



2013

Percolation, Uniformity, and Coherent Adjudication: The Federal Circuit Experience

Rochelle C. Dreyfuss

New York University School of Law, rochelle.dreyfuss@nyu.edu

Follow this and additional works at: <https://scholar.smu.edu/smulr>

Recommended Citation

Rochelle C. Dreyfuss, *Percolation, Uniformity, and Coherent Adjudication: The Federal Circuit Experience*, 66 SMU L. Rev. 505 (2013)
<https://scholar.smu.edu/smulr/vol66/iss3/2>

This Article is brought to you for free and open access by the Law Journals at SMU Scholar. It has been accepted for inclusion in SMU Law Review by an authorized administrator of SMU Scholar. For more information, please visit <http://digitalrepository.smu.edu>.

PERCOLATION, UNIFORMITY, AND COHERENT ADJUDICATION: THE FEDERAL CIRCUIT EXPERIENCE

Rochelle C. Dreyfuss*

*Two important lessons had been taught by the reactions to the Freund and Hruska Reports. One was that it was politically unacceptable to shut off any case in the lower federal courts from access to the Supreme Court by way of certiorari, however unavailing that might be in reality. . . . In addition, a widespread sentiment was evident among the bench and bar against having "specialized courts."*¹

CONGRESS established the Federal Circuit as a response to two studies of the federal docket: the Freund Commission Report, which considered ways to ease the then-burgeoning caseload of the Supreme Court,² and the Hruska Commission Report, which dealt with similar issues in the federal courts of appeal.³ Congress expected that the Federal Circuit would solve the second problem by taking patent cases—which many judges found technologically complex, legally esoteric, and time consuming—out of the regional appellate system.⁴ And because one court would decide *all* patent cases, Congress assumed that circuit splits in patent law would be eliminated, thus thinning the Supreme Court's docket as well.⁵ Further, by establishing a court that would entertain appeals from both trials and Patent and Trademark Office (PTO) determinations, Congress hoped that the Federal Circuit would also resolve a third problem: eliminating the "notorious difference[s]" the Supreme Court had noticed between the patent validity standards applied

* Pauline Newman Professor of Law, New York University School of Law. I would like to thank Peter Lee and the faculty at U.C. Davis for their insightful discussion of this paper.

1. Daniel J. Meador, *Origin of the Federal Circuit: A Personal Account*, 41 AM U. L. REV. 581, 587 (1992).

2. See FED. JUDICIAL CTR., REPORT OF THE STUDY GROUP ON THE CASELOAD OF THE SUPREME COURT (1972), reprinted in 57 F.R.D. 573, 584 (1972) (named for its Chairman, Professor Paul A. Freund).

3. COMM'N ON REVISION OF THE FED. COURT APPELLATE SYS., THE GEOGRAPHICAL BOUNDARIES OF THE SEVERAL JUDICIAL CIRCUITS: RECOMMENDATIONS FOR CHANGE (1973), reprinted in 62 F.R.D. 223, 228 (1973) (named for its Chair, Senator Roman Hruska).

4. Rochelle Cooper Dreyfuss, *The Federal Circuit: A Case Study in Specialized Courts*, 64 N.Y.U. L. REV. 1, 2-3 (1989).

5. *Id.* at 6-7.

by the PTO and by the courts.⁶

But as the above statement by Daniel Meador—one of the court's principal architects—suggests, concentrating patent cases in a single court was controversial.⁷ There was a hope that the court's immersion in patent law would allow it to develop significant expertise in this arcane field,⁸ but there were also many concerns. To paraphrase a well-known proverb, if all the judges have is the hammer of patent law, every social problem they encounter could easily come to look like a nail.⁹ They might, in other words, begin to see patents as the only incentive to innovate and lose sight of the many other reasons to invent—competition, lead-time advantage, curiosity, professional advancement, personal enjoyment, reputational interests—and discount other forms of legal protection such as copyright, trademark, and trade secrecy.¹⁰ Furthermore, the one-dimensional nature of the docket could make the court vulnerable to capture by well-organized, well-heeled lobbyists—which is to say, the patent industries—at the expense of the public's interest in access to creative products and technological information.¹¹ Even if the judges withstood the pressure, their absorption in a single field might lead them to take it out of the jurisprudential mainstream and render patent law even more esoteric.¹² To accommodate these fears, Congress gave the Federal Circuit *case* (rather than *issue*) jurisdiction, thus enabling its judges to see patent disputes embedded in a broader context.¹³ Moreover, the legislature assigned the court cases in a few areas far removed from patent law.¹⁴ As Meador predicted, Congress also kept the Supreme Court in the mix so that a generalist tribunal would have ultimate authority over patent

6. *Id.*; see *Graham v. John Deere Co. of Kan. City*, 383 U.S. 1, 18 (1966).

7. See Meador, *supra* note 1, at 587.

8. See, e.g., *Court of Appeals for the Federal Circuit: Hearings Before the Subcomm. on Courts, Civil Liberties and the Administration of Justice of the House Comm. on the Judiciary*, 97th Cong. 42–43 (1981) (statement of the Hon. Howard T. Markey, C. J., Court of Customs and Patent Appeals). At the same hearing, it was opined that patents were “the most unattractive thing about being a Federal judge.” *Id.* at 46 (statement of Rep. Sawyer).

9. Rochelle Cooper Dreyfuss, *What the Federal Circuit Can Learn from the Supreme Court—And Vice Versa*, 59 AM. U. L. REV. 787, 790 (2010).

10. See *id.*

11. *Id.* at 789–90.

12. See Dreyfuss, *supra* note 4, at 25.

13. See Rochelle Cooper Dreyfuss, *Specialized Adjudication*, 1990 BYU L. REV. 377, 412–14 (comparing the Federal Circuit's case jurisdiction to the issue jurisdiction of the Temporary Emergency Court of Appeals (TECA)).

14. See 28 U.S.C. § 1295 (2006) (providing for jurisdiction over appeals of regional adjudication of all patent disputes and certain tort cases brought against the United States; of decisions of the Court of Federal Claims and the Court of International Trade; of certain decisions of the International Trade Commission; of decisions of the Merit Systems Protection Board; of certain tax decisions from the courts of the Canal Zone, Guam, the Virgin Islands, and Northern Mariana Islands; of dispute resolution under the Contract Disputes Act and various economic measures, including the Harmonization Tariff Schedule, the Economic Stabilization Act, the Emergency Petroleum Allocation Act, the National Gas Policy Act, and the Energy Policy Conservation Act; and of certain agency action under the Federal Labor Relations Authority, the Patent Act, and the Lanham (Trademark) Act).

jurisprudence.¹⁵

Much has happened in the thirty years since the Federal Circuit was founded. Most obviously, patent law is no longer exotic. Patent filings have exploded worldwide, issues arising in patent cases are routinely covered by the popular press,¹⁶ economists regularly study the effect of patents on social welfare,¹⁷ and there is a growing legal literature on innovation. Because many other changes in the economy and technology have occurred in this time period as well, it is impossible to credit the Federal Circuit with prompting all of this attention. But it is surely responsible for some of it. Under its direction, patents are considered more dependable investments.¹⁸ Indeed, the success of the court has spurred many other countries to develop specialized intellectual property tribunals; studies of those courts suggest that they too are improving the efficiency with which intellectual property disputes are resolved.¹⁹

But even if the concerns expressed at the time of the court's founding have been allayed, a problem that was largely unforeseen has emerged: the high cost of eliminating intercircuit debate from the adjudicatory system. The architects of the Federal Circuit certainly realized that channeling appellate cases to a single forum would limit percolation.²⁰ However, they saw uniformity as the critical goal.²¹ At the time the court was created, forum shopping was rampant; some circuits were more than four times more hospitable to patents than others.²² Further, the designers of the new system seriously discounted the value of percolation.²³ Indeed, Dan Meador considered percolation largely overrated in the statutory context:

As applied to judicial interpretations of federal statutes, "percolation" is a euphemism for incoherence. The argument has the earmark of being an effort to put a good face on a bad situation. Whatever modest value there may be in these regional discrepancies as to federal statutory provisions, the benefit is outweighed by the

15. See Meador, *supra* note 1, at 587.

16. See, e.g., Richard A. Posner, *Why There Are Too Many Patents in America*, THE ATLANTIC (July 12, 2012), <http://www.theatlantic.com/business/archive/2012/07/why-there-are-too-many-patents-in-america/259725/> (discussing the patent war fought over smart phone technology between Apple, Samsung, and Motorola); Azeen Ghorayshi, *Can a Patent Own Your Genes?*, MOTHER JONES (Dec. 13, 2011), <http://www.motherjones.com/bluemarble/2011/12/myriad-genes-patent-lawsuit> (discussing the validity of patents covering the human genes BRCA 1 and BRCA 2, which are associated with early-onset breast cancer).

17. See, e.g., Michele Boldrin & David K. Levine, *The Case Against Patents* (Fed. Reserve Bank of St. Louis, Working Paper No. 2012-035A), available at <http://research.stlouisfed.org/wp/2012/2012-035.pdf>.

18. See, e.g., Jeffrey A. Lefstin, *The Measure of the Doubt: Dissent, Indeterminacy, and Interpretation at the Federal Circuit*, 58 HASTINGS L.J. 1025, 1072 (2007).

19. INT'L INTELLECTUAL PROP. INST. & U.S. PATENT AND TRADEMARK OFFICE, STUDY ON SPECIALIZED INTELLECTUAL PROPERTY COURTS 2, 5 (2012) (noting that over ninety countries have established some sort of specialized tribunal).

20. Dreyfuss, *supra* note 4, at 7.

21. *Id.*

22. *Id.* at 6–7.

23. See, e.g., Daniel J. Meador, *A Challenge to Judicial Architecture: Modifying the Regional Design of the U.S. Courts of Appeal*, 56 U. CHI. L. REV. 603, 633–34 (1989).

cost to the system and to American citizens. . . . The percolation that produces intercircuit inconsistencies and incoherence may provide intellectual stimulation for academicians, but in the world of human activity it works costly inequities.²⁴

Meador was not alone in this view. In the 1980s, many esteemed proceduralists had become disenchanted with the idea—which owed its origins to the Evarts Act²⁵—that there was benefit in allowing the appellate courts to decide cases independently of one another.²⁶ According to Henry Friendly, the lack of sub-Supreme Court capacity for “authoritative determination” of statutory issues was the most significant question facing the judicial system.²⁷ Paul Bator expressed a similar sentiment: “[P]ercolation is not a purposeful project. It is just a way of postponing decision.”²⁸ To Erwin M. Griswold, “‘the law’ has become a gossamer web with very little in it on which a lawyer or judge can firmly and safely rely.”²⁹ Or as Dan Meador memorably rephrased the point, settling statutory questions is more important than settling them “right.”³⁰

Yet the experience of the Federal Circuit suggests that in the absence of percolation, much can go awry. On several issues, the court has swung back and forth between extremes.³¹ In other areas, no single approach has developed.³² Nor has Supreme Court review helped.³³ The Court deals with patent law in the same way that it deals with other fields: it articulates norms and policies, but it rarely lays down specific rules.³⁴ Instead, it leaves implementation to the lower courts.³⁵ But with only one appellate court to refashion the law, and with that court the one whose decision was (often unfavorably) reviewed, the outcomes can leave much to be desired.³⁶ As Rebecca Eisenberg so aptly put it, the relationship between the Supreme Court and federal patent law “sometimes seems like that of a non-custodial parent who spends an occasional weekend with the kids.”³⁷ In short, it appears that federal law depends rather cru-

24. *Id.* at 634.

25. Circuit Court of Appeals (Evarts) Act, ch. 517, 26 Stat. 826, 827 (1891).

26. *Id.*

27. Paul D. Carrington & Paulina Orchard, *The Federal Circuit: A Model for Reform?*, 78 GEO. WASH. L. REV. 575, 583 (2010).

28. Paul M. Bator, *What is Wrong With the Supreme Court?*, 51 U. PITT. L. REV. 673, 690 (1990).

29. Erwin M. Griswold, *The Federal Courts Today and Tomorrow: A Summary and Survey*, 38 S.C. L. REV. 393, 406 (1987).

30. Carrington & Orchard, *supra* note 27, at 583.

31. See discussion *infra* notes 121–24.

32. See discussion *infra* note 125–31.

33. See generally John M. Golden, *The Supreme Court as “Prime Percolator”*: A Prescription for Appellate Review of Questions in Patent Law, 56 UCLA L. REV. 657 (2009).

34. See, e.g., John F. Duffy, *Federal Circuit En Bancs in an Era of Active Supreme Court Review*, LANDSLIDE, Nov.–Dec. 2011, at 8, 11–12 (discussing the decision in *KSR v. Teleflex*, 550 U.S. 398 (2007)).

35. See *id.*

36. See *id.*

37. Rebecca S. Eisenberg, Commentary, *The Supreme Court and the Federal Circuit: Visitation and Custody of Patent Law*, 106 MICH. L. REV. FIRST IMPRESSIONS 28, 28 (2007),

cially on percolation in intermediate courts, even in a field like patent law with clear statutory underpinnings.

The Federal Circuit is now thirty years old, and a third generation of judges is taking over the bench. These jurists have an opportunity to rethink the Federal Circuit's practices and to influence the Supreme Court's. They also face formidable challenges. With knowledge products becoming more salient in the economy and more countries beginning to innovate at global levels, countries with effective patent laws will enjoy an increasingly important comparative advantage. The America Invents Act (AIA),³⁸ which was enacted in 2011 and becomes effective in stages through 2013, was meant to keep U.S. law competitive,³⁹ but it raises many new questions.⁴⁰ In this changing environment, answering these questions "right" becomes ever more urgent.

This comment is in three parts. The first discusses the tradeoff between uniformity and getting it "right," arguing that the experience of the Federal Circuit demonstrates that the '80s proceduralists were mistaken—that achieving uniformity does not create coherence, nor does it compensate for the loss in accuracy. The second part examines the role of percolation in adjudication. The last section demonstrates how recent changes in patent law and its administration offer to restore dialogue and debate to the patent system

I. UNIFORMITY VS. ACCURACY: WERE THE ARCHITECTS RIGHT?

There has been considerable debate over the Federal Circuit's jurisprudence and whether, in the quest for uniformity, too much has been sacrificed.⁴¹ While there is no easy way to determine when a decision is "right," there are many signs that the judiciary and members of the creative community have become uneasy with the tradeoff and with law developed single-handedly by the Federal Circuit.

A review of the Supreme Court's activity in the patent arena is suggestive. In the first fifteen years of the Federal Circuit's existence, the Supreme Court largely left the court—or more generally, patent jurisprudence—alone. It heard only eight cases involving patent issues,

available at <http://www.michiganlawreview.org/assets/fi/106/eisenberg.pdf>. See generally Dreyfuss, *supra* note 9.

