

TEN PRESCRIPTIONS FOR WHAT AILS PATENT LAW

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ABSTRACT

This Article is adapted from a speech I gave at the Patent Trolls and Patent Reform conference at Stanford Law School on March 21, 2014.

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INTRODUCTION

Reforming patent law is an important topic because, by many indications, the system needs reform to make sure that it incentivizes innovation, rather than impedes it. But proposals to change patent law too often focus on gimmicky solutions, regulation by anecdote, or overly theoretical approaches. Recently, I presided over a patent trial in the Eastern District of Texas. I was impressed by the jury's competence and diligence, and it reminded me of the responsibility the rest of the patent community has to get the law right before it passes into the hands of the jury.

Currently, patent law is framed against the background of three views held

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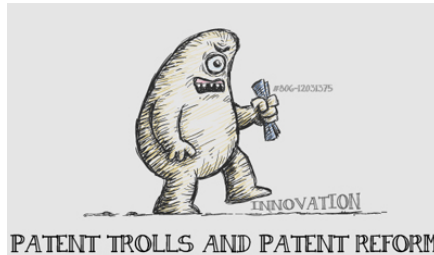
by society at large and the patent community in particular. The first of the three is a widespread view that innovation is the driver of the American economy, and will remain central for a long time to come. Industries that are intellectual property-intensive provide 18.8% of all jobs, and 34.8% of GDP in the United States.¹ Technological innovation is crucial for productivity growth. There is not serious disagreement as to that view, but the other two views conflict, and reflect very different approaches to fostering technological growth.

One view sees broader patent protection and stronger patent enforcement as necessary to protect American inventions from unfair competition and misappropriation. That view holds that the creation and enforcement of strong intellectual property rights are essential to foster innovation. This view indeed sees patent protection as largely responsible for incentivizing technological advances. An opposing view, particularly manifest in the conference graphic showing a so-called patent troll stomping on innovation² and in the copyright context, does not see enforcing intellectual property rights as the best way to foster innovation and creativity. In other words, this school cautions that protecting intellectual property may be counterproductive by impairing innovation instead of fostering it.

These two opposing views are at the heart of the debate over patent law. Both views have merit. Justice Breyer recognized in *Mayo* that “patent protection” may be a “two-edged sword” that can incentivize innovation with the promise of exclusive rights and at the same time impede innovation by raising consumer prices and restricting competition.³ Reforming patent law does not involve making a simple choice of one view or the other. Patent law must strike a delicate balance between the two, and at the same time recognize that neither is served by a dysfunctional system for granting patents and adjudicating the scope of patent rights. My focus is on dysfunctional aspects of the patent system, and on some proposals for making it better.

1. ECON. & STATISTICS ADMIN. & U.S. PATENT & TRADEMARK OFFICE, INTELLECTUAL PROPERTY AND THE U.S. ECONOMY: INDUSTRIES IN FOCUS 3 (2012), available at http://www.uspto.gov/news/publications/IP_Report_March_2012.pdf.

2. The graphic for Stanford’s 2014 Patent Trolls and Patent Reform conference:



Patent Trolls and Patent Reform, STAN. L. SCH., <https://www.law.stanford.edu/event/2014/03/21/patent-trolls-and-patent-reform> (last visited Apr. 12, 2014).

3. *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289, 1305 (2012).

1. REDUCE THE PTO BACKLOG WITHOUT SACRIFICING PATENT QUALITY

First, there is the problem of the Patent and Trademark Office (PTO) backlog. As of last month, the PTO had an unexamined patent application backlog of over 600,000.⁴ Those are applications that are awaiting a first office by a patent examiner. In March 2014, it took an average of more than eighteen months for an examiner to take any official action on a patent application.⁵ It took only three weeks for Alexander Graham Bell to get a patent on the telephone.⁶

Under Director Kappos, the PTO made major efforts to try to reduce the size of the application backlog with a goal of reducing the backlog of applications awaiting a first action to 300,000, and of reducing the average wait time for first actions to ten months.⁷ Obviously the PTO has not reached those goals. Part of the problem is the rate of incoming applications—the PTO received over 500,000 utility patent applications last year.⁸ The PTO did achieve some success under Director Kappos; the number of pending applications went down from over 750,000 to the current total of about 600,000.⁹ But the delay and number of pending applications are still substantial. This delay disserves both applicants and third parties who may have entered the marketplace during the time the application was pending.

