

KEYNOTE

The Supreme Court Saps Patent Certainty

*The Honorable Paul R. Michel**

Good afternoon, everyone. The afternoon has started, but I think we all were treated to a splendid morning, a very thoughtful discussion. For me personally, the two panels this morning and all of the comments by all of the panelists were the most encouraging things that I've heard since leaving the court three and a half years ago. In contrast, so much of the debate in the press, in Congress, and in other settings seems to feature rhetoric over facts and self-narrow interest over what's good for the country, what's good for the economy, what's good for technological progress, what's good for American global competitiveness, and so on. So, I thought we were very fortunate to be here, and I'm very much looking forward to the afternoon. I expect all of you are, as well.

I want to thank *The George Washington Law Review* and its members for putting on a conference that's very hospitable and efficient and gracious and well organized. I've had the pleasure of speaking here before at various events, which were also well done, but I think this one might set a new record, so congratulations to the Law Review staff.

* Former Chief Judge, United States Court of Appeals for the Federal Circuit. This piece is based on my keynote address delivered at *The George Washington Law Review's* symposium entitled "Cracking the Code: Ongoing Section 101 Patentability Concerns in Biotechnology and Computer Software" on November 15, 2013.

Now, broadly speaking, I think we should all consider ourselves, from ancient practitioners to academics to scientists, law students, and every other background represented here in this room, we should all consider ourselves as being part of sort of the patent community, perhaps the patent profession. And if we adopt the perspective of what's good for the country, what's good for the patent system, what's needed, I think we have to conclude that it's not in satisfactory condition. Both patent granting and patent reviewing, both occurring in the Patent and Trademark Office ("PTO"),¹ and patent litigation in the courts are grotesquely too slow,² vastly too expensive,³ unacceptably uncertain,⁴ unduly disruptive and harassing for participants. So, there are a lot of problems at that very, very basic systemic level.

Whatever the merits of the different provisions of the Leahy-Smith America Invents Act ("AIA"),⁵ now fully enforced after being passed a little over two years ago, for sure it put more burdens on both the PTO and on the courts.

The legislation that's now pending in Congress will put further burdens, again both on the courts and on the PTO. And, of course, this occurs at a time where the courts and the PTO are severely understaffed, as they have been for more than a decade, and when both institutions are suffering the effects of the ongoing sequester chaos that the Congress has left our country facing.

So, there are lots of problems, lots of tensions, and I'm sorry to say that I think that courts, particularly the Supreme Court in the context of eligibility for patenting, have only made things worse, again, adding further to uncertainty, expense, disruption, and all of the other fundamental ills.

¹ See U.S. PATENT & TRADEMARK OFFICE, PERFORMANCE & ACCOUNTABILITY REPORT FISCAL YEAR 2013 at 21 tbl.4, available at <http://www.uspto.gov/about/stratplan/ar/USPTOFY2013PAR.pdf> (showing average patent pendency of 29.1 months).

² See CHRIS BARRY ET AL., PRICEWATERHOUSECOOPERS LLP, 2013 PATENT LITIGATION STUDY 21 (2013), available at http://www.pwc.com/en_US/us/forensic-services/publications/assets/2013-patent-litigation-study.pdf (showing average time to trial of approximately 2.5 years).

³ See Jim Kerstetter, *How Much Is That Patent Lawsuit Going to Cost You?*, CNET (Apr. 5, 2012, 10:00 AM), <http://www.cnet.com/news/how-much-is-that-patent-lawsuit-going-to-cost-you/> (summarizing data).

⁴ See, e.g., *Lighting Ballast Control LLC v. Philips Elecs. N. Am. Corp.*, 744 F.3d 1272, 1286–92 (Fed. Cir. 2014) (discussing import of standard of review of claim construction on uncertainty in patent litigation); *CLS Bank Int'l v. Alice Corp. Pty. Ltd.*, 717 F.3d 1269, 1273 (Fed. Cir. 2013) (en banc) (per curiam) (affirming by an equally divided court on an issue of patent eligibility), *aff'd*, 134 S. Ct. 2347 (2014).

⁵ Leahy-Smith America Invents Act, Pub. L. 112-29, 125 Stat. 284 (2011) (codified as amended in scattered sections of 35 U.S.C.).