38. Leahy-Smith America Invents Act, Pub. L. No. 112-29, 125 Stat. 284 (2011) (codified in scattered sections of 35 U.S.C.).

39. See, e.g., *Acting Secretary Blank and USPTO Director Kappos Join President Obama at the American Invents Act Signing Ceremony*, DEP'T OF COM. (Sept. 16, 2011), <http://www.commerce.gov/blog/2011/09/16/acting-secretary-blank-and-uspto-director-kappos-join-president-obama-america-invent>.

40. See, e.g., Robert P. Merges, *Priority and Novelty under the AIA* (UC Berkeley Pub. Law Research, Paper No. 2130209, 2012), available at <http://ssrn.com/abstract=2130209>.

41. See, e.g., Arti K. Rai, *Patent Validity Across the Executive Branch: Ex Ante Foundations for Policy Development*, 61 DUKE L.J. 1237, 1238-39 (2012).

four on purely procedural questions.⁴² In the next half of the circuit's life, however, the Court stepped up its review considerably. It considered twenty-eight patent cases, nineteen on substantive patent-law questions.⁴³ Significantly, in over 80% of the cases considered, the Supreme Court reversed, vacated, modified, or otherwise seriously questioned the Federal Circuit's approach.⁴⁴ Given the significance of circuit splits to decisions to grant certiorari,⁴⁵ and considering that only four of the cases involved court splits,⁴⁶ this level of activity suggests that, at least in the Supreme Court's view, uniformity does not compensate for the loss of

42. Listed in chronological order. See *Dennison Mfg. Co. v. Panduit Corp.*, 475 U.S. 809 (1986) (reviewing a decision of the Supreme Court of Florida that held contrary to a Federal Circuit decision, *Interpart Corp v. Italia*, 777 F.2d 678 (Fed. Cir. 1985), on an issue of patent preemption); *Christianson v. Colt Indus. Operating Corp.*, 486 U.S. 800 (1988); *Bonito Boats, Inc. v. Thunder Craft Boats, Inc.*, 489 U.S. 141 (1989); *Eli Lilly & Co. v. Medtronic, Inc.*, 496 U.S. 661 (1990); *Cardinal Chem. Co. v. Morton Int'l, Inc.*, 508 U.S. 83 (1993); *Asgrow Seed Co. v. Winterboer*, 513 U.S. 179 (1995); *Markman v. Westview Instruments, Inc.*, 517 U.S. 370 (1996); *Warner-Jenkinson Co. v. Hilton Davis Chem. Co.*, 520 U.S. 17 (1997). See generally John F. Duffy, *The Festo Decision and the Return of the Supreme Court to the Bar of Patents*, 2002 SUP. CT. REV. 273.

43. See *Pfaff v. Wells Elec., Inc.*, 525 U.S. 55 (1998) (reversing a decision of the Eleventh Circuit taking an approach similar to that of the Federal Circuit on the relationship between patent law and intellectual property law); *Fl. Prepaid Postsecondary Educ. Expense Bd. v. Coll. Savs. Bank*, 527 U.S. 627 (1999); *Dickinson v. Zurko*, 527 U.S. 150 (1999); *Nelson v. Adams USA, Inc.*, 529 U.S. 460 (2000); *J.E.M. Ag Supply, Inc. v. Pioneer Hi-Bred Int'l, Inc.*, 534 U.S. 124 (2001); *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 535 U.S. 722 (2002); *Holmes Grp., Inc. v. Vornado Air Circulation Sys., Inc.*, 535 U.S. 826 (2002); *Merck KGaA v. Integra Lifesciences I, Ltd.*, 545 U.S. 193 (2005); *Unitherm Food Sys., Inc. v. Swift-Eckrich, Inc.*, 546 U.S. 394 (2006); *eBay Inc. v. MercExchange, L.L.C.*, 547 U.S. 388 (2006); *Ill. Tool Works, Inc. v. Indep. Ink, Inc.*, 547 U.S. 28 (2006); *Microsoft Corp. v. AT & T Corp.*, 550 U.S. 437 (2007); *MedImmune, Inc. v. Genentech, Inc.*, 549 U.S. 118 (2007); *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398 (2007); *Quanta Computer, Inc. v. LG Elec., Inc.*, 553 U.S. 617 (2008); *Carlsbad Tech., Inc. v. HIF Bio, Inc.*, 556 U.S. 635 (2009); *Bilski v. Kappos*, 130 S. Ct. 3218 (2010); *Microsoft Corp. v. i4i Ltd. P'ship*, 131 S. Ct. 2238 (2011); *Bd. of Trs. of the Leland Stanford Junior Univ. v. Roche Molecular Sys., Inc.*, 131 S. Ct. 2188 (2011); *Global-Tech Appliances, Inc. v. SEB S.A.*, 131 S. Ct. 2060 (2011); *Caraco Pharm. Labs., Ltd. v. Novo Nordisk A/S*, 132 S. Ct. 1670 (2012); *Kappos v. Hyatt*, 132 S. Ct. 1690 (2012); *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289 (2012); *Bowman v. Monsanto Co.*, 133 S. Ct. 1761 (2013); *Ass'n for Molecular Pathology v. Myriad Genetics, Inc.*, 133 S. Ct. 2107 (2013); *Gunn v. Minton*, 133 S. Ct. 1059 (2013); *FTC v. Actavis, Inc.*, 133 S. Ct. 2223 (2013). I also include in the total *Laboratory Corp. of America Holdings v. Metabolite Laboratories, Inc.*, 548 U.S. 124 (2006), where a writ of certiorari was dismissed as improvidently granted. I include it because the vigorous dissent by Justice Breyer had a strong impact on the law of patentable subject matter.

44. See sources cited *supra* note 43.

45. See, e.g., SUP. CT. R. 10(A) (listing circuit splits as the first consideration in the decision to grant certiorari).

46. Ronald Mann, *Is the New Economy Driving the Court's Docket?*, SCOTUSBLOG (Oct. 15, 2012), <http://www.scotusblog.com/?p=153842> (noting a decline in the grant rate from 84 cases in the 2010 October term to 48 so far in the 2012 October term). The four cases are *Christianson* (split with the Seventh Circuit on where review should take place), *Bonito Boats* (split with the Supreme Court of Florida on patent preemption), *Gunn* (split with the Supreme Court of Texas on whether patent malpractice cases arise under federal law), and *Actavis* (split between the Eleventh and Federal Circuits on the one hand and the Third Circuit on the other). See 486 U.S. 800; 489 U.S. 141; 133 S. Ct. 1059; 133 S. Ct. 2223.

accuracy.⁴⁷

To be sure, three of the cases—*Christianson v. Colt Industries*, *Holmes Group v. Vornado Air Circulation Systems*, and *Gunn v. Minton*—merited review because of the Federal Circuit’s unique position in a system that largely assigns cases geographically.⁴⁸ All three consider when a case involving a patent law issue “arises under” federal patent law.⁴⁹ Thus, they all involved the allocation of cases between the Federal and regional circuits.⁵⁰ Only the Supreme Court (or Congress) can decide that question definitively.⁵¹

Still, these cases betray concern about prizing uniformity over other goals. Because *Christianson*, decided in 1988, was only the second Federal Circuit case the Supreme Court reviewed, the decision to apply the well-pleaded complaint rule to the question of whether appeals go to the Federal or regional circuit was based entirely on the Court’s interpretation of the jurisdictional statutes in question.⁵² That is, in directing the case, which had a patent defense, to the Seventh Circuit, the Court found that even if Congress had intended to produce perfect uniformity in the administration of patent law, it had done an imperfect job.⁵³ By 2002, how-

47. Ronald Mann suggests that the upsurge in interest should be attributed to rising interest in intellectual property law rather than to concerns over the Federal Circuit. *See id.* (noting that the Court reviews a similar number of cases from the Sixth Circuit as it does the Federal Circuit). However, if the architects of the Federal Circuit were right, the Federal Circuit should not be reviewed at the same rate as courts whose decisions give rise to circuit splits. Moreover, the Supreme Court would not be reversing so many of the court’s decisions. In addition, if the thesis were correct, there should be at least as many copyright cases reaching the Supreme Court. Admittedly, copyright cases do not raise jurisdictional boundary issues, however there are many more copyrighted works than patented inventions and because these cases are heard in the regional circuits, they can give rise to circuit splits. Still, the Court has considered only fifteen copyright cases during the relevant time period. *See Kirtsaeng v. John Wiley & Sons, Inc.*, 133 S. Ct. 1351 (2013); *Golan v. Holder*, 132 S. Ct. 873 (2012); *Reed Elsevier, Inc. v. Muchnick*, 559 U.S. 154 (2010); *Metro-Goldwyn-Mayer Studios, Inc. v. Grokster, Ltd.*, 545 U.S. 913 (2005); *Eldred v. Ashcroft*, 537 U.S. 186 (2003); *N.Y. Times Co. v. Tasini*, 533 U.S. 483 (2001); *Feltner v. Columbia Pictures Television, Inc.*, 523 U.S. 340 (1998); *Quality King Distribs., Inc. v. L’anza Research Int’l, Inc.*, 523 U.S. 135 (1998); *Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569 (1994); *Fogerty v. Fantasy, Inc.*, 510 U.S. 517 (1994); *Prof’l Real Estate Investors, Inc. v. Columbia Pictures Indus., Inc.*, 508 U.S. 49 (1993); *Feist Publ’ns, Inc. v. Rural Tel. Serv. Co.*, 499 U.S. 340 (1991); *Stewart v. Abend*, 495 U.S. 207 (1990); *Cnty. for Creative Non-Violence v. Reid*, 490 U.S. 730 (1989); *Harper & Row, Publishers, Inc. v. Nation Enters.*, 471 U.S. 539 (1985); *Mills Music, Inc. v. Snyder*, 469 U.S. 153 (1985). I did not count *Sony Corp. of America v. Universal City Studios, Inc.*, 464 U.S. 417 (1984), which was decided after the Federal Circuit was created but before it started to hear cases; *Costco Wholesale Corp. v. Omega, S.A.*, 131 S. Ct. 565 (2010) (per curiam), which was affirmed by an equally divided Court and involved the same issue as *Kirtsang*; or *Dastar Corp. v. Twentieth Century Fox Film Corp.*, 539 U.S. 23 (2003), and *Dowling v. United States*, 473 U.S. 207 (1985), which involved copyright issues tangentially.

48. *See Christianson*, 486 U.S. at 803–04; *Holmes*, 535 U.S. at 827; *Gunn*, 133 S. Ct. at 1062.

49. *See Christianson*, 486 U.S. at 807; *Holmes*, 535 U.S. at 827; *Gunn*, 133 S. Ct. at 1062.

50. *See Christianson*, 486 U.S. at 807; *Holmes*, 535 U.S. at 827; *Gunn*, 133 S. Ct. at 1062.

51. *See Christianson*, 486 U.S. 807; *Holmes*, 535 U.S. at 827; *Gunn*, 133 S. Ct. at 1062.

52. *See* 486 U.S. at 813–14.

53. *See id.* at 819.

ever, when the Supreme Court decided *Holmes*, it had more experience with specialization.⁵⁴ Once again, the Court interpreted the statute strictly—it decided that patent law counterclaims do not create a case within the Federal Circuit’s purview.⁵⁵ This time, however, Justice Stevens wrote a separate opinion in which he questioned the notion that uniformity was the highest value.⁵⁶ Noting that under *Holmes* “other circuits will have some role to play in the development of this area of the law,” he argued that “[a]n occasional conflict in decisions may be useful in identifying questions that merit this Court’s attention. Moreover, occasional decisions by courts with broader jurisdiction will provide an antidote to the risk that the specialized court may develop an institutional bias.”⁵⁷ *Gunn*, which involved a patent malpractice claim, raised a different countervailing interest: the state’s “special responsibility for maintaining standards among members of the licensed professions.”⁵⁸

The debate between the Supreme Court and the Federal Circuit over the use of bright line rules is another indicator that the sound administration of justice requires more than uniformity. The Federal Circuit is drawn to clear rules. For example, at one time, it deemed processes to be patentable subject matter only if they were tied to a machine or effectuated a physical transformation;⁵⁹ it required the PTO and lower courts to apply a “teaching, suggestion, or motivation” test to determine whether an invention was nonobvious;⁶⁰ it developed a set of rules that largely eliminated resort to the doctrine of equivalents (which extended the scope of infringement beyond the literal claims);⁶¹ it laid down a “general rule” of awarding injunctive relief in cases where a valid patent was found to have been infringed;⁶² and it equated patents with market power in antitrust cases.⁶³ In a system in which uniformity is prized, it is easy to understand why such bright line rules would be desired.⁶⁴ Trial judges do not have the expertise enjoyed by specialized jurists and clear rules help lay decisionmakers treat like cases alike, even if some of the complexities in the technological parts of the cases are obscure.⁶⁵

54. See *Holmes*, 535 U.S. at 827.

55. *Id.* at 832–33.

56. *Id.* at 838–39 (Stevens, J., concurring).

57. *Id.* at 839. Interestingly, however, Congress reversed the Supreme Court’s disposition on these issues in the AIA. See 28 U.S.C. §§ 1295(a)(1), 1338(a) (Supp. V 2011).

58. 133 S. Ct. 1059, 1068 (2013).

59. *In re Bilski*, 545 F.3d 943, 958–59 (Fed. Cir. 2008), *aff’d*, *Bilski v. Kappos*, 130 S. Ct. 3218 (2010).

60. *In re Lee*, 277 F.3d 1338, 1343–44 (Fed. Cir. 2002).

61. *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 234 F.3d 558, 566–78 (Fed. Cir. 2000), *vacated*, 535 U.S. 722 (2002).

62. *MercExchange, LLC v. eBay, Inc.*, 401 F.3d 1323, 1339 (Fed. Cir. 2005), *vacated*, 547 U.S. 388 (2006).

63. *Indep. Ink, Inc. v. Ill. Tool Works, Inc.*, 396 F.3d 1342, 1346 (Fed. Cir. 2005), *vacated*, 547 U.S. 28 (2006).

64. Dreyfuss, *supra* note 9, at 798–99.

65. See generally Peter Lee, *Patent Law and the Two Cultures*, 120 YALE L.J. 2 (2010) (attributing the tendency toward formalism to the cognitive burden technological issues place on lay judges).