One downside is that efforts to reduce the backlog by hiring additional personnel have spawned a vast regulatory bureaucracy at the PTO—one that will grow substantially in light of the America Invents Act (AIA) to accommodate new *inter partes* and post-grant review procedures.¹⁰ The PTO currently employs around 12,000 people, and about 8,000 of those are patent examiners.¹¹ The PTO is similar in size to the Department of Labor, which has over 16,000 employees.¹² The workload is staggering, especially if you account

4. *March 2014 Patents Data, at a Glance*, U.S. PAT. & TRADEMARK OFF., <http://www.uspto.gov/dashboards/patents/main.dashxml> (last visited Apr. 12, 2014).

5. *Id.* (listing the average “first office action pendency” as 18.6 months).

6. *See* U.S. Patent No. 174,465 (filed Feb. 14, 1876) (issued Mar. 7, 1876), *available at* <http://www.google.com/patents/US174465>; *see also* Rick Merritt, *Patent Debate Spawns Stanford Study*, *EE TIMES* (Mar. 14, 2014, 11:00 AM EDT), http://www.eetimes.com/document.asp?doc_id=1321398 (using this example).

7. David Kappos, Dir., U.S. Patent & Trademark Office, Remarks to IPO Annual Conference: The USPTO—Early Views and Initiatives of the Obama Administration (Sept. 14, 2009), *available at* http://www.uspto.gov/main/homepagenews/2009sep14_kappos_ipo_speech.htm.

8. U.S. PATENT & TRADEMARK OFFICE, PERFORMANCE & ACCOUNTABILITY REPORT: FISCAL YEAR 2013, at 189 (2013), *available at* <http://www.uspto.gov/about/stratplan/ar/USPTOFY2013PAR.pdf>.

9. *Id.* at 190.

10. *See* Leahy-Smith America Invents Act, Pub. L. No. 112-29, § 6, 125 Stat. 284, 299-313 (2011) (codified at 35 U.S.C. §§ 301, 311-19, 321-29).

11. U.S. PATENT & TRADEMARK OFFICE, *supra* note 8, at 9.

12. *Federal Agencies List*, OFF. PERSONNEL MGMT., <https://www.opm.gov/about-us/open-government/Data/Apps/Agencies/index.aspx> (last visited Apr. 12, 2014).

for both examinations and appeals. At the examination level there were 309,593 allowances and 266,425 final rejections in 2013.¹³ There are 177 judges on the Patent and Trademark Appeal Board,¹⁴ and to my understanding, each issues about eighty-to-ninety written decisions per year. In 2013, the Board issued a record number of 12,250 appeals decisions.¹⁵ Appeals from examinations and increasing numbers of post-grant proceedings place huge demands on these judges.

Efforts to reduce the backlog, commendable as they are, raise the concern that the PTO will solve the backlog problem by placing greater emphasis on the quantity rather than the quality of examinations. An easy way to reduce the backlog is to issue more patents, regardless of quality. A recent study suggests that the decrease in the PTO's backlog of applications awaiting review coincided with an increase in allowance rates.¹⁶ We must find a way to reduce the backlog without turning examiners into rubber stamps. The good thing is that the PTO has the resources at its disposal to work on improving the quality of patent examinations with a proposed operating budget of more than three billion dollars for 2015.¹⁷

2. POLICE CLAIM DRAFTING

The second prescription, which relates to the first, is that patent examiners must do a better job in policing claim drafting. Writing claims to describe an invention is an inherently difficult task. A new chemical compound can often be claimed with simplicity and clarity, but most inventions cannot be so easily described. It also often serves an applicant's interest to secure unclear claims that can be expanded by interpretation to cover new competitive technologies. Through continuations, applicants can rewrite or amend claims so that they cover competing technologies that were not even envisioned when the original application was filed.¹⁸

13. U.S. PATENT & TRADEMARK OFFICE, *supra* note 8, at 188.

14. JAMES DONALD SMITH, U.S. PATENT & TRADEMARK OFFICE, PATENT PUBLIC ADVISORY COMMITTEE MEETING: PATENT TRIAL AND APPEAL BOARD UPDATE 3 (2013), available at http://www.uspto.gov/about/advisory/ppac/20131121_PPAC_PTABUupdate.pdf.

