### ARTICLE

# MYTHS AND REALITY OF PATENT LAW AT THE SUPREME COURT<sup>†</sup>

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#### Abstract

Over the past twenty years, patent cases have become a major component of the Supreme Court's shrinking docket. The Court's return to patent law after a long absence has inspired a rich literature theorizing about the Court's agenda and critiquing its decisions. Those analyses, though differing in their particulars, have given rise to numerous conventional wisdoms about the Supreme Court and patent law: that the Supreme Court distrusts the Federal Circuit (the specialized appellate court that has exclusive jurisdiction over patent cases), that the Court places far more trust in the Solicitor General (who represents the executive branch in Supreme Court litigation), and that, for better or worse, the Supreme Court is now a major institutional player in the patent system.

But are those conventional wisdoms true? In this Article, we separate myth from reality by presenting a novel quantitative and qualitative study of all patent-related Supreme Court cases since 1982, the year the Federal Circuit began operating. Our study questions whether many of the patent cases decided by the Court have actually been important. Instead, we show that most of the Court's patent-related cases have involved issues far from the substantive core of patent law and are rarely cited by the Federal Circuit. Assessing the Court's impact on patent law, we argue, requires focusing on a small subset of decisions involving the core doctrines of patent validity and infringement.

In those decisions, the Supreme Court has been surprisingly deferential to the Federal Circuit. The cases in which the Federal Circuit has performed poorly

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(at least in the eyes of the Supreme Court) cluster around issues of jurisdiction, procedure, and remedies. We also identify specific types of patent-related cases in which the Solicitor General wins far less frequently than usual.

Testing other patent "myths," we find support for the notions that the Supreme Court prefers malleable standards over bright-line rules and that the Supreme Court is less favorable for patent owners than the Federal Circuit. But we also find that Justice Breyer, often cited as the force behind the Court's growing patent docket, did not have an abnormally large influence over patent law. Similarly, specialist Supreme Court litigators, though increasingly involved in patent cases, don't seem to fare any better (or worse) than other lawyers in patent cases.

In brief, our findings confirm some conventional wisdoms about the Supreme Court and patent law, disprove others, and offer a glimpse of patent law's future.

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#### INTRODUCTION

Patent law is often perceived to be specialized and esoteric.<sup>1</sup> The existence of the Federal Circuit, with its exclusive appellate jurisdiction over patent cases,<sup>2</sup> as well as the exclusionary "patent bar"—lawyers with scientific training who are the only people allowed to practice at the Patent Office<sup>3</sup>—only further the view that patent law is a singular field.<sup>4</sup> For the second half of the twentieth century, the Supreme Court did little to counter those perceptions. It rarely decided patent cases and even more rarely decided patent cases of any importance.<sup>5</sup>

In the past twenty years, however, the Supreme Court seems to have taken a keen interest in the field. The Court's patent decisions—over 50 in number since the year 2000—have prompted a flurry of theories about what the Court is doing and why. Is the Court anti-patent?<sup>6</sup> Is it anti-formalist?<sup>7</sup> Does it distrust the Federal Circuit?<sup>8</sup> Does it just follow the recommendations of the Solicitor General?<sup>9</sup> Was it dominated by Justice Breyer—one of the few Supreme Court Justices with a background in intellectual property ("IP") law?<sup>10</sup>

<sup>4</sup> See William Hubbard, *Razing the Patent Bar*, 59 ARIZ. L. REV. 383, 400-19 (2017) (criticizing the Patent Office's technical education requirement).

<sup>5</sup> See John F. Duffy, *The* Festo Decision and the Return of the Supreme Court to the Bar of Patents, 2002 SUP. CT. REV. 273, 294-95.

<sup>6</sup> See Gregory N. Mandel, Institutional Fracture in Intellectual Property Law: The Supreme Court Versus Congress, 102 MINN. L. REV. 803, 811 (2017); Robert P. Merges, One Hundred Years of Solicitude: Intellectual Property Law, 1900-2000, 88 CALIF. L. REV. 2187, 2223 (2000) (discussing ebbs and flows in the Supreme Court's disposition toward patent rights).

<sup>7</sup> See David O. Taylor, Formalism and Antiformalism in Patent Law Adjudication: Rules and Standards, 46 CONN. L. REV. 415, 420 (2013).

<sup>8</sup> See Rochelle Cooper Dreyfuss, Lecture, *What the Federal Circuit Can Learn from the Supreme Court—and Vice Versa*, 59 AM. U. L. REV. 787, 792-93 (2010) (collecting Supreme Court cases reversing, questioning, or vacating Federal Circuit patent decisions).

<sup>9</sup> See Tejas N. Narechania, Defective Patent Deference, 95 WASH. L. REV. 869, 873 (2020); Ben Picozzi, Note, The Government's Fire Dispatcher: The Solicitor General in Patent Law, 33 YALE L. & POL'Y REV. 427, 432-33 (2015).

<sup>10</sup> See I. Glenn Cohen, *Make It Work! Justice Breyer on Patents in the Life Sciences*, 128 HARV. L. REV. 418, 428 (2014).

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<sup>&</sup>lt;sup>1</sup> Judge Learned Hand memorably called patent law's nonobviousness requirement—a crucial prerequisite to patentability—the most "fugitive, impalpable, wayward, and vague a phantom as exists in the whole paraphernalia of legal concepts." Harries v. Air King Prods. Co., 183 F.2d 158, 162 (2d Cir. 1950).

<sup>&</sup>lt;sup>2</sup> 28 U.S.C. § 1295(a)(4)(A).

<sup>&</sup>lt;sup>3</sup> U.S. PAT. & TRADEMARK OFF., GENERAL REQUIREMENTS BULLETIN FOR ADMISSION TO THE EXAMINATION FOR REGISTRATION TO PRACTICE IN PATENT CASES BEFORE THE UNITED STATES PATENT AND TRADEMARK OFFICE 5, https://www.patbar.com/pdf/grb.pdf [https://perma.cc/6DR9-HAYA]. The patent bar also includes non-lawyer "patent agents" who are permitted to practice before the Patent Office.

In this Article, we provide a comprehensive evaluation of the Supreme Court's patent decisions over the past 40 years—since the Federal Circuit began operating in 1982. While others have thoughtfully examined those cases individually or in groups,<sup>11</sup> we do so in more depth, categorizing the legal issues in each case, the outcome, the role of the Solicitor General, the Court's agreement or disagreement with the Federal Circuit, the identity of the lawyers handling the case, and the effect of individual Supreme Court decisions on the development of patent law, among numerous other characteristics. Our results confirm some conventional wisdoms but upend others.

First, we show that the Supreme Court's impact on patent law has been limited to a few, discrete areas. Though the number of patent-related Supreme Court cases has substantially increased in the past two decades, more than half of the Supreme Court's "patent" cases since 1982 have dealt with issues we categorize as 'peripheral' to the core, substantive patent law doctrines of validity, infringement, claim construction, and remedies.<sup>12</sup> Moreover, the vast majority of Supreme Court patent rulings are rarely cited in subsequent decisions by the Federal Circuit.<sup>13</sup>

Second, we add significant nuance to the widespread assumption that the Federal Circuit is one of the Supreme Court's favorite targets for reversal.<sup>14</sup> By homing in on the small number of important Supreme Court decisions in the patent field, we show that the Federal Circuit has fared respectably in what we call 'core' patent cases and in cases involving the quasi-common-law doctrines most fundamental to patent practice. Setting aside a few cases about remedies for patent infringement, the Supreme Court has agreed with the Federal Circuit on core, common-law issues 30% to 40% of the time since 1982—a rate that compares favorably to how the Supreme Court treats other federal courts of appeals.<sup>15</sup> But the Federal Circuit does terribly in cases further removed from patent law substance, including on issues of jurisdiction and procedure, where the Supreme Court has agreed with it only once in 16 cases,<sup>16</sup> and on questions about remedies for patent infringement, where the Supreme Court has *never* agreed with the Federal Circuit.<sup>17</sup>

<sup>&</sup>lt;sup>11</sup> For a comprehensive examination of the Supreme Court's role in patent cases from a slightly earlier era, see 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 (2009).

<sup>&</sup>lt;sup>12</sup> See infra Section II.B.

<sup>&</sup>lt;sup>13</sup> See infra Section III.D.

<sup>&</sup>lt;sup>14</sup> See Golden, supra note 11, at 659 (surveying commentary contending that "legal decisionmaking by [the] allegedly specialized Federal Circuit has, predictably, gone horribly awry").

<sup>&</sup>lt;sup>15</sup> See infra Section V.A.

<sup>&</sup>lt;sup>16</sup> See infra Section V.A.

<sup>&</sup>lt;sup>17</sup> WesternGeco LLC v. ION Geophysical Corp., 138 S. Ct. 2129 (2018); Samsung Elecs. Co. v. Apple Inc., 137 S. Ct. 429 (2016); Halo Elecs., Inc. v. Pulse Elecs., Inc., 136 S. Ct.

Finally, we refine the conventional wisdom about the Solicitor General ("SG") and patent law. As prior scholarship has noted, the SG does well across the board in patent cases, as it does in most areas of law.<sup>18</sup> But our categorization of patent cases makes plain that the SG's performance varies by the nature of the question presented. In cases involving core patent law issues, such as validity, infringement, and claim construction, the Supreme Court has adopted the SG's position over 90% of the time.<sup>19</sup> The SG has also prevailed in practically every case in which it has participated raising jurisdictional or procedural issues far from the core of substantive patent law.<sup>20</sup> Where the SG does noticeably worse is in a middle category of cases involving questions of statutory interpretation of the Patent Act and constitutional law issues about the structure of the patent system.<sup>21</sup>

Our findings have several implications that should interest patent lawyers and scholars as well as anyone curious about the role of the Supreme Court in the legal system.

First, our study casts doubt on the notion that the Supreme Court has become a major player in patent law.<sup>22</sup> Instead, there's a good argument that, in patent cases, the Supreme Court has the proverbial "instinct for the capillary."<sup>23</sup> Setting aside a few high-profile, frequently cited decisions on the claim construction process and certain patent validity requirements,<sup>24</sup> most of the Court's patentrelated cases, simply put, don't matter much to the day-to-day operation of the patent system.

Second, we tell a positive story about the often criticized Federal Circuit. We show that, in the most consequential patent cases, the Supreme Court hasn't

<sup>22</sup> Cf. Matthew Sag, Tonja Jacobi & Maxim Sytch, *Ideology and Exceptionalism in Intellectual Property: An Empirical Study*, 97 CALIF. L. REV. 801, 848 (2009) ("The Court's renewed interest in patents arguably reflects both the crisis of confidence in the U.S. patent system and a belief that the Federal Circuit has strayed too far from Supreme Court authority in recent years.").

<sup>23</sup> *Cf.* Gregory P. Joseph, *An Instinct for the Capillary*, LITIGATION, Summer/Fall 2012, at 9, 9-10 (making a similar observation about the federal civil rulemaking process, which is overseen by the Supreme Court and frequently yields more questions than it resolves); *see* 28 U.S.C. § 2072(a).

<sup>24</sup> E.g., Mayo Collaborative Servs. v. Prometheus Lab'ys, Inc., 566 U.S. 66 (2012); KSR Int'l Co. v. Teleflex Inc., 550 U.S. 398 (2007); Markman v. Westview Instruments, Inc., 517 U.S. 370 (1996).

<sup>1923 (2016);</sup> Octane Fitness, LLC v. ICON Health & Fitness, Inc., 572 U.S. 545 (2014); eBay Inc. v. MercExchange, L.L.C., 547 U.S. 388 (2006).

<sup>&</sup>lt;sup>18</sup> See, e.g., John F. Duffy, *The Federal Circuit in the Shadow of the Solicitor General*, 78 GEO. WASH. L. REV. 518, 540-41 (2010). For an interesting counterexample in another area of intellectual property law, see Pamela Samuelson, The Solicitor General's Mixed Record of Success in Supreme Court Copyright Cases 1 (Mar. 7, 2023) (unpublished manuscript) (available at https://papers.srn.com/sol3/papers.cfm?abstract\_id=4381579).

<sup>&</sup>lt;sup>19</sup> See infra Section IV.B.

<sup>&</sup>lt;sup>20</sup> See infra Section IV.B.

<sup>&</sup>lt;sup>21</sup> See infra Section IV.B.

taken as dim of a view of the Federal Circuit's case law as is commonly thought. Instead, we isolate the circuit's poor performance to a few discrete types of cases: cases about remedies for patent infringement and jurisdictional and procedural cases that are not really about patent law.<sup>25</sup> That phenomenon might plausibly be attributed to an earlier era of Federal Circuit judges who, according to the conventional wisdom, had a predilection for creating nonsubstantive rules that differed from parallel rules in nonpatent cases, a tendency often referred to as "patent exceptionalism."<sup>26</sup> Yet it turns out that the Supreme Court agreed with the Federal Circuit *more* frequently during the early 2000s, when criticism of the circuit was at its peak,<sup>27</sup> than it has over the past decade, during which Presidents Obama and Biden have appointed eight new judges to the Federal Circuit, many of whom have extensive backgrounds in federal litigation practice and who, one might presume, would be adept at dodging the Supreme Court's ire, particularly on trans-substantive issues.<sup>28</sup>

Finally, while our study generally confirms the Court's oft-mentioned preference for fuzzy standards over bright-line rules,<sup>29</sup> what's clearest from our data is that the Court is most confident in its own judgment when considering matters of constitutional law and statutory interpretation. The Court is much more deferential to the Solicitor General and, somewhat surprisingly, the Federal Circuit, when considering issues close to patent law's substantive core.<sup>30</sup>

Though our analysis centers on patent law and its key institutional actors, it has implications for the role of the Supreme Court more generally. For instance, the Supreme Court commonly hinges its patent decisions on sparse statutory language, often coupled with a dictionary, rather than relying on history, policy, or even the Court's own caselaw.<sup>31</sup> Remarkably, the Court uses that type of reasoning even when the issue is one that developed at common law—as

<sup>28</sup> See infra Section V.B.

<sup>&</sup>lt;sup>25</sup> For a preliminary sketch of this argument, see Paul R. Gugliuzza, *How Much Has the Supreme Court Changed Patent Law?*, 16 CHI.-KENT J. INTELL. PROP. 330, 352 (2017).

<sup>&</sup>lt;sup>26</sup> *Cf.* Peter Lee, *The Supreme Assimilation of Patent Law*, 114 MICH. L. REV. 1413, 1416 (2016) (discussing the Supreme Court's apparent campaign to eliminate patent exceptionalism).

<sup>&</sup>lt;sup>27</sup> For a paradigmatic example, see Craig Allen Nard & John F. Duffy, *Rethinking Patent Law's Uniformity Principle*, 101 Nw. U. L. REV. 1619, 1620-21 (2007) (blaming the Federal Circuit for lack of predictability and efficiency in patent litigation).

<sup>&</sup>lt;sup>29</sup> See, e.g., Rochelle Cooper Dreyfuss, *In Search of Institutional Identity: The Federal Circuit Comes of Age*, 23 BERKELEY TECH. L.J. 787, 808-09 (2008) ("[T]he Federal Circuit tends to favor a kind of formalism that is more characteristic of legal thinking in the nineteenth century than in the twenty-first.").

<sup>&</sup>lt;sup>30</sup> See infra Sections IV.B, V.A.

<sup>&</sup>lt;sup>31</sup> A paradigmatic case is *Bilski v. Kappos*, 561 U.S. 593, 607 (2010), in which the Court largely reduced a difficult question about the history and policy of allowing patents on methods of doing business to an antiseptic exercise of interpreting the term "method" as it appears in the relevant section of the Patent Act.

numerous core patent law doctrines have.<sup>32</sup> This is a troubling development. Supreme Court decisions that reduce complicated questions of patent law to a rote exercise of finding the "plain meaning" of some vague statutory term elide nuance and, ironically, undercut the legal predictability often said to be crucial to innovators<sup>33</sup> because dictionary definitions and plain text can often justify any plausible result.<sup>34</sup>

In addition, by highlighting the low proportion of Supreme Court patent decisions that actually affect the day-to-day operation of the patent system, we underscore the danger of fixating on the Supreme Court in scholarly critiques in any area of the law.<sup>35</sup> In patent law, for example, all cases are concentrated in the Federal Circuit and a small handful of federal district courts, meaning that those courts' lower-profile rulings and procedural practices impact vastly more patent proceedings<sup>36</sup> than a Supreme Court decision on, say, assignor estoppel<sup>37</sup> or the equitable defense of laches.<sup>38</sup> Though the current Supreme Court has, no doubt, wreaked havoc in many areas of American law and life,<sup>39</sup> it is the lower federal courts, along with the Patent and Trademark Office ("PTO"), whose rules and decisions are most relevant to the innovators the patent system is supposed to motivate.

<sup>34</sup> See Anya Bernstein, *Democratizing Interpretation*, 60 WM. & MARY L. REV. 435, 435 (2018) ("[This type of mechanistic statutory interpretation] seems to constrain judges' authority by handing the reins to someone else, giving interpretation a democratized veneer. But in fact, [it] funnels power right back to the judge.").

<sup>35</sup> Cf. Aaron-Andrew P. Bruhl, Communicating the Canons: How Lower Courts React when the Supreme Court Changes the Rules of Statutory Interpretation, 100 MINN. L. REV. 481, 483 (2015) ("The usual academic focus on the Supreme Court has meant that we do not know very much about the interpretive practices of the lower federal courts . . . ."); Tara Leigh Grove, Sacrificing Legitimacy in a Hierarchical Judiciary, 121 COLUM. L. REV. 1555, 1558 (2021) ("[T]he narrow emphasis on the Supreme Court overlooks the broader reality of the federal judiciary.").

<sup>36</sup> For a discussion of how "[c]ase schedules, procedural practices, and rulings on routine pretrial motions" matter immensely to patent litigation strategy, see J. Jonas Anderson & Paul R. Gugliuzza, *Federal Judge Seeks Patent Cases*, 71 DUKE L.J. 419, 422-23 (2021) (noting that differences in these details have led to forum and judge shopping).

<sup>37</sup> Minerva Surgical, Inc. v. Hologic, Inc., 141 S. Ct. 2298, 2302 (2021).

<sup>38</sup> SCA Hygiene Prods. Aktiebolag v. First Quality Baby Prods., LLC, 137 S. Ct. 954, 959 (2017).

<sup>39</sup> See Mark A. Lemley, *The Imperial Supreme Court*, 136 HARV. L. REV. F. 97, 97 (2022) ("The Court of late gets its way... by undercutting the ability of any entity to do something the Justices don't like. We are in the era of the imperial Supreme Court.").

