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How Much Has the Supreme Court Changed Patent Law?

Paul Gugliuzza

Boston University School of Law

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HOW MUCH HAS THE SUPREME COURT CHANGED PATENT LAW?

PAUL R. GUGLIUZZA*

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INTRODUCTION

The U.S. Supreme Court has decided a remarkable number of patent cases in the past decade, particularly as compared to the first twenty years of the Federal Circuit’s existence. No longer is the Federal Circuit “the de facto Supreme Court of patents.”¹ Rather, it seems *the Supreme Court* is the Supreme Court of patents. In the article at the center of this symposium, Judge Dyk writes that the Supreme Court’s decisions “have had a major impact on patent law,” citing, among other evidence, the Court’s seventy

* Associate Professor, Boston University School of Law. For comments and helpful discussions, thanks to Jonas Anderson, Jack Beermann, Dmitry Karshtedt, Megan La Belle, Peter Lee, Rachel Rebouché, Greg Reilly, David Taylor, and the participants at PatCon7 at Northwestern University School of Law. Thanks also to Kris Hansen for valuable research assistance.

1. Mark D. Janis, *Patent Law in the Age of the Invisible Supreme Court*, 2001 U. ILL. L. REV. 387, 387 (2001).

percent reversal rate in Federal Circuit cases.² In this essay, I suggest that the Supreme Court's effect on patent law has actually been more limited, for two reasons in particular. First, the Supreme Court's recent decisions, though substantial in number, have rarely involved the fundamental legal doctrines that directly ensure the inventiveness of patents and regulate their scope.³ Second, the Supreme Court's minimalist approach to opinion writing in patent cases frequently enables the Federal Circuit to ignore the Court's changes to governing doctrine.

I. THE SUPREME COURT'S INTEREST IN PATENT LAW

Before fully explaining those arguments, it will help to summarize the ongoing debate about the Supreme Court's proper role in the patent system and to consider why, exactly, the Supreme Court is so interested in patent law these days.

On the Supreme Court's role: One possible benefit of Supreme Court activity in patent law is that it can serve as the "percolating" force that patent law generally lacks because of the centralization of appeals in the Federal Circuit.⁴ Frequent Supreme Court review can create a dialogue between the Justices and the Federal Circuit about patent law and policy.⁵ Moreover, the possibility of Supreme Court review can incentivize Federal Circuit judges to be more vocal when they believe law reform is necessary by, for example, writing separate opinions and explicitly calling for en banc or Supreme Court review.⁶

That said, many stakeholders perceive Supreme Court Justices as knowing little about patent law and the technology relevant to patent cases, at least as compared to the expert judges on the Federal Circuit.⁷ Critics have particularly assailed the Court's decisions on patent-eligible subject matter, contending that the Court has adopted an amorphous test that is difficult for

2. Timothy B. Dyk, *Thoughts on the Relationship Between the Supreme Court and the Federal Circuit*, 16 CHI.-KENT J. INTELL. PROP. 67, 72 (2016).

3. Four recent decisions on patent-eligible subject matter are a conspicuous exception to this statement. I discuss those decisions in more detail below.

4. John M. Golden, *The Supreme Court as "Prime Percolator": A Prescription for Appellate Review of Questions in Patent Law*, 56 UCLA L. REV. 657, 662-64 (2009).

5. Paul R. Gugliuzza, *Saving the Federal Circuit*, 13 CHI.-KENT J. INTELL. PROP. 350, 358-59 (2014).

6. *See id.* at 356-57 (discussing the frequency of this behavior among Federal Circuit judges).

7. Greg Reilly, *How Can the Supreme Court Not "Understand Patent Law"?*, 16 CHI.-KENT J. INTELL. PROP. 292, 298 (2017).

lower courts and the PTO to apply and that has destroyed the predictability and certainty that is supposedly essential to innovation.⁸

Many commentators have thoughtfully considered whether the Supreme Court should be deciding so many patent cases,⁹ reaching conclusions that range from optimism about the Court's ability to improve the patent system¹⁰ to outright mockery of the Justices' intellectual aptitude for patent law.¹¹ But, for better or worse, the Supreme Court's large docket of patent cases is unlikely to shrink soon. The Court has considered six patent cases in the 2016 Term, which is wrapping up as this essay goes to press. Those six cases build on three patent law decisions in the 2015 Term, three more in the 2014 Term, and six in the 2013 Term.¹² Moreover, patent law is indisputably more visible to lawyers and to the general public today than it was a decade or two ago.¹³ Stories about patent law, patent litigation, and even the Federal Circuit itself are regular fixtures of leading newspapers,¹⁴ including those likely to influence the decisionmaking of the Justices and their law clerks.¹⁵ In addition, patent reform is now a staple of Congress's

8. See, e.g., Paul R. Michel, *The Supreme Court Saps Patent Certainty*, 82 GEO. WASH. L. REV. 1751, 1761 (2014); David O. Taylor, *Confusing Patent Eligibility*, 83 TENN. L. REV. (forthcoming 2017) (manuscript at 3), <http://ssrn.com/abstract=2754323>.

9. As a small sample of the literature touching on this question, see Rochelle Cooper Dreyfuss, *What the Federal Circuit Can Learn from the Supreme Court—and Vice Versa*, 59 AM. U. L. REV. 787 (2010); John F. Duffy, *The Festo Decision and the Return of the Supreme Court to the Bar of Patents*, 2002 SUP. CT. REV. 273; Timothy B. Dyk, *Does the Supreme Court Still Matter?*, 57 AM. U. L. REV. 763 (2008); Golden, *supra* note 4; Timothy R. Holbrook, *Explaining the Supreme Court's Interest in Patent Law*, 3 IP THEORY 62 (2013); Peter Lee, *The Supreme Assimilation of Patent Law*, 114 MICH. L. REV. 1413 (2016).

10. See, e.g., Dreyfuss, *supra* note 9, at 807; see also Duffy, *supra* note 9, at 342; Golden, *supra* note 4, at 720 (both perhaps best described as cautious optimism).

11. See Reilly, *supra* note 7, at 309.

12. For a comprehensive list of Supreme Court patent cases see *Supreme Court Patent Cases*, WRITTEN DESCRIPTION, <http://writtendescription.blogspot.com/p/patents-scotus.html> (last visited Apr. 25, 2017).

13. Dyk, *supra* note 2, at 83.

14. See, e.g., Ashby Jones, *Critics Fault Court's Grip on Appeals for Patents*, WALL ST. J. (July 6, 2014), <https://www.wsj.com/articles/critics-fault-courts-grip-on-appeals-for-patents-1404688219>; Brent Kendall, *Supreme Court to Hear Patent Case That Could Limit Venue Shopping*, WALL ST. J. (Dec. 14, 2016), <https://www.wsj.com/articles/supreme-court-to-hear-patent-case-that-could-limit-venue-shopping-1481749533>; Steve Lohr, *With Patent Litigation Surging, Creators Turn to Washington for Help*, N.Y. TIMES (Apr. 29, 2015), <https://www.nytimes.com/2015/04/30/technology/with-patent-litigation-surging-creators-turn-to-washington-for-help.html>.

15. Lawrence Baum & Neal Devins, *Why the Supreme Court Cares About Elites, Not the American People*, 98 GEO. L.J. 1515, 1542-44 (2010); see also Gregory N. Mandel, *Institutional Fracture in Intellectual Property Law: The Supreme Court Versus Congress*, 102 MINN. L. REV. (forthcoming 2017) (manuscript at 53-54, 58), <https://ssrn.com/abstract=2926110> (suggesting that the Supreme Court's recent decisions in intellectual property cases reflect an "elite popular opinion" that displays "a growing concern about the strength of intellectual property rights").

agenda, and that legislative activity surely piques the Court's interest.¹⁶ Wide-ranging and high-profile policy debates about "patent trolls" likewise seem to have caught the Court's attention.¹⁷

Perhaps most importantly, members of the specialized Supreme Court bar—who have an enormous influence on the Court's docket¹⁸—now frequently urge the Court to hear patent cases and argue those cases once certiorari is granted. For instance, Seth Waxman, the former Solicitor General, presented oral argument in four of the six patent cases argued in the 2016 Term. His opponents included Carter Phillips, a former Assistant to the Solicitor General who has argued nearly a hundred Supreme Court cases; Kathleen Sullivan, the former Dean of Stanford Law School who has argued nearly a dozen Supreme Court cases; and Deanne Maynard, another former Assistant to the Solicitor General who has argued over a dozen Supreme Court cases. Supreme Court specialists such as Waxman, Phillips, Sullivan, Maynard, and others have also been arguing more frequently in the Federal Circuit in recent years.¹⁹

In addition, the Justices' law clerks frequently work for these Supreme Court specialists as summer associates or for brief stints before their time at the Court. The revolving door between the law firms pushing the Court to hear patent cases (at the behest of their clients, of course) and the Justices' chambers, where law clerks have significant control over the petitions that emerge from the cert pool,²⁰ likely cements the perception that patent cases are important and belong on the Court's docket. In short, despite patent law's reputation as a specialized area of practice, the field is plainly no longer, as

16. See J. Jonas Anderson, *Patent Dialogue*, 92 N.C. L. REV. 1049, 1069-70 (2014).

17. A few Supreme Court opinions have explicitly mentioned concerns about trolls. See, e.g., *eBay Inc. v. MercExchange, L.L.C.*, 547 U.S. 388, 396 (2006) (Kennedy, J., concurring). For a synopsis of the controversies surrounding patent trolls, see generally Paul R. Gugliuzza, *Patent Trolls and Patent Litigation Reform*, in OXFORD HANDBOOKS ONLINE at 2-8 (2017), <http://www.oxfordhandbooks.com>.