15. U.S. PATENT & TRADEMARK OFFICE, *supra* note 8, at 23.

16. Christopher Anthony Cotropia, Cecil D. Quillen, Jr. & Ogden Webster, *Patent Applications and the Performance of the U.S. Patent and Trademark Office* 9-10 (Univ. of Richmond Sch. of Law Intellectual Prop. Inst., Research Paper No. 2013-01, 2013), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2225781; see also Dennis Crouch, *Patent Application Outcomes: Rising Allowances and Falling Abandonments*, PATENTLY-O (Dec. 6, 2012), <http://patentlyo.com/patent/2012/12/patent-application-outcomes-rising-allowances-and-falling-abandonments.html>.

17. U.S. PATENT & TRADEMARK OFFICE, FISCAL YEAR 2015 PRESIDENT'S BUDGET: THE USPTO CONGRESSIONAL BUDGET JUSTIFICATION 8 (2014), available at <http://www.uspto.gov/about/stratplan/budget/fy15pbr.pdf>; Tony Dutra, *Obama Administration Sets PTO's FY2015 Budget to Exceed \$3.4 Billion*, BLOOMBERG BNA (Mar. 5, 2014), <http://www.bna.com/Obama-administration-sets-n17179882600>.

18. *In re* Henriksen, 399 F.2d 253, 262 (C.C.P.A. 1968) (continuation applications

Construing ambiguous and poorly drafted claims continues to be the principal task that our court faces in patent cases. Both before and after *Phillips*,¹⁹ we continue to provide guidance on rules for claim interpretation. But the truth is that creating standards for claim interpretation is a limited solution to the lack of claim clarity. The PTO must take a more active role in ensuring that issued claims are drafted to cover what they should, and to achieve maximum possible clarity. The suggestion is not that examiners should place their own claim interpretations in the record. Rather, I am saying that examiners should reject applications when the claims are not clear.

Historically, patent examiners did not view their role as one that included ensuring clarity, except in those rare instances where the claims were invalid as indefinite under 35 U.S.C. § 112.²⁰ I understand that this may be changing with the PTO putting greater emphasis on requiring clarity. The President's recent executive actions are specifically aimed at training examiners on functional claiming and promoting applicants' use of glossaries.²¹ It is not clear if these will be enough to strengthen patent examination systematically. Greater efforts are necessary to ensure that the presumption of validity given to issued patents is warranted by the level of examination they receive, and the clarity of the claims that issue.

3. GIVE THE PTO A GREATER ROLE IN POLICY FORMULATION

Third, I propose a somewhat heretical notion—that the PTO should have a greater role in formulating substantive patent policy. At the present time, the

receive benefit of prior application's filing date even if "it is unfortunate that a patent should be granted on an application depending upon another application filed over 20 years ago"); MPEP § 201.07 (9th ed. Mar. 2014), available at http://www.uspto.gov/web/offices/pac/mpep/s201.html#ch200_d1ff70_2cc79_146 ("At any time before the patenting or abandonment of or termination of proceedings on his or her earlier nonprovisional application, an applicant may have recourse to filing a continuation in order to introduce into the application a new set of claims and to establish a right to further examination by the primary examiner.").

19. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1314 (Fed. Cir. 2005) (en banc) (providing guidance on construing claim language based on "the words of the claims themselves, the remainder of the specification, the prosecution history, and extrinsic evidence concerning relevant scientific principles, the meaning of technical terms, and the state of the art." (quoting *Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1116 (Fed. Cir. 2004))).

20. 35 U.S.C. § 112(a) (2011) (effective Sept. 16, 2011) ("The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor or joint inventor of carrying out the invention.").

21. Office of the Press Secretary, *Fact Sheet: White House Task Force on High-Tech Patent Issues*, WHITE HOUSE (June 4, 2013), <http://www.whitehouse.gov/the-press-office/2013/06/04/fact-sheet-white-house-task-force-high-tech-patent-issues> (under heading "Tightening Functional Claiming").