Now, there's a long origin of how we got to where we are on § 101,⁶ which we don't really have time to pursue today. I'm going to try to work with the Law Review to produce an article that will trace back in the caselaw what we see showing up in *Bilski v. Kappos*,⁷ in *Mayo Collaborative Services v. Prometheus Laboratories, Inc.*,⁸ and in *Association for Molecular Pathology v. Myriad Genetics, Inc.*,⁹ but we don't have time for that today.

So, I just want to hit a few highlights. It seems to me that the most fundamental problem from the perspective of courts adjudicating cases, making policy, setting precedents, governing future decisions by enumerable actors, it's not so much that the courts don't understand patent law, particularly the Supreme Court. It's not so much that courts, particularly the Supreme Court once again, don't understand the science and technology. Those problems are serious enough, but the biggest problem of all, I think, is that the Supreme Court, and to some extent the lower courts—what the Constitution inelegantly calls the inferior courts¹⁰—don't focus enough on the systemic effect.

So, if you take the Patent Act, for example, you can't look at § 101¹¹ in isolation from § 102,¹² § 103,¹³ § 112,¹⁴ and have it work very well. In terms of policy changes, whether at the hands of Congress or the Supreme Court or even other actors, you have to see what the effects are. You have to understand the effects, and to understand the effects, you have to have a basis in data and in analysis.

It seems to me that all of the recent Supreme Court decisions suffer from a lack of that broader perspective; the interaction of the different parts of the patent statute, the interaction between the PTO, the courts, the companies, the inventors, the investors, all these different players in this vast, rather complicated system. And so, to my eye, too much has been decided based on gut reactions or even worse, huge assumptions.

So, for example, Justice Breyer says, as if it's an irrefutable truth, in what I call the *Mayo* case—this morning, of course, we were calling

⁶ 35 U.S.C. § 101 (2012).

⁷ *Bilski v. Kappos*, 130 S. Ct. 3218 (2010).

⁸ *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289 (2012).

⁹ *Ass'n for Molecular Pathology v. Myriad Genetics, Inc.*, 133 S. Ct. 2107 (2013).

¹⁰ U.S. CONST. art. III, § 1.

¹¹ 35 U.S.C. § 101 (2012).

¹² 35 U.S.C. § 102 (2012).

¹³ 35 U.S.C. § 103 (2012).

¹⁴ 35 U.S.C. § 112 (2012).

it *Prometheus*, but take your choice—that obviously § 103 isn't sufficient; that § 101 is a better tool, that only § 101 can do what needs to be done.¹⁵ From my experience I would say it's exactly the opposite, that in most cases—not always—but in most cases § 103 or § 102 is the better single shot to kill a bad patent either at the PTO initially or on review in the PTO or in litigation in the courts.

So, where does this come from? This idea that § 103 is not sufficient; § 101 is much better? I don't know. He also says that patents threaten to stifle innovation more than incentivize it.¹⁶ Well, yeah, as a matter of raw possibility, sure, it's possible. But how would you know? How would you make that net assessment? What data would you have on the two sides of the scale? Where is that data, and where is it being assessed in the *Mayo* case? It's not. It's just stated as an oracular truth. It's so because I say it's so. At least that's the way it looks to me.

Unanimous decision. Unanimous decision. So, then, a couple years later we get *Myriad*. I don't care about the merits of *Myriad* and the line drawing done there. But *Myriad* re-adopts—six times citing and quoting from *Mayo*—all of the things said in *Mayo*,¹⁷ half of which I suggest are unsubstantiated assumptions that may well be right, but they may well be wrong. My guess is they're more likely wrong than right, but who knows. The whole point is nobody can prove anything because the factual foundation for making inferences isn't there. So, what do we do?

I think the only way forward that is feasible—it's like Churchill talking about democracy as the least, worst alternative¹⁸—and that is the Federal Circuit. Of course, I'm an alumnus from the Federal Circuit so you could say, “Well, of course he says that because he used to work there, and he thought the work was great and important,” and I did. (Laughter)

So, why did I leave if I liked it so much? It's very simple. Sitting judges quite properly are under very strict restraints in the extent to which they can participate in political controversies, public policy debates, and things of that sort.