18. Richard J. Lazarus, *Advocacy Matters Before and Within the Supreme Court: Transforming the Court by Transforming the Bar*, 96 GEO. L.J. 1487, 1490 (2008).

19. See, e.g., *Acorda Therapeutics Inc. v. Mylan Pharms. Inc.*, 817 F.3d 755 (Fed. Cir. 2016) (Ted Olson and Paul Clement); *TiVo Inc. v. EchoStar Corp.*, 646 F.3d 869 (Fed. Cir. 2011) (Waxman and Josh Rosenkranz); *Kyocera Wireless Corp. v. Int'l Trade Comm'n*, 545 F.3d 1340 (Fed. Cir. 2008) (Phillips and Ken Starr, among others); see also *Unwired Planet, LLC v. Google Inc.*, No. 2015-1812, 2017 WL 1229744 (Fed. Cir. Apr. 4, 2017) (denial of petition for rehearing en banc) (William Jay and Neal Katyal as principal counsel on the rehearing briefs).

20. David R. Stras, *The Supreme Court's Gatekeepers: The Role of Law Clerks in the Certiorari Process*, 85 TEX. L. REV. 947, 996-97 (2007).

it was once derisively described, the domain of only “people wearing propeller hats.”²¹

Framing the Supreme Court’s interest in patent law as enduring highlights important questions that scholars have not explored in much detail. As noted above, there is a rich literature debating whether the Court *should* be deciding patent cases, and much contemporary patent scholarship considers whether the Court has reached the *correct results* in those cases. Yet few scholars have considered whether the Court’s docket is filled with *the right kind of* patent cases,²² nor have many scholars considered how the *manner in which the Court explains its rulings*—separate and apart from the results reached—affects whether the Court’s rulings change the decisions of lower courts and the behavior of participants in the patent system.²³ The remainder of this essay provides an initial exploration of those questions, suggesting that the Supreme Court may be too focused on areas of patent law with little potential to fix key problems in the patent system and that the Court often limits the impact of its decisions by inadequately explaining how lower courts and the PTO should implement them.

II. THE SUPREME COURT’S PATENT DOCKET: TRANSSUBSTANTIVITY, HARMONIZATION, AND STATUTORY INTERPRETATION

The first step in critiquing the Supreme Court’s selection of issues and judicial methodology is to understand precisely what the Court’s patent docket looks like. Most of that docket consists of cases with at least one of

21. Kimberly A. Moore, *Are District Judges Equipped to Resolve Patent Cases?*, 15 HARV. J. L. TECH. 1, 11 (2001) (quoting Judge Samuel Kent in *O.I. Corp. v. Tekmar Co.*, No. 95-CV-113 (S.D. Tex. June 17, 1996)).

22. For consideration of a related question, specifically, in what circumstances should the Supreme Court decide to grant review, see Dreyfuss, *supra* note 9, at 799-800 (suggesting that the Court should intervene when “the Federal Circuit signal[s] the need for intervention” and that the “involvement of others (practitioners, the Solicitor General) . . . remain[s] important”); Golden, *supra* note 4, at 709-10 (“There appear to be at least three traits that a good case for merits review should generally have: (1) the substantive question involved is not currently subject to meaningful debate in the courts below; (2) there is good reason to suspect that the Federal Circuit’s settled approach to that question is substantially inferior to a legally permissible alternative; and (3) the case at hand is a good vehicle for addressing the substantive question as part of determining the outcome of a dispute between the specific parties involved.”); see also Duffy, *supra* note 9, at 340-42 (praising the Supreme Court for relying on “specialized actors,” such as the Federal Circuit itself and the PTO, to identify the issues warranting the Court’s attention).

23. For one analysis of the Court’s judicial methodology in patent cases, see Peter Lee, *Patent Law and the Two Cultures*, 120 YALE L.J. 2, 71 (2010) (arguing that the Court, to facilitate adjudication of patent cases by district judges who are neither expert in patent law nor the relevant technology, should adopt “clearly defined” analytical frameworks coupled with “illustrative examples”).

the following characteristics: (1) the case involves what might be called a “transsubstantive” issue, that is, an issue that arises in all types of federal litigation, not just patent cases, such as issues of jurisdiction, procedure, and remedies;²⁴ (2) the case presents the opportunity draw on or harmonize patent law with other areas of federal law; or (3) the case requires the Court to interpret a discrete provision of the patent statute.²⁵

Supreme Court patent cases involving transsubstantive issues abound. Notable examples include: *eBay* on the test for issuing an injunction upon a finding of infringement,²⁶ *MedImmune* on declaratory judgment standing,²⁷ *Medtronic* on the burden of proof in declaratory judgment cases,²⁸ *Gunn v. Minton* on subject matter jurisdiction,²⁹ *Teva* on the standard of appellate review for claim construction,³⁰ and the pending *TC Heartland* case on venue.³¹

24. For an exploration of the meaning of the term “transsubstantive” and a critique of prevailing scholarship on the topic, see generally David Marcus, *Trans-Substantivity and the Processes of American Law*, 2013 BYU L. REV. 1191 (2013).

25. For an early effort at classifying patent cases in which the Supreme Court has granted review, see Rebecca S. Eisenberg, *The Supreme Court and the Federal Circuit: Visitation and Custody of Patent Law*, 106 MICH. L. REV. FIRST IMPRESSIONS 28, 29-30 (2007), which notes that the Court has tended to grant certiorari in cases in which some or all of the following factors existed: (1) “the Federal Circuit’s patent jurisprudence [was] at odds with the treatment of similar issues in other fields of law,” (2) “the Federal Circuit [had] departed from the Supreme Court’s own patent law decisions,” (3) internal divisions existed within the Federal Circuit, (4) the Solicitor General urged review, or (5) there was substantial amicus interest in the case. In more recent work, Peter Lee draws a distinction between “heartland” issues of substantive patent doctrine, such as validity and infringement, and “transcendent” issues that touch on both patent doctrine as well as other areas, such as standards of review, jurisdiction, and remedies. Lee, *supra* note 9, at 1450-51.

26. *eBay Inc. v. MercExchange, L.L.C.*, 547 U.S. 388, 390 (2006).

27. *MedImmune, Inc. v. Genentech, Inc.*, 549 U.S. 118, 145 (2007).

28. *Medtronic, Inc. v. Mirowski Family Ventures, LLC*, 134 S. Ct. 843, 852 (2013).

29. *Gunn v. Minton*, 133 S. Ct. 1059, 1064 (2013).

30. *Teva Pharms. USA, Inc. v. Sandoz, Inc.*, 135 S. Ct. 831, 839 (2015).

31. *In re TC Heartland LLC*, 821 F.3d 1338 (Fed. Cir.), *cert. granted sub nom.*, *TC Heartland LLC v. Kraft Food Grp. Brands LLC*, 137 S. Ct. 614 (2016). These transsubstantive cases, it should be noted, could be further divided into more granular categories or, perhaps more accurately, placed on a spectrum from, at one end, patent cases that are truly transsubstantive (in that the decisions also have clear consequences for non-patent cases), to, at the other end, patent cases that require the Court to simply apply (often well-settled) transsubstantive principles in the unique context of patent law. A quintessential example of the former is *Carlsbad Technology, Inc. v. HIF Bio, Inc.*, in which the Supreme Court held, in a patent-related case on certiorari from the Federal Circuit, that the federal courts of appeals have jurisdiction to review district court orders declining to exercise supplemental jurisdiction under 28 U.S.C. § 1367(c). 556 U.S. 635, 636 (2009). (*Carlsbad* is so transsubstantive that I am reluctant to even identify it in the text as a “patent case.”) Good examples of the latter include *Teva*, in which the Court simply applied the clear-error standard of Federal Rule of Civil Procedure 52(a)(6) in the context of patent law, and *Medtronic*, in which the Court held that in patent cases, just like in all other cases, the identity of the party bearing the burden of proof does not change simply because the suit is one for a declaratory judgment rather than for damages or an injunction.