And yet the Supreme Court rejected every one of these rules. In *Bilski v. Kappos*, it barred exclusive use of the machine or transformation test.⁶⁶ Writing for the plurality, Justice Kennedy reasoned that use of a “categorical rule denying patent protection for inventions in areas not contemplated by Congress . . . would frustrate the purposes of the patent law.”⁶⁷ In *KSR International Co. v. Teleflex, Inc.*, the Court was even more blunt.⁶⁸ It introduced its discussion of the teaching, suggestion, or motivation tests by first “rejecting the rigid approach of the Court of Appeals” and continuing to criticize the court’s rigidity five more times in the decision.⁶⁹ In *Warner-Jenkinson Co. v. Hilton Davis Chemical Co.*, on the doctrine of equivalents, the Supreme Court said it could “see no substantial cause for requiring a more rigid rule” than had been used in the past,⁷⁰ and in a second case on the same issue, *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, Justice Kennedy stressed that “we have consistently applied the doctrine in a flexible way, not a rigid one.”⁷¹ In *eBay, Inc. v. MercExchange, L.L.C.*, the Supreme Court criticized the Federal Circuit’s “general rule” favoring permanent injunctive relief and emphasized the equitable factors that need to be considered.⁷² And in *Illinois Tool Works Inc. v. Independent Ink, Inc.*, a tying case, it endorsed a rule-of-reason analysis.⁷³

Significantly, in many of these cases, the Court also pursued a goal closely related to percolation. Rejecting patent exceptionalism, it faulted the Federal Circuit for failing to consider how similar issues are treated in other areas of the law. The Court has been particularly insistent in the case of procedural issues where there is an obvious commonality among fields. Thus, in its very first review of a Federal Circuit decision, *Dennison Manufacturing Co. v. Panduit Corp.*, the Court held that there could be no deviation from the standard set by Federal Rule of Civil Procedure 52(a) for reviewing the district court’s factual findings.⁷⁴ In *eBay*, the Supreme Court was shocked by the court’s failure to consider the “traditional test” on injunctive relief.⁷⁵ Similarly, *MedImmune, Inc. v. Genentech, Inc.* criticized the Federal Circuit’s narrow definition of what constitutes a “case or controversy” and mandated the more generous ap-

66. 130 S. Ct. 3218, 3227 (2010).

67. *Id.* (internal quotation marks omitted).

68. *See* 550 U.S. 398, 415, 419, 421–22, 428 (2007).

69. *Id.*

70. 520 U.S. 17, 32 (1997).

71. 535 U.S. 722, 738 (2002).

72. 547 U.S. 388, 393–94 (2006).

73. 547 U.S. 28, 42 (2006). The Supreme Court similarly adopted a rule of reason for determining when the settlement of a patent case violates the antitrust laws. *FTC v. Actavis, Inc.*, 133 S. Ct. 2223, 2237 (2013). The Federal Circuit regarded such settlements as nonactionable. *In re Ciprofloxacin Hydrochloride Antitrust Litig.*, 544 F.3d 1323, 1341 (Fed. Cir. 2008).

74. 475 U.S. 809, 811 (1986).

75. 547 U.S. at 390. Whether the Court’s own four-part test correctly stated a rule that was traditional is another issue. *See generally* Mark P. Gergen et al., *The Supreme Court’s Accidental Revolution? The Test for Permanent Injunctions*, 112 COLUM. L. REV. 203 (2012).

proach used in other fields.⁷⁶

Even in cases involving substantive patent law issues, the Court's preference is that the Federal Circuit consider analogous approaches in other realms. For instance, in *Global-Tech Appliances, Inc. v. SEB S.A.*, which addressed the standard for determining whether a defendant accused of inducing infringement had the appropriate intent, the Court affirmed the Federal Circuit's resolution but adopted the standard of culpability from traditional criminal law doctrines.⁷⁷ Similarly, in *Illinois Tool*, the Supreme Court took the Federal Circuit to task for failing to glean from the work of the Department of Justice, the Federal Trade Commission, and Chicago School economists that patents should not be presumed to confer market power.⁷⁸

Other concerns appear to go well beyond exceptionalism; the Court also appears worried about substantive patent law—in particular, with whether the Federal Circuit overvalues patents to the detriment of public-access interests. The *MedImmune* reversal gave licensees, who are in a unique position to challenge patent validity, greater ability to do so.⁷⁹ The reversal in *Caraco Pharmaceutical Laboratories, Ltd. v. Novo Nordisk* facilitated the approval of non-infringing generic drugs.⁸⁰ The *Cardinal Chemical Co. v. Morton International, Inc.* reversal, which prevented the Federal Circuit from vacating decisions of invalidity when the defendant had been found not to infringe, added another access-protective feature.⁸¹ It preserves “the interest of the successful litigant” in developing “markets [for] similar products in the future,” as well as the public interest in a definitive determination of invalidity.⁸²

By the same token, the Court has been active on the question of defenses to patent infringement. In *Merck KGaA v. Integra Lifesciences I, Ltd.*, it expanded the scope of the statutory research exemption.⁸³ Both *Quanta Computer, Inc. v. LG Electronics Inc.* and *Microsoft Corp. v. AT & T Corp.* imposed limits on infringement liability.⁸⁴ *Florida Prepaid Postsecondary Education Expense Board v. College Savings Bank* used the Eleventh Amendment to shield states that infringe upon patent rights from claims for monetary damages.⁸⁵

76. 549 U.S. 118, 126–27 (2007).

77. 131 S. Ct. 2060, 2068–69 (2011).

78. 547 U.S. at 45.

79. See 549 U.S. at 137; see also *Lear, Inc. v. Adkins*, 395 U.S. 653, 676 (1969).

80. See 132 S. Ct. 1670, 1683 (2012).

81. 508 U.S. 83, 99–101 (1993).

82. *Id.*

83. 545 U.S. 193, 207 (2005). *But see* *Asgrow Seed Co. v. Winterboer*, 513 U.S. 179, 190–91 (1995) (narrowing the statutory exemption for resowing seed found in the Plant Variety Protection Act, 7 U.S.C. § 2541).

84. *Quanta Computer, Inc. v. LG Elecs., Inc.*, 553 U.S. 617, 621 (2008); *Microsoft Corp. v. AT & T Corp.*, 550 U.S. 437, 442 (2006). *Bowman v. Monsanto Co.* examines a Federal Circuit decision expanding the scope of infringement liability. 133 S. Ct. 1761, 1764 (2013).

85. 527 U.S. 627, 634–35 (1999).

Most significantly, in a stream of cases beginning with Justice Breyer's dissent from the denial of certiorari in *Laboratory Corp. of America Holdings v. Metabolite Laboratories, Inc. (Lab Corp)*, the Court has questioned whether the Federal Circuit expanded the scope of patentable subject matter so far that patents could be obtained on material crucial to technological development.⁸⁶ Warning that "sometimes *too much* patent protection can impede rather than promote the Progress of Science and useful Arts," Breyer would have invalidated a patent on a medical diagnostic.⁸⁷ While the *Lab Corp* dissent led the Federal Circuit to reevaluate its analysis of patentable subject matter, the Supreme Court continued to find fault with the Federal Circuit's approach.⁸⁸ In *Bilski*, the Court affirmed the invalidation of three claims to hedging methods as too abstract but rejected the Federal Circuit's sole reliance on the machine or transformation test.⁸⁹ Furthermore, even though the *Bilski* Court agreed that the test might furnish a "clue" to patentability,⁹⁰ in *Mayo Collaborative Services v. Prometheus Laboratories, Inc.*, the Court reversed a decision validating patents on a diagnostic that recited specific physical transformations.⁹¹ According to Justice Breyer, "[U]pholding the patents would risk disproportionately tying up the use of the underlying natural laws, inhibiting their use in the making of further discoveries."⁹² Similarly, in *Association for Molecular Pathology v. Myriad Genetics, Inc.*, the Court held that isolated genomic DNA is not patentable, reiterating that exceptions to patentability are necessary to avert the "considerable danger that the grant of patents would tie up the use of [the basic tools of scientific and technological work] and thereby inhibit future innovation premised upon them."⁹³

Of course, it is possible that the Federal Circuit, with its special expertise in patent law, has it right and that the generalists on the Supreme Court fail to appreciate the ways in which the Federal Circuit has chosen to supervise the lower courts, develop patent law doctrines, and balance the public's access demands against the proprietary interests of patentees.⁹⁴ Were the Court alone in questioning the outcomes of Federal Circuit cases, one might conclude that the architects' initial instincts were correct, and the Supreme Court should have been eliminated from the system to spare the specialists review by untrained generalists.

The Supreme Court is not, however, alone in its concerns about the Federal Circuit's jurisprudence. Most glaring is the heavy participation of *amicus curiae* at both the Supreme Court and in cases the Federal Circuit

86. See, e.g., 548 U.S. 124, 126–27 (2006) (Breyer, J., dissenting).

87. *Id.* at 126, 134–38 (internal quotation marks omitted).

88. See *id.*

89. 130 S. Ct. 3218, 3231 (2010).

90. *Id.* at 3227.

91. 132 S. Ct. 1289, 1294 (2012).

92. *Id.*

93. 133 S. Ct. 2107, 2111, 2116 (2013) (internal quotation marks omitted).

94. Significantly, Congress disagreed with the Supreme Court on the ambit of the Federal Circuit's jurisdiction. See *supra* note 56.

takes en banc.⁹⁵ Getting it right is (obviously) important to the parties; one would certainly anticipate that losers would petition for en banc rehearings and for certiorari and that both sides would argue these cases vigorously. But if the community's interest were largely in uniformity, there is no reason to expect broader participation. Nevertheless, as Colleen Chien has pointed out, over 1,000 briefs were filed in Federal Circuit and Supreme Court patent cases between 1989 and 2009, with slightly more amicus filings in the Federal Circuit than the average in other circuits.⁹⁶ Admittedly, the Federal Circuit is especially hospitable to these briefs.⁹⁷ It has a liberal grant policy and takes the unusual step of maintaining a list of bar associations that are invited to file.⁹⁸ The Federal Circuit's desire for these briefs does not, however, explain the willingness of the creative community—lobbying organizations, such as Biotechnology Industry Organization (BIO); universities, professors, and scientists; both state and federal government entities; and consumer groups—to spend the time and money weighing in on cases in which they have no direct involvement.⁹⁹ Nor does it explain activity in the Supreme Court, where many more briefs are filed in favor of granting certiorari to patent cases than on the side of declining review.¹⁰⁰

The prevalence of these filings suggests that the public cares more about accuracy than the champions of uniformity thought.¹⁰¹ *Mayo* attracted more than thirty amici;¹⁰² *Myriad* and *Bilski*, over fifty-five each.¹⁰³ In *Microsoft Corp. v. i4i Ltd. Partnership*, which raised a question about the evidentiary standard to be used in reviewing prior art, over sixty amicus briefs were filed.¹⁰⁴ Indeed, there were seven amicus briefs filed in *Pfaff v. Wells Electronics, Inc.*, which dealt with a question about the on-sale bar that was esoteric even to patent lawyers.¹⁰⁵ As John Duffy has noted, the Solicitor General plays an increasingly active role in patent cases, which further suggests there is a strong public interest in how patent law issues are resolved and not merely in their uniform resolution.¹⁰⁶ That view is reinforced by reports of the National Academies, the Federal Trade Commission, the Department of Justice, and the Health and

95. See generally Colleen V. Chien, *Patent Amicus Briefs: What the Courts' Friends Can Teach Us About the Patent System*, 1 U.C. IRVINE L. REV. 395 (2011).

96. *Id.* at 398–99 & n.21.

97. *Id.* at 398.

98. *Id.* at 398, 406; FED. CIR. R. 29(b) (“The clerk will maintain a list of bar associations and other organizations to be invited to file amicus curiae briefs when the court directs. Bar associations and other organizations will be placed on the list if they request. The request must be renewed annually not later than October 1.”).

99. Chien, *supra* note 95, at 410–15.

100. *Id.* at 424.

101. See *id.* at 398–99.

102. See 132 S. Ct. 1289 (2012).

103. See *Ass'n for Molecular Pathology v. Myriad Genetics, Inc.*, 133 S. Ct. 2107 (2013); *Bilski v. Kappos*, 130 S. Ct. 3218 (2010).

104. See 131 S. Ct. 2238, 2249–52 (2011).

105. See 525 U.S. 55, 65–68 (1998).

106. John F. Duffy, *The Federal Circuit in the Shadow of the Solicitor General*, 78 GEO. WASH. L. REV. 518, 520 (2010).

Human Services Secretary's Committee on Genetics, Health, and Society, which all have critiqued the impact of Federal Circuit decisions on such matters as research, competition, and the delivery of healthcare.¹⁰⁷

Also telling is the high level of dissent within the Federal Circuit. As Richard Revesz argues, dissenting is costly.¹⁰⁸ The circuits put pressure on the judges to produce their fair share of majority opinions, but judges receive no credit for writing dissents.¹⁰⁹ Further, a dissenting judge loses power to influence majority opinions while inflicting extra work on the colleague who must respond to the attack.¹¹⁰ If uniformity were the principal value, one would expect few Federal Circuit judges to roil the waters by dissenting. And yet the percentage of dissents in the Federal Circuit is the second highest in the federal system.¹¹¹ Indeed, thanks to the newest judges, the rate of dissent may well be increasing.¹¹² It is probable that some of these dissents are confined to disagreement on the application of fact to law.¹¹³ However, the persistence of dissent suggests that the court, though charged with producing uniformity, also cares about substance.¹¹⁴

The opinions of Judge O'Malley, the first trial court judge to be elevated to the Federal Circuit,¹¹⁵ reflect another dimension of the uniform-

107. See, e.g., SEC'Y'S ADVISORY COMM. ON GENETICS, HEALTH & SOC'Y, GENE PATENTS AND LICENSING PRACTICES AND THEIR IMPACT ON PATIENT ACCESS TO GENETIC TESTS 63-71 (2010), available at http://oba.od.nih.gov/oba/sacghs/reports/SACGHS_patents_report_2010.pdf; U.S. DEP'T OF JUSTICE & FED. TRADE COMM'N, ANTI-TRUST ENFORCEMENT AND INTELLECTUAL PROPERTY RIGHTS: PROMOTING INNOVATION AND COMPETITION 5, 18 (2007), available at <http://www.ftc.gov/reports/innovation/P040101PromotingInnovationandCompetitionrpt0704.pdf>; NAT'L RESEARCH COUNCIL OF THE NAT'L ACADS., REAPING THE BENEFITS OF GENOMIC AND PROTEOMIC RESEARCH: INTELLECTUAL PROPERTY RIGHTS, INNOVATION, AND PUBLIC HEALTH (2006), available at <http://www.ncbi.nlm.nih.gov/books/NBK19865/pdf/TOC.pdf>; NAT'L RESEARCH COUNCIL OF THE NAT'L ACADS. OF SCIENCE, A PATENT SYSTEM FOR THE 21ST CENTURY (Stephen A. Merrill et al. eds., 2004); FED. TRADE COMM'N, TO PROMOTE INNOVATION: THE PROPER BALANCE OF COMPETITION AND PATENT LAW AND POLICY (2003), available at <http://www.ftc.gov/os/2003/10/innovationrpt.pdf>.