¹⁵ *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289, 1303–04 (2012).

¹⁶ *Id.* at 1301 (“And so there is a danger that the grant of patents that tie up [the use of laws of nature] will inhibit future innovation premised upon them . . .”).

¹⁷ *Ass'n for Molecular Pathology v. Myriad Genetics, Inc.*, 133 S. Ct. 2107, 2116, 2119 n.7 (2013) (citing and quoting *Mayo*, 132 S. Ct. at 1293, 1301, 1304–05).

¹⁸ See Winston Churchill, Speech to the House of Commons (Nov. 11, 1947), in 7 WINSTON S. CHURCHILL: HIS COMPLETE SPEECHES, 1897–1963, at 7563, 7566 (Robert Rhodes James ed., 1974).

As I watched the evolution of what became the AIA and now watching with even greater trepidation the advance of the bill sponsored by Congressman Goodlatte,¹⁹ Chairman Goodlatte, I'm absolutely convinced that it's more important to be out speaking, including to groups like this, than to be continuing to decide cases at the Federal Circuit. But nevertheless, I suggest to you that the Federal Circuit is the single best hope of an adequately balanced, sensible, factually-grounded, logical system with improved clarity and predictability.

So, how do they get there? We're in a bit of a trap. In my opinion, the Supreme Court has trapped itself over and over in these cases: *Bilski*, *Mayo*, *Myriad*. The last two being unanimous makes it even scarier to me,²⁰ but they've trapped themselves by picking up dicta from ancient Supreme Court cases and repeating it and repeating it and turning it into sort of, again, oracular truth.²¹ It's true because we once said it, and it's completely true, and this is the principle going forward.

So, what can we do at this point? What we can do is help the Federal Circuit properly, not insubordinately, to follow the force of precedent but properly to limit and clarify some of the broader statements in these three recent Supreme Court cases.

Now, just a little bit of a diversion: I think these three cases are absolutely remarkable to the extent to which they skew the Supreme Court's immediately preceding effort into the § 101 field, again, a trilogy of cases: *Gottschalk v. Benson*,²² *Parker v. Flook*,²³ and *Diamond v. Diehr*.²⁴ To my reading, *Gottschalk* was a little bit of a one-off, so let's put that aside. Just focus on *Flook* and *Diehr*. So, split decisions, both *Flook* and *Diehr*. In the earlier one, *Flook*, a six to three decision, they initiated claim dissection and looking for inventive concepts,²⁵ going back to the ancient cases like *Great Atlantic & Pacific*

¹⁹ Innovation Act, H.R. 3309, 113th Cong. (2013).

²⁰ Justice Scalia filed a concurring opinion in *Myriad* noting that he joined the judgment of the court except for the "fine details of molecular biology." *Myriad*, 133 S. Ct. at 2120 (Scalia, J., concurring in part and concurring in the judgment) ("I am unable to affirm those details on my own knowledge or even my own belief.").

²¹ See, e.g., *Myriad*, 133 S. Ct. at 2117 (citing *Funk Bros. Seed Co. v. Kalo Inoculant Co.*, 333 U.S. 127, 128–30, 132 (1948)); *Mayo*, 132 S. Ct. at 1293 (citing *O'Reilly v. Morse*, 56 U.S. (15 How.) 62, 112–20 (1853); *Le Roy v. Tatham*, 55 U.S. (14 How.) 156, 175 (1852)); *Bilski v. Kappos*, 130 S. Ct. 3218, 3225 (2010) (citing *Funk Bros.*, 333 U.S. at 130; *Le Roy*, 55 U.S. at 174–75).

²² *Gottschalk v. Benson*, 409 U.S. 63 (1972).

²³ *Parker v. Flook*, 437 U.S. 584 (1978).

²⁴ *Diamond v. Diehr*, 450 U.S. 175 (1981).