<sup>&</sup>lt;sup>32</sup> Craig Allen Nard, *Legal Forms and the Common Law of Patents*, 90 B.U. L. REV. 51, 53 (2010).

<sup>&</sup>lt;sup>33</sup> See, e.g., R. Polk Wagner & Lee Petherbridge, *Is the Federal Circuit Succeeding? An Empirical Assessment of Judicial Performance*, 152 U. PA. L. REV. 1105, 1108 (2004); Laura G. Pedraza-Fariña, *Understanding the Federal Circuit: An Expert Community Approach*, 30 BERKELEY TECH. L.J. 89, 107 (2015) (noting commentators' split on the effectiveness of the Federal Circuit in creating predictability).

The remainder of this Article proceeds as follows. We discuss the history of patent law, the Supreme Court, and the Federal Circuit in Part I. In Part II, we describe the methodology of our study and explain its importance for both patent law and the judicial system more broadly. In Parts III through V, we test ten commonly held beliefs about the Supreme Court and patent law. Our analysis upends several conventional wisdoms, confirms others, and, more generally, adds nuance and evidence (both quantitative and qualitative) to the ongoing conversation about the Supreme Court's role in the patent system. We discuss additional implications in Part VI, including how, in the coming years, patent law may be affected by changes in membership on the Federal Circuit and the politics of Supreme Court litigation.

#### I. THE SUPREME COURT, THE FEDERAL CIRCUIT, AND PATENT CASES: A BRIEF HISTORY

The federal patent statute was one of the first statutes passed by the very first Congress.<sup>40</sup> Patent cases have long been part of the Supreme Court's docket,<sup>41</sup> with ebbs and flows over the first 200 years of the country's existence.<sup>42</sup>

For our purposes, we can pick up the story in the early 1980s, when Congress created the U.S. Court of Appeals for the Federal Circuit and gave the new court exclusive jurisdiction over patent cases.<sup>43</sup> For twenty years, the Federal Circuit dominated the patent system. In the late 1990s, however, the Supreme Court entered the fray, deciding an increasing number of patent cases, as Figure 1 illustrates.

<sup>&</sup>lt;sup>40</sup> Patent Act of 1790, 1 Stat. 109.

<sup>&</sup>lt;sup>41</sup> For the Supreme Court's first patent decision, see Tyler v. Tuel, 10 U.S. (6 Cranch) 324, 326-27 (1810) (holding that the plaintiffs did not have standing to sue for infringement because a purported assignment to them reserved rights in four Vermont counties).

<sup>&</sup>lt;sup>42</sup> See Duffy, supra note 5, at 288; Christopher Beauchamp, *The First Patent Litigation Explosion*, 125 YALE L.J. 848, 852-53 (2016) (summarizing variations in district court patent litigation from the founding to today).

<sup>&</sup>lt;sup>43</sup> See Federal Courts Improvement Act of 1982, Pub. L. No. 97-164, 96 Stat. 25.

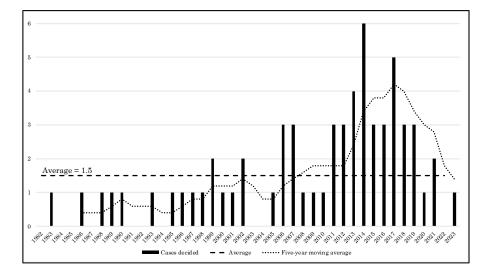


Figure 1. Supreme Court Patent Decisions, 1982 through 2023.44

In 2011, Congress got in on the act, passing the America Invents Act ("AIA")<sup>45</sup>—the most significant amendment to the patent statute since the 1950s.

In this Part, we review the evolution of the patent system since the Federal Circuit's creation, organizing the history into three eras: a Federal Circuit era (from the early 1980s to the late 1990s), a Supreme Court era (from the late 1990s to the mid-2010s), and a Patent Trial and Appeal Board era (from the mid-2010s to the present).<sup>46</sup> Along the way, we highlight the various theories, arguments, and conventional wisdoms we seek to evaluate in the remainder of the Article.

<sup>&</sup>lt;sup>44</sup> Figure 1 omits one patent case in which the Supreme Court dismissed the cert petition as improvidently granted, Lab'y Corp. of Am. Holdings v. Metabolite Lab'ys, Inc., 548 U.S. 124, 125 (2006) (per curiam), and it includes five patent-related cases that arose from courts besides the Federal Circuit. Kimble v. Marvel Ent., LLC, 576 U.S. 446 (2015) (Ninth Circuit); Gunn v. Minton, 568 U.S. 251 (2013) (Texas Supreme Court); FTC v. Actavis, Inc., 570 U.S. 136 (2013) (Eleventh Circuit); Bonito Boats, Inc. v. Thunder Craft Boats, Inc., 489 U.S. 141 (1989) (Florida Supreme Court); and Gen. Motors Corp. v. Devex Corp., 461 U.S. 648 (1983) (Third Circuit).

<sup>&</sup>lt;sup>45</sup> Pub. L. No. 112-29, 125 Stat. 284 (2011).

 $<sup>^{\</sup>rm 46}$  Thanks to Jay Thomas for suggesting we divide patent law's recent history in this fashion.

#### A. The Federal Circuit Era (1982 to the Late 1990s)

For nearly a century, judges, lawyers, and scholars had been calling for a specialized court to hear patent cases.<sup>47</sup> Those pleas finally gained traction in the 1970s, in response to a perceived lack of uniformity among the regional courts of appeals that was supposedly weakening patents as an incentive to innovate.<sup>48</sup>

The reality of how the Federal Circuit came to exist, however, is more complicated,<sup>49</sup> involving not just concerns about a lack of uniformity<sup>50</sup> but also worries about the United States' economic competitiveness in an increasingly global economy, corporate lawyers and executives who thought a specialized patent court would increase the value of their intellectual property rights, and a president who wanted to be seen doing *something* about the caseload of the federal courts, which had grown substantially starting in the 1960s.<sup>51</sup>

In 1982, Congress passed the Federal Courts Improvement Act.<sup>52</sup> The Act created the Federal Circuit<sup>53</sup> and gave the new court exclusive appellate

<sup>48</sup> See H.R. REP. No. 97-312, at 22-23 (1981) (noting that the "central purpose" of the Federal Courts Improvement Act, which created the Federal Circuit, was "to reduce the widespread lack of uniformity and uncertainty of legal doctrine that exist in the administration of patent law"); Pauline Newman, *After Twenty-Five Years*, 17 FED. CIR. BAR J. 123, 123 (2008) ("[The Federal Circuit's] charge, the expectation and hope of its creators, was that uniform national law, administered by judges who understand the law and its purposes, would help to revitalize industrial innovation through a strengthened economic incentive.").

<sup>49</sup> For a landmark early assessment of the Federal Circuit's performance, which looked beyond considerations about uniformity, see Rochelle Cooper Dreyfuss, *The Federal Circuit: A Case Study in Specialized Courts*, 64 N.Y.U. L. REV. 1, 3-5 (1989) (describing "the efficiency and managerial goals" the Federal Circuit might achieve given its "technical expertise . . . in the patent area").

<sup>50</sup> Both in terms of patent law doctrine and in the results of litigation over particular patents, which might be held valid in one federal court but invalid in another. *See* Paul R. Gugliuzza, *Patent Law Federalism*, 2014 WIS. L. REV. 11, 16 (distinguishing between legal uniformity and "adjudicative uniformity").

<sup>51</sup> See Paul R. Gugliuzza, Rethinking Federal Circuit Jurisdiction, 100 GEO. L.J. 1437, 1454-56 (2012).

<sup>52</sup> Pub. L. No. 97-164, 96 Stat. 25.

<sup>53</sup> By combining the Court of Customs and Patent Appeals, which mainly heard appeals from the Patent and Trademark Office, and the appellate division of the Court of Claims, which heard appeals in cases involving civil claims against the federal government. For a

<sup>&</sup>lt;sup>47</sup> See, e.g., Marconi Wireless Tel. Co. of Am. v. United States, 320 U.S. 1, 60-61 (1943) (Frankfurter, J., dissenting in part) ("It is an old observation that the training of Anglo-American judges ill fits them to discharge the duties cast upon them by patent legislation."); Parke-Davis & Co. v. H.K. Mulford Co., 189 F. 95, 115 (C.C.S.D.N.Y. 1911) (Hand, J.) ("How long we shall continue to blunder along without the aid of unpartisan and authoritative scientific assistance in the administration of justice, no one knows; but all fair persons not conventionalized by provincial legal habits of mind ought, I should think, unite to effect some such advance."); HENRY J. FRIENDLY, FEDERAL JURISDICTION: A GENERAL VIEW 157 (1973) ("I am unable to perceive why we should not insist on the same level of scientific understanding on the patent bench that clients demand of the patent bar....").

jurisdiction over patent cases, including both litigation in the federal district courts and proceedings at the Patent and Trademark Office,<sup>54</sup> as well cases in other areas of federal law, including civil claims against the federal government,<sup>55</sup> international trade disputes,<sup>56</sup> trademark proceedings at the PTO,<sup>57</sup> and disputes involving federal government employees.<sup>58</sup>

The Federal Circuit quickly came to dominate the patent system.<sup>59</sup> In a variety of ways, the circuit limited the power of the PTO<sup>60</sup> and the federal district courts.<sup>61</sup> It even acted preemptively to prevent Congress from intervening in patent matters.<sup>62</sup> The Supreme Court decided few patent cases during the Federal Circuit's first decade plus—hearing, at most, one patent case every other term.<sup>63</sup> And the odd patent case the Court decided tended to involve jurisdictional or

<sup>54</sup> 28 U.S.C. § 1295(a)(1), (a)(4)(A).

<sup>55</sup> Arising mostly from the Court of Federal Claims. *Id.* § 1295(a)(3).

<sup>56</sup> Arising from the Court of International Trade and the International Trade Commission. *Id.* 1295(a)(5)-(6).

<sup>57</sup> Id. § 1295(a)(4)(B).

<sup>58</sup> Arising from the Merit Systems Protection Board. *Id.* § 1295(a)(9). Congress later expanded the Federal Circuit's jurisdiction to include disputes over veterans' benefits claims arising from the newly created U.S. Court of Appeals for Veterans Claims. Veterans' Judicial Review Act, Pub. L. No. 100-687, sec. 301(a), § 4092, 102 Stat. 4105, 4120-21 (1988) (codified at 38 U.S.C. § 7292).

<sup>59</sup> See Michael J. Burstein, *Rules for Patents*, 52 WM. & MARY L. REV. 1747, 1757 (2011) ("Originally created to bring national uniformity to patent law, the Federal Circuit has become the most important expositor of the substantive law of patents in the United States." (footnote omitted)).

<sup>60</sup> See Stuart Minor Benjamin & Arti K. Rai, *Who's Afraid of the APA? What the Patent System Can Learn from Administrative Law*, 95 GEO. L.J. 269, 271 (2007) (noting the Federal Circuit had held that the Administrative Procedure Act did not apply to the PTO, a position that the Supreme Court overturned).

<sup>61</sup> See Paul R. Gugliuzza, *The Federal Circuit as a Federal Court*, 54 WM. & MARY L. REV. 1791, 1830-41 (2013) ("The Federal Circuit has also assumed a powerful role in its vertical relationship with the district courts... by aggressively reviewing fact-driven and discretionary decisions.").

<sup>62</sup> See Jonas Anderson, Congress as a Catalyst of Patent Reform at the Federal Circuit, 63 AM. U. L. REV. 961, 966-67 (2014) (noting how Federal Circuit decisions on issues such as venue, willful infringement, and damages appeared to respond to pending legislative proposals); J. Jonas Anderson, *Patent Dialogue*, 92 N.C. L. REV. 1049, 1073-74 (2014) (discussing letters from the Federal Circuit's judges to Congress about patent reform legislation).

<sup>63</sup> On the Supreme Court's "retreat to the peripheries of patent law after the creation of the Federal Circuit," see Mark D. Janis, *Patent Law in the Age of the Invisible Supreme Court*, 2001 U. ILL. L. REV. 387, 388. For a full list of patent-related Supreme Court cases since the Federal Circuit's creation, see *infra* Appendix A.

discussion of how that merger came about by the key architect of the Federal Circuit, see Daniel J. Meador, *Origin of the Federal Circuit: A Personal Account*, 41 AM. U. L. REV. 581, 590 (1992).

procedural issues in which substantive patent law was, at most, a background consideration.<sup>64</sup>

Things began to change in the late 1990s. In 1996, the Court decided *Markman v. Westview Instruments, Inc.*,<sup>65</sup> which raised a question about patent claim construction<sup>66</sup>—the process, crucial to determining both patent infringement and validity, by which courts determine the meaning of the numbered "claims" that appear at the end of a patent document and that define the scope of the patentee's exclusive rights.<sup>67</sup> As we show below, *Markman* has become the most cited Supreme Court patent case since the Federal Circuit was created.<sup>68</sup> And, in retrospect, it marked the beginning of a new era for the patent system.

#### B. The Supreme Court Era (the late 1990s to the Mid 2010s)

In the 15 years before *Markman*, the Supreme Court decided only seven patent cases (and one of those cases arose from the Third Circuit, not the Federal Circuit). In the five years after *Markman*, the Court decided eight patent cases. That trickle quickly became a flood: in the decade and a half from 2005 through 2019, the Court decided a whopping 43 patent cases—a significant increase not just from the prior, Federal Circuit era, but from the previous three decades.<sup>69</sup>

#### 1. Why?

What happened in the late 1990s that spurred the Supreme Court to take up patent disputes? There were likely many factors,<sup>70</sup> several of which we evaluate later in the Article.

Most simply, it could have been the factors the law says *should* animate the Supreme Court's exercise of certiorari: conflicting decisions among the lower

<sup>66</sup> Specifically, whether claim construction should be conducted by the judge or is subject to the Seventh Amendment's guarantee of a jury trial. *Id.* at 372.

<sup>&</sup>lt;sup>64</sup> See, e.g., Cardinal Chem. Co. v. Morton Int'l, Inc., 508 U.S. 83, 101 (1993) (disapproving of the Federal Circuit's practice of vacating district court rulings of patent invalidity upon a finding of noninfringement); Christianson v. Colt Indus. Operating Corp., 486 U.S. 800, 810 (1988) (approving the Federal Circuit's decision that it lacked jurisdiction over a patent-related antitrust dispute); Dennison Mfg. Co. v. Panduit Corp., 475 U.S. 809, 811 (1986) (vacating a Federal Circuit decision for not applying the clear-error standard of Federal Rule of Civil Procedure 52(a) to a district judge's ruling that a patent was invalid for obviousness).

<sup>&</sup>lt;sup>65</sup> 517 U.S. 370 (1996).

<sup>&</sup>lt;sup>67</sup> See Dan L. Burk & Mark A. Lemley, *Fence Posts or Sign Posts? Rethinking Patent Claim Construction*, 157 U. PA. L. REV. 1743, 1749 (2009). On the importance of patent claim construction, see Greg Reilly, *Patent "Trolls" and Claim Construction*, 91 NOTRE DAME L. REV. 1045, 1045 (2016).

<sup>&</sup>lt;sup>68</sup> See infra Table 1.

<sup>&</sup>lt;sup>69</sup> See Duffy, supra note 5, at 288 fig.1 (documenting pre-1980 Supreme Court cases); infra Appendix A.

<sup>&</sup>lt;sup>70</sup> For a summary of possibilities, see Timothy R. Holbrook, *Explaining the Supreme Court's Interest in Patent Law*, 3 IP THEORY 62, 65-77 (2013).

courts and important legal questions.<sup>71</sup> Of course, patent law, with appeals centralized in the Federal Circuit, lacks the circuit splits that are the most common indicator of a case worthy of certiorari.<sup>72</sup> So, as Tejas Narechania has argued, in patent cases, the Court seems to look for "field splits": "two fields of law apply[ing] the same transsubstantive doctrine differently."<sup>73</sup> Likewise, Narechania has noted that Congressional revisions of the patent statutes (such as the AIA), can raise (and have raised) "important" questions worthy of the Court's review.<sup>74</sup> Similarly, Tim Holbrook has explored how many of the Supreme Court's patent cases seem to evidence skepticism of the Federal Circuit as a specialized institution and of the circuit's interpretation of the Supreme Court's case law.<sup>75</sup>

We don't doubt that doctrinal explanations for the Supreme Court's gravitation toward patent cases bear some degree of truth. But (with apologies to Justice Kagan) we're all legal realists now,<sup>76</sup> at least when it comes to assessing the actions of the Supreme Court.<sup>77</sup> So we think there are other, extralegal factors worth mentioning, particularly because they bear on our analysis below.

The first is the appointment of Justice Breyer. Before taking the bench, Justice Breyer was a law professor focusing on the administrative state (of which the patent system an increasingly important part),<sup>78</sup> and he wrote a seminal law review article expressing skepticism about the copyright system and legal and political campaigns to expand authors' exclusive rights.<sup>79</sup> Many observers have speculated that Justice Breyer influenced his Supreme Court colleagues to pay more attention to patent disputes and, in particular, to how overbroad and overlapping intellectual property rights can inhibit innovation.<sup>80</sup> President

<sup>77</sup> Ryan D. Doerfler, *Late-Stage Textualism*, 2021 SUP. CT. REV. 267, 288.

<sup>&</sup>lt;sup>71</sup> See SUP. Ct. R. 10.

<sup>&</sup>lt;sup>72</sup> STEPHEN M. SHAPIRO, KENNETH S. GELLER, TIMOTHY S. BISHOP, EDWARD A. HARTNETT & DAN HIMMELFARB, SUPREME COURT PRACTICE § 4.7 (11th ed. 2019).

<sup>&</sup>lt;sup>73</sup> Tejas N. Narechania, *Certiorari, Universality, and a Patent Puzzle*, 116 MICH. L. REV. 1345, 1348 (2018) (citing numerous case examples).

<sup>&</sup>lt;sup>74</sup> Tejas N. Narechania, *Certiorari in Important Cases*, 122 COLUM. L. REV. 923, 935, 974 (2022).

<sup>&</sup>lt;sup>75</sup> Holbrook, *supra* note 70, at 71-77.

<sup>&</sup>lt;sup>76</sup> Cf. Harvard Law School, The 2015 Scalia Lecture Series: A Dialogue with Justice Elena Kagan on the Reading of Statutes, YOUTUBE, at 08:22 (Nov. 25, 2015), https://www.youtube.com/watch?v=dpEtszFT0Tg ("[W]e're all textualists now ....").