108. Richard L. Revesz, *Congressional Influence on Judicial Behavior? An Empirical Examination of Challenges to Agency Action in the D.C. Circuit*, 76 N.Y.U. L. REV. 1100, 1110 (2001).

109. *Id.*

110. *Id.*

111. Christopher A. Cotropia, *Determining Uniformity Within the Federal Circuit by Measuring Dissent and En Banc Review*, 43 LOY. L.A. L. REV. 801, 803 (2010).

112. See Dennis Crouch & Jason Rantanen, *Dissenting Opinions at the Federal Circuit*, PATENTLY-O (Sept. 2, 2012), <http://www.patentlyo.com/patent/2012/09/dissenting-opinions-at-the-federal-circuit.html> (showing a high dissent rate for Judges O'Malley and Reyna, appointed in 2010 and 2011, respectively).

113. See Cotropia, *supra* note 111, at 803, 815-16.

114. See *id.* Judge Rader has, for example, consistently dissented on the application of the written description requirement. See, e.g., *Ariad Pharms., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1362 (Fed. Cir. 2010) (en banc) (Rader, J., dissenting) (listing all of his previous dissents on the issue). See generally Lee Petherbridge, *Patent Law Uniformity?*, 22 HARV. J.L. & TECH. 421 (2009); R. Polk Wagner & Lee Petherbridge, *Is the Federal Circuit Succeeding? An Empirical Assessment of Judicial Performance*, 152 U. PA. L. REV. 1105 (2004) (examining the substantive issues on which judges dissent).

115. Jason Rantanen, *Judge Kathleen O'Malley Confirmed to the Federal Circuit*, PATENTLY-O (Dec. 24, 2010), <http://www.patentlyo.com/patent/2010/12/judge-kathleen-omalley-confirmed-to-the-federal-circuit.html>.

ity versus accuracy question: the impact that decisions can have on adjudication. While a district judge, Judge O'Malley led a panel discussion of trial judges which highlighted the problems associated with the Federal Circuit's *de novo* review of claim construction.¹¹⁶ Noting that this approach can lead to reversals and retrials, the judges felt that the Federal Circuit was "demoraliz[ing]" the lower bench.¹¹⁷ Not surprisingly, now that Judge O'Malley is on the Federal Circuit, she has dissented on a variety of questions regarding inter-tribunal relationships, including the question of how to review claim interpretation.¹¹⁸ Like the Supreme Court, she has also criticized the adoption of "hard and fast" rules which, she claims, pose real difficulties for the district courts that must apply them.¹¹⁹

The level of dissent in the Federal Circuit and the concerns expressed by district court jurists also suggest that the goal of uniformity may be something of an illusion. In some areas, the law has swung from one extreme to another. The jurisprudence on inequitable conduct in the PTO illustrates the point. In its early years, the Federal Circuit considered inequitable conduct broader than common law fraud and made it fairly easy to demonstrate the elements of materiality and intent.¹²⁰ Over time, it made these elements so easy to prove¹²¹ that allegations of inequitable conduct became—in the Federal Circuit's own words—"an absolute plague."¹²² In 2011, the court took a case *en banc* and radically raised the standard of both materiality and intent.¹²³ Whether this is the final word on inequitable conduct is hard to say. Should misconduct in the PTO rise in reliance on the new lenient standard, the standard could be altered again and would be applied, like the previous standards have been ap-

116. Kathleen M. O'Malley et al., *A Panel Discussion: Claim Construction from the Perspective of the District Judge*, 54 CASE W. RES. L. REV. 671, 679–80 (2004).

117. *Id.* at 682.

118. See, e.g., *Apple, Inc. v. Samsung Elecs. Co.*, 678 F.3d 1314, 1334 (Fed. Cir. 2012) (O'Malley, J., dissenting in part) (arguing that the remand ordered by the majority will cause unnecessary delay); *Memorylink Corp. v. Motorola, Inc.*, 676 F.3d 1051, 1052 (Fed. Cir. 2012) (O'Malley, J., dissenting), *cert. denied*, 132 S. Ct. 2734 (2012); *Byrne v. Wood, Herron & Evans LLP*, 676 F.3d 1024, 1027 (Fed. Cir. 2012) (O'Malley, J., dissenting) (dissenting from denial of rehearing *en banc* on the issue of the court's jurisdiction over malpractice claims); *Retractable Techs., Inc. v. Becton, Dickinson & Co.*, 659 F.3d 1369, 1373 (Fed. Cir. 2011) (O'Malley, J., dissenting) (dissenting from denial of rehearing *en banc* on the question of *de novo* review of claim construction), *cert. denied*, 133 S. Ct. 833 (2013).

119. See *Therasense, Inc. v. Becton, Dickinson & Co.*, 649 F.3d 1276, 1297 (Fed. Cir. 2011) (*en banc*) (O'Malley, J., dissenting in part).

120. See, e.g., *J.P. Stevens & Co. v. Lex Tex Ltd.*, 747 F.2d 1553, 1559–60 (Fed. Cir. 1984) (requiring proof that a reasonable examiner would have considered the material important and permitting intent to be inferred from conduct).

121. See, e.g., *Critikon, Inc. v. Becton Dickinson Vascular Access, Inc.*, 120 F.3d 1253, 1257–59 (Fed. Cir. 1997) (stating that materiality depended on what an examiner would have liked to know and that intent could be inferred from materiality).

122. *Burlington Indus., Inc. v. Dayco Corp.*, 849 F.2d 1418, 1422 (Fed. Cir. 1988).

123. *Therasense*, 649 F.3d at 1291 (requiring "but for" the conduct, the patent would not have been granted and requiring proof of specific intent to deceive, with no inference to be drawn from materiality).

plied, retroactively.¹²⁴

While the law on inequitable conduct has had a clear up-and-down trajectory, the history of claim construction illustrates that sometimes there is no trajectory at all. Claim construction is an area where uniformity is particularly valuable. Indeed, in a rare affirmance of the Federal Circuit, the Supreme Court in *Markman v. Westview Instruments, Inc.* agreed that “the importance of uniformity in the treatment of a given patent” required it to treat claim construction as the functional equivalent of a question of law, to be decided by the judge rather than the jury.¹²⁵ As a result, the Federal Circuit reviews claim constructions de novo.¹²⁶ But as the critique by Judge O’Malley’s panel intimates, the outcome of Federal Circuit review has been unpredictable.¹²⁷ At one time, interpretation depended so heavily on the composition of the panel hearing the appeal, Professor Polk Wagner ran a website that calculated the probability that any given panel would employ a particular methodology.¹²⁸ Once again, the court took a case en banc,¹²⁹ yet little has changed.¹³⁰ Not only is it difficult for inventors and businesses to predict the scope of a claim, it is also hard for judges—including district court judges with substantial experience in patent law—to anticipate the Federal Circuit’s interpretation.¹³¹

The bottom line is in some ways the worst of all worlds. There is stronger public interest in substantive content than the proceduralists predicted,¹³² but the goal of uniformity has not been achieved.¹³³ Moreover, the lack of uniformity is of a particularly pernicious sort. Disuniformity in the regional circuits does not entirely undermine predictability because the geographic scope of each court’s authority usu-

124. See, e.g., Sona De, *The Inequitable Conduct Defense: Before and After Therasense*, INTELL. PROP. & TECH. L.J., Sept. 2012, at 15, 15–16; Dashiell Milliman-Jarvis, *The State of Ethical Duties After Therasense*, 25 GEO. J. LEGAL ETHICS 695, 710 (2012).

125. 517 U.S. 370, 390 (1996).

126. *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996).

127. O’Malley, *supra* note 116, at 680–81; see, e.g., *Vitronics*, 90 F.3d at 1581–83 (describing the kinds of evidence judges rely on). See generally Jeffrey A. Lefstin, *Claim Construction, Appeal, and the Predictability of Interpretive Strategies*, 61 U. MIAMI L. REV. 1033 (2007).

128. See *The Federal Circuit Predictor*, CLAIMCONSTRUCTION.COM, <http://predictor.claimconstruction.com/> (last visited Oct. 31, 2013).

129. See *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005) (en banc).

130. R. Polk Wagner & Lee Petherbridge, *Did Phillips Change Anything? Empirical Analysis of the Federal Circuit’s Claim Construction Jurisprudence* 33 (Univ. of Pa. Law Sch. Inst. for Law & Econ., Paper No. 11-27), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1909028. The advent of new judges may further destabilize claim construction. See, e.g., *Aventis Pharms. Inc. v. Amino Chems., Ltd.*, 715 F.3d 1363, 1373, 1377–81 (Fed. Cir. 2013) (featuring an opinion by Judge Reyna and a dissent by Judge Bryson directed, in part, to the effect of prosecution history).

131. David L. Schwartz, *Practice Makes Perfect? An Empirical Study of Claim Construction Reversal Rates in Patent Cases*, 107 MICH. L. REV. 223, 226 n.7 (2008) (quoting District Court Judge Marsha J. Pechman as stating that the Federal Circuit’s handling of these cases makes her think “you might as well throw darts”); see also Mark D. Janis & Timothy R. Holbrook, *Patent Law’s Audience*, 97 MINN. L. REV. 72, 93–100 (2012).

132. See discussion *supra* notes 95–107.

133. See discussion *supra* notes 120–31.

ally makes it possible to determine which law will apply.¹³⁴ However, when the disuniformity derives from the composition of particular panels (as in claim construction) or the point in time when a case reaches the appellate level (as with inequitable conduct), it is not possible to conform one's behavior to the dictates of the law.¹³⁵ In addition, it is worth noting that even though forum shopping at the appellate level decreased with the establishment of the Federal Circuit, it did not disappear.¹³⁶ Instead, it occurs among district courts.¹³⁷

II. WOULD PERCOLATION HELP?

The proceduralists' attack on percolation was aimed at statutory interpretation.¹³⁸ Thus, it is not surprising that the architects of the Federal Circuit thought patent law would be a perfect place to experiment.¹³⁹ Since information is nonrivalrous, the right to exclude is a creature of statute.¹⁴⁰ Furthermore, the myriad technical details in the Patent Act make it appear to be a comprehensive codification of the law.¹⁴¹

However, the history of the Act belies the notion that patent law is purely statutory. Much of the current law is built on the patent acts of the 19th century, a time when legislators relied heavily on judges to fill interstices.¹⁴² More importantly, the goal of patent law is to encourage new—and as Justice Kennedy pointed out in *Bilski*, unforeseeable—inventions.¹⁴³ Further, these advances can—as Justice Kennedy suggested in *eBay*—alter the “economic function of the patent holder” and thus require modifications in the way the law is applied.¹⁴⁴ The legislature could adapt the law each time the Federal Circuit misinterpreted the statute or whenever technological innovation required rethinking, but patent law has never been administered that way.¹⁴⁵ Instead, common law development has been the rule.¹⁴⁶ Craig Nard recently canvassed the field and

134. Interstate actors may find it difficult to deal with conflicting rules, but they will not often be surprised by the law that will be applied in a given case.

135. See discussion *supra* notes 120–31.

136. Chester S. Chuang, *Offensive Venue: The Curious Use of Declaratory Judgment to Forum Shop in Patent Litigation*, 80 GEO. WASH. L. REV. 1065, 1073 n.46 (2012).

137. *Id.* at 1073–74.

138. See *supra* notes 20–30.

139. See *supra* notes 20–30.

140. S. Jay Plager & Lynne E. Pettigrew, *Rethinking Patent Law's Uniformity Principle: A Response to Nard and Duffy*, 101 NW. U. L. REV. 1735, 1741–42 (2007).

141. See *id.* at 1736.

142. Craig Allen Nard, *Legal Forms and the Common Law of Patents*, 90 B.U. L. REV. 51, 68–72 (2010).

143. *Bilski v. Kappos*, 130 S. Ct. 3218, 3227–28 (2010) (“[I]n deciding whether previously unforeseen inventions qualify as patentable ‘process[es],’ it may not make sense to require courts to confine themselves to asking the questions posed by the machine-or-transformation test. Section 101’s terms suggest that new technologies may call for new inquiries.”).

144. *eBay Inc. v. MercExchange, L.L.C.*, 547 U.S. 388, 396 (2006) (Kennedy, J., concurring).

145. Nard, *supra* note 142, at 52–53.

146. *Id.*

demonstrated the many ways in which judges have supplied the rules of decision in patent jurisprudence.¹⁴⁷ Thus, peripheral claiming started with the bar and was embraced by the bench as a way to firm up infringement determinations; the practice was finally codified in 1870.¹⁴⁸ Nonobviousness was purely a judge-made doctrine, as were contributory and induced infringement.¹⁴⁹ All three were first codified in 1952.¹⁵⁰ Subject matter eligibility, the doctrine of equivalents, patent misuse, and methodologies for computing damages were also developed by courts.¹⁵¹ Indeed, these doctrines have never been fully incorporated into the statute.¹⁵² And new issues arise continually. For example, both innovation and exploitation are now dispersed, requiring reallocation of ownership interests—which were never governed by statute—to reflect collaborative production¹⁵³ and reconsideration of “divided infringement” to deal with the ways in which interactive technologies are used.¹⁵⁴

To be sure, many states have specialized courts that work well. The Delaware Chancery Court, which was in its heyday when the Federal Circuit was created, is a prime example; its expertise in corporate law was said to have attracted an extraordinary number of firms to incorporate in Delaware.¹⁵⁵ However, what works for states does not necessarily work for the federal government. Because incorporations are a key source of business in Delaware, the Delaware legislature has strong incentives to keep abreast of developments and intercede as soon as problems arise.¹⁵⁶ But patent law does not have the same salience in the federal system that corporate law has in Delaware. As the history of the AIA demonstrates, congressional response to patent problems can be very slow; despite the obvious need to conform U.S. law to the law of its trading partners and to fix various administrative problems in the PTO, it took the legislature six

147. *Id.* at 77–97; see also Peter S. Menell, *Forty Years of Wondering in the Wilderness and No Closer to the Promised Land: Bilski's Superficial Textualism and the Missed Opportunity to Return Patent Law to Its Technology Mooring*, 63 *STAN. L. REV.* 1289, 1307–11 (2011).

148. Nard, *supra* note 142, at 69–71.

149. *Id.* at 72–74 & n.105.

150. *Id.*

151. *Id.* at 72, 85, 101–04.