These transsubstantive cases often provide the Court with opportunities to harmonize the law applicable to patent cases with more generally applicable principles of federal law. In *Gunn*, for instance, the Court synchronized the law under the patent-specific jurisdictional statute with case law on the general federal question statute.³² In *Teva*, the Court changed the standard of appellate review of patent claim construction to match the generally applicable clear-error standard in Federal Rule of Civil Procedure 52(a)(6).³³ And in *eBay* the Court demanded that courts apply a supposedly “traditional” four-element test for determining whether an injunction is warranted upon a finding of patent infringement.³⁴

The Supreme Court has also repeatedly harmonized (or considered harmonizing) patent law with other substantive areas of federal law, including other fields of intellectual property law. In *Global Tech*, for instance, the Court looked to criminal law’s doctrine of willful blindness to define the mental state required for induced patent infringement.³⁵ And in *Octane Fitness* the Court discussed case law interpreting the Copyright Act’s fee shifting provision in articulating the standard for awarding attorneys’ fees under the Patent Act.³⁶ In fact, in two patent cases in the current 2016 Term, the Court has confronted questions identical to questions it recently resolved in the copyright context. In *SCA Hygiene*, the Court held that an infringer may not invoke the equitable doctrine of laches as a defense to a claim of patent infringement,³⁷ just three years after holding that laches is not a defense to a claim for damages for copyright infringement.³⁸ And in

32. *Gunn*, 133 S. Ct. at 1065-66 (citing, among other cases, *Grable & Sons Metal Prods., Inc. v. Darue Eng’g & Mfg.*, 545 U.S. 308 (2005), and *Merrell Dow Pharms. Inc. v. Thompson*, 478 U.S. 804 (1986)); see also 28 U.S.C. § 1331 (general federal question statute); *id.* § 1338(a) (conferring exclusive jurisdiction on the federal courts in cases “arising under” patent law).

33. *Teva*, 135 S. Ct. at 836.

34. *eBay Inc. v. MercExchange, L.L.C.*, 547 U.S. 388, 390 (2006); see also *id.* at 392 (asserting that application of the “traditional” test “is consistent with our treatment of injunctions under the Copyright Act”). For a scholarly analysis raising doubts about whether the test articulated in *eBay* is consistent with traditional equitable practice, see Mark P. Gergen, John M. Golden & Henry E. Smith, *The Supreme Court’s Accidental Revolution? The Test for Permanent Injunctions*, 112 COLUM. L. REV. 203, 207 (2012). Also, there remains some dispute about whether the four points of analysis articulated in *eBay* are factors to be weighed or elements that must each be satisfied. I have called them elements in the text, in line with a recent Federal Circuit decision that appears to adopt that view. *Nichia Corp. v. Everlight Ams., Inc.*, --- F.3d ---, 2017 WL 1521595, at *9 (Fed. Cir. Apr. 28, 2017) (noting that a party seeking a permanent injunction “must prove that it meets all four equitable factors”).

35. *Global-Tech Appliances, Inc. v. SEB S.A.*, 563 U.S. 754, 766-71 (2011).

36. *Octane Fitness, LLC v. ICON Health & Fitness, Inc.*, 134 S. Ct. 1749, 1756 (2014).

37. *SCA Hygiene Prods. Aktiebolag v. First Quality Baby Prods., LLC*, 137 S. Ct. 954, 959 (2017).

38. *Petrella v. MGM, Inc.*, 134 S. Ct. 1962, 1977 (2014) (noting that in “extraordinary cases” laches could provide a defense from injunctive relief).

Impression Products v. Lexmark, which is under submission as this essay goes to press, the Court is considering whether a sale outside the United States exhausts U.S. patent rights,³⁹ just four years after holding that a foreign sale exhausts a U.S. copyright.⁴⁰

Many of the Court's recent patent cases have centered on the interpretation of discrete provisions of the Patent Act. Examples include *Life Technologies* on the meaning of "substantial" in § 271(f)(1),⁴¹ *Samsung v. Apple* on the meaning of "article of manufacture" in § 289,⁴² and a trio of cases on the meaning of inducement under § 271(b).⁴³ Similarly, the pending *Sandoz v. Amgen* case⁴⁴ raises difficult questions about how to interpret the Biologics Price Competition and Innovation Act, a statute designed to expedite FDA approval of generic biologic drugs.

Interestingly, just as many of the Court's transsubstantive patent cases present opportunities to harmonize the law applicable in patent cases with other areas of the law, many of these statutory interpretation cases involve issues that could be considered transsubstantive. The statutory interpretation issue in *Samsung*, for instance, was relevant to determining damages for design patent infringement.⁴⁵ Also, the *Octane Fitness* case on the standard for awarding attorneys' fees required the Court to interpret § 285 of the Patent Act, which permits the award of fees "in exceptional cases."⁴⁶ And *Halo*, on the issue of enhanced damages for patent infringement, required

39. *Lexmark Int'l, Inc. v. Impression Prods., Inc.*, 816 F.3d 721 (Fed. Cir.), *cert. granted*, 137 S. Ct. 546 (2016).

40. *Kirtsaeng v. John Wiley & Sons, Inc.*, 133 S. Ct. 1351, 1358 (2012).

41. *Life Techs. Corp. v. Promega Corp.*, 137 S. Ct. 734, 743 (2017). Section 271(f)(1) imposes liability on anyone who supplies a "substantial portion of the components of a patented invention" and actively induces someone else to combine those components abroad in a manner that would infringe the patent if done in the United States. 35 U.S.C. § 271(f)(1).

42. *Samsung Elecs. Co. v. Apple Inc.*, 137 S. Ct. 429, 434 (2016). Section 289 of the Patent Act permits the owner of an infringed design patent to recover the defendant's "total profit" from its sales of the "article of manufacture" to which the patented design was applied. 35 U.S.C. § 289. In *Samsung*, the Court held that the "article of manufacture" is not necessarily the finished product sold to the public; it could be a component of that product. 137 S. Ct. at 436.

43. *Commil USA, LLC v. Cisco Sys., Inc.*, 135 S. Ct. 1920, 1926 (2015); *Limelight Networks, Inc. v. Akami Techs. Inc.*, 134 S. Ct. 2111, 2112 (2014); *Global-Tech Appliances, Inc. v. SEB S.A.*, 563 U.S. 754, 757 (2011). Section 271(b) of the Patent Act complements § 271(a)'s prohibition on direct infringement by providing that "[w]hoever actively induces infringement of a patent shall be liable as an infringer." 35 U.S.C. § 271(b).

44. *Amgen Inc. v. Sandoz Inc.*, 794 F.3d 1347 (Fed. Cir. 2015), *cert. granted*, 137 S. Ct. 808 (2017).

45. *See Samsung*, 137 S. Ct. 434-36.

46. *Octane Fitness, LLC v. ICON Health & Fitness, Inc.*, 134 S. Ct. 1749, 1752 (2014).

the Court to interpret § 284, which provides that a court “may increase the damages” up to three times the amount awarded by the factfinder.⁴⁷

III. “FOUNDATIONAL” QUESTIONS OF PATENT LAW?

In his article, Judge Dyk says that “most” of the Supreme Court’s recent patent cases “have involved important and foundational questions with enormous impacts on patent litigation.”⁴⁸ But the brief review provided above suggests that the Court, with one notable exception I will discuss shortly, has actually issued few opinions involving the truly “foundational” provisions of the Patent Act—most notably, the requirements of patentability. Those provisions require patents to be, among other things, novel, nonobvious, and adequately disclosed.⁴⁹ They directly serve patent law’s central policy of promoting innovation by ensuring the PTO awards patents only for inventions that are truly inventive, thoroughly described, and clearly claimed.

Importantly, the lax application of those requirements has, by many accounts, caused significant problems in the modern patent system.⁵⁰ But, unlike the issues on which the Supreme Court has fixated, the Patent Act’s provisions on patentability offer little statutory language on which to base a decision.⁵¹ And, by their very nature, they offer few opportunities to harmonize patent law with other areas of law.