<sup>&</sup>lt;sup>78</sup> For two recent law review symposia dedicated entirely to the intersection of patent law and administrative law, see Symposium, *Administering Patent Law*, 104 IOWA L. REV. 2299 (2019), and Symposium, *Intellectual Property Exceptionalism in Administrative Law*, 65 DUKE L.J. 1551 (2016).

<sup>&</sup>lt;sup>79</sup> Stephen Breyer, *The Uneasy Case for Copyright: A Study of Copyright in Books, Photocopies, and Computer Programs*, 84 HARV. L. REV. 281, 350-51 (1970).

<sup>&</sup>lt;sup>80</sup> E.g., Dmitry Karshtedt, Photocopies, Patents, and Knowledge Transfer: "The Uneasy Case" of Justice Breyer's Patentable Subject Matter Jurisprudence, 69 VAND. L. REV. 1739,

Clinton appointed Justice Breyer to the Court in 1994; the Court granted certiorari in *Markman* the next Term.<sup>81</sup>

Second, the 1990s saw explosive growth of new technology in information and the biosciences. Those developments—coupled with lax standards of patentability adopted by the Federal Circuit<sup>82</sup>—led to concerns about abusive patent assertions, particularly by so-called patent trolls.<sup>83</sup> Several of the Supreme Court's patent decisions in the early twenty-first century can be understood as motivated by troll enforcement behavior.<sup>84</sup> Similarly, overly broad patent claims to naturally occurring DNA sequences and the fragmentation of rights among numerous researchers raised concerns that the patent system might be hindering the development of lifesaving diagnostics and therapeutics.<sup>85</sup> Again, at least a few of the Supreme Court's patent decisions seem responsive to those considerations.<sup>86</sup>

policy/innovationrpt.pdf [https://perma.cc/2KMW-YBW3] (describing the "thicket of overlapping patent rights" software companies must navigate to bring new technologies to market); Mark A. Lemley, *Software Patents and the Return of Functional Claiming*, 2013 WIS. L. REV. 905, 928-36 (discussing how the number of patents used in software technologies burdens the patent system and software development).

<sup>84</sup> For an explicit discussion of troll behavior in an opinion by a Supreme Court Justice, see eBay Inc. v. MercExchange, L.L.C., 547 U.S. 388, 396 (2006) (Kennedy, J., concurring) ("An industry has developed in which firms use patents not as a basis for producing and selling goods but, instead, primarily for obtaining licensing fees. For these firms, an injunction, and the potentially serious sanctions arising from its violation, can be employed as a bargaining tool to charge exorbitant fees to companies that seek to buy licenses to practice the patent." (citation omitted)).

<sup>85</sup> See Dan L. Burk & Mark A. Lemley, *Policy Levers in Patent Law*, 89 VA. L. REV. 1575, 1624-27 (2003) ("Anticommons theorists point to the risk of a bargaining breakdown whenever the development of a product requires permission from the owners of two or more inputs... Anticommons theory maps very well onto the biotechnology industry."); Rochelle C. Dreyfuss & James P. Evans, *From* Bilski *Back to* Benson: *Preemption, Inventing Around, and the Case of Genetic Diagnostics*, 63 STAN. L. REV. 1349, 1370 (2011) ("Given the difficulty in finding effective substitutes for genetic information, it is no wonder that courts have begun to question the validity of these patents... When a process or a product patent cannot be invented around, both product markets and innovation markets are badly distorted.").

<sup>86</sup> See, e.g., Mayo Collaborative Servs. v. Prometheus Lab'ys, Inc., 566 U.S. 66, 87 (2012) (invalidating a patent on a method of disease diagnosis because it "threaten[s] to inhibit the development of more refined treatment recommendations").

<sup>1740-42 (2016) (</sup>identifying concerns about barriers to information flow as a defining theme of Justice Breyer's IP jurisprudence); David O. Taylor, *Justice Breyer and Patent Eligibility*, 21 UIC REV. INTELL. PROP. L. 71, 81 (2022) (criticizing limits the Supreme Court has placed on patent eligibility in opinions by Justice Breyer).

<sup>&</sup>lt;sup>81</sup> Markman v. Westview Instruments, Inc., 515 U.S. 1192 (1995).

<sup>&</sup>lt;sup>82</sup> *E.g.*, State St. Bank & Tr. Co. v. Signature Fin. Grp., 149 F.3d 1368, 1375 (Fed. Cir. 1998) (approving of patents on methods of doing business).

<sup>&</sup>lt;sup>83</sup> See, e.g., FTC, TO PROMOTE INNOVATION: THE PROPER BALANCE OF COMPETITION AND PATENT LAW AND POLICY 6-7 (2003), https://www.ftc.gov/sites/default/files/documents/ reports/promote-innovation-proper-balance-competition-and-patent-law-and-

Third, the 1990s saw the emergence of an elite cadre of lawyers specializing in Supreme Court litigation. The Court has been highly sympathetic to the arguments pressed by those advocates, who often represent the world's largest corporations, in matters of significant interest to the business community.<sup>87</sup> As one of us showed in prior work, those lawyers have increasingly been seeking Supreme Court review in patent disputes, and they have been remarkably successful in getting the Court's attention.<sup>88</sup>

Lastly, the Supreme Court's newfound interest in patent disputes in the late 1990s could be part of a swing from a pro-patent to patent-skeptical era, repeating a pattern that has occurred throughout history.<sup>89</sup> The Federal Circuit, as one might expect from a court specializing in patent law, has been perceived as relatively solicitous of patent rights.<sup>90</sup> The Supreme Court's interventions could be understood as an (inevitable) push back against the Federal Circuit's "pro-patent" inclination.<sup>91</sup>

#### 2. What?

From the late 1990s through the mid-2010s, the Supreme Court addressed a wide range of patent-related legal questions. In 2007, the Court issued the most important decision in forty years on the most important requirement of patentability: nonobviousness. That case, *KSR International Co. v. Teleflex, Inc.*,<sup>92</sup> upended Federal Circuit precedent that had made it easy to satisfy the

<sup>&</sup>lt;sup>87</sup> See Richard J. Lazarus, Advocacy Matters Before and Within the Supreme Court: Transforming the Court by Transforming the Bar, 96 GEO. L.J. 1487, 1539-49 (2008); Katherine Shaw, Friends of the Court: Evaluating the Supreme Court's Amicus Invitations, 101 CORNELL L. REV. 1533, 1541 (2016) (noting "that the experience and talents of [elite Supreme Court lawyers] are disproportionately deployed in the service of business interests," and discussing "the troubling distributional consequences" of that dynamic).

<sup>&</sup>lt;sup>88</sup> Paul R. Gugliuzza, *The Supreme Court Bar at the Bar of Patents*, 95 NOTRE DAME L. REV. 1233, 1236 (2020) ("[A]lthough elite lawyers accounted for only 16% of cert petitions filed in patent cases from 2002 through 2016, they accounted for 40% of the petitions granted review.").

<sup>&</sup>lt;sup>89</sup> See Mark A. Lemley, *The Surprising Resilience of the Patent System*, 95 TEX. L. REV. 1, 13 (2016) (tracing swings from pro-patent to patent-skeptical eras (and back again) to the late 1500s—a period of perceived overprotection that led Parliament to pass the landmark Statute of Monopolies in 1623).

<sup>&</sup>lt;sup>90</sup> See id. at 7-8 (citing case examples in which Federal Circuit strengthened patent rights); WILLIAM M. LANDES & RICHARD A. POSNER, THE ECONOMIC STRUCTURE OF INTELLECTUAL PROPERTY LAW 335 (2003) ("The Federal Circuit has . . . turned out to be a pro-patent court in comparison to the average of the regional courts that it displaced in the patent domain.").

<sup>&</sup>lt;sup>91</sup> See Lemley, supra note 89, at 10-11 (citing case examples in which Supreme Court weakened patent rights).

<sup>&</sup>lt;sup>92</sup> 550 U.S. 398, 415 (2007). The Court's previous significant encounter with the nonobviousness requirement was *Graham v. John Deere Co.*, 383 U.S. 1, 13 (1966).

nonobviousness requirement.<sup>93</sup> As we show below, *KSR* is the third most frequently cited Supreme Court patent case of the modern era.<sup>94</sup>

Also, in a series of four decisions,<sup>95</sup> the Supreme Court reinvigorated the largely dormant requirement of patent eligible subject matter.<sup>96</sup> That doctrine has significantly—and controversially—limited the patentability of computer software<sup>97</sup> and medical diagnostic tests.<sup>98</sup> And it accounts for two of the eight Supreme Court patent decisions most frequently cited by the Federal Circuit over the past forty years.<sup>99</sup>

But not all the Supreme Court's patent cases have been blockbusters. For instance, the Court decided three cases between 2007 and 2018 involving 35 U.S.C. § 271(f), a rarely invoked provision of the patent statute that makes it unlawful to supply a component of a patented invention for assembly outside the United States.<sup>100</sup>

In addition, a large portion of the Supreme Court's patent cases have not involved substantive patent law doctrines, focusing instead on issues of jurisdiction, procedure, or remedies relevant to patent disputes.<sup>101</sup> To be sure, some of those decisions were important. *eBay Inc. v. MercExchange, L.L.C.*,<sup>102</sup> for instance, overturned a Federal Circuit rule that had practically guaranteed a permanent injunction upon a finding of patent infringement, reducing the bargaining leverage of non-practicing patentees (that is, "patent trolls") in settlement negotiations.<sup>103</sup> And *TC Heartland LLC v. Kraft Foods Group* 

<sup>96</sup> See Mark A. Lemley, Michael Risch, Ted Sichelman & R. Polk Wagner, *Life After* Bilski, 63 STAN. L. REV. 1315, 1318 (2011) ("For a decade after 1998, patentable subject matter was effectively a dead letter.").

<sup>97</sup> See Timothy K. Armstrong, Symbols, Systems, and Software as Intellectual Property: Time for CONTU, Part II?, 24 MICH. TELECOMM. & TECH. L. REV. 131, 167 (2018).

<sup>98</sup> Rebecca S. Eisenberg, *Diagnostics Need Not Apply*, 21 B.U. J. SCI. & TECH. L. 256, 286 (2015).

<sup>99</sup> Alice, 573 U.S. 208, and Mayo, 566 U.S. 66. See infra Table 1.

<sup>100</sup> WesternGeco LLC v. ION Geophysical Corp., 138 S. Ct. 2129, 2134 (2018); Life Techs. Corp. v. Promega Corp., 137 S. Ct. 734, 737-38 (2017); Microsoft Corp. v. AT&T Corp., 550 U.S. 437, 441 (2007).

<sup>101</sup> Rebecca S. Eisenberg, *The Supreme Court and the Federal Circuit: Visitation and Custody of Patent Law*, 106 MICH. L. REV. FIRST IMPRESSIONS 28, 29 (2007) (providing examples).

<sup>102</sup> 547 U.S. 388, 394 (2006).

<sup>&</sup>lt;sup>93</sup> See Jason Rantanen, The Federal Circuit's New Obviousness Jurisprudence: An Empirical Study, 16 STAN. TECH. L. REV. 709, 713 (2013).

<sup>&</sup>lt;sup>94</sup> See infra Table 1.

<sup>&</sup>lt;sup>95</sup> Alice Corp. v. CLS Bank Int'l, 573 U.S. 208, 223 (2014); Ass'n for Molecular Pathology v. Myriad Genetics, Inc., 569 U.S. 576, 591 (2013); Mayo Collaborative Servs. v. Prometheus Lab'ys, Inc., 566 U.S. 66, 77-78 (2012); Bilski v. Kappos, 561 U.S. 593, 604 (2010).

<sup>&</sup>lt;sup>103</sup> Colleen V. Chien & Mark A. Lemley, *Patent Holdup, the ITC, and the Public Interest*, 98 CORNELL L. REV. 1, 8-10 (2012) (noting that, before *eBay*, "[p]atentees who owned rights in very small pieces of complex, multicomponent products could threaten to shut down the entire product").

*Brands*, *LLC*,<sup>104</sup> by changing the law of venue in patent infringement litigation, made it much more difficult for patentees to file suit in their favorite forum of Marshall, Texas.<sup>105</sup>

But, as with the Supreme Court's substantive patent decisions, some of the patent-related procedural issues that have repeatedly caught the Court's attention aren't terribly important to the day-to-day operation of the patent system. For instance, the Court has decided several cases involving highly technical aspects of the process of generic drug approval and related patent assertions.<sup>106</sup> Moreover, two cases we include as "patent" cases in our study because they involved infringement claims arising out of the Federal Circuit<sup>107</sup> have been omitted from other analyses of Supreme Court patent cases because the questions presented were not peculiar to patent practice.<sup>108</sup> All of these cases, we show below, are cited by the Federal Circuit once per year at most.<sup>109</sup>

Important or not, many of the Supreme Court's interventions into patent law beginning in the 1990s were consistent with scholarly criticisms of the Federal Circuit and the patent system.<sup>110</sup> One persistent complaint about the Federal Circuit was that it was overly formalistic and rule-oriented,<sup>111</sup> as some might

<sup>107</sup> Unitherm Food Sys., Inc. v. Swift-Eckrich, Inc., 546 U.S. 394, 396 (2006); Nelson v. Adams USA, Inc., 529 U.S. 460, 463 (2000).

<sup>108</sup> See. e.g., Supreme WRITTEN Court Patent Cases. DESCRIPTION, https://writtendescription.blogspot.com/p/patents-scotus.html [https://perma.cc/8YAP-7TNM] (last visited Apr. 3, 2024). Unitherm involved the question of whether a party who didn't move for a new trial or for judgment as a matter of law could challenge on appeal the sufficiency of the evidence in support of the judgment below. 546 U.S. at 396 (it can't). Nelson presented the issue of whether a court may permit a plaintiff to amend its pleading to add a party and, simultaneously, amend the judgment to include that party. 529 U.S. at 462-63 (can't do that either).

<sup>109</sup> See infra Section III.D.

<sup>110</sup> For a summary of then-prevailing critiques, see DAN L. BURK & MARK A. LEMLEY, THE PATENT CRISIS AND HOW THE COURTS CAN SOLVE IT 21-36 (2009).

<sup>111</sup> See, e.g., John R. Thomas, *Formalism at the Federal Circuit*, 52 AM. U. L. REV. 771, 775 (2003) ("[T]he Federal Circuit's increasing orientation towards rulemaking may negatively impact innovation policy, lead to heavy burdens upon patent administration, and

<sup>&</sup>lt;sup>104</sup> 137 S. Ct. 1514, 1516-17 (2017).

<sup>&</sup>lt;sup>105</sup> See Anderson & Gugliuzza, supra note 36, at 442-47 (2021) (documenting the fall of the Eastern District of Texas and the rise of the Western District of Texas as a patent litigation hotspot in *TC Heartland*'s wake).

<sup>&</sup>lt;sup>106</sup> See, e.g., Sandoz Inc. v. Amgen Inc., 137 S. Ct. 1664, 1669-70 (2017); Caraco Pharm. Lab'ys, Ltd. v. Novo Nordisk A/S, 566 U.S. 399, 403-04 (2012); Merck KGaA v. Integra Lifesciences I, Ltd., 545 U.S. 193, 195 (2005). Of course, the cabined impact of these cases doesn't mean they aren't important to the day-to-day operation of the *pharmaceutical* patent system. And, though pharmaceutical patent cases may represent a numerically small portion of total patent cases, they have outsized impact on the system as a whole. In fact, patents are likely more important in pharma than in any other industry. Dmitry Karshtedt, Mark A. Lemley & Sean B. Seymore, *The Death of the Genus Claim*, 35 HARV. J.L. & TECH. 1, 64-65 (2021).

expect from a specialized, expert tribunal.<sup>112</sup> And, indeed, many of the Supreme Court's patent-related decisions embraced more malleable standards than the Federal Circuit had adopted.<sup>113</sup>

Another point of concern in the early 2000s was strike suits (or threats of suit) by so-called patent trolls who accumulated broad and vague patents (often on computer-related technology) and sued (or threatened to sue) numerous defendants (often the users—not manufacturers—of the relevant technology), seeking a quick settlement.<sup>114</sup> Decisions such as *eBay*, which made it harder to obtain an injunction,<sup>115</sup> significantly reduced patentees' leverage in negotiating settlements.<sup>116</sup> Relatedly, scholars criticized the judges of the Eastern District of Texas for pandering to patent trolls to draw cases to their courtrooms.<sup>117</sup> The Supreme Court's decision in *TC Heartland*, however, made it more difficult for patentees to show that venue is proper in a rural locale like the Eastern District.<sup>118</sup>

Because of these high-profile reversals, the Federal Circuit came to be perceived as one of the Supreme Court's favorite punching bags.<sup>119</sup> In fact, in a

<sup>112</sup> See David Charny, *The New Formalism in Contract*, 66 U. CHI. L. REV. 842, 848 (1999) ("[I]t may be that formalism and expertise go hand-in-hand . . . .").

<sup>113</sup> See, e.g., Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., 535 U.S. 722, 737 (2002) (rejecting the Federal Circuit's holding that a narrowing claim amendment during prosecution is a "complete bar" to proving infringement under the doctrine of equivalents, adopting a "flexible-bar rule" instead); KSR Int'l Co. v. Teleflex Inc., 550 U.S. 398, 415 (2007) ("We begin by rejecting the rigid approach of the Court of Appeals.").

<sup>114</sup> See Colleen Chien & Edward Reines, *Why Technology Customers Are Being Sued En Masse for Patent Infringement and What Can Be Done*, 49 WAKE FOREST L. REV. 235, 235 (2014).

<sup>115</sup> Christopher B. Seaman, *Permanent Injunctions in Patent Litigation After* eBay: *An Empirical Study*, 101 IOWA L. REV. 1949, 1983 fig.1, 1988 fig.3 (2016) (finding district courts granted injunctions upon a finding of infringement 72.5% of the time after *eBay*, but only 16% of the time for patent assertion entities).

<sup>116</sup> See Mark A. Lemley & A. Douglas Melamed, *Missing the Forest for the Trolls*, 113 COLUM. L. REV. 2117, 2142 (2013) ("Monetary damages are almost always adequate for firms whose business is asserting patents in order to generate cash . . . .").

<sup>117</sup> E.g., J. Jonas Anderson, *Court Competition for Patent Cases*, 163 U. PA. L. REV. 631, 635 (2015); Daniel Klerman & Greg Reilly, *Forum Selling*, 89 S. CAL. L. REV. 241, 250 (2016).