152. An attempt was made to codify the calculation of damages in the lead up to the AIA. See Josh Friedman, Note, *Apportionment: Shining the Light of Day on Patent Damages*, 63 *CASE W. RES. L. REV.*, 147, 165–66 & n.110 (2012). It was, however, rejected. See *id.*

153. See, e.g., *Ethicon, Inc. v. U.S. Surgical Corp.*, 135 F.3d 1456, 1468–72 (Fed. Cir. 1998) (Newman, J., dissenting); *Abraxis Bioscience, Inc. v. Navinta LLC*, 672 F.3d 1239, 1243–47 (Fed. Cir. 2011); Aaron X. Fellmeth, *Conception and Misconception in Joint Invention*, 2 *N.Y.U. J. INTELL. PROP. & ENT. L.* 73, 109, 140–41 (2012).

154. See *Akamai Techs., Inc. v. Limelight Networks, Inc.*, 692 F.3d 1301, 1305–18 (Fed. Cir. 2012) (en banc) (per curiam).

155. See, e.g., Roberta Romano, *Law as a Product: Some Pieces of the Incorporation Puzzle*, 1 *J.L. ECON. & ORG.* 225, 280–81 (1985); Daniel R. Fischel, *The “Race to the Bottom” Revisited: Reflections on Recent Developments in Delaware's Corporation Law*, 76 *Nw. U. L. REV.* 913, 919–20 (1982).

156. Rochelle C. Dreyfuss, *Forums of the Future: The Role of Specialized Courts in Resolving Business Disputes*, 61 *BROOK. L. REV.* 1, 29 (1995).

years to pass a new statute.¹⁵⁷

Besides, as Nard argues, in many ways common law development makes the most sense for patent law.¹⁵⁸ Modern technologies can change very quickly. Because judges are closer to the patent industries than are legislators, they are better positioned to develop doctrine that meets each technology's changing needs and expectations.¹⁵⁹ In fact, congressional response in the patent realm has tended to be poorly considered. Take for example the Federal Circuit's expansion of patentable subject matter to cover business methods.¹⁶⁰ Instead of debating the question whether business methods should be patentable, the legislature dealt only with the impact of these patents (which is to say, it treated the symptoms rather than examining the possibility of disease).¹⁶¹ To make matters worse, the Supreme Court then used the new statute to—rather reluctantly—approve business-method patenting.¹⁶²

Under the current regime, then, elucidation of both statutory provisions and common law doctrines relies entirely on the interaction between the Federal Circuit and the Supreme Court.¹⁶³ This could, of course, be taken as the ideal solution, for it combines judges who possess expertise with those who possess a generalist perspective. But as we have seen, it has failed.¹⁶⁴ Over the years, commentators have attributed that failure to the Federal Circuit itself and to the formalistic way in which it decides cases and justifies its decisions.¹⁶⁵ As I observed in a 2008 article:

[Federal Circuit] opinions rarely provide insight into the goals the court sees the law as achieving; “policy discussions” take the form of incantations of standard justifications for statutory terms. Instead, the court focuses on parsing precedent and on dictionary definitions. As Judge Alan Lourie recently put it, “[N]ot once have we had a discussion as to what direction the law should take. . . . We have just applied precedent as best we could determine it to the cases that have come before us.” The court, in short, fails to instill confidence in its decisions because it rarely tests the accuracy of its positions by

157. David W. Trilling, *Recognizing a Need for Reform: The Leahy-Smith America Invents Act of 2011*, 2012 U. ILL. J.L. TECH. & POL'Y 239, 241 (2012); Ryan Vacca, *Acting Like an Administrative Agency: The Federal Circuit En Banc*, 76 MO. L. REV. 733, 752–53 (2011).

158. Nard, *supra* note 142, at 56, 99–106.

159. *Id.* See generally Jeanne C. Fromer, *Patentography*, 85 N.Y.U. L. REV. 1444 (2010) (arguing that trial judges are even closer to technological communities).

160. *State St. Bank & Trust Co. v. Signature Fin. Grp., Inc.*, 149 F.3d 1368, 1375–77 (Fed. Cir. 1998) (approving patents on business methods).

161. See 35 U.S.C. § 273(a) (Supp. V 2011) (outlining a prior user right for those practicing business methods prior to the filing of the patent application).

162. *Bilski v. Kappos*, 130 S. Ct. 3218, 3228–29 (2010) (rejecting an exclusion for business methods based on then § 273(b)); see Rebecca S. Eisenberg, *Wisdom of the Ages or Dead-Hand Control? Patentable Subject Matter for Diagnostic Methods After In re Bilski*, 3 CASE W. RES. J.L. TECH. & INTERNET 1, 3–5 (2012).

163. Rochelle Cooper Dreyfuss, *In Search of Institutional Identity: The Federal Circuit Comes of Age*, 23 BERKELEY TECH. L.J. 787, 806–10 (2008).

164. See *id.*

165. *Id.* at 808–09.

trying to explain them.¹⁶⁶

In that piece, I also attributed the Federal Circuit's insistence on formalism and its refusal to consider policy to a desire to establish credibility during its formative years when it was "on probation" in the public's mind.¹⁶⁷

The court has now passed its probationary period and has, in fact, become somewhat more forthcoming. At least since *Festo*, when an en banc decision featuring multiple dissents attracted Supreme Court attention,¹⁶⁸ the Federal Circuit's judges have become adept at airing the choices the court faces, the advantages of particular positions, and the relevance of cognate bodies of law.¹⁶⁹ Furthermore, consistent with a suggestion I made in 2004 to broaden the court's experience, Federal Circuit judges have begun to sit on other circuits, and the court has invited visiting judges to participate in its decisionmaking.¹⁷⁰ Yet these changes have had little impact on outcomes. Since *Festo*, the Supreme Court reversed or substantially modified the vast majority of the Federal Circuit decisions it reviewed.

If the problem cannot be attributed solely to the Federal Circuit's formalism (which actually mirrors the preferred methodology of several Supreme Court justices), then it is time to consider whether the proceduralists who founded the court were wrong to dismiss the role of percolation. After all, federal law is not typically the product of a dialogue between two courts hierarchically related to one another. Perhaps the drafters of the Evarts Act implicitly recognized important truths that in a country as complex as the United States, the adjudicatory system is stronger when courts have overlapping jurisdiction and the independence to question one another, modify each other's outcomes, and resolve similar issues differently; that the Supreme Court benefits from—and depends upon—this activity; and that percolation provides important information to Congress.

166. *Id.* (citations omitted). See generally Peter Lee, *Antiformalism at the Federal Circuit: The Jurisprudence of Chief Judge Rader*, 7 WASH. J.L. TECH. & ARTS 405 (2012) (noting that Judge Rader is much more sensitive to context, but agreeing that his colleagues are formalistic in their approach); John R. Thomas, *Formalism at the Federal Circuit*, 52 AM. U. L. REV. 771 (2003).

167. Dreyfuss, *supra* note 163, at 815–17; see also Dreyfuss, *supra* note 9, at 803 & n.70 (quoting Federal Circuit judges' statements on their unwillingness to engage in policy discussions).

168. See Duffy, *supra* note 34, at 11–12.

169. See, e.g., *Akamai Techs., Inc. v. Limelight Networks, Inc.*, 692 F.3d 1301, 1311–14 (Fed. Cir. 2012) (en banc) (per curiam) (generating three opinions dealing with divided infringement claims, all arguing about the relative weight to be accorded to tort, criminal, and copyright law); *id.* at 1308, 1311, 1325, 1328–30 (Newman, J., dissenting); *id.* at 1343–48 (Linn, J., dissenting); *In re Seagate Tech., LLC*, 497 F.3d 1360, 1375–76 (Fed. Cir. 2007) (en banc) (consulting criminal law cases on the application of the work-product privilege).

170. Rochelle Cooper Dreyfuss, *The Federal Circuit: A Continuing Experiment in Specialization*, 54 CASE W. RES. L. REV. 769, 793–96 (2004); Paul R. Gugliuzza, *Rethinking Federal Circuit Jurisdiction*, 100 GEO. L.J. 1437, 1470–73 (2012).

Percolation certainly appears to be important as new issues work their way “up” to the Supreme Court. As Fred Schauer has theorized, it is not just hard cases that make bad law; *all* cases (including statutory cases) can do it.¹⁷¹ The salience of specific facts can distort the judges’ thinking, and once a bad rule is adopted, the court will have trouble altering it.¹⁷² The facts of the first case anchor consideration of later cases, and the rule initially adopted frames all future discussion.¹⁷³ Anticipating these difficulties, litigants can become reluctant to even argue for change.¹⁷⁴ The Federal Circuit’s 2002 decision in *Madey v. Duke University* is a perfect illustration of Schauer’s theory: the facts—a fired university professor suing his university for patent infringement—were odd and led the court to severely restrict the scope of the common law experimental use exemption.¹⁷⁵ The ruling is so potentially disruptive of research, it has induced firms to establish research arms outside the United States.¹⁷⁶ Arguably, it has also driven Justice Breyer’s concern over patenting research inputs.¹⁷⁷ And yet a decade has gone by and no one has risked raising the scope of the exemption again.¹⁷⁸

Schauer focused on adjudication by individual courts and did not consider the effects of percolation.¹⁷⁹ Arguably, dialogue among tribunals can make a significant difference. Thus, all courts may well suffer similar cognitive problems. However, unless the facts of the first case in each court are systematically skewed in the same direction, the salience, anchoring, and framing effects with which Schauer was concerned could wash out, at least partially.¹⁸⁰ Furthermore, as Craig Nard and John Duffy have argued, each tribunal produces information that the litigants can use in successive cases and each decision spurs them to develop more creative arguments.¹⁸¹ Any one forum’s legal conclusions might be “bad law,” but the collective outcome may converge on a better (if not the

171. Frederick Schauer, *Do Cases Make Bad Law?*, 73 U. CHI. L. REV. 883, 884–85 (2006).

172. *Id.* at 900–01.

173. *Id.* at 901–05.

174. *Id.* at 910–11.

175. 307 F.3d 1351, 1352–53, 1362 (Fed. Cir. 2002); *see* Schauer, *supra* note 171, at 884–85.

176. *See* Bayer AG v. Housey Pharms., Inc., 340 F.3d 1367, 1376–77 (Fed. Cir. 2003) (permitting the data acquired offshore from unauthorized patent use to be imported into the United States); Pamela Samuelson, *Intellectual Property Arbitrage: How Foreign Rules Can Affect Domestic Protections*, 71 U. CHI. L. REV. 223, 227 (2004).

177. *See supra* notes 53–56.

178. *See* Roy Zwahlen, Mayo v. Prometheus: *Thought Leaders Express Concern and Evaluate the Impact*, BIOTECHNOW (June 21, 2012), <http://www.biotech-now.org/public-policy/patently-biotech/2012/05/mayo-v-prometheus-thought-leaders-express-concern-evaluate-business-impact-and-discuss-the-future>. The issue could have been raised in *Integra Lifesciences I, Ltd. v. Merck KGaA*, but instead the defendant made a somewhat far-fetched (but in the end successful) argument for extending the statutory exception of 35 U.S.C. § 271(e). 496 F.3d 1334, 1336–37 (Fed. Cir. 2007).

179. *See* Schauer, *supra* note 171, at 890–906.

180. *See id.* at 894–99.

181. Craig Allen Nard & John F. Duffy, *Rethinking Patent Law’s Uniformity Principle*, 101 Nw. U. L. REV. 1619, 1633 (2007).

“right”) rule.¹⁸² If divergence in the form of a circuit split nonetheless persists, then, as Justice Stevens noted in *Holmes*, that signals to the Supreme Court that the issue merits review.¹⁸³

When the issue reaches the Court, the percolation that occurred below can also improve the Justices’ consideration. The varying decisions of the lower courts can be understood as furnishing a rating system (a species of crowdsourcing).¹⁸⁴ While it would be wrong for the Supreme Court to simply adopt the most popular opinion, the Court can derive important information from the fact that several courts have confronted the same problem or resolved the same legal issue in similar ways. Consider, for example, the problem that began in *Dennison*, where, in a short per curiam issued without benefit of argument, the Supreme Court demanded that the Federal Circuit adhere to the dictates of Rule 52(a) when reviewing findings of facts.¹⁸⁵ *Dennison* led the Federal Circuit to classify many important matters as questions of law to invoke de novo review and thus retain control over outcomes.¹⁸⁶ But that practice has led to many reversals and retrials, to the aforementioned demoralization of the trial courts, and to dissents on what should be considered an issue of fact or law.¹⁸⁷ Indeed, in claim construction cases, the Federal Circuit has twice considered the standard of review en banc.¹⁸⁸ Perhaps the Court would have been more deliberative had there been other specialized courts grappling with the same problem of reviewing lay factfinding. Significantly, when it came to the converse problem of lay judges reviewing expert administrative action, the Supreme Court developed the *Chevron* doctrine and a series of nuanced standards on the degree of deference owed in particular circumstances.¹⁸⁹ These standards largely address

182. See *id.* The argument about whether the common law evolves toward efficiency is an old one. See, e.g., RICHARD A. POSNER, *ECONOMIC ANALYSIS OF LAW* 98 (1st ed. 1972); Daniel Klerman, *Jurisdictional Competition and the Evolution of the Common Law*, 74 U. CHI. L. REV. 1179, 1182–83 (2007); Lewis A. Kornhauser, *An Economic Perspective on Stare Decisis*, 65 CHI.-KENT L. REV. 63, 63–65 (1989). The claim here is not that the resulting law is efficient, but rather than the outcome of multicourt dialogue can be an improvement over law developed by a single court, subject to another single tribunal’s review.

183. *Holmes Grp., Inc. v. Vornado Air Circulation Sys., Inc.*, 535 U.S. 826, 838–39 (2002) (Stevens, J., concurring).

184. See generally BETH SIMONE NOVECK, *WIKI GOVERNMENT: HOW TECHNOLOGY CAN MAKE GOVERNMENT BETTER, DEMOCRACY STRONGER, AND CITIZENS MORE POWERFUL* 14, 18, 181 (2009) (describing various uses of crowdsourcing in governmental activities).

185. *Dennison Mfg. Co. v. Panduit Corp.*, 475 U.S. 809, 810–11 (1986) (per curiam).

