

I. Opening Remarks

I am privileged to be asked to give a lecture named in honor of Judge Helen Nies. She was the first woman to serve on the Federal Circuit and the only woman, to the date of this lecture, to serve as its chief judge. Although I did not have the opportunity to meet her before she passed away in 1996, all four women currently on the court are well aware that Judge Nies blazed a trail for us. At her investiture to the Court of Customs and Patent Appeals—one of the predecessor courts to the Federal Circuit—Judge Nies said that she hoped her service on the court would inspire other women to consider undertaking the same challenge. No doubt she would be pleased to see one-third of the seats on the current court filled by women—and to see how many talented young women are now entering the intellectual property (IP) field.

In preparing to come here today, I thought I should learn something more about Helen Nies than her statistical firsts on the court. I wanted to get a sense of the person whose name you all invoke every year at this time. So I read the transcripts of her investiture to the court in 1980, her investiture as chief judge in 1990, her portrait ceremony in 1993, and her memorial service only three years later.

While I learned, of course, about her impressive background and education, and generally about her years of service on the court, I also captured a glimpse of the person who was Judge Nies. In reading what others said about Judge Nies, and attending to her own words, I was amazed to see how much Judge Nies and I had

- We both grew up and went to college and law school in the Midwest.
- We both were economics majors as undergraduates.
- We both waited tables while in school, to help put ourselves through.
- We both were devoted daughters.
- We both had children while practicing law and threw ourselves into raising them with a zeal that our children sometimes found annoying.
- We both love physical activity and staring at the water.
- · We both love singing—though she, unlike me, could actually do it well and was apparently not afraid to do it in public.
- We both cherish our nonlawyer girlfriends who help give balance to our lives.
- We both love to entertain and host parties, especially if champagne is involved.
- We were both in private practice and government service before taking the bench.
- Neither one of us was a patent specialist when appointed to the Federal Circuit; she was a trademark specialist, and I was a district judge (and thus, by necessity, a generalist).
- We both do our best legal writing at the kitchen table.
- We both have strong bonds with our law clerks and judicial assistants, and have a deep appreciation for all that they do for us.
- And, most importantly, we both love being judges, love the law, and work extraordinarily hard not just to do the work of the court but also to try to do it well.

I hope that Judge Nies is looking down and rooting on her kindred spirit. And I hope my years on the court will someday be remembered as fondly as hers.

This past spring, the Hon. Kathleen M. O'Malley delivered the Law School's Nies Lecture in Intellectual Property Law. The annual lecture remembers the late Helen Wilson Nies, who served as a judge of the U.S. Court of Appeals for the Federal Circuit (and a predecessor court) from 1980 to 1996. Judge O'Malley is herself a judge of the Federal Circuit since 2010; she previously served as a United States district judge in Cleveland, Ohio. This is a lightly edited version of Judge O'Malley's Nies Lecture.

II. The Evolution of the Federal Circuit

AN OVERVIEW

or my Nies Lecture topic today, I am going to focus on the United States Court of Appeals for the Federal Circuit's shift from a relatively little-known court to one whose work in the IP field has become the focus of all three branches of government, an increasing number of increasingly vocal academics in the field, reporters, and—yes—even bloggers. It is not the judges on the court who are garnering or deserving of all this attention. I believe it is a change in patent litigation that has begun to shine light on the court.

There has been a change in the volume of patent litigation, in the nature of the parties engaging in it, in the law firms representing those parties, in the impact of patent litigation on the individuals and other entities involved in it, and in the importance of patents to the economy as a whole. All of these changes have caused many to take notice of the work of the Federal Circuit—some of that notice welcome, some less so.

Let me touch on each of these changes briefly and then discuss the attention the Federal Circuit and patent litigation generally are receiving from all three branches of government. I will leave it to the academics to do an empirical study on the changes in their own ranks and in their attitudes toward IP litigation. On that score, I will just note that I have seen an increase in the number of amicus filings from academics, as well as a greater variety of academic institutions represented in those filings. And, I will leave the reporters and bloggers alone, in the hope (however vain) that they might return the favor.

THE INCREASING VOLUME OF PATENT APPEALS

The Federal Circuit was formed in 1982, the year I graduated from law school. As a consequence of this timing, I did not learn about the Federal Circuit in my civil procedure class, and Case Western, like most

law schools then, did not have a class on patent law, where discussion of its potential creation might have arisen.