Though the Court has decided a remarkable thirty-three patent cases since 2006,⁵² it has decided precisely zero cases involving the novelty requirement of § 102. The Court has decided one case involving the disclosure requirements of § 112.⁵³ But that case did not involve the

47. Halo Elecs., Inc. v. Pulse Elecs., Inc., 136 S. Ct. 1923, 1928 (2016).

48. Dyk, *supra* note 2, at 72.

49. 35 U.S.C. §§ 102, 103, 112.

50. See, e.g., JAMES BESSEN & MICHAEL J. MEURER, PATENT FAILURE: HOW JUDGES, BUREAUCRATS, AND LAWYERS PUT INNOVATORS AT RISK 10-11 (2008); Michael D. Frakes & Melissa F. Wasserman, *Does the U.S. Patent and Trademark Office Grant Too Many Bad Patents? Evidence from A Quasi-Experiment*, 67 STAN. L. REV. 613, 617 (2015).

51. Craig Allen Nard, *Legal Forms and the Common Law of Patents*, 90 B.U.L. REV. 51, 53 (2010). The barebones language of those provisions does not, however, stop the Court from trying to suggest that its decisions are dictated by statutory text. See, e.g., *Bilski v. Kappos*, 561 U.S. 593, 606-08 (2010) (rejecting a categorical bar on business method patents based on a textual analysis of the term “process” as used in § 101).

52. As of April 28, 2017, three additional patent cases remain pending on the Court’s merits docket. *Supreme Court Patent Cases*, *supra* note 12.

53. *Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120 (2014).

fundamental prerequisites of enablement and written description,⁵⁴ even though the very existence of the written description requirement has been vigorously debated among Federal Circuit judges in recent years.⁵⁵ Rather, the Supreme Court's sole case on § 112 involved the test for determining when a patent can be invalidated as indefinite—an issue that, though it arises in a large number of cases,⁵⁶ is successful in a relatively narrow slice of them.⁵⁷ And although the Court in *Nautilus* eased the legal requirements for invalidating a patent as indefinite,⁵⁸ observers have questioned whether the decision has had much impact on the ground.⁵⁹

The Court has also decided only one case involving the nonobviousness requirement of § 103—“the sine qua non of patentability.”⁶⁰ That case, to be sure, was a fairly high-profile decision. In *KSR v. Teleflex*, the Court deemphasized the “teaching, suggestion, or motivation” requirement imposed by the Federal Circuit, replacing it with a “flexible” analysis that permits a ruling of obviousness to be based on market demands, design incentives, or even common sense.⁶¹ *KSR* appears to have made it at least

54. The enablement requirement mandates that the invention be described in sufficient detail that a person of ordinary skill in the art could recreate the invention without undue experimentation. See *Consol. Elec. Light v. McKeesport Light Co.*, 159 U.S. 465, 474 (1895). The written description requirement ensures that the inventor, at the time of filing the patent application, had actually invented what is claimed in the issued patent. See *Gentry Gallery Inc. v. Berkline Corp.*, 134 F.3d 1473, 1479 (1998); see also 35 U.S.C. § 112(a) (requiring the patent's specification to “contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same”).

55. See *Ariad Pharms., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336 (Fed. Cir. 2010) (en banc).

56. John R. Allison, Mark A. Lemley & David L. Schwartz, *Understanding the Realities of Modern Patent Litigation*, 92 TEX. L. REV. 1769, 1782 (2014).

57. John R. Allison, Mark A. Lemley & David L. Schwartz, *Our Divided Patent System*, 82 U. CHI. L. REV. 1073, 1105 (2015) (reporting that indefiniteness challenges succeed mainly in cases involving software and computer-related inventions).

58. Under the Federal Circuit's prior case law, a patent claim was invalid as indefinite only if it was “insolubly ambiguous.” *Nautilus*, 134 S. Ct. at 2122. The Supreme Court, by contrast, held that “a patent is invalid for indefiniteness if its claims, read in light of the specification . . . and the prosecution history, fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention.” *Id.* at 2123.

59. Compare Jason Rantanen, *Teva, Nautilus, and Change Without Change*, 18 STAN. TECH. L. REV. 430, 432 (2015) (arguing that, after *Nautilus*, “[i]t seems to be business as usual at the Federal Circuit”), with Lisa Ouellette, *Dow v. NOVA: Maybe Nautilus Does Matter*, WRITTEN DESCRIPTION (Aug. 28, 2015), <http://writtendescription.blogspot.com/2015/08/dow-v-nova-maybe-nautilus-does-matter.html> (discussing the Federal Circuit's decision in *Dow Chemical Co. v. NOVA Chemicals Corp.*, 803 F.3d 620, 630 (Fed. Cir. 2015), which invalidated several patent claims and noted that “there can be no serious question that *Nautilus* changed the law of indefiniteness”).

60. *Roanwell Corp. v. Plantronics Inc.*, 429 U.S. 1004, 1005 (1976) (White, J., dissenting from the denial of certiorari).

61. *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 417-22 (2007).

somewhat easier to demonstrate that a claimed invention is impermissibly obvious,⁶² though, as discussed below, the Federal Circuit has sometimes resisted the more flexible framework articulated by the Supreme Court.⁶³

The most notable exception to the Supreme Court's reluctance to consider the requirements of patentability is in the area of patent-eligible subject matter. In four decisions in the past seven years, the Court has invigorated that requirement, prohibiting patents directed to laws of nature, natural phenomena, or abstract ideas unless they also contain an "inventive concept."⁶⁴ Eligibility doctrine polices both patent breadth (by ensuring patents do not claim the building blocks of future innovation) and originality (by ensuring inventiveness)—something both the Federal Circuit and the PTO had trouble doing in the 1990s and early 2000s.

But many observers have complained about the Supreme Court's emergent case law in this area. These critics contend that the test for patent eligibility adopted by the Supreme Court is too amorphous for the courts and the PTO to apply predictably⁶⁵ and that some of the Court's opinions are internally inconsistent.⁶⁶ They also argue that the eligibility requirement serves no meaningful policy objective not already served by the requirements of novelty, nonobviousness, and adequate disclosure.⁶⁷ In addition, the invigorated eligibility requirement may lead courts to sometimes invalidate patents on meritorious inventions. The quintessential example according to many commentators⁶⁸ is *Ariosa v. Sequenom*, in which the Federal Circuit invalidated a patent on a non-invasive prenatal genetic

62. See, e.g., Glynn S. Lunney, Jr. & Christian T. Johnson, *Not So Obvious After All: Patent Law's Nonobviousness Requirement, KSR, and the Fear of Hindsight Bias*, 47 GA. L. REV. 41, 44 (2012); Jason Rantanen, *The Federal Circuit's New Obviousness Jurisprudence: An Empirical Study*, 16 STAN. TECH. L. REV. 709, 713 (2013).

63. See *infra* notes 104-105 and accompanying text.

64. E.g., *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 72-73 (2012).

65. See, e.g., David O. Taylor, *Amending Patent Eligibility*, 50 U.C. DAVIS L. REV. (forthcoming 2017) (manuscript at 3), <https://ssrn.com/abstract=2853700>.

66. See Peter Lee, *The Supreme Court's Myriad Effects on Scientific Research: Definitional Fluidity and the Legal Construction of Nature*, 5 U.C. IRVINE L. REV. 1077, 1106 n.223 (2015) (collecting criticism of the Supreme Court's decision in *Ass'n for Molecular Pathology v. Myriad Genetics, Inc.*, 133 S. Ct. 2107 (2013)).

67. See, e.g., J. Jonas Anderson, *Applying Patent-Eligible Subject Matter Restrictions*, 17 VAND. J. ENT. & TECH. L. 267, 280 (2015) (collecting criticism); see also John M. Golden, *Redundancy: When Law Repeats Itself*, 94 TEX. L. REV. 629, 699-710 (2016) (analyzing the costs and benefits of eligibility's overlap with other validity doctrines).