²⁵ *Flook*, 437 U.S. at 593–95 ("Respondent's process is unpatentable under § 101, not because it contains a mathematical algorithm as one component, but because once that algorithm is

*Tea Company v. Supermarket Equipment Corp.*²⁶ and *Cuno Engineering Corp. v. Automatic Devices Corp.*²⁷ *Diehr*, to my eye, overruled *Flook* five to four.²⁸ And the same year, *Diamond v. Chakrabarty*²⁹ came out. So, now *Chakrabarty* seems to be sort of put a little bit off to the side, a little bit demoted as a precedent, and *Flook* is revived as the governing, dominant force³⁰ even though it was overruled, I say, by *Diehr*. So, kind of a tortuous logic in my view, and a very odd use of precedent in the first trilogy, and now the second trilogy.

But Law School 101, there's dicta and there's holding. Why isn't that equally true of Supreme Court opinions? Of course, every inferior court, the Federal Circuit, every district court, and the PTO must follow the law as declared by the Supreme Court unless, and until, it is overruled by Congress, which happens from time to time.

Remember in 1946 when the Supreme Court, out of the blue, abrogated means plus function claims in the *Halliburton Oil Well Cementing Co. v. Walker*³¹ case, Congress promptly turned it around and said, "No, no, no. We want to have those kind of claims. They're important to industrial growth." So they passed a statute that effectively overruled the *Halliburton* case, and that's what became what we call, by shorthand, § 112, ¶ 6.³² So, it does happen sometimes.

Maybe there will be Congressional intervention on § 101. There's no guarantee that it would produce a better result, but more pertinently for the moment there's no interest because in the AIA run-up, seven years of hearings, nobody talked about § 101, that I'm aware of. Nobody testified about it, and in the context of the Goodlatte and the

assumed to be within the prior art, the application, considered as a whole, contains no patentable invention.").

²⁶ *Great Atl. & Pac. Tea Co. v. Supermarket Equip. Corp.*, 340 U.S. 147, 150–52, 154 (1950) (finding a patent invalid for lack of inventiveness).

²⁷ *Cuno Eng'g Corp. v. Automatic Devices Corp.*, 314 U.S. 84, 89–92 (1941) (finding a patent invalid for lack of inventiveness).

²⁸ *Cf. Diehr*, 450 U.S. at 211–16 (Stevens, J., dissenting) (explaining that the majority "mis-applie[d]" *Flook*).

²⁹ *Diamond v. Chakrabarty*, 447 U.S. 303 (1980).

³⁰ *Cf. Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289, 1296–98 (2012) (dissecting claim for purposes of patent eligibility).

³¹ *Halliburton Oil Well Cementing Co. v. Walker*, 329 U.S. 1, 11–12 (1946), *superseded by statute*, 35 U.S.C. § 112(f) (2012).

³² *See Warner-Jenkinson Co. v. Hilton Davis Chem. Co.*, 520 U.S. 17, 27–28 (1997) (explaining Congress enacting predecessor of § 112(f) in response to *Halliburton*); *see also In re Donaldson Co.*, 16 F.3d 1189, 1194 (Fed. Cir. 1994) (same). Section 112, ¶ 6 has been renumbered to § 112(f) under the Leahy-Smith America Invents Act, Pub. L. 112-29, 125 Stat. 284 (2011) (codified as amended in scattered sections of 35 U.S.C.).

other nine bills pending in the House and the Senate, I'm not aware that anybody is talking about it.

Let's redefine the four categories in § 101 and have, perhaps, some legislated exceptions clearly stated right in § 101. But right now there are no exceptions stated in § 101, so what does the Supreme Court do? The Supreme Court says—I'm using their words—"There are implied exceptions."³³ Implied where? From what? They don't base it on the Constitution. They aren't interpreting any word in § 101. They're not interpreting the word "composition" or "manufacture,"³⁴ at least not overtly.

But they've created these exceptions. Sometimes we're told there are three. I actually count five, and they continue to expand over time. So, we start out with law of nature, then we graduate to natural phenomenon.³⁵ Then we talk about products of nature,³⁶ and now we're talking about natural correlations.³⁷ To me, that's an expanding set of ideas. And then, of course, in the other category: abstract ideas.³⁸

Now, these labels were created by the Supreme Court ages ago kind of out of the air,³⁹ and to me they're not very good categories.

³³ *Mayo*, 132 S. Ct. at 1293 ("The Court has long held that [§ 101] contains an important implicit exception.").

³⁴ *Cf.* 35 U.S.C. § 101 (2012) ("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.").