PTO receives little deference from the judiciary. Our holding that the PTO lacks substantive rulemaking authority,²² and the Supreme Court's decision in *Hyatt*²³ permitting patent applicants to seek largely de novo review of initial rejections in district courts reflect this reduced level of deference. In the AIA, Congress rejected earlier proposals that would have expanded the PTO's substantive rulemaking authority.²⁴ This is in stark contrast to the other administrative agencies that have rulemaking authority and receive *Chevron* deference.²⁵

Examination would be easier in some cases if there were more bright-line rules in patent law. Yet the development of bright-line rules is largely relegated to judges, who are often ill-equipped to draw the lines. The PTO may be better-equipped to do this. To be clear, I do not propose that the PTO should be given broad substantive rulemaking authority that would earn *Chevron* deference on all issues of patent law. Since the Founding, the courts have had primary responsibility for interpreting the substantive law, and this will not and should not change.

What I am proposing is that the PTO be given limited substantive rulemaking authority in some specific and limited areas. Even without a grant of formal rulemaking authority, more could be done. The PTO can issue additional examination guidelines binding examiners and should do more in that direction.

4. INCREASE CLARITY OF PATENT LAW

Fourth, as I have said on other occasions, the judiciary must make efforts to clarify patent law. Patent holders and their competitors have to navigate through a labyrinth of decisional law. Patent doctrine often has no counterpart in other fields. Patent law is rich with sui generis doctrines—obviousness, enablement, written description, the doctrine of equivalents—that do not exist outside of patent law.

This lack of clarity in patent decisions is of particular concern because, despite the fact-specific nature of patent cases, many patent law issues are designated as legal. The construction of patent claims is treated as a legal

22. *Merck & Co., Inc. v. Kessler*, 80 F.3d 1543, 1550 (Fed. Cir. 1996) (“Congress has not vested the Commissioner [of the PTO] with any general substantive rulemaking power . . .” (citing *Animal Legal Def. Fund v. Quigg*, 932 F.2d 920, 930 (Fed. Cir. 1991))).

23. *Kappos v. Hyatt*, 132 S. Ct. 1690 (2012).

24. Melissa Wasserman, *The Changing Guard of Patent Law: Chevron Deference for the PTO*, 54 WM. & MARY L. REV. 1959, 1998 (2013) (“[T]he AIA declined to grant the PTO the robust substantive rule-making powers that had been proposed in earlier versions of the legislation.”); see Patent Reform Act of 2007, H.R. 1908, 110th Cong. § 11 (2007) (unenacted proposal to grant the PTO power to “promulgate such rules, regulations, and orders that the Director determines appropriate”). See generally Sarah Tran, *Patent Powers*, 25 HARV. J.L. & TECH. 609, 642-43 (2012) (recounting Congress's extended deliberation over whether to grant the PTO “power to ‘set standards’ for the first time”).

25. See *Chevron, U.S.A., Inc. v. Natural Res. Def. Council, Inc.*, 467 U.S. 837 (1984).

question and reviewed de novo on appeal.²⁶ Other substantive questions, such as prosecution history estoppel, indefiniteness, and obviousness, raise legal questions that are subject to de novo review.²⁷

When Congress established our court in 1982, its purpose was to bring an end to intercircuit conflict and to bring certainty and clarity to patent law. The idea was that increased uniformity and consistency would “strengthen the United States patent system in such a way as to foster technological growth and industrial innovation.”²⁸ The lack of doctrinal clarity makes it more difficult to achieve Congress’s aims in creating the Federal Circuit and impairs innovation.

5. MAKE THE TECHNOLOGY MORE ACCESSIBLE

Fifth, I suggest that we need to make the technology at issue more accessible to judges and juries. Patent cases are among the most technologically complex facing the judiciary. The cumulative nature of technological advances means that each innovation builds on and incorporates those that came before, making each new generation of technology more complex and more specialized. This is an especially big problem in areas of innovation where a large number of patents cover closely related technologies. In these “patent thickets,” understanding the difference between old and new technology is as difficult as it is important.