<sup>118</sup> Ofer Eldar & Neel U. Sukhatme, *Will Delaware Be Different? An Empirical Study of* TC Heartland *and the Shift to Defendant Choice of Venue*, 104 CORNELL L. REV. 101, 124 (2018).

<sup>119</sup> See, e.g., Steven Seidenberg, US Perspectives: Troubled Federal Circuit Hobbles US Patent System, INTELL. PROP. WATCH (July 31, 2017), https://www.ip-watch.org/2017/07/31/troubled-federal-circuit-hobbles-us-patent-system

[https://perma.cc/9J8V-UX4U] ("Over the past 15 years, the tribunal once known as the nation's 'patent court' has seen many of its most important patent law decisions reversed by the Supreme Court—sometimes in withering opinions.").

fail to realize the goals of certainty and predictability so often ascribed to adjudicative rule formalism.").

string of fourteen cases from 1999 through 2009 the Federal Circuit saw the Supreme Court agree with its position only once.<sup>120</sup>

Things got so bad for the Federal Circuit that Supreme Court Justices mocked the circuit during oral argument. During the 2006 argument in *KSR*, the Justices criticized the relevant Federal Circuit precedent as "meaningless," "worse than meaningless," "misleading," "gobbledygook," and "irrational."<sup>121</sup> Likewise, in a 2009 case about the appealability of orders by federal district courts remanding cases to state court, Chief Justice Roberts quipped: "They"—meaning the federal courts of appeals—"can't say, I don't like the Supreme Court rule so I'm not going to apply it, other than the Federal Circuit."<sup>122</sup> According to the argument transcript, the Chief's quip got some "(Laughter.)"<sup>123</sup> at the Federal Circuit's expense.

#### 3. The Era of the Solicitor General?

Though we've called the period from the late 1990s to the mid-2010s patent law's "Supreme Court" era, we could also call it the era of the Solicitor General. The SG represents the federal government in all litigation at the Supreme Court, including representing the federal government when it is a party and filing amicus briefs in cases in which the federal government has an interest.<sup>124</sup> Many of the Supreme Court's reversals of the Federal Circuit during the Supreme Court era were at the Solicitor General's urging.

In an important law review article published in 2010, John Duffy showed that, from 1996 through 2010, the Supreme Court adopted the SG's legal position in practically every patent case the Court decided.<sup>125</sup> Moreover, in nine of the thirteen cases in which the SG participated over that time period, the SG supported a different result than that reached by the Federal Circuit.<sup>126</sup> In every one of those cases, the Supreme Court agreed with the SG's position and rejected the Federal Circuit's.<sup>127</sup> The SG's sparkling success rate led Duffy to conclude

<sup>&</sup>lt;sup>120</sup> See infra Appendix A. The one case in which the Supreme Court agreed with the Federal Circuit was *J.E.M. Ag Supply, Inc. v. Pioneer Hi-Bred International, Inc.*, 534 U.S. 124, 127 (2001), which held that utility patents could be issued for plants, despite the Plant Patent Act of 1930, which provides exclusive rights for plant varieties.

<sup>&</sup>lt;sup>121</sup> Transcript of Oral Argument at 36-41, KSR Int'l Co. v. Teleflex, Inc., 550 U.S. 398 (2006) (No. 04-1350). Justice Scalia also ridiculed the Federal Circuit for trying to alter its case law after the Court granted cert. *Id.* at 53 ("And in the last year or so, after we granted cert in this case after these decades of thinking about it, [the Federal Circuit] suddenly decides to polish it up.").

<sup>&</sup>lt;sup>122</sup> Transcript of Oral Argument at 18, Carlsbad Tech., Inc. v. HIF Bio, Inc., 556 U.S. 635 (2009) (No. 07-1437).

<sup>&</sup>lt;sup>123</sup> *Id.* 

<sup>&</sup>lt;sup>124</sup> About the Office, OFF. OF THE SOLIC. GEN., U.S. DEP'T OF JUST. (June 16, 2023), https://www.justice.gov/osg/about-office [https://perma.cc/CBE2-TF7B].

<sup>&</sup>lt;sup>125</sup> See Duffy, supra note 18, at 540.

<sup>&</sup>lt;sup>126</sup> Id.

<sup>&</sup>lt;sup>127</sup> Id.

that the Federal Circuit—created as an expert patent tribunal—actually stood "in the shadow" of the generalist SG on questions of patent law.<sup>128</sup>

Whether that observation about the relationship among the Supreme Court, SG, and Federal Circuit still holds is another proposition we test below.

#### C. The Patent Trial and Appeal Board Era (the Mid-2010s to the Present)

Many of the complaints about the patent system that likely weighed on the Supreme Court's forays into patent law (and the Solicitor General's arguments that the Court should overturn Federal Circuit precedent) were simultaneously being aired to Congress. Beginning in 2005, Congress considered numerous amendments to the Patent Act on issues ranging from changing patent priority rules,<sup>129</sup> to reforming damages and venue law, to creating administrative procedures at the Patent Office for challenging already-issued patents.<sup>130</sup>

Congress passed the America Invents Act in 2011.<sup>131</sup> The Act's most consequential reform was its creation of the Patent Trial and Appeal Board ("PTAB")—a tribunal within the Patent Office that allows anyone (though usually it's someone who's been accused of or sued for infringement)<sup>132</sup> to challenge the validity of an issued patent. PTAB proceedings have been immensely popular. Since the PTAB began operating in 2013, it has received over 10,000 petitions to institute the most heavily used proceeding, inter partes review.<sup>133</sup> The PTAB has instituted review on over half of the inter partes review

<sup>&</sup>lt;sup>128</sup> *Id.* at 546; *accord* Colleen V. Chien, *Patent Amicus Briefs: What the Courts' Friends Can Teach Us About the Patent System*, 1 U.C. IRVINE L. REV. 397, 402 (2011) (finding that, from 1989 through 2009 "every single amicus brief authored by the United States in a Supreme Court patent case except one predicted the case outcome"). On the importance of the SG to Supreme Court decision making more generally, see LINCOLN CAPLAN, THE TENTH JUSTICE: THE SOLICITOR GENERAL AND THE RULE OF LAW 19-21 (1987); REBECCA MAE SALOKAR, THE SOLICITOR GENERAL: THE POLITICS OF LAW 114-16 (1992); and RYAN C. BLACK & RYAN J. OWENS, THE SOLICITOR GENERAL AND THE UNITED STATES SUPREME COURT: EXECUTIVE BRANCH INFLUENCE AND JUDICIAL DECISIONS 132 (2012).

<sup>&</sup>lt;sup>129</sup> That is, the rules about who gets a patent when two inventors invent the same thing around the same time. *See* Mark A. Lemley & Colleen V. Chien, *Are the U.S. Patent Priority Rules Really Necessary*?, 54 HASTINGS L.J. 1299, 1299-1300 (2003).

<sup>&</sup>lt;sup>130</sup> See Joe Matal, A Guide to the Legislative History of the America Invents Act: Part I of II, 21 FeD. CIR. BAR J. 435, 438 (2012).

<sup>&</sup>lt;sup>131</sup> Pub. L. No. 112-29, 125 Stat. 284.

<sup>&</sup>lt;sup>132</sup> Saurabh Vishnubhakat, Arti K. Rai & Jay P. Kesan, *Strategic Decision Making in Dual PTAB and District Court Proceedings*, 31 BERKELEY TECH. L.J. 45, 49-50 (2016) (noting that PTAB petitioners are defendants in pending infringement lawsuits about 70% of the time).

<sup>&</sup>lt;sup>133</sup> 2021 PATENT LITIGATION YEAR IN REVIEW, DOCKET NAVIGATOR 29 (2022), https://brochure.docketnavigator.com/2021-year-in-review [https://perma.cc/X8FN-LYDW]. In inter partes review, the challenger may argue that the patent is invalid because it lacks novelty or is obvious based on documentary prior art, such as prior patents and publications. *See* 35 U.S.C. § 311(b).

petitions it has received,<sup>134</sup> and, in the cases it institutes, it holds at least some claims unpatentable in 60-80% of its final decisions in any given year.<sup>135</sup>

Not surprisingly, patentees have come to loathe the PTAB. A former chief judge of the Federal Circuit dubbed it "a patent-killing 'death squad."<sup>136</sup> Though that claim is questionable as an empirical matter,<sup>137</sup> Congress has, at the urging of patentees, considered several legislative proposals to weaken the PTAB.<sup>138</sup> So far, none have gained traction.<sup>139</sup>

Opponents of the PTAB have also lodged challenges in the courts, including two cases that threatened the PTAB's very existence and ultimately reached the Supreme Court. In its 2018 decision, *Oil States Energy Services, LLC v. Greene's Energy Group, LLC*,<sup>140</sup> the Supreme Court rejected the argument that administrative patent cancelation by the PTAB violates Article III and the Seventh Amendment. In its 2021 decision, *United States v. Arthrex, Inc.*,<sup>141</sup> however, the Court agreed that the statutory method for appointing PTAB judges (so-called administrative patent judges, or "APJs")<sup>142</sup> violated the constitution's Appointments Clause. But, rather than declaring the PTAB wholly unconstitutional, the Court remedied the violation by mandating that APJs' decisions be reviewable by the Director of the Patent and Trademark Office,<sup>143</sup> who, unlike APJs, is nominated by the President and confirmed by the Senate.<sup>144</sup> In addition to *Oil States* and *Arthrex*, the Court has decided four other cases

<sup>135</sup> *Id.* at 13.

<sup>136</sup> JOHN R. THOMAS, CONG. RSCH. SERV., R44905, INTER PARTES REVIEW OF PATENTS: INNOVATION ISSUES 2 (2017) (quoting then-Federal Circuit Chief Judge Randall Rader).

<sup>137</sup> The PTAB's invalidation rate appears high because it includes only cases in which the PTAB has *already* decided to institute review because there is a prima facie case of invalidity. Once denials of institution are considered, the PTAB actually invalidates a *smaller* percentage of the patents before it than the courts do. *See* John R. Allison, Mark A. Lemley & David L. Schwartz, *Understanding the Realities of Modern Patent Litigation*, 92 TEX. L. REV. 1769, 1801 (2014) (reporting a litigation invalidity rate of 43%, virtually unchanged over the prior two decades).

<sup>138</sup> See, e.g., STRONGER Patents Act of 2019, S. 2082, 116th Cong. (2019).

<sup>139</sup> Nor is any proposal likely to gain traction in the near future. *See* David O. Taylor, *Patent Reform, Then and Now*, 2019 MICH. ST. L. REV. 431, 503 (discussing disagreements between companies in the life sciences and software industries about whether legislative patent reform is necessary). For a discussion of the difficulties in changing minds about IP policy, see Maggie Wittlin, Lisa Larrimore Ouellette & Gregory N. Mandel, *What Causes Polarization on IP Policy?*, 52 U.C. DAVIS L. REV. 1193, 1196 (2018) ("[F]acts about the IP system do not drive much of the actual opinion about IP policy.").

<sup>140</sup> 138 S. Ct. 1365, 1370 (2018).

<sup>141</sup> 141 S. Ct. 1970, 1985 (2021).

<sup>142</sup> Under the AIA, APJs are appointed by the Secretary of Commerce "in consultation with the Director [of the Patent and Trademark Office]." 35 U.S.C. § 6(a).

<sup>143</sup> Arthrex, 141 S. Ct. at 1986.

<sup>144</sup> 35 U.S.C. § 3(a)(1).

<sup>&</sup>lt;sup>134</sup> U.S. PAT. & TRADEMARK OFF., PTAB TRIAL STATISTICS: FY23 END OF YEAR OUTCOME ROUNDUP IPR, PGR 6 (2023), https://www.uspto.gov/sites/default/files/ documents/ptab\_aia\_fy2023\_roundup.pdf [https://perma.cc/9KJN-ERZS].

involving the PTAB since 2016—all of which were entirely or largely about PTAB procedure, not substantive patent law<sup>145</sup>—solidifying the past decade in patent law as the era of the PTAB.<sup>146</sup>

#### II. METHODOLOGY

In this part, we make the stakes of our project clear, and we describe the methodology of the quantitative and qualitative study of Supreme Court patent cases that we report in the remainder of the Article.

### A. Why We Should Care What the Supreme Court Thinks About Patent Law<sup>147</sup>

Heading into the Federal Circuit era in the early 1980s, patent law had long been an island of its own, with a specialized bar,<sup>148</sup> idiosyncratic legal rules,<sup>149</sup> and a vocabulary that can seem impenetrable to outsiders.<sup>150</sup> That isolation increased with the Federal Circuit's creation because patent cases were no longer

<sup>147</sup> Cf. Adam Mossoff, Who Cares What Thomas Jefferson Thought About Patents? Reevaluating the Patent "Privilege" in Historical Context, 92 CORNELL L. REV. 953, 955 (2007) (suggesting that judges and scholars may care a bit too much).

<sup>&</sup>lt;sup>145</sup> Thryv, Inc v. Click-To-Call Techs., LP, 140 S. Ct. 1367, 1370 (2020) (holding that a decision by the PTAB that a petition is time barred may not be appealed); Return Mail, Inc. v. USPS, 139 S. Ct. 1853, 1859 (2019) (holding that a federal agency may not seek PTAB review); SAS Inst., Inc. v. Iancu, 138 S. Ct. 1348, 1353 (2018) (holding that a PTAB final decision must address the patentability of all claims challenged in the petition); Cuozzo Speed Techs., LLC v. Lee, 136 S. Ct. 2131, 2142 (2016) (holding that the PTAB's decision about whether to institute review is not appealable and also addressing the appropriate standard for claim construction in PTAB proceedings).

<sup>&</sup>lt;sup>146</sup> For an early study documenting the growing importance of the PTAB after the AIA's passage, see Rochelle Cooper Dreyfuss, *Giving the Federal Circuit a Run for Its Money: Challenging Patents in the PTAB*, 91 NOTRE DAME L. REV. 235, 240-42 (2015). And for more recent commentary exploring the "struggl[es]" of participants in the patent system "to accept a shift to greater administrative authority after two hundred years of judicial dominance of patent policy-making," see Greg Reilly, *Patent Office Power and Discretionary Denials*, 55 CONN. L. REV. 589, 589 (2023).

<sup>&</sup>lt;sup>148</sup> On how the scientific and technical requirements for membership in the PTO's "patent bar" exclude qualified women and others from practicing patent law, see Mary T. Hannon, *The Patent Bar Gender Gap: Expanding the Eligibility Requirements To Foster Inclusion and Innovation in the U.S. Patent System*, 10 IP THEORY 1, 2 (2020).

<sup>&</sup>lt;sup>149</sup> For one long-standing example, see Immunocept, LLC v. Fulbright & Jaworski, LLP, 504 F.3d 1281, 1285 (Fed. Cir. 2007) (holding that the federal courts have exclusive jurisdiction over state-law malpractice cases involving patent lawyers), *overruled by* Gunn v. Minton, 568 U.S. 251, 264-65 (2013).

<sup>&</sup>lt;sup>150</sup> Say the word "prosecution" to most lawyers and it will mean one thing. *See Prosecution*, BLACK'S LAW DICTIONARY (11th ed. 2019) ("A criminal proceeding in which an accused person is tried."). Say the same word to a patent lawyer and it will mean something quite different. *See id.* ("*Patents.* The process of applying for and pursuing a patent through the U.S. Patent and Trademark Office and negotiating with the patent examiner.").

part of the general mix of disputes heard by the regional circuits<sup>151</sup> and, despite the various types of nonpatent cases within the Federal Circuit's jurisdiction,<sup>152</sup> the court's judges ended up spending most of their time working in patent law.<sup>153</sup> The isolation deepened further when the Supreme Court left patent law alone for the Federal Circuit's first decade-plus.

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As we noted above, patent lawyers and scholars have sought to explain why that seemed to change beginning around 1996. They have also tried to develop theories to synthesize the Supreme Court's decision making on the merits in patent cases, ranging from distrust of the Federal Circuit as an institution,<sup>154</sup> to a rejection of special, patent-specific doctrines developed by the Federal Circuit,<sup>155</sup> to skepticism of patents in general,<sup>156</sup> to a preference for fuzzy standards over the bright-line rules often embraced by the Federal Circuit.<sup>157</sup>

<sup>155</sup> See, e.g., Lee, supra note 26, at 1416; Narechania, supra note 73, at 1348.

<sup>&</sup>lt;sup>151</sup> See Diane P. Wood, Keynote Address: Is It Time To Abolish the Federal Circuit's Exclusive Jurisdiction in Patent Cases?, 13 CHI.-KENT J. INTELL. PROP. 1, 7 (2013) ("[Law] should not be an arcane preserve for specialists . . . .").

<sup>&</sup>lt;sup>152</sup> See supra notes 54-58 and accompanying text.

<sup>&</sup>lt;sup>153</sup> As the Congressional committee reports accompanying the Federal Circuit's creation make clear, and as the Federal Circuit's own judges have observed, the court's raison d'etre is patent law. *See, e.g.*, H.R. REP. No. 97-312, at 22-23 (1981) (noting that the "central purpose" of the Federal Courts Improvement Act, which created the Federal Circuit, was "to reduce the widespread lack of uniformity and uncertainty of legal doctrine that exist in the administration of patent law"); George C. Beighley, Jr., *The Court of Appeals for the Federal Circuit: Has It Fulfilled Congressional Expectations?*, 21 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 671, 702 (2011) (quoting Federal Circuit Judge Pauline Newman: "The court was formed for one need, to recover the value of the patent system as an incentive to industry. The combination of the Court of Claims and the Court of Customs and Patent Appeals was not desired of itself, it was done for this larger purpose. This was our mission—our only mission."). Today, patent cases comprise over half of the Federal Circuit's caseload. *See* APPEALS FILED, BY CATEGORY FY 2022, U.S. CT. OF APPEALS FOR THE FED. CIR., https://cafc.uscourts.gov/wp-content/uploads/reports-stats/caseload-by-

category/CaseloadbyCategory-FY2022.pdf [https://perma.cc/TKZ9-RWX6]. And patent cases are among the most complex types of cases heard by the court, so they certainly occupy a disproportionate share of the judges' time. *See, e.g.*, Paul R. Michel, *The Court of Appeals for the Federal Circuit Must Evolve To Meet the Challenges Ahead*, 48 AM. U. L. REV. 1177, 1181 (1999) (speculating that "each patent infringement case takes perhaps ten times the work of" an appeal from the Merit Systems Protection Board).