³⁵ *See* *Diamond v. Diehr*, 450 U.S. 175, 185 (1981) ("Excluded from such patent protection are *laws of nature*, *natural phenomena*, and abstract ideas." (emphasis added)).

³⁶ *See* *Ass'n for Molecular Pathology v. Myriad Genetics, Inc.*, 133 S. Ct. 2107, 2111 (2013) ("[W]e hold that a naturally occurring DNA segment is a *product of nature* and not patent eligible . . ." (emphasis added)).

³⁷ *See* *Mayo*, 132 S. Ct. at 1298 ("[W]e believe that the steps are not sufficient to transform *unpatentable natural correlations* into patentable applications of those regularities." (emphasis added)).

³⁸ *See* *Diehr*, 450 U.S. at 185 ("Excluded from such patent protection are laws of nature, natural phenomena, and *abstract ideas*." (emphasis added)).

³⁹ The first case generally cited for the prohibition on natural phenomena is *Le Roy v. Tatham*, 55 U.S. (14 How.) 156 (1852). In *Le Roy*, the Court explained that "[a] principle, in the abstract, is a fundamental truth; an original cause; a motive; these cannot be patented, as no one can claim in either of them an exclusive right." *Id.* at 175. As the Court explained,

[t]hrough the agency of machinery a new steam power may be said to have been generated. But no one can appropriate this power exclusively to himself, under the patent laws. The same may be said of electricity, and of any other power in nature, which is alike open to all, and may be applied to useful purposes by the use of machinery.

Id. The Court explained that "the processes used to extract, modify, and concentrate natural agencies, constitute the invention. The elements of the power exist; the invention is not in discovering them, but in applying them to useful objects." *Id.* The Court continued, stating that

First of all, it's not clear what's in and what's out.⁴⁰ Secondly, the categories overlap one another to my reading. Third, they tend to be subjective. They tend to be indeterminate. They tend to therefore be highly unpredictable, which leads to all the consequences you heard about this morning: difficultly advising clients, people knowing what to do, how to act.

So, these categories are part of the problem. That's part of the linguistic trap that I think the Supreme Court has created for itself, so it keeps repeating these categories, expanding them slightly, and then applying them in particular cases.

Now, we can't ignore it because that would be insubordination, and I'm not advocating that, but why don't we read these cases the same way we read other appellate decisions for what they hold as distinguished from every single thing they say?

And in the case of the Supreme Court, it's always amazed me what is said in a footnote ends up having this Delphic, oracle importance for the whole legal system forever. That's totally crazy. That's not part of the holding. That's hardly even part of the opinion, (laughter) so it's all a question of how we read the commands from on high.

I suggest to you that, through party briefs and amicus briefs, all of you and your professional peers everywhere can hugely help the entire system, the country, the economy, the technological progress right from Article 1, Section 8,⁴¹ by carefully limiting and further defining and clarifying some of this very broad language in these three recent § 101 cases. I think it's entirely consistent with proper lawyering, proper judging. It will take some careful work. I think it can be done.

Now, you could say, "Well, I don't have too much confidence in Congress's approaching § 101." Maybe you don't have too much confidence in the Supreme Court either. Certainly I don't, as you can detect from my remarks. (Laughter) But then you could say, "Well, why should we trust the Federal Circuit? After all, we just saw *CLS*

"[a] patent is not good for an effect, or the result of a certain process, as that would prohibit all other persons from making the same thing by any means whatsoever. This, by creating monopolies, would discourage arts and manufactures, against the avowed policy of the patent laws." *Id.*

⁴⁰ See *CLS Bank Int'l. v. Alice Corp. Pty. Ltd.*, 717 F.3d 1269, 1273 (Fed. Cir. 2013) (en banc) (per curiam) (affirming by an equally divided court on the scope of the abstract ideas exception), *aff'd*, 134 S. Ct. 2347 (2014).

⁴¹ U.S. CONST. art. I, § 8, cl. 8 ("The Congress shall have the Power . . . To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries.").

*Bank International v. Alice Corporation Pty. Ltd.*⁴² Wasn't that also a train wreck?" Yes, that was a terrible train wreck, but it's the least worst alternative.

