai, *Regulating Scientific Research: Intellectual Property Rights and the Norms of Science*, 94 NW. U. L. REV. 77, 126-29 (1999) (suggesting that patents on multiple gene fragments, such as ESTs, could block the use of a larger DNA sequence of which they are a part, and citing Michael A. Heller & Rebecca S. Eisenberg, *Can Patents Deter Innovation? The Anticommons in Biomedical Research*, 280 SCIENCE 698 (1998) (arguing that patents can deter innovation in the field of basic biological research)). This argument and its implications are explored in depth in the other important works by Eisenberg. See, e.g., Rebecca S. Eisenberg, *Property Rights and the Norms of Science in Biotechnology Research*, 97 YALE. L. J. 177 (1987) (exploring potential negative impact of patent rights on scientific norms in the field of basic biological research); Rebecca S. Eisenberg, *Patents and the Progress of Science: Exclusive Rights and Experimental Use*, 56 U. CHI. L. REV. 1017 (1989) (exploring an experimental use exemption from patent infringement as a device for alleviating potential negative impact of patent rights on scientific norms in the field of basic biological research); Rebecca S. Eisenberg, *Public Research and Private Development: Patents & Technology Transfer in Government-Sponsored Research*, 82 VA. L. REV. 1663 (1996) (offering preliminary observations about the empirical record of the use of patents in the field of basic biological research and recommending a retreat from present government policies of promoting patents in that field).

²⁰ F. Scott Kieff, *Facilitating Scientific Research: Intellectual Property Rights and the Norms of Science - A Response to Rai & Eisenberg*, 95 NW. U. L. REV. 691, 699-700 (2000) (showing why a patent claim directed to a gene fragment like an EST cannot be construed to cover a larger DNA sequence, such as a substantial portion of an entire gene, and citing Kieff, *supra* note 8 at 721-22 (noting that if the patentee attempts to argue that the claim to the smaller fragment covers the fragment within the environment of the larger DNA, then the claim is likely to be held invalid over the prior art or for lack of adequate disclosure because to be valid, the claimed subject matter must be new and nonobvious, and the patent application must disclose the metes and bounds of the claimed subject matter with physical and chemical detail as well as how to make and use it; and alternatively pointing out that since ESTs exist in nature in the company of the other DNA of the genome, a typical EST claim must be limited in order to overcome this prior art to a version of the EST in some specific environment other than its natural one, such as isolated from all other DNA or inserted into an artificially engineered piece of DNA, and the details of the degree of isolation or of the engineered piece of DNA must also be provided so as to satisfy the disclosure requirements)).

²¹ Pub L. No. 106-113, 113 Stat. 1501 (1999) (eighteen month publication of applications).

function patents play in controlling the potential rent-seeking, and therefore rent-dissipating, behavior of those others who also might be working towards the same invention as claimed in the patent. This legal development can therefore function as another tool for trimming social cost.

The present system is also justified in eschewing a shift to a first-to-file rule. Because such a shift would increase several of the costs discussed above, it should be avoided by soft-look systems – such as the present system and the proposed registration model. More particularly, a first-to-file system may lead to an increased likelihood that neither party in a priority dispute will remain with a valid patent. This is because the increased incentive to file early that may operate to make one party a winner on priority might also have caused that party to file an application with a disclosure that is inadequate to make the patent valid.²² In contrast, under a first-to-invent system there is less of an incentive to rush to file and therefore a lower likelihood that the winner on priority will be left with a patent that fails the disclosure requirements. The first-to-invent system thereby at least protects the investments of one of the claimants. In addition, first-to-file may lead to a winner-take-all mind set for those seeking patents, which in turn may cause a reduction in the beneficial inducing power of the reward because each potential claimant may find the possibility of winning the race to be too low; or alternatively it may cause the harmful, rent-dissipating power to increase as the increase in uncertainty causes even more individuals to gamble on winning the race.²³ A first-to-invent regime does increase litigation frequency through use of the quasi-litigation priority disputes called interferences that exist under such a regime, but this is beneficial because such disputes can also reach issues of validity.²⁴ The costs of determining validity in such a proceeding are likely to be less than in a hard-look examination because the opponent in such a priority dispute is like the alleged infringer in litigation in its ability to more cheaply obtain and evaluate the information needed to determine validity, as discussed above.