186. See, e.g., *Cybor Corp. v. FAS Techs., Inc.*, 138 F.3d 1448, 1454–55 (1998) (en banc).

187. See *Highmark, Inc. v. Allcare Health Mgmt. Sys., Inc.*, 701 F.3d 1351, 1353–54, 1356, 1363 (Fed. Cir. 2012) (en banc) (featuring a dissent by Judge Moore, joined by Chief Judge Rader and Judges O’Malley, Reyna, and Wallach on whether the issue was one of law meriting de novo review); see also *Cybor*, 138 F.3d at 1454–55; *Bard Peripheral Vascular, Inc. v. W.L. Gore & Assocs., Inc.*, 682 F.3d 1003, 1004–06 (Fed. Cir. 2012), *cert. denied*, 133 S. Ct. 932 (2013).

188. See *Cybor*, 138 F.3d at 1455 (en banc); *Lighting Ballast Control LLC v. Philips Elecs. N. Am. Corp.*, 500 Fed. App’x 951, 951–52 (Fed. Cir. 2013) (order granting en banc review).

189. See *Chevron, U.S.A., Inc. v. Nat’l Res. Def. Council*, 467 U.S. 837, 842–44 (1984); *Skidmore v. Swift & Co.*, 323 U.S. 134, 139–40 (1944).

problems confronting the D.C. Circuit, but the D.C. Circuit was not alone in reviewing administrative agencies, and that may have contributed to the Supreme Court's sense that an extended analysis was needed when review occurs under conditions of knowledge asymmetry.¹⁹⁰

Prior percolation can also help the Supreme Court craft its own approach. Although the Court usually takes only one case raising a particular issue at a time, it is surely aware of the other cases dealing with the same question. These cases can reduce the salience, anchoring, and framing effects of the reviewed case and thus diminish cognitive distortion. And because the reviewed court will often have considered prior courts' resolutions, its decision will usually provide the Justices with an understanding of the reason it deviated. Had, for example, several courts faced the question of determining when a process constitutes patentable subject matter, the machine or transformation test would have been more widely discussed; some courts might have made improvements or developed different approaches. Justice Kennedy would presumably have had the same concerns he articulated in *Bilski*, but with more approaches to consider, the Court might have had an easier time developing a principle for deciding when processes are too abstract to be patented.¹⁹¹ Experience under varying rules also provides empirical evidence of how well particular dispositions work in practice and the problems they can cause.¹⁹²

Percolation may be even more important on the way "down" from the Supreme Court. The Supreme Court is very good at articulating norms and identifying policy considerations that the lower courts did not consider or properly weigh. However, it often leaves the hard work of implementing its approach to further development below.¹⁹³ In the context of the Federal Circuit, this is a real problem. First, it is difficult for any court to figure out how to implement a standard with which it does not agree, and that is especially true, as it often is with the Federal Circuit, when an en banc (rather than a circuit split) was the signal to grant certiorari. In such cases, every judge suffers from anchoring and framing effects; each has already debated the issue with everyone else on the court and staked out a public position. Second, because the Federal Circuit is more specialized than the Supreme Court, its judges can become intellectually complacent (some might call it arrogant) about whose resolution is correct.¹⁹⁴

190. See *Chevron*, 467 U.S. at 842–44.

191. See *Bilski v. Kappos*, 130 S. Ct. 3218, 3225–29 (2010).

192. See *Kirtsaeng v. John Wiley & Sons, Inc.*, 133 S. Ct. 1351, 1366–67, 1389–90 (2013). *Kirtsaeng* raised the question whether copyright law recognizes an international exhaustion doctrine. To decide, the Court compared the experience in circuits that had adopted opposing approaches. See *id.* at 1366–67; *id.* at 1389–90 (Ginsburg, J., dissenting).

193. See, e.g., *Warner-Jenkinson Co. v. Hilton Davis Chem. Co.*, 520 U.S. 17, 39 n.8 (1997) ("We leave it to the Federal Circuit how best to implement procedural improvements to promote certainty, consistency, and reviewability to this area of the law.").

194. See generally Lucas S. Osborn, *Instrumentalism at the Federal Circuit*, 56 ST. LOUIS U. L.J. 419 (2012) (describing the ways the Federal Circuit minimizes the Supreme Court's impact).

The result is not a happy one. For example, in *KSR International Co. v. Teleflex Inc.*, the case on inventiveness (nonobviousness), the Supreme Court rejected the Federal Circuit's teaching, suggestion, and motivation test as overly rigid.¹⁹⁵ It also warned the Federal Circuit that ordinary artisans are not automatons and can be expected to exercise a degree of creativity.¹⁹⁶ The Court's goal was to raise the degree of inventiveness required to merit protection, yet the Federal Circuit's Chief Judge has repeatedly assured the public that *KSR* has changed nothing.¹⁹⁷

The Federal Circuit was even less receptive to the patentable subject matter cases. As former Chief Judge Michel said in connection with *Mayo*: "There's a certain amount of . . . suspicion that there might be some deeper immersion, deeper familiarity, harder thinking and greater exposure [to patent law] at the Federal Circuit than the Supreme Court itself can offer."¹⁹⁸ Indeed, certiorari was granted in *Myriad* twice—the second time because the Federal Circuit essentially ignored the Supreme Court's remand to reconsider it in light of the decision in *Mayo*.¹⁹⁹

In other federal law areas, the reviewed court may be equally uninterested in altering its approach, or the judges may be equally unable to escape their priors. However, there are always other courts in the system that are intellectually freer to consider the Supreme Court's guidance and turn decisions into operable rules. There are, as John Golden put it, more courts available to explore "plausible paths for doctrinal development."²⁰⁰ Later development may produce a uniform rule. If not, it creates an empirical basis for the Supreme Court to return to the issue and clarify the doctrine.

Even if statutory law is conceived of as different from pure common law and Congress stays abreast of developments, percolation would be helpful, for it would signal the need for the legislature to step in. Tax law furnishes a good example. Courts, long interested in preventing taxpayers from engaging in transactions that have no aim other than to subvert the tax code, adopted the economic substance doctrine.²⁰¹ The appellate courts developed several approaches, and after years of refinement, Congress stepped in and used the debate as the basis for codifying a new rule.²⁰² For patent law, the benefits of such an approach are evident. Con-

195. 550 U.S. 398, 416 (2007).

196. *Id.* at 420–22.

197. See, e.g., Gene Quinn, *Chief Judge Rader Says KSR Didn't Change Anything, I Disagree*, IP WATCHDOG (Oct. 6, 2011), <http://www.ipwatchdog.com/2011/10/06/chief-judge-rader-says-ksr-didnt-change-anything-i-disagree/id=19603/>.

198. Zwahlen, *supra* note 178.

199. See *Ass'n for Molecular Pathology v. USPTO*, 653 F.3d 1329 (Fed. Cir. 2011), *vacated and remanded*, 132 S. Ct. 1794 (2012), *decision reinstated*, 689 F.3d 1303 (Fed. Cir. 2012), *cert. granted sub nom.* *Ass'n for Molecular Pathology v. Myriad Genetics, Inc.*, 133 S. Ct. 694 (Fed. Cir. 2012). Similarly, the grant in *Festo* was required because the circuit evaded the dictates of *Warner-Jenkinson*. See 535 U.S. 722, 729 (2002).

200. Golden, *supra* note 33, at 673.

201. See, e.g., *Gregory v. Helvering*, 293 U.S. 465, 468–70 (1935).

202. Health Care and Education Reconciliation Act of 2010, Pub. L. No. 111-152, § 1409(a), 124 Stat. 1029, 1067–68 (codified at I.R.C. § 7701(o)); see Martin J. McMahon,

sider claim construction. As noted earlier, the Federal Circuit has been heavily criticized for its failure to develop an approach that would make the meaning of claims more predictable.²⁰³ Under current law, however, the task may be insoluble. Thus, Jeanne Fromer argues that the current practice of peripheral claiming does not comport with the way that information is processed.²⁰⁴ Starting with the notion that people learn more from exemplars than from metes and bounds, she has proposed a variation on central claiming that would also require patentees to provide many examples.²⁰⁵ Federal Circuit Judge Plager has a different solution: he would reorganize the PTO and give it control over claim interpretation.²⁰⁶ Both solutions would require legislative intervention.²⁰⁷ Had many courts failed at finding a predictable way to interpret claims, Congress might have taken up the issue when it enacted the AIA. But currently, it is easier to blame the Federal Circuit. To put it another way, Congress may be reluctant to pay the political price of change when a problem can be resolved through the action of a single appellate court.

Admittedly, after thirty years it is easy to forget the horrors of forum shopping. However, experience over these years suggests that uniform law and good law are not, as the architects of the Federal Circuit assumed, the same and that a two-court dialogue is not enough to develop a coherent or accurate regime. Circuit law is improved through multiple considerations of the same legal issue in a variety of factual contexts and through discussion among hierarchically independent courts. The Supreme Court relies on percolation in its decisions on when to take a case and during its deliberation. Moreover, successful implementation is dependent on debate and revision in multiple venues. The question, then, is how to restore percolation to the system.

III. CAN PERCOLATION BE RESTORED WITHOUT SACRIFICING UNIFORMITY?

Others have addressed the percolation issue. As we saw, Congress gave the Federal Circuit *case* rather than *issue* jurisdiction, which requires it to consider legal questions that can also arise in the regional courts.²⁰⁸ Further, the Supreme Court attempted to insert the Federal Circuit into the appellate court dialogue by insisting that it consider doctrinal develop-

Jr., et al., *Recent Developments in Federal Income Taxation: The Year 2011*, 12 FLA. TAX REV. 235, 362–68 (2012) (citing cases from the Tax Court and the Fourth, Sixth, Eighth, and Federal Circuits); see also PAUL R. MCDANIEL ET AL., FEDERAL INCOME TAXATION: CASES AND MATERIALS 1229–62 (6th ed. 2008) (providing a broader account, including contributions from other appellate courts).

203. See *supra* notes 125–31.

204. Jeanne C. Fromer, *Claiming Intellectual Property*, 76 U. CHI. L. REV. 719, 763–65 (2009).

205. *Id.*

206. Plager & Pettigrew, *supra* note 140, at 1746–47.

207. See Fromer, *supra* note 204, at 763–65; Plager & Pettigrew, *supra* note 140, at 1746–47.

208. See *supra* note 13.

ments in other areas when construing patent law.²⁰⁹ While both strategies could broaden the judges' perspective, neither is likely to lead to a fruitful interchange. Practically since its inception, the Federal Circuit has eschewed serious consideration of nonpatent questions. Rather than debate issues arising in other fields, it has instead applied the law of the circuit from which the case arose.²¹⁰ That approach appears to be based on an analogy to *Erie Railroad Co. v. Tompkins*, which requires federal courts to apply state law to state issues arising in federal cases.²¹¹ But as I have argued elsewhere, the analogy is misguided in that circuits are not like states. They are not sovereign entities with sovereign—and sole—power to determine the law of their territories.²¹² Until the Federal Circuit comes into alignment with practice under the Evarts Act and makes its own independent determination of all open questions of federal law, patent jurisprudence is unlikely to benefit significantly from the dialogic processes envisioned by Congress and the Supreme Court. An example is *Akamai Technologies, Inc. v. Limelight Networks, Inc.*, where the Federal Circuit nominally based its approach to divided infringement on the law on joint tortfeasors.²¹³ But according to the dissent and commentators, the court largely misconceived the doctrine.²¹⁴

In a 2009 article, John Golden suggested that the Supreme Court should alter its practices to become the “prime percolator” in patent law.²¹⁵ In Golden's view, the original instinct of the Federal Circuit's architects was largely correct: intervention by the Supreme Court often substitutes a generalist—and possibly uninformed—view for the expert resolution of a specialized bench.²¹⁶ But Golden would not entirely eliminate the Supreme Court from the system.²¹⁷ Rather, he would have it review cases only when it appears the law is ossified and could use a dose of “creative disruption.”²¹⁸ He would therefore limit certiorari to situations where the substantive question was no longer being debated by the Federal Circuit judges; there is reason in the form of empirical research by outside parties to think that the Federal Circuit's rule is suboptimal; and the case presents a good vehicle for addressing the issue.²¹⁹

This approach clearly has the advantage of reducing tension between

209. See *supra* notes 42–47.

210. See, e.g., *Atari, Inc. v. JS & A Grp.*, 747 F.2d 1422, 1437–40 (Fed. Cir. 1984) (en banc) (applying the law of the circuit of origin to the non-patent issue in the case).

211. See *Erie R.R. Co. v. Tompkins*, 304 U.S. 64, 78 (1938).

212. Dreyfuss, *supra* note 170, at 788–91.

213. 692 F.3d 1301, 1311–13 (Fed. Cir. 2012) (en banc).

214. See *id.* at 1328–30 (Newman, J., dissenting); Lynda J. Oswald, *Unexpected Hazards of a Specialized Patent Court: Lessons from Joint Infringement Doctrine*, in *THE CHANGING FACE OF U.S. PATENT LAW AND ITS IMPACT ON BUSINESS STRATEGY* (Daniel R. Cahoy & Lynda J. Oswald eds., 2013).

215. Golden, *supra* note 33, at 709.

216. *Id.* at 688–89.

217. *Id.* at 709.

218. *Id.*

219. *Id.* at 710–13.

the two courts.²²⁰ Further, it would preserve the benefits that accrue from the Federal Circuit's expertise.²²¹ However, it is not responsive to the concerns discussed above.²²² The core frustration is not with ossification but with the court's vacillation and, even more, with rigid rules that are not adaptable to new technologies or to new business models and do not take account of the public's interest in access.²²³ It is also hard to square Golden's concern for ossification with his belief that the Federal Circuit can act as a "second percolator" in its attempts to implement the Supreme Court's guidance.²²⁴ As we saw, once the court digs in, it becomes less willing to search for new solutions.²²⁵

Craig Nard and John Duffy proposed a different approach.²²⁶ Starting from the premise that decisionmaking authority over patent law suffers from excess centralization and institutionalized parochialism, they would reestablish "competitive jurispruden[ce]" by empowering one other circuit to hear patent appeals from the district courts and by giving the D.C. Circuit shared responsibility over appeals from the PTO.²²⁷ That, they say, would introduce administrative and regulatory expertise into the system, force the Federal Circuit to write persuasively, restore the signaling effect of circuit splits, and foster dialogue on implementing Supreme Court precedent.²²⁸ At the same time, this system would give the judges on each court enough patent cases to develop expertise.²²⁹

It is hard to argue with Nard and Duffy's diagnosis of the problem; it is very close to my own. However, their proposal raises many problems. Treating PTO and district court appeals differently would risk recreating the "notorious differences" in standards that the Federal Circuit was partly designed to eliminate.²³⁰ Assigning appeals from trial courts to more than one circuit could also foster forum shopping. The drafters could eliminate that problem by assigning appeals randomly,²³¹ but random assignment would create the same pernicious form of disuniformity discussed earlier.²³² In addition, Nard and Duffy claim that disuniformity

220. *See id.*

221. *See id.*

222. *See id.*; *supra* Part I.