Professor Golden says, "Let's turn it over to the PTO and let them issue regulations." Well, in the perfect world there might be a lot to that because very expert, detailed regulations in recent decades in this country have been issued by expert administrative agencies. But they're very different agencies than is the PTO. One thing, there's a legal authority problem. The PTO has zero substantive rulemaking authority by statute⁴³ and case law,⁴⁴ so the first problem is they're not allowed to do it. The second problem is they have no experience at all doing it. And the third problem, as far as I can tell—and this is not a criticism much less an insult—they don't have any competence to do it either. They don't have the machinery to do it. They don't have the staff to do it. And keep in mind, this is the same PTO that has now got 600, going on 700, AIA post-grant proceedings, an ever-escalating annual filing rate of evermore complicated claimed inventions, and longer and more difficult-to-examine applications. So, the idea that the PTO, through regulations, can save us—in some ideal world, maybe, but not in the real world that we live in today.

So, I revert back to the Federal Circuit. The Federal Circuit has the time. It has the interest. It has a better sense of the interplay of different parts of the patent statute, the different parts of the patent system, and thus the Supreme Court—you can't leave it to the district courts. You've got 700, 800 district judges going in how many different directions. It has to come from some centralized source. The Federal Circuit is it, at least for now.

Maybe if Chief Judge Wood has her way, the Federal Circuit won't exist in a year.⁴⁵ I wouldn't bet on it because it seems to me that for all the Federal Circuit's infirmities—and any court, any institution

⁴² *CLS Bank Int'l v. Alice Corp. Pty. Ltd.*, 717 F.3d 1269 (Fed. Cir. 2013) (en banc) (per curiam), *aff'd*, 134 S. Ct. 2347 (2014).

⁴³ See 35 U.S.C. § 2(b)(2)(A) (2012) (limiting PTO's rulemaking power to regulations which "shall govern the conduct of proceedings in the Office").

⁴⁴ See *Merck & Co. v. Kessler*, 80 F.3d 1543, 1549–50 (Fed. Cir. 1996) ("As we have previously held, the broadest of the PTO's rulemaking powers authorizes the Commissioner to promulgate regulations directed only to 'the conduct of proceedings in the [PTO]'; it does NOT grant the Commissioner the authority to issue substantive rules." (alteration in original) (citation omitted) (quoting *Animal Legal Def. Fund v. Quigg*, 932 F.2d 920, 930 (Fed. Cir. 1991))).

⁴⁵ See generally Hon. Diane P. Wood, *Keynote Address: Is It Time to Abolish the Federal Circuit's Exclusive Jurisdiction in Patent Cases?*, 13 CHI.-KENT J. INTELL. PROP. 1 (2013) (arguing that the Federal Circuit should no longer have exclusive jurisdiction over appeals in patent cases).

has them—they may change over time, but nobody's perfect. Certainly the Federal Circuit is not perfect, but I doubt that corporate America is going to want to abolish the Federal Circuit at this point and go back to the era that led to the creation of the Federal Circuit because of the cacophony of fragmented views of the different regional circuits.⁴⁶ So, the Federal Circuit is the best hope to improve § 101.

Now, not much has been said yet today and maybe won't be because in terms of disciplines, we're a little more narrow, but some allusions were made to business people. But even beyond the concentric circle of business people, the most important people of all that the patent system is designed to motivate and animate and energize are the people who make investment decisions, even outside of companies: venture capitalists, angel capitalists, equity funds, private equity funds, and all these other sources of capital because most invention—not all invention but most invention—requires a lot of money, and it requires up-front money with uncertain outcome; therefore, it requires strong incentives.

The point of the patent system, above many other objectives, in my opinion, is to create adequate incentives to get that money invested. And consider this, that's private investment money, whether it's the revenue stream of IBM being applied for more and more research for new generations of computers or whether it's outside capital that's fueling a startup or a small- or medium-sized company that's emerging and going to become the Apple of the next decade possibly.

And the private money is more important now than ever because what's happening to the public money in research, development, and commercialization? It's going down because of the fiscal crisis of the country. So, the National Institutes of Health is taking a huge hit in all twenty-seven of its organizations on research and development money and the follow-on money. The same thing is happening at the Department of Energy, at the Department of Defense, and at all these other research-oriented arms of the federal government.