While clerking on the United States Court of Appeals for the Sixth Circuit, I also had no occasion to come across or care about what the Federal Circuit was doing or saying. It was not until I started practicing law at Jones Day in Cleveland, and was assigned to work on a number of patent cases, that I learned about this unusual circuit—the only one based on subject matter rather than geography. I soon realized that I was among a rarefied few in the legal profession who knew about the Federal Circuit or the scope of its jurisdiction.

In its first year—despite the court's nationwide jurisdiction over patent actions arising in all district courts—the Federal Circuit entertained appeals from district court judgments in only 175 cases. This low number is reflective of the fact that, in each of the three years prior to 1982, there were far fewer than 1,000 patent cases filed in district courts nationwide. The patent cases that were reviewed on appeal accounted for only a small percentage of the Federal Circuit's overall docket.

By the time Judge Nies passed away in 1996, the number of patent appeals had risen to more than 350, and the number of patent actions filed in district courts had risen to about 1,800. During that year, patent appeals challenging U.S. Patent and Trademark Office (PTO) decisions numbered 89. Despite this increase, patent cases still only constituted about 30 percent of the Federal Circuit's overall docket.

Fast-forward to 2012 and 2013, where the Federal Circuit entertained appeals from district court judgments in more than 500 cases during each of those years, and district court patent filings rose to 5,189 and 6,497 respectively. At the same time, appeals arising from PTO decisions were up to 132 in each of 2012 and 2013, a 28 percent increase. Patent cases now account for 55 percent of the court's docket—an all-time high.

While federal filings in complex civil cases in regional circuits have been down in recent years, the patent litigation business is booming. Indeed, patent filings in district courts have almost doubled from 2010—when there were 3,301 patent actions filed—to 2013, when, as noted earlier, there were 6,497 such cases instituted. And, notably, the approximately 550 patent appeals we saw in 2013 arose from cases instituted in earlier years, where district court filings were far fewer than today. So long as the appeals pace keeps up with the increase in the number of filings in district courts—even partially—appeals in patent actions from the district courts will

increase. At the same time, we expect appeals from the PTO arising out of the post-grant reviews authorized under the America Invents Act to skyrocket.

But it is not just the numbers that are important. As with all things, the quality and character of patent litigation today are as meaningful as its quantity.

THE CHANGING CHARACTER OF PATENT LITIGATION

Many patent cases filed today are actions brought by patent owners who do not actually practice the invention that is the subject of the patent and that is allegedly embodied in the product or method they attack. Some of these actions are filed by what have been variously referred to as nonpracticing entities, patent-assertion entities, or—the favorite term in congressional hearings—trolls. Trolls are generally considered entities that purchase patents for the purpose of generating capital by enforcing them. A recent Government Accountability Office study estimates that about 20 percent of patent cases are

Now patents are seen as ways to prevent competitors from catching up, from using the same building blocks to arrive eventually at the same place. This seems particularly true where computer-implemented software patents are involved.

This litigation is also often brought in parallel with actions before the U.S. International Trade Commission (ITC), stretching the resources of those sued and upping the ante with the threat of a possible order barring importation of what could be a company's key product or the key component of its products. Indeed, appeals from the ITC to our court involving requests to bar products on the grounds that they infringe one or more patents held by a domestic industry—appeals once in the single digits—have averaged in excess of 20 per year for the last five years.

Let me add that patent actions often include claims against a corporation's competitors and customers alike, further complicating the proceedings, causing sensitivity with respect to sharing of discovery, and interfering with business relationships.

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prosecuted by nonpracticing entities, though many argue that this estimate is low. This monetization of the property rights reflected in patents is new and results in enforcement of patents that in years past would have remained dormant—passive rights which owners either did not have the wherewithal or the desire to enforce. And some assert that it results in enforcing—or efforts to enforce—undeserving patents, which either should not have been granted or are no longer relevant.

Those numbers do not take into account, moreover, active companies that do practice inventions reflected in some of their patents, but nevertheless bring actions based on others that they own but no longer practice because their own technology has moved on. Again, this is generally new as well. In the past, competitors tended to worry only about those competing in the exact same space, with the same technology.

A CHANGE IN WHO IS LITIGATING PATENT CASES

The change in the nature and number of law firms litigating these matters is meaningful as well—and not just because with big law firms tend to come big legal fees. When I started practicing law, Jones Day was one of the few general-practice firms to handle patent litigation. It was then largely the province of boutique firms that did nothing but prosecute and litigate patents. Indeed, even when I took the bench in 1994, the law firms I tended to see in patent cases were not the same firms trying other complex civil cases in my court. Today, I would venture to guess that there are not more than a handful of large firms without vibrant patent litigation departments, and, of those few, most are probably actively trying to develop them. I think this to be important for a number of reasons.