Much has been written about the difficulty juries have in cases with complex technology.²⁹ Less attention has been paid to the difficulty that judges have with the technology. Judges who are charged with patent adjudication are typically not expert scientists. Unlike most district courts and the Supreme Court, we often we have law clerks with expertise in the particular technology. Helpful as that is, it is not a solution. We must primarily rely on counsel to explain the technology that is relevant in each case—even though they are often themselves not experts in the particular technology.

Having counsel take time to candidly explain complicated technology to the jury and the court often involves hiring experts to give technology tutorials, raises the costs of litigation, and places additional demands on judicial time and resources. But it is essential.

26. *Lighting Ballast Control LLC v. Phillips Elecs. N. Amer. Corp.*, No. 2012-1014, 2014 U.S. App. LEXIS 3176 (Fed. Cir. Feb. 21, 2014) (en banc).

27. *See, e.g., Takeda Pharm. Co. Ltd. v. Zydus Pharms. USA, Inc.*, 743 F.3d 1359, 1366 (Fed. Cir. 2014); *Pac. Coast Marine Windshields Ltd. v. Malibu Boats, LLC*, 739 F.3d 694, 700 (Fed. Cir. 2014); *Cordis Corp. v. Boston Scientific Corp.*, 561 F.3d 1319, 1332 (Fed. Cir. 2009).

28. H.R. REP. NO. 97-312, at 20 (1981).

29. *See, e.g., Kimberly A. Moore, Judges, Juries, and Patent Cases—An Empirical Peek Inside the Black Box*, 99 MICH. L. REV 365 (2000); Symposium, *Abolition of Jury Trials in Patent Cases*, 34 IDEA 77 (1994).

6. REDUCE THE STAGGERING COST OF LITIGATION

The sixth point is the necessity of reducing the staggering costs of litigation. Those costs threaten to limit entry to innovators with deep pockets who can bear the risks, not only of failing in the marketplace, but of patent litigation. The number of patent actions filed has increased—from 2011 to 2012, the number of filings leapt by twenty-nine percent, reaching 5,189—the highest number ever recorded.³⁰ In 2011, median legal costs were \$5 million when more than \$25 million was at risk, and \$2.5 million when more than \$1 to \$25 million was at risk.³¹ Even in cases with less than \$1 million at stake, median legal costs were \$650,000.³²

These enormous costs are imposed on innovators who have to forgo or delay projects because of the costs of settling or litigating to defend their technology. Society pays through lost innovation or unwarranted monopoly prices. To be cynical, but also to be realistic, the patent bar is unlikely to see the high cost of litigation as undesirable and is therefore unlikely to see that as a problem that needs to be fixed.

Limiting discovery is important, as is limiting the length of a trial. In the Eastern District of Texas, for example, allowing each side ten-to-fifteen hours total for direct- and cross-examination seems to work well without sacrificing the ability of counsel to present complex cases to the jury. By forcing the parties to litigate only those issues that are truly dispositive, it likely contributes to better advocacy—and outcomes—as well.

7. BROADEN PARTICIPANTS

Patent reform should include efforts to broaden the base of participation and public involvement in the patent system as a whole. The patent system is based on regulation through adversarial court litigation and PTO proceedings. As a general matter, the only interests represented are those of the patent holder and its competitors or potential licensees—the plaintiffs and the defendants and their legal counsel. An insular community, out of the public spotlight, is one that will have potential problems.

The exceptions to insularity are few and far between. The FTC became involved in the reverse payments dispute;³³ the ACLU and the Justice

30. PRICEWATERHOUSE COOPERS, 2013 PATENT LITIGATION STUDY 6 (2013), available at http://www.pwc.com/en_US/us/forensic-services/publications/assets/2013-patent-litigation-study.pdf.

31. Jim Kerstetter, *How Much is that Patent Lawsuit Going to Cost You?*, CNET (Apr. 5, 2012, 10:00 AM PDT), <http://www.cnet.com/news/how-much-is-that-patent-lawsuit-going-to-cost-you> (citing AM. INTELLECTUAL PROP. LAW ASS'N, 2011 REPORT OF THE ECONOMIC SURVEY (2011)).