And I don't see over the next decade or two that we're going to have big increase in public funding of research and development and related developmental things, so therefore more is going to have to come from the private sector if we're going to have the technological advance and leadership, the global competitiveness, the prosperity at

⁴⁶ See H.R. REP. NO. 97-312, at 20–22 (1981) (discussing forum-shopping and inconsistency as problems prior to the formation of the Federal Circuit).

home, the job creation, and all the other things that we all want and which are desperately needed. So, we've got to have adequate incentives.

A lot of that means patents have to be carefully granted, carefully reviewed, but at the end of the day consider this: a patent really is just a piece of paper, and a cynic would call it a ticket to litigate because unless an infringer voluntarily wants to buy a license—which is the normal transaction, of course—from a patent owner, the patent owner has no choice at all except to go to court. And every private, voluntary settlement takes place in the shadow of the possibility that if there isn't a negotiated settlement, there may be litigation. There may be an adjudication: a court enforced judgment, an injunction, royalties, or whatever it might be.

So, the system has to—if it's going to provide the incentives needed—it has to work. It needs to be much faster. Now, it often takes five years to get a patent.⁴⁷ It often takes five to ten years to fully litigate a patent.⁴⁸ We can't afford that now. That's an order of magnitude too expensive and too slow; millions and millions of dollars to litigate a case fully, sometimes ten million,⁴⁹ so we need to improve the system. We need to strengthen the system. We need a stronger patent system, not a weaker patent system. It's got to be smarter. It's got to be more discriminating. Of course we need to weed out bad patents as cheaply and early and quickly and reliably as humanly possible, but the ones that are valid and that are actually being infringed need to be enforceable in affordable timeframes and at an affordable cost.

But more than anything, we need the certainty. In my three-and-a-half years as a private citizen, I have spent a lot of time talking to business leaders, sometimes talking to inventors, a lot of time talking to investors, and I've learned a whole lot more about this broader complicated system. And the message that comes through universally from every discipline is that what we need the most is certainty, predictability. We need to know what the rules are. We need to know what can be patented, what can't. What's enforceable, what isn't.

I think we have a huge deficit now in the certainty category, and I think huge progress can be made at a very fast pace. One of the problems for the Supreme Court is the preappointment backgrounds

⁴⁷ Cf. U.S. PATENT & TRADEMARK OFFICE, *supra* note 1, at 21 tbl.4 (showing average patent pendency).

⁴⁸ Cf. BARRY ET AL., *supra* note 2, at 20 & chart 7a (showing time-to-trial distribution).

⁴⁹ Cf. Kerstetter, *supra* note 3 (discussing cost of litigation).

of the justices with one partial exception—Justice Sotomayor—not really being IP lawyers. One of the other problems is they just don't have enough cases. You can't map out § 101 or § 103 or anything successfully taking a case every couple years, or even a case every year.

The Federal Circuit has ten or twenty times higher frequency per issue, so in a reasonable timeframe the Federal Circuit will have enough cases to map out a better mapping of § 101 eligibility than we have today courtesy of these cases.

The disagreements mentioned earlier and personified by Chief Justice Rader and Judge Lourie can be resolved. The Federal Circuit isn't proud of the *CLS* decision. Everybody knows it's an embarrassment, so the question is can they do better in the next case, and the next case, and the next case? And the answer's of course they can. Do they want to? Of course they do, and they need your help.

They get great help from the internal staff. A lot of people don't realize the Federal Circuit has an expert staff of long-term technically trained people over and above their law clerks in their chambers. And the law clerks in their chambers are almost always people of great experience stolen from fine law firms like Jeff Kushan and Don Dunner and others who are here. Half of my clerks in the latter part of my tenure had Ph.D.'s in fields. Even more had master degrees. Lots had lab experience. Lots had industrial experience. Lots had experience as district court clerks.

So, the Federal Circuit has tremendous resources in the building in the central staff and its law clerks, and a tremendous motivation among its judges to provide a more unified, clarified mapping on all the issues, but for today's purposes, especially § 101. They're in the best position to do it. It won't be perfect. It won't happen immediately. It can happen in a reasonable timeframe, two or three years I would guess it will take to complete the mapping, but there's a steady flow of cases coming up.