Other recent and important empirical work provides evidence that the present patent system is actually operating in accordance with the theory

²² See, Kieff, *supra* note 8 at 749-50 (discussing incentive to file early and its interaction with the disclosure requirements).

²³ *Id.* at 711 (discussing Mark F. Grady & Jay I. Alexander, *Patent Law and Rent Dissipation*, 78 VA. L. REV. 305 (1992) (discussing possible rent seeking and rent dissipating effects of patent law)).

²⁴ See Charles L. Gholz, *Interferences*, in CHISUM ET AL., *supra* note 4, at 511-513 (describing the interference process and its ability to reach issues of validity).

discussed above to minimize social costs. For example, Allison and Lemley show that by almost any measure patents are becoming more complex over time.²⁵ The increase in the number of prior art references cited and the length of prosecution before the Patent Office that are identified by the Allison and Lemley paper can be seen as evidence that issued patents are getting better scrutiny.²⁶ Furthermore, the increase in variation among patents identified by the Allison and Lemley paper and can be seen as evidence of increased selectivity in deciding which patents get the increased scrutiny.

The combination of these two effects provides some evidence that it is patentees themselves who are acting to rationally choose to increase scrutiny on only those patents they believe to be most important. If so, then they are acting in a way that both internalizes and mitigates many of the costs explored above. Patentees are motivated to rationally choose to behave this way because they face a complex gamble when selecting claim scope. The several requirements for patentability discussed above operate in concert to force a form of self-discipline on patent scope that mitigates the complex economic concerns explored by Merges and Nelson.²⁷ As Judge Rich often said about patents, “*the name of the game is the claim ... [and] the function of claims is to enable everyone to know, without going through a lawsuit, what infringes the patent and what does not.*”²⁸ According to Judge Rich, claims present a fundamental dilemma for every patentee because “the stronger a patent the weaker it is and the weaker a patent

²⁵ JOHN R. ALLISON & MARK A. LEMLEY, THE GROWING COMPLEXITY OF THE UNITED STATES PATENT SYSTEM, U.C. BERKELEY SCHOOL OF LAW PUBLIC LAW AND LEGAL THEORY WORKING PAPER NO. 66 (2001), available online at <http://papers.ssrn.com/abstract=281395> (providing empirical evidence on complexity of patents).

²⁶ Compare, e.g., JOSH LERNER, WHERE DOES STATE STREET LEAD? A FIRST LOOK AT FINANCE PATENTS, 1971-2000, NAT'L BUREAU OF ECON. RESEARCH WORKING PAPER NO. 7918, 29 (2000), available at <http://www.nber.org/papers/w7918> (suggesting that poor patent quality of some early business method patents may be due to their relatively anemic citation of prior art, which is one of the complexity parameters explored by Allison and Lemley *supra*, note 25).

²⁷ Robert P. Merges & Richard R. Nelson, On the Complex Economics of Patent Scope, 90 Colum. L. Rev. 839, 845 (1990) (exploring economic implications of varying patent scope).

²⁸ See, e.g. Giles S. Rich, *The Extent of the Protection and Interpretation of Claims — American Perspectives*, 21 INT'L REV. INDUS. PROP. & COPYRIGHT L. 497, 499, 501 (1990) as quoted in *Hilton Davis Chem. Co. v. Warner-Jenkinson Co.*, 62 F.3d 1512, 1539 (Plager, Circuit Judge, with whom Chief Judge Archer and Circuit Judges Rich and Lourie join, dissenting) (emphasis in original). While Judge Rich made these remarks in a discussion about the benefits of the present examination system, they are even more germane to the model registration system.

the stronger it is.”²⁹ By this he meant that a broad patent claim is strong on offense because it covers more and therefore is more likely to be infringed, but it also is weak on defense because it may cover something in the prior art or fail to contain a sufficiently detailed disclosure, and therefore is more likely to be invalid; while a narrow claim is weak on offense, because it covers less and therefore is less likely to be infringed, but it also is strong on defense because it may not cover something in the prior art or fail to contain a sufficiently detailed disclosure, and therefore also is less likely to be invalid.³⁰

To be sure, a patentee’s offensive drive is strong, but it is also strongly undercut by the defensive drive via the tie through claim breadth. This is because the costs of preparing a patent with claims of meaningful scope are substantial while an adjudication of invalidity destroys all private value of the patent. The patentee’s drafting decisions before filing must take into consideration several factors. Compliance with the disclosure requirements when tested in litigation looks to the disclosure made at filing. In addition, because the best information about validity is most likely to be held by parties other than the patentee, as discussed earlier, the patentee experiences substantial incentive either to err on the side of narrowness or to obtain that information so the patent can be drafted around it. It is this incentive for the patentee to make its own correct determination of validity and scope before filing that helps explain the evidence discussed above from Allison and Lemley that patentees themselves are making decisions that tend to keep their own patent scope “just right” from a social perspective.