<sup>&</sup>lt;sup>154</sup> See, e.g., Duffy, supra note 18, at 540 (discussing the influence of the Solicitor General).

<sup>&</sup>lt;sup>156</sup> See, e.g., Michael Abramowicz & John F. Duffy, *Intellectual Property for Market Experimentation*, 83 N.Y.U. L. REV. 337, 369 (2008) (discussing the Supreme Court's decision to make it more difficult to obtain certain patents by overturning the Federal Circuit's "teaching, suggestion, or motivation" test for nonobviousness).

<sup>&</sup>lt;sup>157</sup> See, e.g., Kelly Casey Mullally, Legal (Un)certainty, Legal Process, and Patent Law, 43 LOY. L.A. L. REV. 1109, 1130 (2010).

These explanatory tasks are important. The fundamental purpose of the patent system is to promote innovation.<sup>158</sup> If the Supreme Court's interventions in patent law lack coherence,<sup>159</sup> they risk upsetting expectations and undercutting reliance interests for no good reason. By testing various assumptions that shape perceptions of the patent system and parties' behavior within it, we provide useful evidence to guide future conduct and inform debates about patent law reform.<sup>160</sup> And by identifying previously unrecognized themes in the Supreme Court's patent jurisprudence, we can more accurately evaluate the performance of various actors within the patent system, including, most importantly, the semi-specialized Federal Circuit.

To develop the pertinent evidence, we collected and closely analyzed every Supreme Court opinion in a patent case from 1982 through 2023. Unlike prior work, which tends to look at opinions in one area of patent law<sup>161</sup> or with an eye toward developing one theory about judicial behavior,<sup>162</sup> our analysis takes a holistic approach.

The result is a complex story. We begin that story by describing our dataset and how we categorized the Supreme Court's patent cases.<sup>163</sup>

<sup>161</sup> See, e.g., Timothy R. Holbrook, *The Supreme Court's Quiet Revolution in Induced Patent Infringement*, 91 NOTRE DAME L. REV. 1007, 1007-09 (2016); Symposium, *Cracking the Code: Ongoing Section 101 Patentability Concerns in Biotechnology and Computer Software*, 82 GEO. WASH. L. REV. 1751 (2014).

<sup>162</sup> See, e.g., Paul R. Gugliuzza & Pyry Koivula, Stepping Out of the Solicitor General's Shadow: The Federal Circuit and the Supreme Court in a New Era of Patent Law, 64 B.C. L. REV. 459, 459 (2023); Golden, supra note 11, at 667-71.

<sup>&</sup>lt;sup>158</sup> See U.S. CONST. art. I, § 8, cl. 8 (empowering Congress to create patent laws "[t]o promote the Progress of Science and useful Arts").

<sup>&</sup>lt;sup>159</sup> *Cf.* Greg Reilly, *How Can the Supreme Court Not "Understand" Patent Law?*, 16 CHI.-KENT J. INTELL. PROP. 292, 292 (2017) (critiquing arguments "that the Supreme Court does not understand the law of patents[,]...innovation policy,...[or] the patent system").

<sup>&</sup>lt;sup>160</sup> *Cf.* Mark A. Lemley, *Faith-Based Intellectual Property*, 62 UCLA L. REV. 1328, 1333-34 (2015) (discussing the importance of developing evidence to evaluate the social benefits of IP regimes).

<sup>&</sup>lt;sup>163</sup> Consistent with best practices on data accessibility and transparency, see Jason Rantanen, *Empirical Analyses of Judicial Opinions: Methodology, Metrics, and the Federal Circuit*, 49 CONN. L. REV. 227, 281-82 (2016); Jason Chin et al., The Transparency of Quantitative Empirical Legal Research 5-7 (2018-2020) (Bos. Univ. Sch. of L., Research Paper No. 4034599, 2022), https://ssrn.com/abstract=4034599; Robin Feldman, Mark A. Lemley, Jonathan S. Masur & Arti K. Rai, *Open Letter on Ethical Norms in Intellectual Property Scholarship*, 29 HARV. J.L. & TECH. 339, 348-49 (2016), we have disclosed our coding and data in appendices to this Article. As we recognize throughout, some of our coding decisions presented close calls. Accordingly, we've also made our data available in Excel format in an online, public archive for anyone who'd like to recode and rerun the analysis. *Replication Data for:* Myths and Reality of Patent Law at the Supreme Court, HARV. DATAVERSE (2024), https://doi.org/10.7910/DVN/DWMTS1.

#### Core Patent Issues v. Peripheral Issues B.

Many of the Supreme Court's patent-related cases don't seem much like patent cases at all; they involve questions of procedure, jurisdiction, and the like, with substantive patent law playing, at most, a background role. As a preliminary matter, then, one proposition worth testing is whether that perception is empirically true. Coding the Supreme Court's patent-related decisions for whether they are actually *about* patent law also provides insight into whether the Supreme Court has impacted patent law as much as the conventional wisdom might suggest,<sup>164</sup> or whether the Court has mainly dealt with issues that are tangential to the day-to-day practice of patent law and administration of the patent system.165

Accordingly, our first step was to categorize the Supreme Court's patentrelated decisions<sup>166</sup> by case type. Though there were a few close calls, we were able to code each case as falling into one of two broad categories:

(1) Cases raising core patent law issues (namely, infringement, validity, enforceability, claim construction, and defenses to and remedies for infringement), or

(2) Cases raising issues peripheral to the substantive core of patent law (for example, jurisdiction, procedure, standing, evidentiary rules, standards of proof, standards of appellate review, and nonpatent substantive issues).

Applying that framework, we coded over half of the Supreme Court's patent decisions from 1982 through 2023 (33 of 63) as 'peripheral,' confirming the intuition that many Supreme Court "patent" cases aren't really patent cases at all. This data also raises some initial questions about whether the Supreme Court has altered patent law as much as the large number of patent-related cases decided by the Court might suggest.

It's worth noting that we could have plausibly put several cases in either category. For instance, two of the Supreme Court's decisions on patent claim construction, Markman<sup>167</sup> and Teva Pharmaceuticals USA, Inc. v. Sandoz, Inc.,<sup>168</sup> were not about the substantive law of claim construction (that is, the law governing how a court interprets a patent and defines the patentee's exclusive

<sup>&</sup>lt;sup>164</sup> One Federal Circuit judge, for example, has claimed that the Supreme Court has "had a major impact on patent law." Timothy B. Dyk, Thoughts on the Relationship Between the Supreme Court and the Federal Circuit, 16 CHI.-KENT J. INTELL. PROP. 67, 72 (2016).

<sup>&</sup>lt;sup>165</sup> See Gugliuzza, supra note 25, at 330-31 (responding to Judge Dyk, supra note 164, suggesting that the Court's effect has been limited because its patent decisions, "though substantial in number, have rarely involved the fundamental legal doctrines that directly ensure the inventiveness of patents and regulate their scope").

<sup>&</sup>lt;sup>166</sup> To identify those decisions, we relied mostly on the Written Description blog's oftenupdated (and highly accurate) list of Supreme Court decisions in patent cases. Supreme Court Patent Cases, supra note 108. But, as discussed supra note 108, we also include two cases omitted from that list.

<sup>&</sup>lt;sup>167</sup> 517 U.S. 370 (1996).

<sup>&</sup>lt;sup>168</sup> 574 U.S. 318, 322 (2015).

rights).<sup>169</sup> Rather, those cases were about the *process of deciding* claim construction: Is it done by a judge or jury (*Markman*)?<sup>170</sup> And under what standard of appellate review (*Teva*)?<sup>171</sup> So we put both cases in the 'peripheral' category, even though claim construction itself is indisputably a core patent law issue.

But if that choice slightly inflates the number of 'peripheral' cases, it's more than canceled out by our decision to categorize all cases involving defenses to or remedies for patent infringement as 'core,' even though several of those cases involve issues we think most patent lawyers would consider far removed from the heart of patent practice or patent law doctrine.<sup>172</sup> (In any case, we ran alternative analyses that changed some of these categorizations; our results did not change significantly; we note below where we ran those alternative analyses.)

The bottom line is that the large proportion of 'peripheral' cases, plus the additional cases involving remedies or defenses that could plausibly have been put in that category,<sup>173</sup> indicate that any assertion about the Supreme Court's "interest" in patent law or "impact" on the patent system can't be based solely on the increased number of patent-related cases the Court has decided over the past few decades.

## C. Common Law, Statutory Interpretation, Jurisdiction, Procedure, and More

Because it's clear that patent-related Supreme Court cases vary widely in the extent to which they're *about* patent law, we wanted to slice the subject matter of the cases more finely beyond the rough (though useful) metrics of 'core' versus 'peripheral.'

<sup>&</sup>lt;sup>169</sup> *See supra* notes 66-67.

<sup>&</sup>lt;sup>170</sup> See 517 U.S. at 372 (holding that claim construction must be conducted by the judge).

<sup>&</sup>lt;sup>171</sup> See 574 U.S. at 322 (holding that, while the judge's ultimate claim construction is a question of law reviewed de novo, any underlying factual findings should be reviewed only for clear error).

<sup>&</sup>lt;sup>172</sup> Two particularly good examples are *WesternGeco LLC v. ION Geophysical Corp.*, 138 S. Ct. 2129, 2134 (2018) (holding that a patentee who proves infringement under 35 U.S.C. § 271(f)(2), which imposes liability on defendants who ship components of a patented invention for assembly abroad, can recover "lost foreign profits"), and *SCA Hygiene Products Aktiebolag v. First Quality Baby Products, LLC*, 137 S. Ct. 954, 959 (2017) (holding that the equitable defense of laches cannot preclude a claim for patent infringement filed within the statute of limitations period).

<sup>&</sup>lt;sup>173</sup> In addition to *WesternGeco* and *SCA Hygiene*, the three other remedies or defenses cases we put in the 'core' category are *Halo Electronics, Inc. v. Pulse Electronics, Inc.*, 136 S. Ct. 1923, 1928 (2016) (on the standard for proving willful infringement, which can entitle a patentee to enhanced damages), *Octane Fitness, LLC v. ICON Health & Fitness, Inc.*, 572 U.S. 545, 548 (2014) (on the standard for recovering attorneys' fees), and *Samsung Electronics Co. v. Apple Inc.*, 137 S. Ct. 429, 432 (2016) (on the standard for determining damages for design patent infringement).

In thinking about a framework we could use, one of us recalled a conversation a few years ago with a lawyer who has argued multiple Supreme Court patent cases and written several successful patent-related cert petitions. His<sup>174</sup> advice in getting the potentially patent-phobic and technology-phobic Justices<sup>175</sup> interested in a patent dispute? Frame the case as being about either (1) a jurisdictional or procedural issue or (2) a question of statutory interpretation. In other words, avoid getting into the weeds of patent doctrine—particularly the largely common-law doctrines of patent validity and infringement<sup>176</sup>—and the technology that's often necessary to understand and decide those issues.<sup>177</sup>

Anecdotally, this sounded like well-founded advice. By coding the Supreme Court's patent-related cases in a more granular fashion, we can figure it out for sure. So we further categorized the Supreme Court's patent cases, this time by the nature of the legal issue presented. There were again a few close calls, but we put each case into one of four categories:

(1) Cases involving the common law of patents,

(2) Cases requiring statutory interpretation of the Patent Act,

(3) Cases raising issues of jurisdiction or procedure, or

(4) Cases involving questions of **nonpatent substantive law** (mainly, patentrelated antitrust or constitutional law issues).

A few points about how we divvied the cases up among those categories. The most difficult line to draw was between 'common law' cases and 'statutory interpretation' cases. That's because many of patent law's essentially common law doctrines (such as the nonobviousness requirement for patent validity, the patentable subject matter requirement, and the law of infringement) hinge on statutes.<sup>178</sup> But those statutes tend to be so sparse<sup>179</sup> and the caselaw so extensive that we're inclined categorize most of them as, ultimately, about the 'common law' of patents.

The current Supreme Court, however, often doesn't see things that way. As it has become hyperfocused on the "objective" meaning of text across all fields of

<sup>&</sup>lt;sup>174</sup> We'll keep the lawyer's identity confidential; the male pronoun doesn't narrow it down much. *See* Paul R. Gugliuzza & Rachel Rebouché, *Gender Inequality in Patent Litigation*, 100 N.C. L. REV. 1683, 1701-09 (2022) (finding that, between 2010 and 2019, men delivered 90.1% of patent-related oral arguments before the Supreme Court).

<sup>&</sup>lt;sup>175</sup> See Peter Lee, Patent Law and the Two Cultures, 120 YALE L.J. 2, 77 (2010) ("The generalist [Supreme] Court approaches technology as a neophyte . . . .").

<sup>&</sup>lt;sup>176</sup> See Nard, supra note 32, at 53.

<sup>&</sup>lt;sup>177</sup> See Lee, supra note 175, at 77 ("The Justices rarely struggle with construing claims and determining prosecution history estoppel, nonobviousness, or the appropriateness of injunctive relief. Furthermore, the Court may be somewhat shielded from the most complex inventions . . . .").

 $<sup>^{178}</sup>$  35 U.S.C. § 101 (patentable subject matter), § 103 (obviousness), § 271 (various doctrines of infringement).

<sup>&</sup>lt;sup>179</sup> See, e.g., *id.* § 271(b) ("Whoever actively induces infringement of a patent shall be liable as an infringer.").

law,<sup>180</sup> it has also grown to resist the judge-created nature of many patent law doctrines, looking instead to meagre and unhelpful language in the Patent Act rather than a rich common law tradition.<sup>181</sup>

In that vein, the toughest patent cases to categorize were *Halo Electronics*, *Inc. v. Pulse Electronics, Inc.* (about the standard for proving willful infringement under § 284 of the Patent Act),<sup>182</sup> *Limelight Networks, Inc. v. Akamai Technologies, Inc.* (about the standard for proving induced infringement under § 271(b)),<sup>183</sup> Octane Fitness, LLC v. Icon Health & Fitness, Inc. (about the standard for obtaining attorneys' fees under § 285),<sup>184</sup> and *Microsoft Corp. v. i4i Limited Partnership* (regarding the standard of proof required to overcome the Patent Act's presumption of validity under § 282(a)).<sup>185</sup> Though the Supreme Court's opinions in all four cases treated the issue as involving the *meaning* of some provision of the Patent Act,<sup>186</sup> we ultimately coded each of them as common-law cases because, in our view, most patent lawyers would consider the law of willful infringement, induced infringement, attorneys' fee awards, and standards of proof to be largely judge made.<sup>187</sup>

Ultimately, we placed 33 of the 63 Supreme Court patent cases since *Markman* into the statutory interpretation or jurisdiction/procedure categories. And that *doesn't* include *Halo*, *Limelight*, *Octane Fitness*, or *i4i*, which the Supreme Court *treated* as being about statutory interpretation but we think are better classified as involving the common law of patents.

So the Supreme Court lawyer's advice appears to have been good: over half of the Supreme Court's 'patent' cases since the Federal Circuit's creation—and nearly 60% depending on how you classify the borderline cases—have involved either jurisdictional or procedural issues that are relevant to patent litigation or questions of statutory interpretation. The Court does seem interested in (or perhaps more comfortable with) those kinds of cases. Coupled with the large share of 'peripheral' cases, our coding by the nature of the legal issue presented

<sup>185</sup> 564 U.S. 91, 95 (2011).

<sup>186</sup> See, e.g., Limelight, 572 U.S. at 917 ("This case presents the question whether a defendant may be liable for inducing infringement of a patent under 35 U.S.C. § 271(b) when no one has directly infringed the patent under § 271(a) or any other statutory provision. The statutory text and structure and our prior case law require that we answer this question in the negative.").

<sup>187</sup> That said, because part of our interest in this Article is to dissect what the Court *thinks* it's doing in patent cases, *see supra* Section II.A, it might not be unreasonable to classify cases in which the Court acted as if it were doing statutory interpretation as 'statutory interpretation.' Fortunately, that wouldn't change our results much, as we note below. *See infra* notes 199, 242, and 338.

<sup>&</sup>lt;sup>180</sup> See Mark A. Lemley, Chief Justice Webster, 106 IOWA L. REV. 299, 299 (2020).

<sup>&</sup>lt;sup>181</sup> But cf. Amgen Inc. v. Sanofi, 143 S. Ct. 1243, 1251-56 (2023) (summarizing and relying on prior Supreme Court decisions involving the Patent Act's enablement requirement).

<sup>&</sup>lt;sup>182</sup> 123 S. Ct. 1923, 1928 (2016).

<sup>&</sup>lt;sup>183</sup> 572 U.S. 915, 917 (2014).

<sup>&</sup>lt;sup>184</sup> 572 U.S. 545, 548 (2014).

raises even more questions about whether the Supreme Court's impact on patent law has been as significant as one might presume from the large number of patent-related cases the Court has decided over the past couple decades.

#### D. Additional Notes About Methodology

Before getting deeper into our analysis, a few additional notes about our dataset of patent-related Supreme Court decisions.

Most importantly, we wanted to evaluate not just the *types* of patent-related cases the Supreme Court has decided, but also the *outcomes*. We coded Supreme Court case outcomes in several ways. For instance: Did the Court agree with the Federal Circuit on the legal rule at issue in the case?<sup>188</sup> With the Solicitor General? Did the decision favor patentees or accused infringers? Did it adopt a bright-line rule or a fuzzy standard? We describe below some of the coding details relevant to our analyses of those questions. But our basic process was straightforward. We each re-read the relevant Supreme Court decisions (which, between the two of us, we'd often already read numerous times), along with any relevant briefs, and we independently coded the decision to the best of our judgment. In the rare instances we disagreed, we discussed the issue and resolved it by consensus.

Also, because we wanted to see not just what the Supreme Court *did* but how much each decision *mattered* to the development of patent law, for each Supreme Court decision in our dataset, we collected information about the number of citations to that decision by the Federal Circuit, as well as a measure of citations per year.<sup>189</sup> Citation counts are, to be sure, an imperfect measure of influence. For instance, almost every patent claim construction case cites the Supreme Court's decision in *Markman*.<sup>190</sup> But the Federal Circuit sometimes cites its own cases implementing a Supreme Court decision rather than the Supreme Court decision itself.<sup>191</sup> Likewise, some decisions may so definitively resolve an issue that it isn't even raised in future litigation (and hence the

<sup>190</sup> See infra Table 1 (reporting that Markman is the Supreme Court patent case most frequently cited by the Federal Circuit).