So, then the question is well, how can you help? Those who represent clients, obviously you're already helping because you're telling one side of the story, and your opposing lawyer's telling the other side of the story, and judges have to try to sort it out. But there's a bigger role for others.

I find it very disappointing, to put it mildly, that Professor Holman's brief⁵⁰ never found its way even into a footnote in any of

⁵⁰ Brief for Christopher M. Holman and Robert Cook-Deegan as Amici Curiae in Support of Neither Party, *Ass'n for Molecular Pathology v. U.S. Patent & Trademark Office*, 689 F.3d 1303 (Fed. Cir. 2012) (No. 2010-1406); *see also* Brief for Christopher M. Holman and Robert

these cases, and I find it very disappointing that what I consider huge assumptions reflected in the language of *Myriad* and *Mayo* have no evidentiary basis that I can tell. You certainly can't read it in the opinion, and if you look at the briefs, it mostly isn't there either. And yet on some specific points of science, they did get amicus briefs but they didn't seem to absorb them very well or utilize them, at least not openly.

So, you could say, "Well, amicus briefs are a waste of time because they don't seem to get much traction." Depends where. They may or may not get much traction in the Supreme Court. I suppose it varies by Justice and case, so I won't try to say more about this. But I can guarantee you that amicus briefs in landmark cases, especially en banc cases, but even panel cases that obviously have landmark potential, *State Street Bank & Trust Co. v. Signature Financial Group, Inc.*,⁵¹ a good example of a case, was not en banc. It was just a panel, a very important case. Amicus participation can make a huge difference. It can broaden the picture painted for the judges, can educate the judges. Everything you read helps, so I'm a big advocate of amicus briefs.

Of course, amicus briefs sometimes are viewed a little cynically by judges, including Federal Circuit judges, because sometimes the amici are just recruited by one of the parties to say the same thing the parties are saying and to sort of roll up numbers. We've got twenty-three amicus briefs on our side, and the other side only has five, so obviously we're right. You know, what kind of a way is that to decide anything?

But the judges know that they need the full picture, the in-depth picture, and even if they're a little cynical about a lot of amicus briefs, they're not cynical or dismissive of amicus briefs that are helpful, that tell them something new and important whether it's science or economics of investment incentives or whatever the nature of the brief is.

So, I'm hoping that you and your peers elsewhere will take up the challenge of helping to straighten out the mess of § 101 law by helping the Federal Circuit clarify and reinterpret the Supreme Court's broad language in these last three cases.

Cook-Deegan as Amici Curiae in Support of Neither Party, *Ass'n for Molecular Pathology v. U.S. Patent & Trademark Office*, 653 F.3d 1329 (Fed. Cir. 2011) (No. 2010-1406).

⁵¹ *State Street Bank & Trust Co. v. Signature Fin. Grp., Inc.*, 149 F.3d 1368 (Fed. Cir. 1998), *abrogated by In re Bilski*, 545 F.3d 943 (Fed. Cir. 2008) (en banc), *and Bilski v. Kappos*, 130 S. Ct. 3218 (2010).

This has happened before. This will be the third time the Federal Circuit had to fix Supreme Court problems. After *eBay Inc. v. MercExchange, L.L.C.*⁵² it was completely unclear who could ever get an injunction, where the Federal Circuit gradually winnowed it down and funneled it and narrowed it, clarified it, and I think we ended up in a pretty good place. Maybe not perfect. Everybody might have a little bit of a different way they would balance it out, but pretty good.

Same thing with *KSR International Co. v. Teleflex Inc.*⁵³ The Federal Circuit took the Court's broad, vague statements about obviousness, clarified them, narrowed them, and reinterpreted them. Again, maybe not perfect but pretty good and way better than if the Supreme Court language in *KSR* had been just applied blindly as oracular truth.

So, we've done this twice before; maybe more than twice, but certainly those two examples fit. We can do it in this case, but it will take a concerted effort of the entire patent community, and that means all of you. Thank you. (Applause)

⁵² *eBay Inc. v. MercExchange, L.L.C.*, 547 U.S. 388 (2006).

⁵³ *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398 (2007).