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To begin, it reflects the fact that patent litigation has become more mainstream; it reflects the extent to which traditional large-firm clients are repeatedly drawn into patent litigation—and the high stakes now involved in those matters. It is not unheard of to see damage verdicts that exceed \$1 billion, and many approach \$100 million or more. Big firms are responding to the needs of their clients and the fear that those clients have of being hit with large damage awards or an injunction barring sales of what could be their most valuable products or, on the other side of things, with losing a legitimate patent advantage in their particular industry.

The presence of general-practice litigators in the mix is important for another reason. They are experienced in trying all manner of cases before district courts and in arguing a variety of civil cases before the regional circuit courts of appeals. As a result, they have a generalized knowledge of how the federal rules of civil procedure and evidence are designed to work, how principles regarding jurisdiction and venue are to be applied, of governing common law concepts, and of how the relationship between the trial and appellate functions is meant to work. They therefore have less tolerance for treating patent cases differently from other cases when it comes to these basic principles and are more comfortable challenging the Federal Circuit in the Supreme Court when it adopts special rules in patent cases.

THE TENSION BETWEEN THE BURDENS OF PATENT LITIGATION AND THE NEED FOR A STRONG PATENT SYSTEM

At the same time that patent litigation has become a more popular tool for challenging competitors and a more popular funding source for venture capital firms, the scope of available e-discovery has exploded. Today, there are emails, backup files, metadata, and other potential sources of information that litigants can and do seek. This means that the costs and burdens of discovery have been increasing at the same time the stakes in these cases have been getting higher. Some studies indicate that the average fees and expenses incurred in defending an infringement suit exceed \$5 million, and costs in the more-complex actions far exceed even that number.

Corporations are feeling the financial burdens, and general counsel can no longer ignore the part that patent litigation plays in a company's legal budget. Where in-house patent counsel were once either deemed unnecessary or left to their own devices given the unique nature of their litigation world, they are now critical players in corporate hierarchy.

It is impossible to go to a patent-related conference or a conference on IP litigation generally, or even on Federal Circuit practice, without hearing complaints from in-house counsel regarding the costs and structural burdens imposed on them by costly, high-stakes, and now somewhat-constant patent litigation. This burden is complicated, moreover, by the scrutiny the Federal Trade Commission (FTC) has now decided to give to patent litigation and those involved in it. Even mutually beneficial and cost-effective resolutions of patent actions can be risky given the FTC's skeptical view of patent settlements and their potentially anticompetitive nature.

The increase in patent litigation and the burdens imposed on businesses by it—especially litigation where abusive or coercive tactics are employed—come at the same time that the need for legitimate patent protection for true innovators has been heightened. As we have become less capable of competing in the manufacturing and energy sectors, American ingenuity has become a primary driver of our economy. It is our ability to conceive of better mousetraps, to continually be one step ahead in the technology space, and to

lead in medical research and development, that keeps us competitive in the world. Thus, while complaints about patent litigation, and its attendant costs and burdens, abound, few would debate that a robust patent system with meaningful mechanisms to enforce patent rights—is necessary to foster innovation and to protect the often substantial investments innovators must make.

Indeed, at a recent conference I attended, I heard the founders of a large technology company explain that, while their company is now often the victim of what it perceives to be unfair infringement claims by nonpracticing entities, they recognize that the company owes its existence to the patent protection upon which it was able to rely in its early days. And, at that same conference, I heard the inventor Dean Kamen say that, although he might be characterized as a troll (because he loves innovating but not manufacturing), he knows that he could not afford to continually come up with new innovations—which are primarily in the medical device field-without confidence that he could get patents for his inventions, which enable him to recoup his costs and fund his next effort. Similarly, those conducting pharmaceutical research and development will tell you that the costs of developing, testing, and getting regulatory approval for new drugs is so prohibitive that it would not be undertaken but for the promise of patent protection, which offers at least the hope of recouping that outlay.

So we are now in a world where patent litigation has become overwhelming to many business owners at the same time that appropriate patent protection has become increasingly important to the economy. It is at the center of this vortex that the Federal Circuit finds itself.