68. See, e.g., Dmitry Karshedt, *Photocopies, Patents, and Knowledge Transfer: "The Uneasy Case" of Justice Breyer's Patentable Subject Matter Jurisprudence*, 69 VAND. L. REV. 1739, 1770-71 (2016).

test that was widely viewed as a scientific and medical breakthrough⁶⁹ because the test involved a “natural law”—the presence of fetal DNA in the mother’s bloodstream.⁷⁰ The judges of the Federal Circuit, in numerous separate opinions, strongly urged the Supreme Court to grant review.⁷¹ But, to the surprise of many, the Court denied certiorari.⁷²

Ariosa aside, what explains the Supreme Court’s fixation on patent eligibility to the exclusion of other requirements of patentability? The Court’s resurgent interest in eligibility doctrine can be traced to Justice Breyer’s 2006 dissent from the dismissal of certiorari in *Lab Corp. v. Metabolite*, in which he, joined by Justices Stevens and Souter, emphasized a view that eligibility has a quasi-constitutional dimension, writing that “the reason for the exclusion [of laws of nature from patent eligibility] is that sometimes *too much* patent protection can impede rather than ‘promote the Progress of Science and useful Arts,’ the constitutional objective of patent and copyright protection.”⁷³ Eligibility’s lofty status might help explain the Supreme Court’s gravitation toward that issue and away from other patentability requirements, such as novelty, adequate disclosure, and even nonobviousness, which seem technical and mundane in comparison. In a similar vein, the fuzzy nature of the eligibility test and its search for an “inventive concept” allows the Court to consider and write about the

69. Rachel Rebouché, *Testing Sex*, 49 U. RICH. L. REV. 519, 527 (2015).

70. *Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1378 (Fed. Cir. 2015).

71. *Id.* at 1381 (Linn, J., concurring) (“The new use of the previously discarded maternal plasma to achieve such an advantageous result is deserving of patent protection. . . . But for the sweeping language in the Supreme Court’s *Mayo* opinion, I see no reason, in policy or statute, why this breakthrough invention should be deemed patent ineligible.”); *Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 809 F.3d 1282, 1287 (Fed. Cir. 2015) (Lourie, J., concurring in the denial of rehearing en banc) (“[I]t is unsound to have a rule that takes inventions of this nature out of the realm of patent-eligibility on grounds that they only claim a natural phenomenon plus conventional steps, or that they claim abstract concepts.”); *id.* (Dyk, J., concurring in the denial of rehearing en banc) (“I share the concerns of some of my colleagues that a too restrictive test for patent eligibility under 35 U.S.C. § 101 with respect to laws of nature (reflected in some of the language in *Mayo*) may discourage development and disclosure of new diagnostic and therapeutic methods in the life sciences This leads me to think that some further illumination as to the scope of *Mayo* would be beneficial in one limited aspect.”).

72. *Sequenom, Inc. v. Ariosa Diagnostics, Inc.*, 136 S. Ct. 2511 (2016).

73. *Lab. Corp. of Am. Holdings v. Metabolite Labs., Inc.*, 548 U.S. 124, 126-27 (2006) (Breyer, J., dissenting from the dismissal of the writ of certiorari) (quoting U.S. CONST. art. I, § 8, cl. 8). For an analysis vehemently challenging the notion that the eligibility requirement stems from the Constitution, see Taylor, *supra* note 65, at 15-22.

patentability of inventions in general terms without digging into more specialized legal doctrines⁷⁴ or the details of the relevant technology.⁷⁵

Whatever spurred the Court's initial interest in eligibility doctrine, the denial of certiorari in *Ariosa* suggests that the Court's enthusiasm for the issue may be waning. It is of course precarious to read anything into a denial of certiorari. But the Court's refusal to hear such a high-profile and controversial case—in an area of patent law in which the Court has been extraordinarily active—might demonstrate that the criticism of the Court's eligibility jurisprudence has dissuaded the Court from tinkering with the doctrine any further.

Yet further disruption of patent law's validity doctrines could be beneficial. Despite the patent system's purpose to incentivize innovation,⁷⁶ in some technological fields, the patent system today may be thwarting innovation because many patents represent minimal advances in the state of the art and provide poor notice of their boundaries.⁷⁷ Those poor quality patents facilitate litigation, heavily concentrated in the U.S. District Court for the Eastern District of Texas, in which patentees file suit with no intention of actually litigating; they are instead leveraging litigation costs to extract a quick settlement.⁷⁸ Though the judges of the Eastern District are partly to blame for adopting rules and practices that encourage nuisance suits,⁷⁹ the root cause of these dynamics is the existence of many patents that are not inventive and that are too broad. The Supreme Court could play an important role in improving the patent system by looking beyond the generalities of patent eligibility and seriously engaging the requirements of the Patent Act that are explicitly designed to ensure that patents are inventive, adequately disclosed, and clearly claimed.

74. Cf. Karshedt, *supra* note 68, at 1777-81 (describing how the Court could have reached the same results in recent eligibility cases through doctrines developed under the Patent Act's novelty provision).

75. More on the Court's possible aversion to technology—and ways in which it might be overcome—below. See *infra* note 98 and accompanying text.

76. See generally Robert P. Merges, *Philosophical Foundations of IP Law: The Law and Economics Paradigm*, in 1 RESEARCH HANDBOOK ON THE ECONOMICS OF IP LAW (Peter S. Menell, Ben Depoorter & David Schwartz, eds., forthcoming), <https://ssrn.com/abstract=2920713>.

77. See generally DAN L. BURK & MARK A. LEMLEY, THE PATENT CRISIS AND HOW THE COURTS CAN SOLVE IT 30-31 (2009).

78. Mark A. Lemley & A. Douglas Melamed, *Missing the Forest for the Trolls*, 113 COLUM. L. REV. 2117, 2126 (2013).

79. J. Jonas Anderson, *Court Competition for Patent Cases*, 163 U. PA. L. REV. 631, 651-54 (2015); Daniel Klerman & Greg Reilly, *Forum Selling*, 89 S. CAL. L. REV. 241, 243 (2016); Brian J. Love & James Yoon, *Predictably Expensive: A Critical Look at Patent Litigation in the Eastern District of Texas*, 20 STAN. TECH. L. REV. 1, 21 (2017).

IV. MAKING REAL CHANGES

So, how, exactly, could the Supreme Court make meaningful changes to the substance of patent law? Some hints can be found in areas of patent law in which the Court's recent decisions have clearly impacted litigants' behavior and lower courts' decisionmaking. Take patent eligibility, for example. The doctrine, to be sure, is not perfectly consistent (though new, common law-like doctrines often take time to evolve from unpredictable standards to more certain rules).⁸⁰ Yet, as I suggest in a forthcoming article, the eligibility requirement fills an important *procedural* gap in patent law.⁸¹ Because courts treat eligibility, unlike other prerequisites of patentability, as a pure question of law, it provides a mechanism to invalidate plainly invalid patents at the pleadings stage—something that patent law has never previously had and that can be an important tool to eliminate nuisance suits.⁸² Indeed, the number of invalidity decisions rendered before discovery begins—and litigation costs begin to escalate quickly—has increased dramatically since the Supreme Court strengthened the eligibility requirement.⁸³

As this procedural justification for eligibility doctrine suggests, it is not only the substantive rules adopted by the Court that matter in effecting meaningful change on the ground. The *manner* in which the Court changes substantive law can be important, too. *KSR* illustrates. In that case, the Court granted review to reconsider a Federal Circuit doctrine that had been settled law for two decades. Not only did the Court reject the “rigid rule” embraced by the Federal Circuit, *it applied the new test to the facts of the case*, demonstrating the “expansive and flexible” mode of analyzing obviousness that the opinion endorsed. The Court provided a similar demonstration in eligibility cases such as *Mayo*, where the Court articulated the legal

80. See Keith N. Hylton, *Patent Uncertainty: Toward A Framework with Applications*, 96 B.U. L. REV. 1117, 1148 (2016). For an argument that the Supreme Court has erred by insisting on standard-like tests for eligibility when clear rules might be more appropriate, see David O. Taylor, *Formalism and Antiformalism in Patent Law Adjudication: Rules and Standards*, 46 CONN. L. REV. 415, 494 (2013).

81. Paul R. Gugliuzza, *Quick Decisions in Patent Cases*, 106 GEO. L.J. (forthcoming 2017-18) (on file with author).

82. *Id.* at 30; see also U.S. FED. TRADE COMM'N, PATENT ASSERTION ENTITY ACTIVITY 4 (2016), https://www.ftc.gov/system/files/documents/reports/patent-assertion-entity-activity-ftc-study/p131203_patent_assertion_entity_activity_an_ftc_study_0.pdf (describing the behavior of numerous patent assertion entities (PAEs) as “consistent with nuisance litigation”).