32. *Id.*

33. *See* FTC v. Actavis, Inc., 133 S. Ct. 2223 (2013).

Department became involved in the gene patenting controversy.³⁴ The Electronic Frontier Foundation has also been involved in a number of cases.³⁵ And the general litigation bar has become increasingly involved in patent litigation.

But by and large, those representing the interests of consumers or government antitrust enforcement are not involved in patent litigation on issues of public concern. While standing may limit the participation of the public interest groups as parties,³⁶ they can participate as amici. The system needs greater policy and empirical input from those with divergent views. There is a need for more Brandeis briefs to educate the courts as to the larger issues involved, and how those issues impact constituencies not before the court as parties.

8. WELCOME THE INVOLVEMENT OF THE SUPREME COURT

This brings up the eighth point, which is the need to embrace the Supreme Court's increasing involvement in the evolution of patent law. In recent years, the Supreme Court has shown considerable interest in patent law. In the past four terms, the Supreme Court has reviewed sixteen Federal Circuit cases.³⁷

34. See Brief for the United States as Amicus Curiae in Support of Neither Party, *Ass'n for Molecular Pathology v. Myriad Genetics, Inc.*, 133 S. Ct. 2107 (2013) (No. 12-398); Petition for Writ of Certiorari, *Myriad*, 133 S. Ct. 2107 (No. 12-398) (filed on behalf of petitioners by the Public Patent Foundation and ACLU Foundation); Brief of Amici Curiae in Support of Defendants' Opposition to Plaintiffs' Motion for Preliminary Injunction, *Univ. of Utah Research Found. v. Ambry Genetics Corp.*, No. 2:13-cv-00640-RJS (D. Utah Aug. 21, 2013), ECF No. 79 (filed by the Public Patent Foundation, the ACLU and ACLU of Utah Foundation, Inc., Association for Molecular Pathology, Breast Cancer Action, and the AARP).

35. See, e.g., Brief of Amicus Curiae Electronic Frontier Foundation in Support of Defendant, *Akamai Techs., Inc. v. Limelight Networks, Inc.*, 693 F.3d 1301 (Fed. Cir. Aug. 9, 2011) (No. 2009-1372).

36. See *Ass'n for Molecular Pathology v. U.S. Patent & Trademark Office*, 689 F.3d 1303, 1323 (Fed. Cir. 2012) (finding that organizational plaintiffs lacked standing), *aff'd in part, rev'd in part sub nom. Ass'n for Molecular Pathology v. Myriad Genetics, Inc.*, 133 S. Ct. 2107 (2013); *Consumer Watchdog v. Wis. Alumni Res. Found.*, Fed. Cir. App. No. 2013-1377, appeal from *inter partes* reexamination No. 96/000,154 (Jan. 22, 2013).

37. Roy E. Hofer & Joshua H. James, *Supreme Court Reversal Rates for Federal Circuit Cases*, LANDSLIDE, Mar.-Apr. 2014, at 40, 40-41. For cases decided between 1982, when the Federal Circuit was established, and 2008, see Timothy B. Dyk, *Does the Supreme Court Still Matter?*, 57 AM. U. L. REV. 763, 764-65 (2008).

Since *Bilski v. Kappos*, 130 S. Ct. 3218 (2010), the Court has decided ten patent cases. See *Medtronic, Inc. v. Mirowski Family Ventures, LLC*, 134 S. Ct. 843 (2014); *FTC v. Actavis, Inc.*, 133 S. Ct. 2223 (2013); *Ass'n for Molecular Pathology v. Myriad Genetics, Inc.*, 133 S. Ct. 2107 (2013); *Bowman v. Monsanto Co.*, 133 S. Ct. 1761 (2013); *Kappos v. Hyatt*, 132 S. Ct. 1690 (2012); *Caraco Pharm. Labs., Ltd. v. Novo Nordisk A/S*, 132 S. Ct. 1670 (2012); *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289 (2012); *Microsoft Corp. v. i4i Ltd. P'ship*, 131 S. Ct. 2238 (2011); *Bd. of Trustees of Leland Stanford Jr. Univ. v. Roche Molecular Sys., Inc.*, 131 S. Ct. 2188 (2011); *Global-Tech Appliances, Inc. v. SEB S.A.*, 131 S. Ct. 2060 (2011).