An understanding of this incentive for individual patentee’s to get patent scope “just right” provides some guidance on the ongoing battle over the so-called doctrine of equivalents, which allows a patentee to win an infringement suit against something that is not literally covered by the claims.³¹ Allowing the patentee recourse to this doctrine is bad in that it weakens the important self-disciplining effect described above; and eliminating the doctrine would be good in accentuating this incentive.

²⁹ See, e.g., Giles S. Rich, *The Proposed Patent Legislation: Some Comments*, 35 GEO. WASH. L. REV. 641, 644 (1967) (responding to proposed legislation S. 1042 and H.R. 5924, 90th Cong., 1st Sess. (1967) and Report of the President’s Commission on the Patent System (1966)).

³⁰ *Id.* (explaining patentee’s dilemma, or “puzzle”).

³¹ See, e.g., *Warner-Jenkinson Co. v. Hilton Davis Chem. Co.*, 520 U.S. 17 (1997) (discussing the doctrine of equivalents and its limits).

The patentees' incentive to make their own correct determination of validity also raises serious issues for some of the present administrative law doctrines relating to the Patent Office. Because the Patent Office Regulations governing a patentee's duty to disclose information material to validity provides no added incentive for the patentee to seek out such information,³² they may be unnecessary under either a hard-look or a soft-look system. Because the Patent Office is not the lower cost provider of information relating to validity, deference to its decisions on validity as being well informed is questionable on its facts.³³ Moreover, to the extent decisions on validity can be made for so-called legal reasons that are based on facts, the potential for public choice problems in shaping those reasons and how they are applied is quite substantial.

The costs of a hard-look system are therefore made worse by the rule of deference. As a result, many of the proposed shifts towards a hard look system should be avoided in part because they have a greater potential for public choice problems, especially under the present regime of heightened deference to the Patent Office.³⁴

To be sure, the balancing effect on claim scope that draws the attention of most patent critics is imperfect, and must be further explored. These critics are correct that many issued patents are held invalid through federal court litigation.³⁵

³² See *American Hoist & Derrick Co. v. Sowa & Sons*, 725 F.2d 1350, 1362 (Fed. Cir. 1984) (holding that patentee has no duty to search).

³³ See, Orrin S. Kerr, *Rethinking Patent Law in the Administrative State*, 42 WM. & MARY L. REV. 127 (2000) (criticizing arguments for deference to the Patent Office). See also, *In re Lueders*, 111 F.3d 1569, 1574-79 (Fed. Cir. 1997) (reviewing reasons for not applying enhanced deference to the Patent Office).

³⁴ See *Dickinson v. Zurko*, 527 U.S. 150 (1999) (Administrative Procedures Act requires deference to fact-finding by the Patent Office). *But compare*, *Merk & Co. v. Kessler*, 80 F.3d 1543, 1549-50 (Fed. Cir. 1996) (holding that the Patent Office should not receive *Chevron* deference on legal questions because "Congress has not vested the Commissioner with any general substantive rulemaking power") *with*, *Dethmers Mfg. Co. v. Automatic Equipment Mfg. Co.*, --- F.3d ---, 2001 WL 1547930 (Fed. Cir. Dec. 5, 2001) (dissenting opinion of Judge Dyk questioning court's decision to not give the Patent Office deference on the interpretation of its own regulations).

³⁵ See John R. Allison & Mark A. Lemley, *Empirical Evidence on the Validity of Litigated Patents*, 26 AIPLA Q.J. 185, 205-07 (1998) (reporting that about 46% of all patents litigated to a final judgment on validity issues are held invalid, including decisions on appeal and at summary judgment); Kimberly Moore, *Judges, Juries and Patent Cases – Empirical Evidence to Peek Inside the Black Box*, 99 MICH. L. REV. 365, 390 tbl.4 (2000) (reporting that 33% of patents are held invalid at trial).