III. All Branches of Government Are Responding

OUR COURT'S EFFORTS TO ADDRESS THESE CHANGES

he Federal Circuit has responded to the changing character of its docket. We are one of the few appellate courts to sit all 12 months of the year. And, in each of those months, we hear more arguments in complex cases than courts sitting far fewer days do in their average court sessions.

With a full complement of judges,* and the benefit of six talented and dedicated senior judges, we have also accelerated the pace of judgments, giving parties and litigants quicker answers and avoiding business uncertainties. We also have increased efficiencies related to the processing of cases by fully implementing an electronic case filing system, a change lauded universally by counsel. Thus our pace has not slowed as it has in some other circuits; it has accelerated.

On the substantive law front, among other things, we have decided six patent cases en banc since I joined the court at the end of 2010:

- TiVo Inc. v. EchoStar Corp., involving district court authority over contempt proceedings (2011)
- Therasense, Inc. v. Becton, Dickinson & Co., concerning inequitable conduct (2011)
- Akamai Technologies Inc. v. Limelight Networks, Inc., concerning indirect infringement (2012)
- CLS Bank International v. Alice Corp. Pty. Ltd., about the patentability of computer-implemented software and methods (2013)
- Robert Bosch, LLC v. Pylon Manufacturing Corp., presenting a question about the scope of our jurisdiction over patent appeals (2013)
- Lighting Ballast Control LLC v. Philips Electronics N.A. Corp., involving the standard of review for claim construction (2014).

Even outside the en banc context, our court has made progress in clarifying difficult issues arising in patent cases. Our jurisprudence has come a long way (1) in the standards and burdens involved where a patent claim is challenged on obviousness or enablement grounds, (2) on the appropriate measures for proving damages in patent actions, (3) on whether, and when, permanent injunctions remain appropriate upon a finding that a patent is valid and infringed, (4) on the standards to be employed when a request for fees is made under Section 285 of the Patent Act, and (5) on when the plaintiff's chosen venue is inappropriate. And, these are not the only areas where we have worked hard to incrementally clarify the law in response to the increasing numbers of patent appeals we are handling and to the increasingly complex and contentious nature of those appeals.

^{*}Randall R. Rader retired from the position of circuit judge on June 30, 2014—i.e., between the date of the lecture and this publication.

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THE SUPREME COURT HAS BECOME INVOLVED IN PATENT APPEALS

As I noted at the beginning, however, we are not the only ones who have recognized the increasing importance of intellectual property law and of the disputes arising thereunder. The Supreme Court, too, has shown an increasing interest in the area, and in the cases that we are deciding. Recent years have seen an unprecedented willingness by the Supreme Court to wade into patent actions within the Federal Circuit's jurisdiction. In the first decade of the circuit's existence, the Supreme Court took 18 cases arising out of the Federal Circuit, only 5 of which were patent cases. While the number of patent cases going to the Supreme Court increased slightly in later decades, in the first 28 years of the Federal Circuit's existence, the Supreme Court granted certiorari in 51 Federal Circuit cases, only 22 of which were patent cases. Between 2010 and today, however, the Supreme Court has taken 22 cases from Federal Circuit judgments, 17 of which are patent cases. And it took one case from state court—Gunn v. Minton (2013)—for the purpose of unanimously overruling Federal Circuit precedent regarding our jurisdiction over state-law patent-malpractice actions.

For a sense of how dramatic this shift is, consider that about 30 percent of the cases that went from the Federal Circuit to the Supreme Court during Judge Nies's 16 years on the bench were patent cases. In my three-and-a-half years on the bench, more than 75 percent of the cases arising out of our court and ending up in the Supreme Court are patent cases. To give you another metric, in the first 28 years of the Federal Circuit's existence, patent actions finding their way to the Supreme Court made up, on average, less than 1 percent of the Supreme Court's total docket. In the last three years, patent matters constituted more than 5 percent of the high court's caseload.

Some of the decisions from the Supreme Court in recent patent cases seem to be sending a general message regarding how the Federal Circuit operates. *eBay Inc. v. MercExchange, L.L.C.* (2006), *KSR International Co. v. Teleflex, Inc.* (2007), *MedImmune, Inc. v. Genentech, Inc.* (2007), *Global Tech Appliances, Inc. v. SEB S.A.* (2011), *Gunn v. Minton* (2013), and *Medtronic, Inc. v. Mirowski Family Ventures, LLC* (2014) are all generally seen as instances where the Supreme Court has been telling the Federal Circuit that, as an Article III court, it is bound by the same civil rules, jurisdictional standards, and common law principles that govern all Article III courts—in other words, that patent litigation must be treated like all other litigation.