This term, it will hear another five cases.³⁸ These cases implicate a range of issues that touch on every area of patent law, and affect how the work of courts adjudicating patents and the PTO.

Strangely, the involvement of the Supreme Court is not welcomed by the patent bar. A standard applause line at bar gatherings is criticism of the Supreme Court for supposed errors in its decisions and even for granting certiorari in the first place. Yet the bar should welcome the Supreme Court's involvement for at least three reasons.

First, the Court has a broader perspective than we do at the Federal Circuit. The Supreme Court's patent jurisprudence has consistently criticized the extension of patent exceptionalism into areas where convergence with conventional legal rules is possible—and preferable, as in *eBay v. MercExchange*³⁹ and *Medimmune v. Genentech*.⁴⁰ However, differences between patent law and other areas remain an important part of Supreme Court review.

Second, the Supreme Court, in patent law, as in other areas, is the only entity that can establish uniformity and bring clarity to legal questions. As I mentioned earlier, legal questions that need greater clarity are prevalent in patent law. A current example is the division of our court in the *CLS Bank* patentable subject matter case.⁴¹ Having failed to resolve the issue, the opportunity for Supreme Court review was essential.

Third, the perhaps most important, only the Supreme Court can alter the Federal Circuit's own established jurisprudence.

9. ALIGN THE LAW WITH POLICY FOR THE PATENT SYSTEM

Ninth, I suggest more attention should be paid to policy concerns. Because of the very general nature of most of the patent statutes, in interpreting those statutes, courts must be guided by general policy considerations articulated by Congress. Many see congressional policy as favoring ever-increasing patent protection based on the faith that more protection is necessarily better. Others believe that patent-assertion entities are necessarily bad. Neither view is correct. There is a need to move from faith-based approaches to more practical, policy-oriented decisionmaking. The need for a greater focus on practical policy concerns can be illustrated by the following example:

Let us suppose that Inventor A filed a patent application for the use of

38. See *Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 896 (2014) (mem.); *Limelight Networks, Inc. v. Akamai Techs., Inc.*, 134 S. Ct. 895 (2014) (mem.); *Alice Corp. Pty. Ltd. v. CLS Bank Int'l*, 134 S. Ct. 734 (2013) (mem.); *Highmark Inc. v. Allcare Health Mgmt. Sys., Inc.*, 134 S. Ct. 48 (2013) (mem.); *Octane Fitness, LLC v. Icon Health & Fitness, Inc.*, 134 S. Ct. 49 (2013) (mem.).

39. 547 U.S. 388 (2006).

40. U.S. 118 (2007).

41. *CLS Bank Int'l v. Alice Corp. Pty. Ltd.*, 717 F.3d 1269 (Fed. Cir. 2013) (en banc), cert. granted, 134 S. Ct. 734 (2013) (mem.).

compound *X* in an industrial process. No one has done this before. Adding *X* speeds up the process by one percent but the cost of using the compound is very high. The patent issues, but the claimed process is never commercialized because of the small benefit and high cost. The technology covered by the patent is, in fact, worthless in the real world. Five years later, Inventor *B* discovers that adding compound *X* and compound *Y* to the process together increases speed by two hundred percent, and revolutionizes the industry. Inventor *B* never knew about *A*'s patent, and never knew of anyone using compound *X* as part of the process. Given the speed of this new process, the cost of compound *X* is well worth it.

Under existing patent law, Inventor *A* was entitled to his patent, and Inventor *B* cannot practice his invention without a license from *A*. Even though Inventor *B* can get a patent on the combination, *A*'s blocking patent reads on any use of the process with compound *X*. Under a "comprising" claim, adding elements will not preclude infringement. Even though this makes perfect sense to a patent lawyer, does it make sense in the real world as a matter of innovation policy? While patent value and commercialization are relevant under existing law as secondary considerations in the obviousness analysis and calculation of damages, is there a role for a utility requirement that would limit *A*'s ability to get a patent in the first place, or that would limit the scope of the issued patent so that *B*, the real inventor, can secure his full reward?