But the number of patents held invalid has decreased over time.³⁶ Critics are also correct that while many issued patents may be invalid but also irrelevant to the market,³⁷ some may be invalid and relevant in a bad way through their *in terrorem* effect without ever reaching litigation. This leaves alleged infringers to decide among several options: federal court litigation to get the patent adjudicated invalid; obtaining permission from the patentee; or not operating in a way that allegedly infringes. The question raised by such patents is how best to decrease the social costs of the alleged infringer being able to make and implement the socially optimal decision.

These social costs may be decreased by use of tools in the proposed registration model that are slightly modified versions of two recent legal trends in the case law of the present system. These tools operate to decrease incentives for strategic behavior and increase incentives for sharing information, thereby helping ensure that the alleged infringer is able to make and implement the socially optimal decision on the choice discussed above.

The first tool arises from an important innovation in Federal Circuit case law that can be used to decrease incentives for strategic behavior by patentees. Despite to the critics' view of the Federal Circuit as a court that is unduly pro-patentee, the Federal Circuit has led the charge in the area of Rule 11 sanctions in cases such as *Judin* where a discretionary ruling of no sanctions was vacated with instructions to award appropriate sanctions *against a patentee, and its trial and appellate counsel*.³⁸ Such disciplining of errant patentees also may be achieved with other similar legal devices including 28 USC § 1927 (counsel's liability for vexatious litigation), and 35 USC § 285 (attorney fees for exceptional cases). Importantly, *Judin* involved the patentee's failure to conduct a pre-filing investigation on infringement. Under a system like the proposed registration model, such a disciplining device might also be extended to curb patentees' failure to conduct pre-filing investigations on validity.

The second tool arises from a highly evolved body of law in the patent area that can operate to punish clients and their lawyers for reliance on

³⁶ See Gloria K. Koenig, PATENT INVALIDITY: A STATISTICAL AND SUBSTANTIVE ANALYSIS 4-19 to 4-23 (rev. ed. 1980) (reporting invalidity numbers about 25 years ago at 65%). See also Allison & Lemley, *supra* note 35, at 206 n.53.

³⁷ This is the important insight explored by Lemley, *supra* note 7.

³⁸ See *Judin v. U.S.* 110 F.3d 780 (Fed. Cir. 1997) (reversing for abuse of discretion a judgment of no sanctions under Rule 11 against patentee and its counsel).

unsatisfactory opinions of counsel.³⁹ The standards for opinions of counsel used by alleged infringers to insulate them from liability could be applied to potential plaintiff patentees before they are allowed to bring an action claiming liability. This would improve a system like the proposed registration model by spreading the costs of validity determinations among patentees and alleged infringers. The cost shifting effects discussed above will provide incentives for patentees and likely infringers to exchange information about the strength of their respective cases, thereby somewhat mitigating the risk of duplicative expenditures. This effect is enhanced by the patentee's interest in communicating with alleged infringers so as to make the alleged infringement appear willful and thereby win treble damages.⁴⁰

In conclusion, patent law can operate to minimize social costs, including those typically associated with information, administration, public choice, races for a common prize, and bargaining. The case for an alternative model registration system is helpful in showing why increased scrutiny of patent applications would worsen, not improve, the present system's performance. Some may argue that a full blown shift to registration may not be optimal because the formality of Patent Office examination may have a positive effect in screening out some truly non-serious filings. But it is not clear that the costs of litigating under the proposed registration model would not serve the same screening function. The present patent system has already evolved some powerful disciplining tools that restrict patentees' ability to cause many of the social costs that prompted the critics. To the extent this effect should be increased, it may be beneficial to dial back somewhat the presumption of validity and increase the patentee's burdens of conducting pre-filing investigations on both infringement and validity.

* * * * *

³⁹ See, e.g., *Johns Hopkins Univ. v. CellPro, Inc.*, 978 F.Supp. 184 (D. Del. 1997) *aff'd* 152 F.3d 1342 (Fed. Cir. 1998) (chastising authoring counsel by name while affirming award of treble damages for willful infringement because opinion of counsel was so plainly deficient).

⁴⁰ See Thomas G. Pasternak and Karen J. Nelson, *Declaratory Judgment Jurisdiction: A Dance on the Razor's Edge*, in CHISUM ET AL., *supra* note 4, at 1043-49 (showing how such communications can be conducted without creating declaratory judgment jurisdiction).