83. See Gugliuzza, *supra* note 81, at 35 (reporting that the number of pleading-stage eligibility dismissals has increased from one in 2010, the year of the Supreme Court's first recent eligibility decision, *Bilski v. Kappos*, 561 U.S. 593 (2010), to seventy-five in 2016).

framework—first, identify the abstract ideas or natural laws, then disregard them and analyze what remains for an “inventive concept”—and *applied* that framework to invalidate several of the patents involved.

By, essentially, “showing its work,” as it did in *KSR* and the eligibility cases, the Court constrained the ability of the Federal Circuit and the PTO to disregard the Court’s doctrinal changes.⁸⁴ As noted, some evidence suggests that invalidity decisions on the ground of obviousness have increased after *KSR*.⁸⁵ And the guidance the PTO provides to its examiners on the question of eligibility hews very closely to the factual analyses provided by both the Supreme Court in decisions such as *Mayo* and the Federal Circuit in decisions following in its wake.⁸⁶

Unfortunately, engagement with core patent law—much less applying the law to the underlying facts of the case—is not a consistent mark of Supreme Court patent jurisprudence. The typical setup of a Supreme Court patent case is that the Court overturns a rigid Federal Circuit rule that appears inconsistent with doctrine in another area of the law or with clear statutory language. The Court then replaces that rule with a more context-sensitive standard.⁸⁷ But, not infrequently, the Court refuses to elaborate on what the new standard means, declines to apply the new standard to the facts of the case, or both.

Though some might celebrate Supreme Court opinions that are limited in scope for reflecting judicial humility,⁸⁸ this humility gives the Federal Circuit wide berth to continue business as usual. For instance, in *Nautilus*, the Supreme Court ruled that a patent could be invalidated as indefinite if it failed to inform, with “reasonable certainty,” a person of ordinary skill in the art about the scope of the invention.⁸⁹ But the Court refused to apply this new standard⁹⁰ even though indefiniteness is a matter of claim construction, which is a question of law to be resolved by the judge.⁹¹ Not surprisingly, the Federal Circuit on remand reached the same result it had reached in the

84. For a parallel argument that the Supreme Court should “enable” its rulings by providing concrete examples of its holdings in action, see Lee, *supra* note 23, at 64-65.

85. See Lunney & Johnson, *supra* note 62.

86. See U.S. PAT. & TRADEMARK OFF., INTERIM GUIDANCE ON PATENT SUBJECT MATTER ELIGIBILITY, 79 Fed. Reg. 74,618 (2014).

87. Kelly Casey Mullally, *Legal (Un)certainty, Legal Process, and Patent Law*, 43 LOY. L.A. L. REV. 1109, 1130 (2010).

88. See, e.g., Duffy, *supra* note 9, at 341.

89. *Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120, 2124 (2014).

90. *Id.* at 2131.

91. *Teva Pharms. USA, Inc. v. Sandoz, Inc.*, 135 S. Ct. 831, 837 (2015).

opinion reviewed by the Supreme Court, taking a seemingly sarcastic jab at the Court's new indefiniteness standard along the way.⁹²

The Court's minimalist approach to writing patent opinions also perpetuates uncertainty about what, exactly, the law is. In *Samsung v. Apple*, for instance, the Court held that the "article of manufacture" for which the infringer's total profits could be awarded under § 289 could be something less than the finished product sold to consumers.⁹³ But the Court did not determine whether Samsung's infringing smartphones or merely some component of them were the relevant "article of manufacture" in the case at hand.⁹⁴ Though perhaps the Court could be excused for not resolving that factual issue on the record presented, the Court refused even to offer any *legal* guidance to the lower courts about how to determine what, precisely, is the relevant article. It instead remanded both issues to the Federal Circuit,⁹⁵ which, in turn, remanded both issues to the district court.⁹⁶ Other examples of the Supreme Court's reluctance to elaborate on the law or to engage the facts of the case are easy to find.⁹⁷

If the Supreme Court is interested in making legal reforms that actually change the patent system, the Court may need to issue decisions, like *KSR* and some of its eligibility decisions, that are more substantial in content and that are more explicit about how changes in the law alter the outcomes of particular cases. The Court might also need to overcome its seeming hesitance to engage the underlying technology, which is evident in decisions like *Nautilus*, where the Court did not apply its new indefiniteness standard

92. *Biosig Instruments, Inc. v. Nautilus, Inc.*, 783 F.3d 1374, 1379 (Fed. Cir. 2015) ("The Court has . . . modified the standard by which lower courts examine allegedly ambiguous claims; we may now steer by the bright star of 'reasonable certainty,' rather than the unreliable compass of 'insoluble ambiguity.'").

93. *Samsung Elecs. Co. v. Apple Inc.*, 137 S. Ct. 429, 435 (2016).

94. *Id.* at 436.

95. *Id.*

96. *Apple Inc. v. Samsung Elecs. Co.*, No. 2014-1335, 2017 WL 490419 (Fed. Cir. Feb. 7, 2017).

97. *See, e.g., Life Techs. Corp. v. Promega Corp.*, 137 S. Ct. 734, 743 (2017) (holding that a single component cannot constitute a "substantial" portion of an invention's components for the purpose of infringement under § 271(f)(1), *see supra* note 41, but refusing to offer guidance about how many components would be sufficient to establish infringement); *eBay Inc. v. MercExchange, L.L.C.*, 547 U.S. 388, 394 (2006) ("[W]e take no position on whether permanent injunctive relief should or should not issue in this particular case . . ."). It should be noted that, although the Court in *eBay* did not apply the test it articulated to the facts of the case, Justice Kennedy's concurrence, which made the very specific point that non-practicing entities should rarely receive injunctions, has effectively dictated lower courts' decisionmaking. *eBay*, 547 U.S. at 396-97 (Kennedy, J., concurring); Ryan T. Holte, *The Misinterpretation of eBay v. MercExchange and Why: An Analysis of the Case History, Precedent, and Parties*, 18 CHAPMAN L. REV. 677, 682 (2015).

to the case at hand even though it was well-situated to do so.⁹⁸ Though one might suggest that lay judges (including Supreme Court Justices) are incapable of developing the technological proficiency needed to understand patent disputes,⁹⁹ the certiorari process gives the Supreme Court the ability to set its own agenda and develop the law through cases that involve technology that is relatively straightforward, such as the automotive gas pedals at issue in *KSR*, or that has been clearly explained by the parties—a criterion that should not be hard to satisfy given the increasing presence of the elite Supreme Court bar in patent cases. To be sure, simple facts could limit how instructive the Court’s decision is to lower courts that must grapple with more complex technology. But the Court could at least partially cope with any concerns about technological complexity through wise screening at the certiorari stage.

To effect real change in the patent system, the Supreme Court might also need to decide multiple cases on a given issue to reinforce its decisions against resistance from the Federal Circuit and the PTO. One reason the Court kept returning to eligibility may have been the skepticism about eligibility doctrine that prevailed among some judges of the Federal Circuit.¹⁰⁰ The Court’s repeated engagement with one issue of patent law was not unprecedented. For example, beginning with *Graham v. John Deere Co.*,¹⁰¹ the Court in the 1960s and 1970s decided a half dozen cases on the issue of obviousness.¹⁰² In *KSR*, the Court discussed several of those cases as illustrating proper application of the obviousness doctrine.¹⁰³ A similar,

98. Another oft-cited example of the Court’s hesitation to engage with technology is Justice Scalia’s concurrence in *Myriad*, in which he agreed with the ruling that isolated DNA is not patent eligible but refused to join the “portions of the . . . opinion going into fine details of molecular biology” because he was “unable to affirm those details on [his] own knowledge or even [his] own belief.” *Ass’n for Molecular Pathology v. Myriad Genetics, Inc.*, 133 S. Ct. 2107, 2120 (2013) (Scalia, J., concurring in part and concurring in the judgment). Interestingly, although Justice Scalia’s choice of wording could easily be caricatured as reflecting a disbelief in basic biology, his concern about the accuracy of the science described in the majority opinion seems to have been justified. See Ian Samuel, *Did Justice Scalia Believe in Dinosaurs? An Investigation*, MEDIUM (Dec. 24, 2016), <https://medium.com/@isamuel/did-justice-scalia-believe-in-dinosaurs-an-investigation-79cd99e3559>.

99. See Michael Goodman, *What’s So Special About Patent Law?*, 26 FORDHAM INTELL. PROP., MEDIA & ENT. L.J. 797, 839 (2016). Also see the discussion of *Myriad* in the previous footnote.

100. See, e.g., *CLS Bank Int’l v. Alice Corp.*, 717 F.3d 1269 (Fed. Cir. 2013) (en banc), *aff’d*, 134 S. Ct. 2347 (2014) (deeply divided en banc decision on the eligibility of a patent on computer software).