223. *See supra* Part I.

224. *See Golden, supra* note 33, at 719.

225. *See supra* notes 193–99.

226. Nard & Duffy, *supra* note 181, at 1625, 1649, 1653–54, 1661–62.

227. *Id.* at 1625, 1649–50. For analogous proposals, *see* Gugliuzza, *supra* note 170, at 1500 (suggesting random assignment of regional circuit cases to the Federal Circuit and consolidating the Federal Circuit with the D.C. Circuit). Judge Diane Wood of the Seventh Circuit has also been concerned with the Federal Circuit's isolation and its failure to consider countervailing interests. She would expand the number of courts hearing patent cases by giving the appellant a choice between the Federal Circuit and the regional circuit with jurisdiction over the district court from which the case arose. *See* Diane P. Wood, *Is It Time to Abolish the Federal Circuit's Exclusive Jurisdiction in Patent Cases?*, 13 CHI. KENT L. REV. 1, 9 (2013).

228. Nard & Duffy, *supra* note 181, at 1653–54, 1661–62.

229. *See id.* at 1636.

230. *See* discussion *supra* note 6.

231. Nard & Duffy, *supra* note 181, at 1668–69.

232. *See supra* notes 120–37.

is not a problem for other intellectual property areas and suggest that where there are potential problems, courts will likely choose to converge on similar rules.²³³ However, neither argument is persuasive. In other areas, disuniformity is geographic.²³⁴ Because actors know where they are operating, they can usually predict the applicable law (and in contracts, they can specify it). Further, the more exogenous pressure on the courts to agree, the less likely that their interchange will improve the law significantly enough to offset the costs of changing the appellate structure.²³⁵ Finally, two voices may not be enough to dissipate the cognitive biases that make decisionmaking by a single court so worrisome.

The Golden article and the Nard and Duffy piece were published prior to several significant modifications in the administration of patent law. Organizational changes at the PTO have given the Office more authority;²³⁶ at the trial court level, a pilot program is fostering expertise among district court judges;²³⁷ and internationally, patent law is converging.²³⁸ Each of these changes creates new opportunities for dialogue. Whether interchange among these entities can duplicate the benefits of percolation depends, in part, on what are seen as the advantages of percolation. Regional circuits do more than take different approaches to the law, they also generate data on the way that differing rules work in practice. Percolation within regional circuits works well because each court binds only one part of the country. In contrast, the PTO's rules apply nationally and, since it has never received *Chevron* deference, the Federal Circuit can always substitute a different (and equally national) rule. District court decisions do apply in particular geographic areas. But since the Federal Circuit undertakes de novo review of legal questions, its determinations (once again) bind the nation as a whole.

To some extent, foreign courts could duplicate the true percolation experience, but there are problems here as well. Because there are many background differences, comparisons must be made cautiously. Furthermore, the United States has so little appetite for following foreign law, judges who have cited it have been threatened with impeachment.²³⁹ Nonetheless, there are several ways to take advantage of each of these possibilities.

233. Nard & Duffy, *supra* note 181, at 1650, 1668–72.

234. *See id.*

235. Plager and Pettigrew have also critiqued the Nard and Duffy approach, but they do so largely for the reasons the proceduralists of the 1980s favored the elimination of percolation—because patent law is purely statutory. Plager & Pettigrew, *supra* note 140, at 1736.

236. *See* discussion *infra* notes 240–63.

237. *See* discussion *infra* notes 264–81.

238. *See* discussion *infra* notes 282–303.

239. *See, e.g.,* Linda Greenhouse, *Rehnquist Resumes His Call for Judicial Independence*, N.Y. TIMES (Jan. 1, 2005), <http://www.nytimes.com/2005/01/01/politics/01scotus.html>; David J. Seipp, *Our Law, Their Law, History, and the Citation of Foreign Law*, 86 B.U. L. REV. 1417, 1417 (2006).

1. The PTO. Before arriving at their proposal to split appeals between the Federal Circuit and other courts, Nard and Duffy considered the PTO as a potential “peer competitor,” arguing that in a sense the PTO already performs that role in that it advises the Solicitor General, it uses notice and comment rulemaking to draft the guidelines used by both examiners and applicants, and its adjudicatory decisions denying patents are given deference.²⁴⁰ Ultimately, however, the lack of rulemaking authority, and hence the lack of *Chevron* deference, led Nard and Duffy to reject that approach.²⁴¹ At the time, there were other reasons to be concerned about PTO decisionmaking. The agency’s funding depended entirely on the number of patents granted and maintained, and Congress periodically enhanced the financial pressure by diverting fees to the Treasury.²⁴² With one minor exception, proceedings were *ex parte*, and gave the PTO no opportunity to hear from entities opposing patent protection.²⁴³ Furthermore, the PTO saw patents only at the application stage and had no way to observe their effects in product or research markets.²⁴⁴

Developments in the last few years have, however, significantly burnished the PTO’s institutional stature. In 2010, the PTO established the Office of the Chief Economist to conduct economic analyses of intellectual property protection, including enforcement issues, and to provide a broad perspective on the impact of patents and their value relative to other forms of intellectual property.²⁴⁵ At around the same time, the PTO appointed a Chief Policy Officer and Director for International Affairs.²⁴⁶ In 2011, Congress also made important changes. Under the AIA, anyone can submit prior art to the PTO during examination and seek post-grant review in the first nine months after a patent is issued.²⁴⁷ Congress also expanded *inter partes* review²⁴⁸ and enacted a special provision to challenge business method patents.²⁴⁹ In addition, the legislature gave the PTO fee-setting authority and promised to refrain from diverting

240. Nard & Duffy, *supra* note 181, at 1640–41; *see, e.g.*, Utility Examination Guidelines, 66 Fed. Reg. 1092 (Jan. 5, 2001); *Dickinson v. Zurko*, 527 U.S. 150, 161–62 (1999).

241. Nard & Duffy, *supra* note 181, at 1640–41.

242. *See, e.g.*, Michael D. Frakes & Melissa F. Wasserman, *Does Agency Funding Affect Decisionmaking?: An Empirical Assessment of the PTO’s Granting Patterns*, 66 VAND. L. REV. 67, 72–75 (2013); Robert P. Merges, *As Many as Six Impossible Patents Before Breakfast: Property Rights for Business Concepts and Patent System Reform*, 14 BERKELEY TECH. L.J. 577, 589–91 (1999).

243. *See* 35 U.S.C. §§ 311–318 (2006) (amended 2012). Prior to the AIA, there was an option for *inter partes* review, however it was available in limited circumstances. *See id.* § 311(a). Because it estopped parties from later raising any claim that could have been raised in the proceeding, it was used sparingly. *See id.* § 315(c).

244. *See id.* § 148.

245. *Office of the Chief Economist*, USPTO, <http://www.uspto.gov/ip/officechiefecon/index.jsp> (last modified Feb. 1, 2013).

246. Shira Perlmutter, USPTO, http://www.uspto.gov/about/bios/bio_perlmutter.jsp (last modified Sept. 20, 2012).

247. 35 U.S.C. §§ 301, 321, 324 (Supp. V 2011).

248. *Id.* §§ 311–319.

249. 37 C.F.R. § 42.301 (2012).

fees.²⁵⁰

Turning the PTO into a convincingly neutral forum will take time. Its first foray into policy analysis is something of a paean to intellectual property rights, with little effort made to consider other incentives to innovate or the costs of strong protection.²⁵¹ The PTO also missed a congressional deadline to produce a report on access to genetic testing.²⁵² Crucially, the PTO still lacks substantive rulemaking authority.²⁵³ Indeed, the Federal Circuit has gone out of its way to “agree” with the PTO, rather than to “defer” to its decisions.²⁵⁴

Still, as the Office regularizes the process of basing its decisions on notice and comment rulemaking and on studies by the Chief Economist’s Office, greater respect will be arguably warranted. The PTO’s new financial structure will make it more independent of patent applicants, and the new review procedures will, for the first time, focus significant attention on the views of those opposing patents. In fact, standing in the post-grant review context is so broad that the PTO could find itself entertaining cases brought by individuals and public interest groups that could not be heard in court.²⁵⁵ Importantly, the Federal Circuit cannot discount the PTO on the ground of lesser expertise; technologically, the examiner corps is probably better educated than the judges of the Federal Circuit.²⁵⁶ Furnished with both the PTO’s views and more compelling decisions by the Federal Circuit, the Supreme Court will be better positioned to choose cases and develop its own views. Involving the PTO in implementing the Supreme Court’s rules will also leaven the inertia produced by the Federal Circuit’s tendency to adhere to prior positions.

It might even be possible to generate some of the experiential benefits of intercircuit percolation. First, the Federal Circuit could allow a PTO rule to stand for a period of time before it considers reversing. Delay would increase the number of factual contexts in which a rule is consid-

250. 35 U.S.C. § 41 (enacted on Sept. 16, 2012); *id.* § 42 (enacted on Jan. 14, 2013), (H.R. Comm. on the Judiciary) (June 21, 2011), <http://judiciary.house.gov/news/06212011.html>.

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

252. See *AIA Studies and Reports*, USPTO, http://www.uspto.gov/aia_implementation/aia_studies_reports.jsp#heading-3 (last modified Apr. 3, 2013).

253. See Arti K. Rai, *Allocating Power Over Fact-Finding in the Patent System*, 19 BERKELEY TECH. L.J. 907, 907–08 (2004). Significantly, Senators Orrin Hatch and Patrick Leahy would have given the PTO rule-making authority. See Patent Reform Act of 2006, S. 3818, 109th Cong. § 315(a) (2006).

254. See, e.g., *In re Fisher*, 421 F.3d 1365, 1372 (Fed. Cir. 2005) (citing and agreeing with the PTO’s Utility Examination Guidelines); see also Nard & Duffy, *supra* note 181, at 1640–41.

255. Compare 35 U.S.C. § 321(a) (“[A] person who is not the owner of a patent may file . . . a petition to institute a post-grant review.”), with *MedImmune, Inc. v. Genentech, Inc.*, 549 U.S. 118, 127 (2007) (requiring adversarial legal interests and a controversy of “sufficient immediacy and reality”).

256. See *Patent Examiner Positions*, USPTO, <http://www.uspto.gov/web/offices/pac/exam.htm> (last modified Nov. 16, 2003) (requiring examiners to have at a minimum a bachelor’s degree in physical science, life science, engineering discipline, or computer science).

ered and allow the court to assess the rule's impact. While such a procedure would introduce temporal disuniformity, the court could mitigate the cost by forewarning the patent community when its acceptance of a PTO position is conditioned on subsequent experience. Moreover, the court could adopt rules on retroactivity that are sensitive to the impact of change.²⁵⁷

Second, the court could capitalize on the PTO's recent decision to open satellite offices in San Jose, Detroit, Dallas-Fort Worth, and Denver.²⁵⁸ Jeanne Fromer has documented the extent to which firms in related fields tend to cluster geographically.²⁵⁹ If that is so, then each of these offices will examine patents in distinct fields—such as software in San Jose and automotive inventions in Denver.²⁶⁰ If courts were to give greater deference to decisions by satellite offices regarding inventions in their specialized fields, the system could experiment with different rules for different technologies. Obviously, this process would also create a measure of disuniformity. But Dan Burk and Mark Lemley argue that patent law should be viewed as including a series of policy levers that allow doctrines to be customized to the problems facing specific industries.²⁶¹ In some cases, the Federal Circuit (or Supreme Court) might decide that Burk and Lemley are correct and leave tailored rules in effect; in other situations, the judges might ultimately decide that a particular rule works so well, it should be generalized to other fields.²⁶² Since parties know the general field of their inventions, technology-based disuniformity does not raise the problems posed by either temporal or geographic differences.²⁶³

2. District Courts. Although dialogue with the PTO could provide the Federal Circuit with a new perspective, the interchanges between the court and the PTO will not be sufficient to fully inform the development of patent law. Apart from the work of the Chief Economist, the PTO does not have occasion to opine on issues that arise after a claim is found valid, including the doctrine of equivalents, theories of liability, defenses, or remedies. As a result, there would not be dialogue on these issues.

257. Cf. *Warner-Jenkinson Co. v. Hilton Davis Chem. Co.*, 520 U.S. 17, 41–42 (1997) (Ginsburg, J., concurring) (suggesting that the court pay attention to the plight of the “patentee who had no notice [of the new rule] at the time of patent prosecution”).

258. Press Release, *U.S. Commerce Department to Open Four Regional U.S. Patent Offices that Will Speed Up the Patent Process and Help American Businesses Innovate, Grow, and Create Jobs*, USPTO (July 2, 2012), <http://www.uspto.gov/news/pr/2012/12-40.jsp>.

259. Fromer, *supra* note 159, at 1444, 1481, 1498–1506.

260. *See id.*

261. Dan L. Burk & Mark A. Lemley, *Policy Levers in Patent Law*, 89 VA. L. REV. 1575, 1579 (2003).

262. *See id.*

263. Arguably, technology-based differences violate Article 27.1 of the TRIPS Agreement, which requires nondiscrimination as to field of technology. See Agreement on Trade-Related Aspects of Intellectual Property Rights, Including Trade in Counterfeit Goods, Apr. 15, 1994, 33 I.L.M. 81. *But see* Graeme B. Dinwoodie & Rochelle C. Dreyfuss, *Diversifying Without Discriminating: Complying with the Mandates of the TRIPS Agreement*, 13 MICH. TELECOMM. & TECH. L. REV. 445, 449–51 (2007) (arguing that member states do not violate TRIPS when they enact laws addressing problems intrinsic to a technology).

More important, the limits on PTO involvement render the system less able to consider the interaction between post- and pre-grant issues. Take, for example, Justice Breyer's concern about patents on scientific inputs impeding technological progress.²⁶⁴ That problem could be solved with strong limitations on what is considered patentable subject matter (as he favors) or by expanding the scope of the research defense (by revising *Madey*).²⁶⁵ Because PTO examination and review can focus only on the first issue, it cannot easily provide insight into which route would be more effective at spurring innovation.