<sup>&</sup>lt;sup>188</sup> In gauging agreement or disagreement, we focused on the Supreme Court's *legal holding*, not necessarily the disposition of the case (affirmed, reversed, etc.). *See infra* notes 222-23.

<sup>&</sup>lt;sup>189</sup> We computed this using Westlaw's citation counts as of October 22, 2022, and we included both the year of decision and 2022 as full years for the calculation. We included both precedential and nonprecedential Federal Circuit decisions citing the relevant Supreme Court ruling. In a few cases, Westlaw's citation count glitched, so we double-checked by hand-searching the Federal Circuit database for Supreme Court case names. Because the Supreme Court's most recent patent decision, *Amgen Inc. v. Sanofi*, 143 S. Ct. 1243 (2023), is *so* recent, we excluded it from our citation analysis.

<sup>&</sup>lt;sup>191</sup> For example, the Federal Circuit now applies the Administrative Procedure Act to PTO factfinding, as *Dickinson v. Zurko*, 527 U.S. 150, 155 (1999), requires, but the Federal Circuit doesn't cite *Zurko* every time it does so. *See, e.g.*, Polaris Innovations Ltd. v. Brent, 48 F.4th 1365, 1372 (Fed. Cir. 2022) (citing *In re* Sullivan, 362 F.3d 1324, 1326, 1328 (Fed. Cir. 2004), and the APA itself, 5 U.S.C. § 706(2)(A)).

decision isn't cited often).<sup>192</sup> And other decisions may be cited more frequently in the district courts than at the appellate level.<sup>193</sup> Nonetheless, the number of subsequent Federal Circuit citations is a rough, if imperfect, proxy for the importance and impact of a Supreme Court patent case.<sup>194</sup>

We also wanted to gauge the influence, if any, of the "elite" Supreme Court bar on the Court's patent-case decision making. Earlier versions of the datasets we used to identify "elite" lawyers and the patent cases in which they participated are described in detail elsewhere.<sup>195</sup> In brief, one dataset contains the identity of every lawyer who conducted oral argument in every Supreme Court case from October Term 1992 through 2021. A second dataset contains every cert petition in a patent-related case that the Supreme Court granted from 1982 through 2022. Combined, these datasets allow us to evaluate the Supreme Court experience of lawyers filing cert petitions in patent cases, their success rates, and whether the increasing presence of elite Supreme Court lawyers in patent cases may be changing the shape of the Court's patent docket.

#### III. MYTHS AND REALITY ABOUT THE SUPREME COURT AND PATENT LAW

Much of the speculation about the Supreme Court and patent law—and many of the propositions we test in this Article—center on the Court's substantive views of the field. For instance, we know the Supreme Court has decided a

<sup>&</sup>lt;sup>192</sup> One example from patent law might be *Impression Products, Inc. v. Lexmark International, Inc.*, 137 S. Ct. 1523, 1529 (2017), in which the Court held that *any sale* of a product exhausts patent rights in that product, regardless of purported contractual restrictions and even if the sale occurred abroad. After *Lexmark*, no rational patentee would even try to bring an infringement claim in that scenario; hence, the *Lexmark* decision may have impacted behavior but won't be cited by other courts. Ditto *Oil States Energy Services, LLC v. Greene's Energy Group, LLC*, 138 S. Ct. 1365, 1370 (2018), which upheld the constitutionality of postissuance review of patent validity by the Patent Office; with that issue settled, there's not much reason to cite the Court's opinion.

<sup>&</sup>lt;sup>193</sup> One example might be *i4i*, which clarified the standard of proof for patent validity at trial. 564 U.S. 91, 95 (2011). While it would be interesting to analyze district court citation patterns in patent cases, obtaining reliable data about those citations is unfortunately difficult. *Compare* Jason Rantanen, Response, *Missing Decisions and the United States Court of Appeals for the Federal Circuit*, 170 U. PA. L. REV. ONLINE 73, 76 (2022) (noting that the collections of Federal Circuit decisions on commercial databases such as Westlaw are relatively complete), *with* David A. Hoffman, Alan J. Izenman & Jeffrey R. Lidicker, *Docketology, District Courts, and Doctrine*, 85 WASH. U. L. REV. 681, 687-88 (2007) (questioning the use of commercial databases for empirical studies of district court opinion writing).

<sup>&</sup>lt;sup>194</sup> See Joseph Scott Miller, United States Supreme Court IP Cases, 1810-2019: Measuring & Mapping the Citation Networks, 69 CATH. U. L. REV. 537, 546 (2020) ("A citation analysis is an ideal way to tap 'case importance' . . . define[d] as the legal relevance of a case for the network of law . . . ." (alterations in original) (quoting James H. Fowler, Timothy R. Johnson, James F. Spriggs II, Sangick Jeon & Paul J. Wahlbeck, Network Analysis and the Law: Measuring the Legal Importance of Precedents at the U.S. Supreme Court, 15 POL. ANALYSIS 324, 325 (2007))).

<sup>&</sup>lt;sup>195</sup> Gugliuzza, *supra* note 88, at 1237-40.

greater *quantity* of patent-related cases over the past couple decades. But is it accurate to say the Supreme Court has taken an increased *interest* in patent *law*?<sup>196</sup> Also, is there any normative theme to the Supreme Court's patent decisions? Does the Court dislike the Federal Circuit's "rule formalism"? Is the Court correcting the Federal Circuit's "pro-patent" inclinations? Regardless of normative thrust, have the Supreme Court's patent decisions *mattered*, in the sense that they've altered the Federal Circuit's case law or decision making? And what about various other theories surrounding the Supreme Court and patent law—for instance, that the Court's case selection has been distorted by the elite bar or driven by specific Justices, such as Justice Breyer?

In this Part of the Article, we attempt to answer those questions.

#### A. Does the Supreme Court Have an "Increased Interest" in Patent Law?<sup>197</sup>

There's no dispute the Supreme Court has decided a greater quantity of patent cases in the past two decades than it did in the first two decades of the Federal Circuit's existence. From 1982 through 2004, the Court decided only 16 patent-related cases. From 2005 through 2023, the Court decided 47—nearly three times as many.

But, as we discussed above, at least half of the Supreme Court's patent-related cases over the time period of our study involved issues peripheral to core patent doctrines.<sup>198</sup> As for the nature of the cases, the greatest proportion were cases involving the 'common law' of patents (23 cases, or 37%) and statutory interpretation of the Patent Act (17 cases, or 27%).<sup>199</sup> Next came issues of jurisdiction or procedure (16 cases, or 25%), and, finally, patent-related cases raising nonpatent substantive issues (seven cases, or 11%).

Twenty of the 23 cases we categorized as common law also raised core issues. Those 20 cases include the Court's four high-profile decisions on patentable subject matter,<sup>200</sup> the landmark obviousness decision in *KSR*, as well as several infringement-related and remedial decisions of varying significance.<sup>201</sup>

<sup>198</sup> See supra Section II.B.

<sup>&</sup>lt;sup>196</sup> Cf. Arti K. Rai, Engaging Facts and Policy: A Multi-Institutional Approach to Patent System Reform, 103 COLUM. L. REV. 1035, 1125 (2003) ("The Supreme Court's recent interest in patent law is particularly welcome . . . .").

<sup>&</sup>lt;sup>197</sup> E.g., Seth P. Waxman, *May You Live in Interesting Times: Patent Law in the Supreme Court*, 17 CHI.-KENT J. INTELL. PROP. 214, 216 (2017) ("[T]he Supreme Court's increased interest in patent law tracks the rising importance of intellectual property in our society.").

<sup>&</sup>lt;sup>199</sup> If we were to categorize the five borderline cases (*Halo, Limelight, Octane Fitness, i4i*, and *Bilski*) as statutory interpretation rather than common law, *see supra* notes 31, 181-86, the figures reported in the text would effectively switch: our dataset would have 22 statutory interpretation cases and 18 common law cases.

<sup>&</sup>lt;sup>200</sup> See supra note 95.

<sup>&</sup>lt;sup>201</sup> Halo Elecs., Inc. v. Pulse Elecs., Inc., 136 S. Ct. 1923 (2016); Commil USA, LLC v. Cisco Sys., Inc., 575 U.S. 632 (2015); Limelight Networks, Inc. v. Akamai Techs., Inc., 572 U.S. 915 (2014); Octane Fitness, LLC v. ICON Health & Fitness, Inc., 572 U.S. 545 (2014);

For statutory interpretation cases, however, things look different. Only nine of the 17 cases we categorized as involving statutory interpretation also raised core issues. And, even among those nine, one would be hard pressed to find a single case that many patent lawyers would characterize as terribly important to patent *law*. They largely involve validity, infringement, or remedial doctrines that are relevant in only a fraction of cases.<sup>202</sup> Moreover, as we discuss below, those core/statutory interpretation cases are rarely cited by the Federal Circuit.<sup>203</sup>

We also evaluate whether the Court's "interest" in patent law—such as it is<sup>204</sup>—has changed over time. As Figure 2 illustrates below, the few patentrelated cases the Supreme Court decided during the Federal Circuit's first 15 years of existence mostly involved issues we categorized as peripheral. Our more granular coding tells us that most of those early cases involved questions of jurisdiction or procedure<sup>205</sup> or statutory interpretation of the Patent Act.<sup>206</sup>

<sup>203</sup> See infra Section III.D.

<sup>204</sup> See Christa J. Laser, *Certiorari in Patent Cases*, 48 AIPLA Q.J. 569, 573-74 (2020) (concluding "it is not . . . primarily an increased interest by the Supreme Court in patent law driving the increasing number of patent cases reviewed by the Supreme Court" but instead factors such as "the merits of a particular case" as well as "policy, timing, and the influence of expert advocates and amici").

<sup>205</sup> Good examples include *Cardinal Chemical Co. v. Morton International, Inc.*, 508 U.S. 83, 89 (1993) (overturning the Federal Circuit's practice of "routinely vacating declaratory judgments regarding patent validity following a determination of noninfringement"), and *Christianson v. Colt Industries Operating Corp.*, 486 U.S. 800, 804 (1988) (about the standard for triggering Federal Circuit jurisdiction over patent appeals).

 $^{206}$  A good example is *Eli Lilly*, a rare core/statutory interpretation case about the standard for immunity from patent infringement claims under 35 U.S.C. § 271(e)(1), which makes activities that would otherwise constitute patent infringement noninfringing if they are undertaken to develop information to be submitted to the Food and Drug Administration. 496 U.S. at 663-64.

Global-Tech Appliances, Inc. v. SEB S.A., 563 U.S. 754 (2011); eBay Inc. v. MercExchange, L.L.C., 547 U.S. 388 (2006); 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).

<sup>&</sup>lt;sup>202</sup> WesternGeco LLC v. ION Geophysical Corp., 138 S. Ct. 2129 (2018); SCA Hygiene Prods. Aktiebolag v. First Quality Baby Prods., LLC, 137 S. Ct. 954 (2017); Life Techs. Corp. v. Promega Corp., 137 S. Ct. 734 (2017); Samsung Elecs. Co. v. Apple Inc., 137 S. Ct. 429 (2016); Microsoft Corp. v. AT&T Corp., 550 U.S. 437 (2007); Merck KGaA v. Integra Lifesciences I, Ltd., 545 U.S. 193 (2005); J.E.M. Ag Supply, Inc. v. Pioneer Hi-Bred Int'l, Inc., 534 U.S. 124 (2001); Eli Lilly & Co. v. Medtronic, Inc., 496 U.S. 661 (1990). One exception *might* be *Helsinn Healthcare S.A. v. Teva Pharmaceuticals USA, Inc.*, 139 S. Ct. 628 (2019), which interpreted the Patent Act's novelty requirement, as revised by the AIA, perhaps giving some hint about how the Court will interpret the statute going forward. *Id.* at 633-34 ("In light of . . . settled pre-AIA precedent . . . , we presume that when Congress reenacted the same language in the AIA, it adopted the earlier judicial construction of that phrase."). But the specific issue the Court decided in *Helsinn*—does a sale to a third party who is required to keep the invention confidential place the invention "on sale" and potentially bar a patent—arises in only a small minority of patent cases.

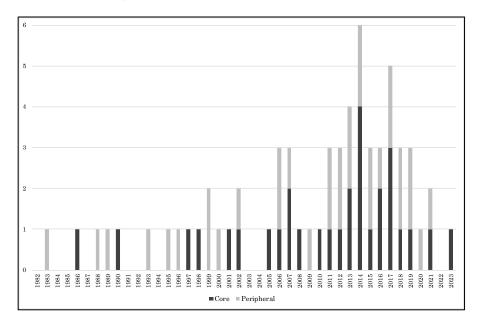


Figure 2. Core Versus Peripheral Patent Cases Decided by the Supreme Court, 1982 Through 2023.

Beginning with the Supreme Court's 1996 claim construction decision in *Markman*, however, the Court began to engage more core issues, such as the patentable subject matter, obviousness, and infringement cases mentioned above. In fact, since 1996, the proportion of core to peripheral cases has been precisely 1:1.<sup>207</sup>

Our more granular coding, summarized in Figure 3 below, tells a more nuanced story, reflecting how the Supreme Court's patent docket has evolved since the beginning of the PTAB era in 2016. From 1996 through 2015, 30 of the Court's 38 patent-related decisions involved the common law of patents or issues of jurisdiction or procedure. But, from 2016 through 2023 (the PTAB era), most cases were about statutory interpretation (ten of 18).

<sup>&</sup>lt;sup>207</sup> The Court decided 28 core cases and 28 peripheral cases from 1996 through 2023.

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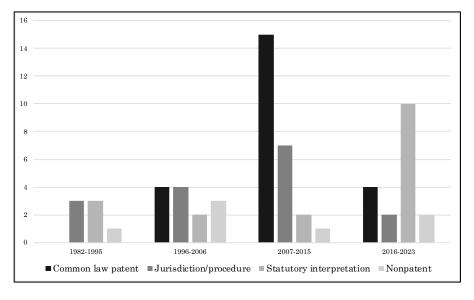


Figure 3. Patent Cases Decided by the Supreme Court, by Nature of Decision.

So is the Supreme Court "increasingly interested" in patent law, as we often hear? We think the evidence is equivocal. The Court definitely decided a greater number of patent cases beginning around 1996, and half of those cases have involved core issues of patent law. Likewise, as one of us showed in prior work, the Court has, in the past decade or so, granted a much higher proportion of patent-related cert petitions than it did in the decade before that.<sup>208</sup>

But a lot of the Supreme Court's patent cases have involved questions about the interpretation of relatively inconsequential provisions of the Patent Act. The number of statutory interpretation cases has increased since the passage of the AIA in 2011.<sup>209</sup> Whether those decisions affected patent law and what they tell us about the institutions that administer the patent system-the Patent Office, the Federal Circuit, and the Supreme Court-are topics we explore in the remainder of this Article.

<sup>208</sup> See Gugliuzza, supra note 88, at 1246 (finding that from 2002 through 2009 the Court granted only 3.9% of paid cert petitions in patent cases but that from 2010 through 2016 the Court granted 9.2% of paid cert petitions in patent cases).

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<sup>&</sup>lt;sup>209</sup> Pub. L. No. 112-29, 125 Stat. 284.

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## B. Does the Supreme Court Dislike the Federal Circuit's "Rule Formalism"?<sup>210</sup>

A common thread many have seen in the Supreme Court's interactions with the Federal Circuit is that the Federal Circuit likes bright-line, "formalist" rules while the Supreme Court prefers open-ended standards.<sup>211</sup> Most patent lawyers can likely provide, off the top of their heads, several examples of the Supreme Court rejecting bright-line Federal Circuit rules in favor of case-by-case inquiries. For instance, the Court rejected the Federal Circuit's "complete bar" rule for prosecution history estoppel in *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*,<sup>212</sup> its "teaching, suggestion, or motivation" requirement for obviousness in *KSR*,<sup>213</sup> its automatic injunction rule in *eBay*,<sup>214</sup> its two-element test for willful infringement in *Halo*,<sup>215</sup> a similar two-element test for awarding attorney's fees in *Octane Fitness*,<sup>216</sup> and its "machine or transformation" test for patent eligibility in *Bilski v. Kappos*.<sup>217</sup>

But does that pattern hold across all patent cases? Our data suggest that the Supreme Court is not entirely uniform in its preference for standards over rules. For starters, in more than a third of the Supreme Court's patent cases, the rules-versus-standards issue simply didn't arise because, for instance, the Court's choice was between two possible interpretations of a statute.<sup>218</sup> Of the 40 Supreme Court decisions we categorized as making a choice between a rule and a standard, the Court opted for a standard in 29 (72%) and a rule in 11 (28%). It's also worth noting that several of the cases we listed above—the easy examples of the Court rejecting a Federal Circuit "rule" for a fuzzier standard—are among the patent cases most heavily cited by the Federal Circuit.<sup>219</sup>

In other words, as a purely quantitative matter, a strong preference for standards over rules doesn't explain everything about the Supreme Court's patent jurisprudence—fewer than half its decisions fit that mold. But, when the Court has a choice between a rule and a standard, it opts for a standard nearly three-quarters of the time. Moreover, as a qualitative matter, many of the Supreme Court patent cases most frequently invoked by the Federal Circuit

<sup>218</sup> See, e.g., Helsinn Healthcare S.A. v. Teva Pharms. USA, Inc., 139 S. Ct. 628, 630 (2019) (presenting the question of whether the AIA's amendments to the Patent Act's novelty provision (35 U.S.C. § 102) overruled case law holding that a sale that does not disclose the details of an invention can nevertheless serve as invalidating prior art).

<sup>219</sup> See infra Table 1.

 $<sup>^{210}</sup>$  E.g., Taylor, *supra* note 7, at 441 (analyzing "the Supreme Court's reputation for standard-based adjudication in patent cases and . . . its history of policing the Federal Circuit's rule-based adjudication").

<sup>&</sup>lt;sup>211</sup> See supra notes 111-13 and accompanying text.

<sup>&</sup>lt;sup>212</sup> 535 U.S. 722, 727-28 (2002).

<sup>&</sup>lt;sup>213</sup> KSR Int'l Co. v. Teleflex Inc., 550 U.S. 398, 407 (2007).

<sup>&</sup>lt;sup>214</sup> eBay Inc. v. MercExchange, L.L.C., 547 U.S. 388, 390 (2006).

<sup>&</sup>lt;sup>215</sup> Halo Elecs., Inc. v. Pulse Elecs., Inc., 136 S. Ct. 1923, 1928 (2016).