Currently, patent examination focuses largely on the scope of prior art references and, to some extent, considerations of patentable subject matter. Few other considerations factor into the analysis. Apart from obviousness and damages, neither the patent office nor courts ask whether a patent contributes significant knowledge or value to the marketplace. We do not ask whether the claimed invention is the type of advance that warrants a monopoly. Strangely, we don't generally ask whether a utility patent has the utility that is required by the patent statute.⁴²

My example is not far-fetched. It describes many patents that are asserted by the entities that are the subject of the conference—non-practicing entities. Problems that result from the patent system will not be resolved by fee-shifting or other procedural adjustments, but by shaping substantive patent law to take account of the appropriate policy concerns. The difficult work of patent law is, as Thomas Jefferson recognized long ago, "drawing a line between the things which are worth to the public the embarrassment of an exclusive patent, and those which are not."⁴³ Patent law needs to be refined so that it gives better

42. See 35 U.S.C. § 101 (2011) ("Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new *and useful* improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title." (emphasis added)).

43. *Graham v. John Deere Co.*, 383 U.S. 1, 9 (1966) (quoting Letter from Thomas Jefferson to Isaac McPherson (Aug. 13, 1813), in 20 THE WRITINGS OF THOMAS JEFFERSON 42 (Andrew A. Lipscomb & Albert Ellery Bergh eds. 1905), available at http://press-pubs.uchicago.edu/founders/documents/a1_8_8s12.html).

answers to those questions.

10. MAKE THE PATENT BAR AND ACADEMY MORE RELEVANT

Finally, the bar and academy need to be more relevant and provide better input into the adjudication process. The patent bar has been too timid and too lacking in creativity—too willing to preach the patent gospel instead of trying to move the ball forward.

For example, in *Lighting Ballast*,⁴⁴ the party supposedly defending *Cybor*⁴⁵ did not defend it. Instead, that party argued that we should modify *Cybor*, but not completely abandon it. Of course, that did not turn out to be our approach, and we reaffirmed *Cybor*.⁴⁶ Another example is in the area of patentable subject matter. It was not until the *Metabolite*⁴⁷ case in the Supreme Court and our own decision in *Comiskey*⁴⁸ that focus was again placed on patentable subject matter after decades of neglect. The question is why the bar did not raise that issue. In *Metabolite*, the question was not raised before us, which is why the Supreme Court ultimately dismissed the case as improvidently granted.⁴⁹

One of my colleagues told me I should not suggest more policy-oriented arguments, and reminded me of recent cases where our court was confronted by policy arguments not grounded in practical reality that had no chance of succeeding. Such arguments will be rejected, but there are many policy concerns that need more attention and exploration. It is essential that the bar focus on those issues and present arguments that are realistic and have a chance of success in our court, the district courts, and the Supreme Court.

I have the same suggestion to the academy because it can help strengthen patent law by addressing these difficult questions. The academy has done valuable work, especially recently, but too much of its work is still overly theoretical or disconnected from the real world. Many articles are addressed to a regime that is unfamiliar to me and not relevant to litigation. The academy has to be more practical and more attuned to the realities of litigation. By practical, I am not referring only to empirical research, but also to analytical work providing suggestions to change existing patent law in ways that are consistent with the current framework and have some realistic chance of being accepted. Conferences like this are valuable to fostering the exchange between the bar and the academy so that we can all come up with solutions and

44. *Lighting Ballast Control LLC v. Phillips Elecs. N. Amer. Corp.*, No. 2012-1014, 2014 U.S. App. LEXIS 3176 (Fed. Cir. Feb. 21, 2014) (en banc).

45. *Cybor Corp. v. FAS Techs., Inc.*, 138 F.3d 1448 (Fed. Cir. 1998) (en banc).

46. *Lighting Ballast*, 2014 U.S. App. LEXIS 3176, at *36.

47. *Lab. Corp. of Am. Holdings v. Metabolite Labs., Inc.*, 548 U.S. 124 (2006) (per curiam).

48. *In re Comiskey*, 554 F.3d 967 (Fed. Cir. 2009).

49. *Metabolite*, 548 U.S. at 125.

proposals to make patent law better.