But the Supreme Court has gone further, even wading into highly technical patent matters, such as the patentability of business methods, software, and even aspects of DNA mapping.

As of this lecture's date, we are currently awaiting decisions in five cases for this term and already have a sixth on the Supreme Court's docket for next term. These cases involve: (1) an analysis of what constitutes patentable subject matter under Section 101 of the Patent Act, (2) what standards govern claims of indirect infringement, (3) what measure should be employed to determine whether claims are indefinite and, thus, invalid, (4) what considerations should affect district court assessments of fee applications under 35 U.S.C. § 285, (5) what standard of review our court may apply to those Section 285 decisions, and, finally, (6) whether the Federal Circuit can continue to review de novo all aspects of claim construction decisions by district judges.

Thus, the Supreme Court has shown a heightened level of interest in what this court does in the patent arena, and in whether we are doing it correctly. Supreme Court-dictated changes in the legal standards that the Federal Circuit must apply or in the governing standard of review it is to employ may affect the Federal Circuit's jurisprudence across a wide spectrum of cases for years to come.



THE EXECUTIVE AND LEGISLATIVE **BRANCHES TAKE** NOTICE

It is not just the Supreme Court that is scrutinizing the matters coming before us or that is recognizing the issues' importance. The President of the United States has taken an interest in patent litigation, even mentioning the need for a

stronger patent system to foster innovation in his State of the Union address this past January. These comments echoed White House announcements regarding the need for policy makers to address abuses in the patent litigation system and to streamline the costs imposed on businesses by such abuses, while at the same time being cautious not to curb the innovation that a strong patent system can encourage. And the White House has created a special in-house position within the Office of Management and Budget-the Intellectual Property Enforcement Coordinator—whose function is to coordinate the efforts of government entities to combat intellectual property theft and to foster innovation.

Because of these White House calls for reform and its own independent concerns, Congress also has shown a willingness, and an apparent continuing desire, to redefine the patent laws in ways not done since passage of the Patent Act in 1952. The America Invents Act was signed into law on September 16, 2011, and the changes brought on by it are sweeping—among other things, creating new classes of actions for challenging the validity of patents before the PTO and thereby fashioning a new platform from which cases can be appealed to our court. That legislation also set up the Patent Pilot Program, through which district judges can opt to handle a greater share of patent cases, in the hopes that with greater experience in these complex cases might come greater expertise and increased efficiencies.

While the America Invents Act took seven years to pass and its changes have not been afforded the test of time, we are seeing proposals for even more patent reform—with one bill having already passed the House and others working their way through the Senate.

These new legislative initiatives are not aimed at making substantive changes to patent law. Instead, they seek to address and change the way patent litigation is conducted by the courts. Congress is currently considering numerous legislative proposals whose avowed purpose is to curb litigation abuses. Their apparent primary focus is on how trial court judges manage those patent cases that come before themthe proposals would dictate everything from pleading requirements, to the extent and timing of discovery, to stays of litigation against certain parties, to whether and when courts should award fees to a prevailing party. These proposals may even go so far as to require the Supreme Court to change certain rules of civil procedure and to direct the Administrative Office of the United States Courts to expend resources to conduct studies regarding litigation practices in patent cases.

These bills have raised questions regarding the appropriate respective roles of Congress and the courts in managing litigation—or at least they have for me. But the debates over them have focused instead on the tension I mentioned earlier between a legitimate, and somewhat frenzied, desire to curb litigation abuses by a certain class of patent litigants, on the one hand, and the need to maintain the integrity of the system for those who might legitimately need to resort to the courts to protect their intellectual property rights and the business interests they further, on the other. As those debates reflect, from a policy perspective—which is Congress's prerogative—there are no easy answers about how to balance these concerns.

IV. Conclusion

ith all of this, in just a few short years, the Federal Circuit has gone from a court familiar to a specialized group of lawyers and fairly limited number of litigants, to one whose work has become more important to our national economy and that is now being scrutinized by all three branches of government. As I said, I do not believe that it is the makeup of the court or the work of the particular judges on the court—or even their personalities—that either deserves the credit—or the blame—for all this attention. Changes in the realities of the patent system and of patent litigation itself have put us at the eye of the storm. It is a storm we on the Federal Circuit will continue to do our part to weather successfully.