<sup>&</sup>lt;sup>216</sup> Octane Fitness, LLC v. ICON Health & Fitness, Inc., 572 U.S. 545, 548 (2014).

<sup>&</sup>lt;sup>217</sup> 561 U.S. 593, 603 (2010).

reject a bright-line rule in favor of a more malleable standard, confirming the conventional wisdom to some degree.

### C. Has the Supreme Court Been Correcting the Federal Circuit's "Pro-Patent" Proclivity?<sup>220</sup>

Another common thread observers have pointed to in Supreme Court patent cases is that the Federal Circuit tends to rule for patentees and the Supreme Court tends to rule against them.<sup>221</sup> This is obviously an overgeneralization, but there are many recent cases which the Supreme Court overturned Federal Circuit case law to make the law friendlier to patent challengers and accused infringers. *KSR*, *eBay*, and *Octane Fitness* are all examples.<sup>222</sup>

To start our analysis of whether the Supreme Court has been correcting the Federal Circuit's "pro-patent" tendencies, we were able to code 60 of the 63 Supreme Court decisions in our dataset as agreeing or disagreeing with the Federal Circuit's holding or key reasoning.<sup>223</sup>

<sup>223</sup> Because we looked at the substance of the two courts' opinions, some cases in which the Supreme Court affirmed the Federal Circuit we actually coded as disagreement. *E.g.*,

<sup>&</sup>lt;sup>220</sup> See, e.g., Sean B. Seymore, *The Enablement Pendulum Swings Back*, 6 Nw. J. TECH. & INTELL. PROP. 278, 278 (2008) ("[C]ommentators and members of the patent bar contend that the [Supreme] Court is . . . inviting the [Federal Circuit] to rethink its historical 'pro-patent' stance."). *But see* Glynn S. Lunney, Jr., *Patent Law, the Federal Circuit, and the Supreme Court: A Quiet Revolution*, 11 SUP. CT. ECON. REV. 1, 3, 14 (2004) (finding that, "[d]espite the Federal Circuit's pro-patent holder reputation, . . . claims of patent infringement are no more likely to succeed since the Federal Circuit's advent," though also noting that, under the Federal Circuit, claims are more likely to fail because the patent is not infringed by the defendant's product or process, not because the patent is invalid).

<sup>&</sup>lt;sup>221</sup> For a particularly emphatic expression of that viewpoint, see Gene Quinn, *Did the Supreme Court Intentionally Destroy the U.S. Patent System*?, IP WATCHDOG (May 22, 2018, 11:07 AM), https://ipwatchdog.com/2018/05/22/did-the-supreme-court-intentionally-destroy-the-u-s-patent-system [https://perma.cc/4WKV-MVR3].

<sup>&</sup>lt;sup>222</sup> See supra notes 211-16. Though the four patentable subject matter cases the Court decided from 2010 through 2014, overall, made the law friendlier to patent challengers and accused infringers, see supra note 95, the Supreme Court actually agreed with the Federal Circuit, in whole or in part, in three of those four cases: Bilski, Myriad (partial), and Alice. And we coded Octane Fitness as friendly to patent challengers and accused infringers because, though the relevant provision of the Patent Act permits either party to recover attorneys' fees in an "exceptional case[]," 35 U.S.C. § 285, we viewed the decision's primary effect to be lowering the bar for *defendants* to obtain fees when faced with frivolous claims of infringement or malicious litigation conduct-which was precisely the fact pattern presented in Octane Fitness itself. See ICON Health & Fitness, Inc. v. Octane Fitness, LLC, 706 F. App'x 666, 668 (Fed. Cir. 2017) (affirming the district court's award of fees after the Supreme Court's decision). Conversely, we coded Octane Fitness's companion case, Highmark Inc. v. Allcare Health Management System, Inc., 572 U.S. 559, 561 (2014), which changed the standard of appellate review for attorneys' fee determinations from de novo to abuse of discretion, as favoring neither patentees nor accused infringers-identical to how we coded the change of standard of review for fact-finding underlying claim construction rulings in Teva v. Sandoz, 574 U.S. 318, 322 (2015).

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Overall, the Supreme Court disagreed with the Federal Circuit in 42 cases, agreed with it in 15, and agreed with it in part in three.<sup>224</sup> Of the 42 cases in which the Supreme Court disagreed with the Federal Circuit, in eight cases the Court adopted a more patentee-friendly position than the Federal Circuit.<sup>225</sup> In 22 of those 42 cases, however, the Court adopted a less patentee-friendly position than the Federal Circuit adopted a cases we were unable to code as clearly favoring either side. Of the 15 cases in which the Supreme Court agreed with the Federal Circuit, the Court embraced a patentee-friendly position four times and a less patentee-friendly position six times. We were unable to clearly code five cases in which the Court agreed with the Federal Circuit.

So there is some truth to the conventional wisdom. When the Supreme Court overturns the Federal Circuit, it's almost three times as likely the Court will adopt a position less friendly to patentees. Overall, the Supreme Court's decisions are unfriendly to patentees by a margin of 31-14—a large difference,

Global-Tech Appliances, Inc. v. SEB S.A., 563 U.S. 754, 766 (2011) (rejecting the Federal Circuit's holding that "deliberate indifference to a known risk that a patent exists" is sufficient to prove induced infringement); Pfaff v. Wells Elecs., Inc., 525 U.S. 55, 60 (1998) (rejecting the Federal Circuit's holding that the on-sale bar to patentability starts running when an invention is "substantially complete"). The cases we did not code for agreement or disagreement were: (1) Kimble v. Marvel Entertainment, LLC, 576 U.S. 446, 449 (2015), a patent-related contract case arising out the Ninth Circuit in which the Supreme Court reconsidered—and reaffirmed—its own case law; (2) Illinois Tool Works Inc. v. Independent Ink, Inc., 547 U.S. 28, 31 (2006), in which the Supreme Court overruled some of its own antitrust case law, which the Federal Circuit had faithfully followed; and (3) General Motors Corp. v. Devex Corp., 461 U.S. 648, 649 (1983), a case appealed from and decided by the Third Circuit before the Federal Circuit existed. We did, however, code several cases that did not arise from the Federal Circuit because the Supreme Court's opinion passed on the content of Federal Circuit law. Gunn v. Minton, 568 U.S. 251, 256 (2013) (patent-related malpractice case arising from the Texas Supreme Court); FTC v. Actavis, Inc., 570 U.S. 136, 141 (2013) (patent-related antitrust case arising from the Eleventh Circuit); Bonito Boats, Inc. v. Thunder Craft Boats, Inc., 489 U.S. 141, 144 (1989) (patent-related preemption case arising from the Florida Supreme Court).

<sup>&</sup>lt;sup>224</sup> The partial agreements include United States v. Arthrex, Inc., 141 S. Ct. 1970, 1976 (2021) (agreeing with the Federal Circuit that the appointments process for administrative patent judges was unconstitutional but disagreeing about the appropriate remedy); Ass'n for Molecular Pathology v. Myriad Genetics, Inc., 569 U.S. 576, 580 (2013) (agreeing with the Federal Circuit that synthetic DNA is patentable subject matter but disagreeing that isolated, naturally occurring DNA is patentable subject matter); Warner-Jenkinson Co. v. Hilton Davis Chem. Co., 520 U.S. 17, 41 (1997) (agreeing with the Federal Circuit that the doctrine of equivalents remains a viable theory of infringement and that the issue may be decided by a jury, but disagreeing with the Federal Circuit's formulation of the infringement standard and mode of analysis).

<sup>&</sup>lt;sup>225</sup> We considered a decision "patentee-friendly" if it made it easier to show patentability, broadened the scope of patent protection, made it easier to prove infringement, or strengthened remedies for infringement. *Accord* Mandel, *supra* note 6, at 809.

but not a completely lopsided one.<sup>226</sup> Moreover, roughly a quarter of the Supreme Court's patent cases don't have any particular pro- or anti-patent valence,<sup>227</sup> underscoring that there is unlikely a single theory that can explain the Court's patent jurisprudence.

We can also tie this discussion of the Supreme Court's pro- or anti-patent proclivities to our earlier discussion of rules versus standards. Out of the ten Supreme Court decisions adopting a rule over a standard that we were able to characterize as patentee-friendly or not, six favored patentees—a higher proportion of patentee-friendly outcomes than in our dataset overall. By contrast, out of the 23 Supreme Court decisions adopting standards over rules that we were able to characterize as patentee-friendly or not, only three favored patentees. So there is also truth in the notion that the Supreme Court's preference for standards over rules benefits patent challengers and accused infringers, not patentees.

Of course, as we've already discussed, only half of the Supreme Court's patent-related cases, at most, are actually *about* patent law. So we also analyzed the pro- or anti-patent valence of only the cases we categorized as core patent law cases. The results provide stronger evidence of the Supreme Court's inclination to rule in favor of patent challengers or accused infringers and against patentees.

Overall, of the 30 core cases decided by the Supreme Court since 1982, the Court agreed with the Federal Circuit in nine (including two partial agreements) and disagreed in 21. Of the 21 core cases in which the Supreme Court disagreed with the Federal Circuit, we were able to categorize 19 as favoring patentees or not. In 15 of those 19 cases, the Supreme Court rejected a patentee-friendly Federal Circuit position; in only four of the core cases in which the Supreme Court disagreed with the Federal Circuit did the Court adopt a position friendly to patentees.<sup>228</sup> Similarly, of the nine core cases in which the Supreme Court agreed with the Federal Circuit, only two adopted a position favorable to patentees.<sup>229</sup>

In addition, we could categorize 24 of the 30 core Supreme Court decisions as adopting either a rule or a standard. A remarkable 20 adopted a standard, and

<sup>&</sup>lt;sup>226</sup> We exclude from our calculations in this portion of the Article *Laboratory Corp. of America Holdings v. Metabolite Laboratories, Inc. (LabCorp)*, 548 U.S. 124, 125 (2006), which, though pro-patentee in that it dismissed a challenge to a patent the lower courts had held valid, wasn't a decision on the merits.

<sup>&</sup>lt;sup>227</sup> Accord Mandel, supra note 6, at 810 n.17 (finding that ten of 44 intellectual property decisions by the Supreme Court from 2002 through 2016 neither strengthened nor weakened IP rights).

<sup>&</sup>lt;sup>228</sup> WesternGeco LLC v. ION Geophysical Corp., 138 S. Ct. 2129, 2134 (2018); SCA Hygiene Prods. Aktiebolag v. First Quality Baby Prods., LLC, 137 S. Ct. 954, 959 (2017); Commil USA, LLC v. Cisco Sys., Inc., 575 U.S. 632, 634 (2015); Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., 535 U.S. 722, 727-28 (2002).

<sup>&</sup>lt;sup>229</sup> Bowman v. Monsanto Co., 569 U.S. 278, 280 (2013); J.E.M. Ag Supply, Inc. v. Pioneer Hi-Bred Int'l, Inc., 534 U.S. 124, 127 (2001).

all but three of those 20 standard-adopting cases clearly favored patent challengers or accused infringers over patentees.

To summarize: in the core set of patent cases, the Supreme Court has been quite favorable to accused infringers and patent challengers, and it has strongly favored standards over rules. Overall, of the core cases we were able to code as favoring patentees or challengers, 22 of 28 favored challengers. And, in the 18 challenger-favoring cases in which the Court faced a choice between a rule and a standard, it chose a standard in all but one.<sup>230</sup> A quick glance at those 17 core, challenger-favoring cases adopting a standard over a rule suggests they include some of the most important patent-related Supreme Court decisions of the past 40 years: *KSR*, *eBay*, *Alice Corp. v. CLS Bank International*,<sup>231</sup> and *Mayo Collaborative Services v. Prometheus Laboratories*, *Inc.*,<sup>232</sup> among others. Though that list also includes some more forgettable cases,<sup>233</sup> it seems fair to say that the Supreme Court has tried to rein in the pro-patent, rule-formalist proclivities of the Federal Circuit, at least in the cases involving core patent law doctrines of validity, infringement, claim construction, and remedies.

#### D. Has the Supreme Court Had a "Major Impact" on Patent Law?<sup>234</sup>

Our analysis so far raises some puzzles. On one hand, the Supreme Court has decided a large number of patent-related cases over the past couple decades, and several of those decisions emphatically rejected pro-patentee, bright-line rules adopted by the Federal Circuit at the core of patent law. Those findings could be interpreted to mean that the Supreme Court has had a major impact on patent law and invoked to argue that the Federal Circuit has failed as, to use Rochelle Dreyfuss's characterization of the court, an "experiment in specialization."<sup>235</sup>

On the other hand, many of the Supreme Court's patent-related decisions address issues peripheral to the substantive core of patent law. And, even in core cases, the Supreme Court agreed with the Federal Circuit seven of 30 times; a

 $<sup>^{230}</sup>$  The lone exception was *Life Technologies Corp. v. Promega Corp.*, 137 S. Ct. 734, 737 (2017), in which the Court adopted a rule that supplying a single component of a patented invention for assembly abroad cannot constitute the substantial portion of components creates liability under 35 U.S.C. § 271(f)(1).

<sup>&</sup>lt;sup>231</sup> 573 U.S. 208 (2014).

<sup>&</sup>lt;sup>232</sup> 566 U.S. 66 (2012).

<sup>&</sup>lt;sup>233</sup> For instance, two exhaustion cases, *Impression Products, Inc. v. Lexmark International, Inc.*, 137 S. Ct. 1523, 1529 (2017), and *Quanta Computer, Inc. v. LG Electronics, Inc.*, 553 U.S. 617, 621 (2008), as well as a § 271(f) case, *Microsoft Corp. v. AT&T Corp.*, 550 U.S. 437, 441 (2007). Those cases have rarely been cited. *See infra* notes 240-42. (Though that's not to say parties don't behave differently now that exhaustion rules have been settled. *See supra* note 191.)

<sup>&</sup>lt;sup>234</sup> See, e.g., Dyk, supra note 164, at 72.

<sup>&</sup>lt;sup>235</sup> Rochelle Cooper Dreyfuss, *The Federal Circuit: A Continuing Experiment in Specialization*, 54 CASE W. RSRV. L. REV. 769, 772 (2004).

23% agreement rate would be decent for any federal court of appeals,<sup>236</sup> much less for a court of appeals that, because of its exclusive jurisdiction, has almost no chance of being on the right side of a circuit split. Moreover, if we remove five cases involving remedies for patent infringement (which are close to the outer bounds of what might be considered a 'core' patent case),<sup>237</sup> the Supreme Court-Federal Circuit agreement rate in core cases jumps to 28%.

To get a better sense of the Supreme Court's impact on patent law, we also studied the Federal Circuit's subsequent citation of every Supreme Court patent decision from 1982 through 2022.<sup>238</sup> It's immediately obvious that the citation pattern is top heavy. Out of 62 Supreme Court patent decisions,<sup>239</sup> only ten have been cited by the Federal Circuit ten or more times per year. Those ten decisions, listed in Table 1 below, are cited an average of 17.5 times per year.

<sup>&</sup>lt;sup>236</sup> For instance, though we measure agreement/disagreement slightly differently than affirmance/reversal, *see supra* note 222, the Supreme Court affirmed the federal courts of appeals only 18% of the time in the 2021 Term. ANGIE GOU, ELLENA ERSKINE & JAMES ROMOSER, SCOTUSBLOG, STAT PACK FOR THE SUPREME COURT'S 2021-22 TERM 24 (2022), https://www.scotusblog.com/wp-content/uploads/2022/07/SCOTUSblog-Final-STAT-PACK-OT2021.pdf [https://perma.cc/5WM5-TU7E]. In fact, the agreement rate we calculate probably *understates* things because we coded some cases in which the Supreme Court affirmed the Federal Circuit as disagreements. *See supra* note 222.

<sup>&</sup>lt;sup>237</sup> See supra notes 172-73.

<sup>&</sup>lt;sup>238</sup> See *supra* Section II.D for a discussion of how we generated the citation data we report in this Section and acknowledgments of potential shortcomings of our methodology.

<sup>&</sup>lt;sup>239</sup> Note that this analysis excludes the Supreme Court's recent decision in *Amgen Inc. v. Sanofi*, 143 S. Ct. 1243 (2023). *See supra* note 189.

Year of	Case	Fed. Cir.	Fed. Cir.
Decision		Cites	Cites/Year
1996	Markman v. Westview Instruments, Inc.	651	25.04
2016	Cuozzo Speed Techs., LLC v. Lee	148	24.67
2007	KSR Int'l Co. v. Teleflex Inc.	309	20.6
2021	United States v. Arthrex, Inc.	19	19
2015	Teva Pharms. USA, Inc. v. Sandoz, Inc.	132	18.86
2018	SAS Inst. v. Lee	71	17.75
2012	Mayo Collaborative Servs. v. Prometheus	147	14.7
	Lab'ys, Inc.		
2014	Alice Corp. v. CLS Bank Int'l	108	13.5
1997	Warner-Jenkinson Co. v. Hilton Davis Chem.	267	10.68
	Co.		
2014	Octane Fitness, LLC v. Icon Health & Fitness,	80	10
	Inc.		

**Table 1.** Supreme Court Patent-Related Decisions from 1982 Through 2022Most Frequently Cited by the Federal Circuit, per Year.

Conversely, fully half of the Supreme Court's patent decisions have been cited by the Federal Circuit two or fewer times per year (31 of 62). Those 31 decisions are cited an average of 0.8 times per year.

Like our comparison of pro- versus anti-patent core cases in the previous section, this top-heavy citation data suggests that, if we want to measure how the Supreme Court has impacted patent law, we should focus on a discrete subset of decisions.

In our dataset, there are ten Supreme Court patent cases that the Federal Circuit has cited at least twice as frequently as the average Supreme Court patent case (that is, ten or more times per year). Five of those ten cases are core cases,<sup>240</sup> roughly the same amount as in the overall dataset, which is 47% core cases.<sup>241</sup> Moreover, two of the peripheral cases in the top ten were about the process for resolving the core issue of claim construction (*Markman* and *Teva v. Sandoz*) and so arguably straddle the border between peripheral and core cases.

Conversely, there are 34 Supreme Court patent cases in our dataset that the Federal Circuit has cited less than half as frequently as the average Supreme Court patent case (that is, 2.5 or fewer times per year). Nineteen of those cases are peripheral cases and only 15 are core cases (44%)—roughly the same proportion of core cases than in the overall dataset.