101. 383 U.S. 1 (1966).

102. See *Graham*, 383 U.S. 1; *United States v. Adams*, 383 U.S. 39 (1966); *Anderson’s-Black Rock, Inc. v. Pavement Salvage Co.*, 396 U.S. 57 (1969); *Dann v. Johnston*, 425 U.S. 219 (1976); *Sakraida v. Ag Pro, Inc.*, 425 U.S. 273 (1976); see also *Graham*, 383 U.S. at 26-37 (discussing the consolidated cases of *Calmar, Inc. v. Cook Chemical Co.* and *Colgate-Palmolive Co. v. Cook Chemical Co.*).

103. *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 415-17 (2007).

recurrent engagement with obviousness might be particularly warranted today in light of recent Federal Circuit decisions in tension with the flexible analysis embraced in *KSR*. Particularly questionable decisions limit the use of common sense¹⁰⁴ and insist that a patent challenger “must” prove a motivation to combine the teachings of prior art references.¹⁰⁵

To summarize the argument thus far: the sheer quantity of patent cases decided by the Supreme Court in recent years might make it seem as if the Court is serving as a percolating force in patent law by disrupting ossified doctrine and engaging in independent analyses of what the law should be.¹⁰⁶ But, with the exception of eligibility doctrine, the Court has hardly brought patent law to a boil. Decisions on remedial issues, such as *eBay*, which made it more difficult for non-practicing entities to obtain injunctive relief,¹⁰⁷ and *Octane Fitness*, which made it easier to obtain attorneys’ fees,¹⁰⁸ have changed outcomes somewhat. But the key doctrines governing novelty, nonobviousness, and disclosure have remained relatively static. Perhaps we should not be surprised to see evidence that, despite seemingly significant changes in the law in the past decade, the primary behavior of participants in the patent system has not changed much.¹⁰⁹

V. CAVEATS AND CLARIFICATIONS

Before considering how litigants and advocates might persuade the Supreme Court to engage patent law’s foundational issues in ways that affect

104. See, e.g., *Arendi S.A.R.L. v. Apple Inc.*, 832 F.3d 1355, 1361 (Fed. Cir. 2016) (holding that common sense typically cannot be invoked to supply a claim limitation not found in the prior art), *cert. denied sub nom.*, *Google Inc. v. Arendi S.A.R.L.*, No. 16-626, 2017 WL 1040877 (U.S. Mar. 20, 2017); *In re Van Os*, 844 F.3d 1359, 1361 (Fed. Cir. 2017) (demanding that “obviousness findings grounded in common sense . . . contain explicit and clear reasoning providing some rational underpinning why common sense compels a finding of obviousness”) (internal quotation marks omitted).

105. *Eli Lilly & Co. v. Teva Parenteral Medicines, Inc.*, 845 F.3d 1357, 1372 (Fed. Cir. 2017). For another critique of the rigidity of post-*KSR* Federal Circuit case law, see Douglas L. Rogers, *Federal Circuit’s Obviousness Test for New Pharmaceutical Compounds: Gobbledygook?*, 14 CHI-KENT J. INTEL. PROP. 49, 105 (2014) (criticizing the “lead compound” doctrine used by the Federal Circuit for determining the patentability of pharmaceutical inventions).

106. On the benefits of percolation in the more traditional context, that is, among the regional federal courts of appeals, see generally Samuel Estreicher & John E. Sexton, *A Managerial Theory of the Supreme Court’s Responsibilities: An Empirical Study*, 59 N.Y.U. L. REV. 681, 699 n.68 (1984).

107. Christopher B. Seaman, *Permanent Injunctions in Patent Litigation After eBay: An Empirical Study*, 101 IOWA L. REV. 1949, 1987-90 (2016).

108. Hannah Jiam, *Fee-Shifting and Octane Fitness: An Empirical Approach Toward Understanding “Exceptional,”* 30 BERKELEY TECH. L.J. 611, 623 (2015).

109. Mark A. Lemley, *The Surprising Resilience of the Patent System*, 95 TEX. L. REV. 1, 2 (2016) (arguing, based on metrics such as the quantity of patent applications filed, the number of patents issued, and the frequency of patent litigation, that changes in patent law have not significantly changed behavior).

meaningful change, let me offer a few caveats and clarifications to the analysis provided so far.

To start, one might reasonably note that the validity issues on which I have mainly focused are not the only “foundational” issues in patent law; doctrines on infringement could be considered foundational, too.¹¹⁰ Similarly, one might defend the Court’s relative inattention to validity on a “rational ignorance” theory—the idea that because so many issued patents are never asserted, the Court’s energy is best directed to issues relevant only to patent litigation, such as infringement and remedies.¹¹¹

Yet the Supreme Court in recent years has shied away from core issues of infringement, just as it has done with validity. For example, the Court has decided a case on infringement under the relatively obscure provision of § 271(f),¹¹² but it has not decided a case involving the far more frequently litigated direct infringement provision of § 271(a). Similarly, the Court has not decided any case involving the substantive law of claim construction, only procedural cases such as *Markman* and *Teva*,¹¹³ as well as *Cuozzo*, in which the Court simply applied the deferential *Chevron* framework to hold that the standard of claim construction applied by the PTO in certain post-issuance proceedings was a reasonable exercise of statutory authority.¹¹⁴ As for remedies, the Court has not addressed the core damages issues of lost profits and reasonable royalties, which patentees seek in practically every case, but it has decided more fringe remedial issues related to attorneys’ fees in *Octane Fitness*,¹¹⁵ willful infringement in *Halo*,¹¹⁶ and the laches defense in *SCA Hygiene*.¹¹⁷

That said, *eBay* was plainly a consequential decision on the remedies for patent infringement.¹¹⁸ The Court has also decided cases on infringement

110. Cf. Timothy R. Holbrook, *The Federal Circuit’s Acquiescence(?)*, 66 AM. U. L. REV. 1061, 1081 (2017) (asserting that the Supreme Court’s recent patent cases “deal with core patent law issues,” citing decisions involving the law of induced infringement, the role of appellate review of fact-finding in claim construction, the award of attorneys’ fees, and the doctrine of willful infringement).

111. See generally Mark A. Lemley, *Rational Ignorance at the Patent Office*, 95 NW. U. L. REV. 1495, 1497 (2001).

112. *Life Techs. Corp. v. Promega Corp.*, 137 S. Ct. 734, 741 (2017).

113. *Teva Pharms. USA, Inc. v. Sandoz, Inc.*, 135 S. Ct. 831, 835 (2015); *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 372 (1996).

114. *Cuozzo Speed Techs., LLC v. Lee*, 136 S. Ct. 2131, 2144 (2016).

115. *Octane Fitness, LLC v. ICON Health & Fitness, Inc.*, 134 S. Ct. 1749, 1752 (2014).

116. *Halo Elecs., Inc. v. Pulse Elecs., Inc.*, 136 S. Ct. 1923, 1926 (2016).

117. *SCA Hygiene Prods. Aktiebolag v. First Quality Baby Prods., LLC*, 137 S. Ct. 954, 959 (2017).

118. See Seaman, *supra* note 107, at 1987-90; Colleen V. Chien & Mark A. Lemley, *Patent Holdup, the ITC, and the Public Interest*, 98 CORNELL L. REV. 1, 9 (2012).

under the doctrine of equivalents (though none since 2002),¹¹⁹ as well as several cases on indirect infringement under § 271(b).¹²⁰ The bottom line for this short essay, however, is that the Supreme Court's recent patent decisions—though substantial in number—have often been trivial in content, even if there are a few exceptions. By and large, that claim holds true on issues of infringement and remedies as well as validity.