District courts could, however, take up the slack. The Federal Circuit's perceived superior expertise in technological matters has led it to classify key issues as questions of law which it then reviews *de novo*.²⁶⁶ But that difference may soon fade, at least in part. In addition to enacting the AIA, Congress made another important change in 2011: it launched the Patent Cases Pilot Program.²⁶⁷ Under this initiative, fourteen districts, all in places where high-tech industries are located, were chosen to experiment with a new approach to case distribution.²⁶⁸ Cases filed in each of these districts will be assigned to its judges randomly.²⁶⁹ However, judges who are disinterested in patent law can transfer their patent cases to judges who volunteer, and are designated, to hear them.²⁷⁰ Presumably, the volunteers will be jurists who are interested in the field and have facility with technical material.²⁷¹

The main thrust of the program is to encourage the development of efficient case management techniques.²⁷² But just as concentration gave the judges of the Federal Circuit more technological expertise, so too should this program.²⁷³ In fact, if Fromer is right about clustering, the designated judges may become even more expert than the jurists on the Federal Circuit.²⁷⁴ As cases in specific technological areas are concentrated before the designated judges, the judges should develop the kind of closeness to technology communities that Nard saw as important to the

264. See *supra* notes 86–93.

265. See *Madey v. Duke Univ.*, 307 F.3d 1351, 1360–62 (Fed. Cir. 2002).

266. See, e.g., *supra* note 126.

267. See Pub. L. No. 111-349, § 1, 124 Stat. 3674, 3674–76 (2011).

268. *District Courts Selected for Patent Pilot Program*, UNITED STATES COURTS, http://www.uscourts.gov/News/TheThirdBranch/11-06-01/District_Courts_Selected_for_Patent_Pilot_Program.aspx (last visited July 22, 2013). The selected district courts are: Eastern District of New York, Southern District of New York, Western District of Pennsylvania, District of New Jersey, District of Maryland, Northern District of Illinois, Southern District of Florida, District of Nevada, Eastern District of Texas, Northern District of Texas, Western District of Tennessee, Central District of California, Northern District of California, and the Southern District of California. *Id.*

269. *Id.*

270. *Id.*

271. See *id.*

272. See 14 *District Courts Selected for Patent Pilot Program*, IP SPOTLIGHT (June 9, 2011), <http://ipspotlight.com/2011/06/09/14-district-courts-selected-for-patent-pilot-program>.

273. See Fromer, *supra* note 159, at 1455–58.

274. See *id.* at 1447.

development of the common law.²⁷⁵ Of course, these judges will not have the PTO's experience in claim drafting or examination, but they will see patents in the context of litigation and over the life cycle of innovation.

The pilot program provides the impetus for developing a new approach to review of trial court decisions. In a series of dissents on claim construction, Judge Rader has argued that the *Markman* decision to allocate claim interpretation to the bench does not imply that interpretive issues must be decided de novo.²⁷⁶ He would instead create a rule of "appropriate deference" based on the same functional analysis that the Supreme Court adopted in *Markman*.²⁷⁷ That formulation could be used to develop a general approach to appellate review.²⁷⁸ In particular, the Federal Circuit (as well as other district courts) should give special consideration to decisions by seasoned designated judges, especially when they are deciding cases in the fields where local industries have specializations. Greater deference would, of course, not eliminate the possibility of reversing a designated judge's determinations. But a presumption of deference would require the Federal Circuit to offer an extended justification for reversal. With the output of an expert district court and the Federal Circuit available, the Supreme Court would have better guidance in its own decision-making, and there would be more minds engaged at the implementation phase. The morale of the district court judges might even improve.

As with the PTO's satellite offices, the pilot program also offers an opportunity for experimentation across technologies. Indeed, the two initiatives are synergistic: a rule adopted by a designated district judge in connection with a patent issued in a satellite office with expertise in the field of the invention ought to be entitled to considerable respect by other trial courts, the Federal Circuit, and the Supreme Court. Of course, where the work of a particular designated judge is left in place, there will be some disuniformity. But if Burk and Lemley are correct, the disuniformity will be of a benign, if not advantageous, sort.²⁷⁹ As noted above, technological differences are, in any case, relatively easy for the patent industries to take into account.²⁸⁰ If problems continue, a single rule could be adopted, or venue rules could be changed.²⁸¹

3. Foreign courts. Zorina Khan has argued that patent law was made a federal right out of "concern with fostering interstate commerce and national markets."²⁸² That was in the 18th century.²⁸³ The modern economy is global; whether a doctrine is "right" is now contingent on the law of

275. See Nard, *supra* note 142, at 99-105.

276. See, e.g., *Cybor Corp. v. FAS Techs., Inc.*, 138 F.3d 1448, 1473, 1478 (Fed. Cir. 1998) (Rader, J., dissenting in part).

277. *Id.* at 1478.

278. See *id.*

279. See Burk & Lemley, *supra* note 261, at 1577-78.

280. See discussion *supra* note 263.

281. See, e.g., Fromer, *supra* note 159, at 1447.

282. B. ZORINA KHAN, *THE DEMOCRATIZATION OF INVENTION: PATENTS AND COPYRIGHTS IN AMERICAN ECONOMIC DEVELOPMENT, 1790-1920*, at 69-70 (2005).

283. *Id.*

other nations. *Madey*, for example, might be a reasonable rule for a single economy, but it presents a problem if other countries permit experimentation with patented inputs and firms respond by taking their research efforts offshore.²⁸⁴ Or consider *Akamai*, where the Federal Circuit's lack of tort law experience made it difficult to use doctrines on joint tortfeasors as the basis for a new approach to divided infringement.²⁸⁵ As it happens, Australia has been considering exactly this approach to divided infringement for more than two decades.²⁸⁶ Surely it would be useful to know how its statute and case law have worked out. And since divided infringement can occur across jurisdictions, adopting a common approach could become as important to international actors as uniformity is within the United States.

Patent judges have long enjoyed informal interchanges;²⁸⁷ a regular practice of citing foreign case law would encourage litigants to develop arguments based on the experiences and practices of jurisdictions with which the United States trades. The newly established specialized tribunals in other countries—including the Unified Patent Court that may soon be endowed with exclusive jurisdiction over EU patent rights²⁸⁸—means there are courts around the world developing expertise equivalent to that of the Federal Circuit. Facing similar problems, their dialogue could be especially fruitful. Indeed, the AIA makes this approach not only plausible but particularly valuable. One goal of the legislation was to bring U.S. law into closer conformity with that of its trading partners.²⁸⁹ As with the law of other nations, priority is to be determined by the first to file, not the first to invent;²⁹⁰ novelty and nonobviousness now depend on filing dates, not invention dates;²⁹¹ geographic distinctions regarding the source of prior art have been eliminated;²⁹² and the best mode requirement is no longer enforceable.²⁹³ These changes, and others, raise many questions new to American law. To the extent the goal is harmonization—and even if it is only internal coherence—it makes sense to consider how jurisdictions that have long operated under similar rules have

284. See *Madey v. Duke Univ.*, 307 F.3d 1351, 1362 (Fed. Cir. 2002).

285. See *Akamai Techs., Inc. v. Limelight Networks, Inc.*, 692 F.3d 1301, 1311–13 (Fed. Cir. 2012) (en banc) (per curiam).

286. See, e.g., Ann L. Monotti, *Liability for Joint Infringement of a Method Patent Under Australian Law*, 35 Eur. Intell. Prop. Rev. 16 (2013) (comparing *Akamai* with Australian law).

287. See, e.g., *International Judges Conference on Intellectual Property Law*, PATENT DOCS (Apr. 22, 2011), <http://www.patentdocs.org/2011/04/international-judges-conference-on-intellectual-property-law.html>; Emmanuel Lazega, *Mapping Judicial Dialogue Across National Borders: An Exploratory Network Study of Learning from Lobbying Among European Intellectual Property Judges*, 8 UTRECHT L. REV. 115, 117 (2012).

288. *Unified Patent Court*, EUROPEAN PATENT OFFICE, <http://www.epo.org/law-practice/unitary/patent-court.html> (last updated Mar. 6, 2013).

289. See, e.g., David J. Kappos, *Patent Law Harmonization*, LANDSLIDE, July–Aug. 2011, at 16.

290. See 35 U.S.C. § 102 (Supp. V 2011).

291. *Id.* § 103

292. *Id.* § 102

293. *Id.* § 112 (2006 & Supp. V 2011).

resolved the problems that arise.²⁹⁴

Of course, U.S. law is not identical to foreign law. Without knowing the context of a foreign practice, following it slavishly would not be appropriate. Judges can, however, learn a great deal through the activities of the Trilateral—a consortium of the European Patent Office, the Japanese Patent Office, and the PTO—that was founded in 1983.²⁹⁵ The group meets on a regular basis, often with the Korean and Chinese Intellectual Property Offices, to discuss worksharing and common practices and to engage in comparative studies on the application of law to emerging technologies.²⁹⁶ The Trilateral maintains a Catalogue of Differing Practices which identifies places where laws diverge, classified into four categories according to whether the differences could be resolved by the patent offices in individual cases, through new regulations, or require legislative or judicial action.²⁹⁷ Admittedly, patent offices concentrate only on pre-grant issues. However, there is a significant literature on comparative patent law and a growing cadre of practitioners with international practices who could help guide courts in their deliberations.²⁹⁸

Entering into a dialogue with foreign courts is certainly tricky given the current parochial climate. But even Justice Scalia—who generally criticizes arguments based on foreign law²⁹⁹—is willing to consider them when countries have agreed to a common approach.³⁰⁰ Congress chose to harmonize patent law unilaterally and not through an international agreement, but the goal remains the same. In a sense, the flexibility created by taking a convergence approach to harmonization allows the nations of the world, in Justice Brandeis's words, “to serve as . . . laborator[ies].”³⁰¹ Laboratories cannot, however, improve the law unless their efforts are carefully studied; percolation provides the vehicle for benefiting from foreign experience.³⁰² So far, courts have been reluctant to entertain foreign

294. See generally Rochelle Cooper Dreyfuss, *The Leahy-Smith America Invents Act: A New Paradigm for International Harmonisation?*, 24 SING. ACAD. L.J. 669 (2012).

295. *About Us*, TRILATERAL, <http://www.trilateral.net/about.html> (last visited July 22, 2013).

296. *Events*, TRILATERAL, <http://www.trilateral.net/events.html> (last visited July 22, 2013).

297. *Catalogue of Differing Practices*, TRILATERAL, <http://www.trilateral.net/catalogue.html> (last visited July 22, 2013).

298. See *International Patent Law & Practice Committee*, IPO, <http://www.ipo.org/index.php/about-ipo/committees/international-patent-law-practice-committee/> (last visited July 22, 2013); James Pooley & Vicki Huang, *Multi-National Patent Litigation: Management of Discovery and Settlement Issues and the Role of the Judiciary*, 22 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 45, 47–48 (2011).

299. See, e.g., *Lawrence v. Texas*, 539 U.S. 558, 597 (2003) (Scalia, J., dissenting) (“[T]his Court . . . should not impose foreign moods, fads, or fashions on Americans.”).

300. *U.S. Association of Constitutional Law Discussion*, FREE REPUBLIC (Jan. 13, 2005), <http://www.freerepublic.com/focus/f-news/1352357/posts>.

301. *New State Ice Co. v. Liebmann*, 285 U.S. 262, 311 (1932) (Brandeis, J., dissenting).

302. See generally Sivaramjani Thambisetty, *The Learning Needs of the Patent System: Implications from Institutionalism for Emerging Technologies Like Synthetic Biology*, (Law Soc’y Econ. Working Papers, Paper No. 18/2013, 2013), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2272980 (describing the many challenges facing institutions in the patent realm).

patent claims.³⁰³ Accordingly, there is little danger that this approach to percolation would produce the kind of disuniformity that leads to forum shopping.

IV. CONCLUSION

After thirty years, it is clear that the dire predictions for the Federal Circuit have not come to pass. Surprisingly, however, one of the core background assumptions underlying the court's establishment has turned out to be wrong. Percolation is more important to the development of patent law than the proceduralists of the 1980s thought. While the architects of the court left the Supreme Court in the system to inject a generalist perspective, two courts, hierarchically related, do not create the kind of interchange that is necessary to produce optimal law.

Perhaps the problem is patent law. The statute is not as comprehensive a codification as the court's architects believed. Or perhaps the problem lies in the interaction between patent law's technological complexity and the differing expertise of the two courts. The Supreme Court tends to distrust the Federal Circuit for adopting special rules in patent cases while the Federal Circuit is inclined to ignore Supreme Court pronouncements on technological issues the Federal Circuit considers uniquely within its competence. But it is also possible that the same result would occur in connection with other statutory regimes. Perhaps the Federal Circuit experience shows that our system of justice depends in a crucial way on dialogic development. If so, proposals to establish courts with specialized authority ought to be considered with care. The development of patent law may also say something about decisionmaking techniques—that in the absence of a legislature poised to intervene in a timely fashion, a strictly formalist approach copes poorly with rapidly changing fields.

There are several plausible ways to introduce more debate into the development of patent law. After the Supreme Court's decision in *eBay* that reduced the availability of injunctive relief, the International Trade Commission (ITC) has become a forum of choice for patent holders interested in excluding goods from the U.S. market.³⁰⁴ As Arti Rai has suggested, the ITC's increased involvement in patent disputes could enable it to play an important policy role, particularly in the remedies area.³⁰⁵ Additionally, Rai proposes more active participation by agencies dealing with science-based issues, including the Federal Trade Commission, the Environmental Protection Agency, the Federal Communications Commission, and the National Institutes of Health.³⁰⁶ The National Academies has also shown an interest in patent law and several of its

303. See, e.g., *Voda v. Cordis Corp.*, 476 F.3d 887, 893–97 (Fed. Cir. 2007).

304. Rai, *supra* note 41, at 1244.

305. *Id.*

306. *Id.* at 1239, 1269, 1278, 1249–62.

recommendations are reflected in the AIA.³⁰⁷ Because scientists, lawyers, economists, and policymakers work together on National Academies reports, Congress would do well to support continuing oversight by that organization.³⁰⁸

At the same time, however, the clearest way to improve patent law is to recognize the importance of percolation within the patent regime itself. Recent developments have created three candidates for that role: the PTO, the district courts, and foreign tribunals. Greater deference to the PTO and district courts would force the Federal Circuit to confront differing approaches and generate more persuasive decisions. With more information on the table, patent law and policy would come to resonate more fully with the needs of the creative community. Deference would interfere with the proceduralist vision of a uniform patent regime. But disuniformity could be produced in ways that do not give rise to forum shopping. In particular, technology-based experimentation could generate the kind of empirical evidence that, as a society, we increasingly value. Dialogue with foreign courts is especially worthy of consideration. Given national differences, it would not provide perfect information. However, it would avoid disuniformity, facilitate global exploitation of knowledge products, and help the United States maintain its comparative advantage in an increasingly competitive innovation marketplace.

307. See discussion *supra* note 107, see also, e.g., William C. Rooklidge & Alyson G. Barker, *Reform of a Fast-Moving Target: The Development of Patent Law Since the 2004 National Academies Report*, 91 J. PAT. & TRADEMARK OFF. SOC'Y 153, 156 (2009).

308. See discussion *supra* note 107.