One might also object to the characterization of the Court's recent validity decisions as trivial. Specifically, what about the four eligibility decisions, which *have* changed the substance of patent law and the process of patent litigation in significant ways? Eligibility doctrine was mostly a dead letter until the Supreme Court got involved in 2010,¹²¹ but the issue is now litigated in many cases. Congress even created a new PTO proceeding, covered business method review, to scrutinize patents that are particularly susceptible to eligibility challenges.¹²²

Yet Supreme Court decisions on novelty, nonobviousness, and the disclosure doctrines would still be useful for at least two reasons. First, as explained above, eligibility is well-designed for quickly invalidating *plainly* invalid patents. However, as the years go by and the PTO and litigants adjust to the new legal regime, it seems likely that fewer and fewer plainly invalid patents will be asserted. Possible evidence of this trend can already be seen in the falling rates at which courts are granting motions to dismiss on eligibility grounds.¹²³ Second, although eligibility is a useful tool for *courts* to quickly invalidate patents, it is not an ideal tool for *examiners* because the eligibility analysis is driven by broad policy concerns about limiting

119. See *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 535 U.S. 722 (2002); *Warner-Jenkinson Co. v. Hilton Davis Chem. Co.*, 520 U.S. 17 (1997). The Court's lack of recent engagement with the doctrine of equivalents may stem in part from the fact that, since the Court decided *Markman* in 1996, judicial claim construction (which can effectively account for arguments under the doctrine of equivalents) has become the centerpiece of patent litigation. See generally John R. Allison & Mark A. Lemley, *The (Unnoticed) Demise of the Doctrine of Equivalents*, 59 STAN. L. REV. 955 (2007); Lee Petherbridge, *On the Decline of the Doctrine of Equivalents*, 31 CARDOZO L. REV. 1371 (2010); David L. Schwartz, *Explaining the Demise of the Doctrine of Equivalents*, 26 BERKELEY TECH. L.J. 1157 (2011).

120. *Commil USA, LLC v. Cisco Sys., Inc.*, 135 S. Ct. 1920 (2015); *Limelight Networks, Inc. v. Akami Techs. Inc.*, 134 S. Ct. 2111 (2014); *Global-Tech Appliances, Inc. v. SEB S.A.*, 563 U.S. 754 (2011).

121. Mark A. Lemley, Michael Risch, Ted Sichelman & R. Polk Wagner, *Life After Bilski*, 63 STAN. L. REV. 1315, 1318 (2011).

122. Paul R. Gugliuzza, *(In)valid Patents*, 92 NOTRE DAME L. REV. 271, 284 (2016).

123. See Gugliuzza, *supra* note 81, at 39 (reporting that, although the number of eligibility motions granted continues to increase, the rate at which courts grant eligibility motions has fallen from sixty-four percent in 2015 to fifty percent in 2016).

monopolization of basic research tools and by common law-like analyses of case law.¹²⁴ Although the PTO has tried to distill the courts' eligibility case law into examples that examiners can reliably apply en masse, examiners are probably better suited to deploy more fact- and technology-intensive validity doctrines such as novelty, nonobviousness, enablement, and written description.

VI. SHAPING THE SUPREME COURT'S AGENDA

Litigants and advocates could take several steps to persuade the Supreme Court to become more active in core areas of patent law. In terms of private actors, patent disputes often involve repeat players who are well-suited to seek systemic reform in the courts. For instance, in the *TC Heartland* case currently pending before the Supreme Court,¹²⁵ a private litigant engaged in a concerted effort from the earliest stages of the case to challenge the Federal Circuit venue doctrine that permits patent litigation to cluster in places like East Texas,¹²⁶ even though that doctrine has been settled law for nearly thirty years. Indeed, the *TC Heartland* case is a surprising vehicle for considering the venue issue because the case was actually filed in Delaware, not Texas.¹²⁷

The public sector also contains actors who could inspire the Court to engage core questions of patentability more frequently and in more factual detail. As noted above, Federal Circuit judges can play a critical signaling role through the separate opinions they write at both the panel and en banc stages. The Supreme Court frequently grants review when the Federal

124. See Greg Reilly, *Decoupling Patent Law*, 97 B.U. L. REV. 551, 592 (2017) (“[T]he Supreme Court identifies an ‘abstract idea’ largely by analogizing (and distinguishing) prior precedent. This is feasible for judges, who are trained and experienced at common law reasoning, but . . . both foreign to, and difficult for, nonlawyer patent examiners.”).

125. *In re TC Heartland LLC*, 821 F.3d 1338, 1340–41 (Fed. Cir.), cert. granted sub nom., *TC Heartland LLC v. Kraft Food Grp. Brands LLC*, 137 S. Ct. 614 (2016).

126. See generally Paul R. Gugliuzza & Megan M. La Belle, *The Patently Unexceptional Venue Statute*, 66 AM. U. L. REV. 1027, 1044–46 (2017).

127. It is worth noting that the petitioner in *TC Heartland* was represented by the same attorney who represented the petitioner in *KSR*, which challenged the Federal Circuit's twenty-year-old teaching, suggestion, or motivation test for proving obviousness, see *supra* note 61 and accompanying text, Professor John Duffy of the University of Virginia School of Law.

Circuit is deeply fractured, as was the case in recent decisions on patent eligibility,¹²⁸ claim construction,¹²⁹ and other issues.¹³⁰

Sometimes, however, the doctrine in need of reform is relatively ossified at the Federal Circuit, as was the case with obviousness before *KSR*. In that circumstance, it is worth noting that Solicitor General has significant sway over the Supreme Court, particularly on patent matters.¹³¹ That office is staffed with appellate generalists, which is probably another reason the Court gravitates toward patent cases that provide opportunities to harmonize patent law with other fields or to interpret statutory language, rather than fact- or technology-intensive validity disputes. But, as a body within the executive branch, the Solicitor General's office is well-positioned to coordinate a dialogue among numerous actors who are sensitive to innovation law and policy, including the PTO (and especially its Solicitor's office, which handles Federal Circuit appeals and sometimes challenges the Federal Circuit's case law¹³²), the Department of Justice, the Federal Trade Commission, the National Institutes of Health, and more.¹³³ All of those actors are well-positioned to identify areas of patent law in need of reform, including areas where the doctrine appears to be well-settled, and to urge the Solicitor General to support private parties who seek Supreme Court review.¹³⁴ They can also leverage their expertise to elaborate on specific outcomes or, at minimum, to reinforce the importance of giving clear

128. *E.g.*, *CLS Bank Int'l v. Alice Corp.*, 717 F.3d 1269 (Fed. Cir. 2013) (en banc), *aff'd*, 134 S. Ct. 2347 (2014).

129. *E.g.*, *Lighting Ballast Control LLC v. Philips Elecs. N. Am. Corp.*, 744 F.3d 1272 (Fed. Cir. 2014) (en banc), *abrogated by* *Teva Pharms. USA, Inc. v. Sandoz, Inc.*, 135 S. Ct. 831 (2015).

130. *E.g.*, *Highmark, Inc. v. Allcare Health Mgmt. Sys., Inc.*, 701 F.3d 1351 (Fed. Cir. 2012) (denying rehearing en banc), *vacated and remanded*, 134 S. Ct. 1744 (2014).

131. John F. Duffy, *The Federal Circuit in the Shadow of the Solicitor General*, 78 GEO. WASH. L. REV. 518, 519 (2010). Emerging evidence suggests that the Solicitor General's historic advantage at the Supreme Court has shrunk in recent years with the development of a specialized Supreme Court bar. *See generally* Lee Epstein & Eric A. Posner, *The Decline of Supreme Court Deference to the President* 25 (Mar. 6, 2017) (Coase-Sandor Institute for Law & Econ. Working Paper No. 800), <https://ssrn.com/abstract=2928222>. This data reinforces the importance of both public sector and private sector actors in urging the Supreme Court to hear the types of cases that might usefully reform patent law.

132. *See, e.g.*, En Banc Brief for the United States as Amicus Curiae in Support of Appellant 17-18, *Medicines Co. v. Hospira, Inc.*, 827 F.3d 1363 (Fed. Cir. 2016) (No. 2014-1469), *available at* <https://patentlyo.com/media/2016/03/US-Amicus-Brief.pdf>; *see also* Dmitry Karshedt, *Acceptance Instead of Denial: Pro-Applicant Positions at the PTO*, 23 B.U. J. SCI. & TECH. L. (forthcoming 2017) (manuscript at 8) (on file with author).

133. Arti K. Rai, *Patent Validity Across the Executive Branch: Ex Ante Foundations for Policy Development*, 61 DUKE L.J. 1237, 1241-42 (2012).

134. Paul R. Gugliuzza, *IP Injury and the Institutions of Patent Law*, 98 IOWA L. REV. 747, 767 (2013).

guidance to lower courts and the PTO about how to apply the law announced in a particular decision, day in and day out.

CONCLUSION

With the exception of its eligibility decisions, the Supreme Court, for now, seems content to nibble around the edges of patent law. Though the Supreme Court might seem like the Supreme Court of patents, most of its recent patent rulings involve transsubstantive issues or matters of statutory interpretation that have marginal significance in most cases and a tenuous relationship to innovation incentives. Unless the Court becomes willing to engage core questions of patent law and to write its opinions in a less minimalist fashion, it seems unlikely the Court will effect revolutionary changes in the patent system.