<sup>&</sup>lt;sup>240</sup> Octane Fitness, LLC v. ICON Health & Fitness, Inc., 572 U.S. 545 (2014); Alice Corp. v. CLS Bank Int'l, 573 U.S. 208 (2014); Mayo Collaborative Servs. v. Prometheus Lab'ys, Inc., 566 U.S. 66 (2012); KSR Int'l Co. v. Teleflex Inc., 550 U.S. 398 (2007); Warner-Jenkinson Co. v. Hilton-Davis Chem. Co., 520 U.S. 17 (1997).

<sup>&</sup>lt;sup>241</sup> See supra Section II.B.

The differences in citation frequency become clearer when we use our more granular coding. For instance, of the 25 Supreme Court decisions most frequently cited by the Federal Circuit, 14, or 56%, involved the common law of patents. (Recall that, overall, common law cases account for only 36% of our dataset.<sup>242</sup>) Conversely, of the 31 Supreme Court decisions cited less than twice per year by the Federal Circuit, 13, or 42%, involved questions of statutory interpretation. (Overall, statutory interpretation cases account for only 27% of our dataset.)

If you look closely at a lot of those infrequently cited cases—in which, recall, the Federal Circuit is rarely affirmed—there's a good qualitative argument that they just aren't important to patent law or the patent system. The list of the 31 most-infrequently cited cases includes all three of the § 271(f) cases discussed above<sup>243</sup> and all three of the pharmaceutical process cases discussed above,<sup>244</sup> as well as three cases on the rarely litigated question of when a patentee "exhausts" its exclusive rights.<sup>245</sup>

It would be too much to claim that the Supreme Court has had *no* impact on patent law. Its decisions on patentable subject matter, obviousness, and claim construction have been heavily cited as a quantitative matter and, as a qualitative matter, have changed important aspects of patent practice. Also, as we noted above, subsequent citation of a Supreme Court case by the Federal Circuit is not a perfect proxy for the case's impact on the patent system.<sup>246</sup> But our point is that we can't simply look at the nearly 50 patent-related cases the Supreme Court has decided in the past two decades and conclude, ipso facto, that the Court has had a major impact on patent law.

### E. Is the Supreme Court's Patent Case Selection Distorted by the Elite Supreme Court Bar?<sup>247</sup>

One theory, drawing on broader literature about the Supreme Court, is that "elite" Supreme Court lawyers are goading the Court into granting certiorari in

<sup>&</sup>lt;sup>242</sup> See supra Section III.A. It's worth noting that four of the borderline common law/statutory interpretation cases (*Octane Fitness, Halo, i4i*, and *Bilski, see supra* notes 181-86) we coded as common law are included in the top 25 most frequently cited cases.

<sup>&</sup>lt;sup>243</sup> See supra note 100.

<sup>&</sup>lt;sup>244</sup> See supra note 106.

<sup>&</sup>lt;sup>245</sup> Impression Prod., Inc. v. Lexmark Int'l, Inc., 137 S. Ct. 1523, 1529 (2017); Bowman v. Monsanto Co., 569 U.S. 278, 280 (2013); Quanta Comput., Inc. v. LG Elecs., Inc., 553 U.S. 617, 621 (2008). But see *supra* note 191 for a discussion of how decisions on exhaustion might alter behavior in the market.

<sup>&</sup>lt;sup>246</sup> See supra Section II.D.

<sup>&</sup>lt;sup>247</sup> See, e.g., Gugliuzza, *supra* note 88, at 1273 (noting that the Court has recently granted cert on "somewhat esoteric issues pressed by elite lawyers," citing examples).

patent-related cases that, though important to their well-heeled clients, are not important to the patent system as a whole.<sup>248</sup>

We're not sure that's true, though.

For the analysis in this Section of the Article, we limit our dataset to cases decided in 2005 or later because, by most accounts, it was in the early 2000s that the elite Supreme Court bar emerged as force shaping the Court's agenda and decisions.<sup>249</sup> Moreover, the period from 2005 through 2023 still covers the vast majority of patent-related Supreme Court cases in our dataset—48 of 64.<sup>250</sup> Three of those 48 cases, it should be noted, involved cert petitions filed by the Solicitor General; we ignore those cases because the Court grants petitions filed by the SG on behalf of the federal government at astronomically high rates.<sup>251</sup>

We counted attorneys with five or more Supreme Court oral arguments from the 1992 through 2021 Terms as "elite" Supreme Court advocates.<sup>252</sup> Out of the 45 cases in our dataset from 2005 through 2023 involving cert petitions filed by private parties, 21 (47%) included one of these elite Supreme Court advocates as counsel of record<sup>253</sup> on at least one of the granted cert petitions.<sup>254</sup>That's a high proportion of elite-advocate representation, and it reflects the substantial advantage elite advocates have at the cert stage. One of us found in a prior study that elite advocates accounted for only 16% of cert petitions *filed* in Federal Circuit patent cases, but nearly 40% of petitions *granted*.<sup>255</sup> Our finding here that nearly half of the granted cert petitions in patent-related cases from 2005

<sup>250</sup> In this analysis, unlike above, we include *LabCorp*, a case in which the Court granted certiorari but then dismissed the writ as improvidently granted.

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<sup>&</sup>lt;sup>248</sup> See Lazarus, supra note 87, at 1490-91 (arguing that the specialized, private Supreme Court bar has transformed the Court's agenda by encouraging it to hear more cases of interest to the business community); Joan Biskupic, Janet Roberts & John Shiffman, At America's Court of Last Resort, a Handful of Lawyers Now Dominates the Docket, REUTERS (Dec. 8, 2014, 10:30 AM), https://www.reuters.com/investigates/special-report/scotus [https://perma.cc/J39F-YP8X]; see also Allison Orr Larsen & Neal Devins, The Amicus Machine, 102 VA. L. REV. 1901, 1903-04 (2016) (exploring how elite Supreme Court lawyers wrangle amicus support to increase the odds the Court will grant cert).

<sup>&</sup>lt;sup>249</sup> See, e.g., Lazarus, *supra* note 87, at 1516 tbl.2, 1520 (showing a significant increase in the number of successful cert petitions filed by and oral arguments delivered by "expert" Supreme Court counsel around that time).

<sup>&</sup>lt;sup>251</sup> See Lazarus, supra note 87, at 1493 (reporting 70% grant rate for the SG, compared to 3-4% for petitions filed by private parties).

<sup>&</sup>lt;sup>252</sup> See id. at 1502 (defining an "expert" Supreme Court advocate to include anyone who has presented at least five oral arguments before the Court).

<sup>&</sup>lt;sup>253</sup> For simplicity, we analyze only the single attorney identified as counsel of record on the cover of the cert petition, even though other attorneys might have been listed and contributed to writing the brief. *See* SUP. CT. R. 9.1 (requiring every filing to identify a single "counsel of record").

<sup>&</sup>lt;sup>254</sup> A few cases in our dataset involved multiple petitions that were consolidated for oral argument on the merits. *See, e.g.*, United States v. Arthrex, Inc., 141 S. Ct. 1970 (2021) (consolidation of case nos. 19-1434, 19-1452, and 19-1458).

<sup>&</sup>lt;sup>255</sup> Gugliuzza, *supra* note 88, at 1263 (studying the period from 2002 through 2016).

through 2023 had an elite advocate as counsel of record underscores the influence that a few dozen lawyers<sup>256</sup> have had on the direction of American law.

But have those elite lawyers directed the Supreme Court to patent cases that are inconsequential to the patent system as a whole? Arguably not. For starters, the Supreme Court patent cases in which the counsel of record on the cert petition has argued before the Court five or more times have been cited by the Federal Circuit an average of 7.0 times per year.<sup>257</sup> Conversely, there are 24 cases in our dataset in which the counsel of record on the petition had fewer than five Supreme Court arguments over the period 1992 through 2021. Those cases have been cited by the Federal Circuit less frequently: an average of 4.1 times per year.

Similarly, of the 21 cases in our dataset in which counsel of record on a cert petition argued five or more cases, 13 were core cases and eight were peripheral—a higher rate of core cases than in our dataset overall. Also, keeping in mind our Supreme Court lawyer's advice about how to get the Court interested in a patent case (stay away from hardcore patent law),<sup>258</sup> ten of the 21 patent cases in which counsel of record on the petition had five or more arguments involved questions of statutory interpretation or jurisdiction/procedure-though that rate is actually slightly lower than in our dataset overall.<sup>259</sup> And nine of the 21 cases with an elite lawyer on the petition involved the common law of patents, a proportion that's actually a little higher than in our dataset overall.<sup>260</sup>

We think we can draw two conclusions from this data. First, though the increasing presence of elite lawyers in patent cases may have contributed to the growth of the Supreme Court's patent caseload, judging by the rates of citations to cases involving cert petitions filed by those elite lawyers, it seems unlikely that it is those lawyers who are directing the Supreme Court to relatively inconsequential patent-related issues. To the contrary, the higher rates at which the Federal Circuit cites cases involving elite lawyers could be interpreted to mean that the presence of an elite lawyer on the cert petition is actually a decent proxy for the "importance" of the question presented.<sup>261</sup>

<sup>&</sup>lt;sup>256</sup> All but three of our 21 patent-related cases with petitions filed by elite lawyers involved lawyers who delivered ten or more arguments from the 1992 through 2021 Terms. Overall, there are only 90 lawyers who meet that benchmark—and roughly half of them work (or used to work) in the Office of the Solicitor General and so aren't fully relevant to our analysis of cert petitions filed on behalf of private parties in patent litigation.

<sup>&</sup>lt;sup>257</sup> Again, excluding the Supreme Court's very recent decision in *Amgen Inc. v. Sanofi*, 143 S. Ct. 1243 (2023). *See supra* note 239.

<sup>&</sup>lt;sup>258</sup> See supra notes 174-77 and accompanying text.

<sup>&</sup>lt;sup>259</sup> Overall, 52% of cases in our dataset involved questions of statutory interpretation or jurisdiction/procedure. *See supra* Section II.C.

<sup>&</sup>lt;sup>260</sup> Overall, 37% of cases in our dataset involved the common law of patents. See id.

<sup>&</sup>lt;sup>261</sup> *Cf.* Narechania, *supra* note 74, at 939-41 (exploring the criteria the Court might consider in applying the "important-questions standard" for granting certiorari under Supreme Court Rule 10(c)).

Second, as a matter of litigation strategy at the cert stage, it might not be as important to frame a patent-related case as *not* about core, common law patent issues, as the conventional wisdom would suggest. Elite lawyers, at least, have had notable success persuading the Court to grant cert in core cases; in fact, cases involving elite lawyers are a little more likely than the average Supreme Court patent case to present questions involving the rich, long-standing, and sometimes obtuse common law of patents.

# F. Is This All About Justice Breyer?<sup>262</sup> (Or Justice Thomas? Or Maybe Justice Gorsuch?)

While we often speak of the Supreme Court as a single entity, it is, of course, composed of nine individuals, many of whom have very different views about the law. And there is reason to suspect that many Justices don't actually think or care that much about patent law.<sup>263</sup>

Justice Breyer was the exception during most of the period of our study. He wrote about intellectual property when he was a law professor, and many considered him the person on the Court who was most interested in patent law.<sup>264</sup> But some have also pointed to the role Justice Thomas plays in patent cases.<sup>265</sup> And Justice Gorsuch has been active in many patent cases since he joined the bench.<sup>266</sup>

In patent law, a single Justice who cares deeply about the field (on the reasonable assumption that most of the Justice's colleagues do not) could have a disproportionate influence that wouldn't be possible in an area such as, say, constitutional law, in which all the Justices are engaged and have strong priors. Unlike Supreme Court cases overall, most Supreme Court patent cases are

<sup>&</sup>lt;sup>262</sup> See, e.g., Cohen, *supra* note 10, at 428 ("Justice Breyer has become the patent law judge on the Court.").

<sup>&</sup>lt;sup>263</sup> Justice Scalia, for instance, provided evidence from which to infer he wasn't a fan of patent cases. *See, e.g., Piers Morgan Live: Interview with Antonin Scalia* (CNN television broadcast July 18, 2012) (transcript available at https://transcripts.cnn.com/show/pmt/date/2012-07-18/segment/01 [https://perma.cc/S7MM-G3WR]) (Question: "What has been your hardest decision, do you think?" Answer: "[I]t's the dullest case imaginable. . . . [T]here is no necessary correlation between the difficulty of a decision and its importance. Some of the most insignificant cases have been the hardest. . . . It would probably be a patent case."); Ass'n for Molecular Pathology v. Myriad Genetics, Inc., 569 U.S. 576, 596 (2013) (Scalia, J., concurring in part and concurring in the judgment) (refusing to join portions of the majority opinion "going into fine details of molecular biology" because "I am unable to affirm those details on my own knowledge or even my own belief").

<sup>&</sup>lt;sup>264</sup> See supra notes 78-81 and accompanying text.

<sup>&</sup>lt;sup>265</sup> See Robert W. Gomulkiewicz, The Supreme Court's Chief Justice of Intellectual Property Law, 22 NEV. L.J. 505, 507 (2022).

<sup>&</sup>lt;sup>266</sup> See Daniel D. Kim & Jonathan Stroud, Administrative Oversight: Justice Gorsuch's Patent Opinions, the PTAB, and Antagonism Toward the Administrative State, 18 CHI.-KENT J. INTELL. PROP. 53, 54-55 (2019).

decided unanimously<sup>267</sup>: 35 of the 63 merits decisions, or 56%, in our dataset.<sup>268</sup> So a Justice who really wanted to influence the direction of patent law would have ample opportunities to seek out opinion assignments in the field.<sup>269</sup> In other fields, by contrast, majority opinion assignments might be highly sought-after and, therefore, few and far between for any given Justice.<sup>270</sup>

To test the influence of Justice Breyer and his colleagues on patent law, we determined the number of cases in which each Justice participated, their votes, and the number of times that Justice wrote a majority opinion, concurrence, or dissent.

Based on that analysis, we find that the role of Justice Breyer in influencing patent law is possibly overestimated. Justice Breyer participated in 56 patent cases during his tenure on the Court.<sup>271</sup> He voted with the majority in 47 of them. Roughly half of the cases in which Justice Breyer participated (30 of 56, or 54%), and 64% of cases in which Justice Breyer joined the majority opinion without writing separately, were unanimous decisions. But Justice Breyer wrote only six majority opinions during his time on the Court, two of which were unanimous. In other words, Justice Breyer, having written the majority opinion in fewer than 13% of the patent cases in which he voted with the majority,

<sup>&</sup>lt;sup>267</sup> We considered a decision to be unanimous if all participating Justices joined the majority opinion, at least in part, and there were no recorded dissents. Our measure of unanimity, it should be noted, *understates* the amount of consensus on the Court in patent cases because it excludes three cases in which the Court voted unanimously on the outcome (affirm, reverse, etc.) but at least one Justice concurred in the judgment only. Microsoft Corp. v. i4i Ltd. P'ship, 564 U.S. 91, 115 (2011); Bilski v. Kappos, 561 U.S. 593, 613 (2010); Holmes Grp., Inc. v. Vornado Air Circulation Sys., Inc., 535 U.S. 826, 839 (2002).

<sup>&</sup>lt;sup>268</sup> In a study examining a shorter time period, Greg Mandel found that the Court issued a unanimous decision in 78% of "substantive patent cases." Mandel, *supra* note 6, at 853. By contrast, from 1946 through 2013, over half of all Supreme Court decisions were accompanied by at least one dissenting opinion. Cass R. Sunstein, *Unanimity and Disagreement on the Supreme Court*, 100 CORNELL L. REV. 769, 782 fig.14 (2015).

<sup>&</sup>lt;sup>269</sup> *Cf.* Edward K. Cheng, *The Myth of the Generalist Judge*, 61 STAN. L. REV. 519, 526, 543 (2008) (finding that federal courts of appeals judges tend to specialize in writing opinions in certain fields and concluding that judges might sometimes "actively seek opinions in areas in which they have expertise or interest").

<sup>&</sup>lt;sup>270</sup> *Cf.* Jeffrey Toobin, *Clarence Thomas's Twenty-Five Years Without Footprints*, NEW YORKER (Oct. 25, 2016), https://www.newyorker.com/news/daily-comment/clarence-thomass-twenty-five-years-without-footprints (speculating that neither Chief Justice Rehnquist nor Chief Justice Roberts "trusted [Justice] Thomas to write an opinion in a big case that could command a majority of even his conservative colleagues").

<sup>&</sup>lt;sup>271</sup> In this discussion, we include *LabCorp*, because, though it was a dismissal of cert as improvidently granted, not a decision on the merits, it was accompanied by a dissenting opinion written by Justice Breyer (and joined by Justices Stevens and Souter). 548 U.S. 124, 125 (2006).

appears to have been no more likely than a randomly selected Justice to write the Court's opinion in a patent case.<sup>272</sup>

Justice Breyer was more likely to write in dissent or concurrence. Of the nine cases in which he dissented, he wrote an opinion in six. And out of the five cases in which Justice Breyer joined a concurring opinion, he wrote the opinion four times. But dissents and concurrences hardly seem a marker of influence over patent law or the Court's agenda in the field.

That said, it was Justice Breyer's dissent from the dismissal of certiorari in the 2006 case *Laboratory Corp. of America Holdings v. Metabolite Laboratories, Inc.*<sup>273</sup> that arguably triggered the Supreme Court to ultimately review four cases on that topic (patentable subject matter) in a five-year period. Indeed, it's possible—though difficult to test at this point in time—that Justice Breyer was pushing the Court to *hear* more patent cases even if he wasn't writing majority opinions. And a few of the majority opinions Justice Breyer did write seem disproportionately important. He wrote the opinions in *Mayo, Teva v. Sandoz*, and *Cuozzo Speed Technologies, LLC v. Lee,*<sup>274</sup> all of which show up on our list of the ten patent cases most frequently cited by the Federal Circuit.<sup>275</sup> Yet his other three majority opinions—*Medtronic, Inc. v. Mirowski Family Ventures, LLC,*<sup>276</sup> *Dickinson v. Zurko,*<sup>277</sup> and *FTC v. Actavis, Inc.*<sup>278</sup>—are cited with average-to-below-average frequency and, we would suggest, are similarly of average-to-below-average importance to patent lawyers (if not antitrust lawyers).<sup>279</sup>

Interestingly, Justice Thomas seems to have had as much, if not more, influence on patent law than Justice Breyer. Through the end of the 2022 Term,

<sup>&</sup>lt;sup>272</sup> Indeed, though Justice Breyer had a scholarly background in copyright law, there wasn't an explosion of copyright cases during his time on the Court either. *See* Samuelson, *supra* note 18, at 2 (reporting that the Court granted cert in only 30 copyright cases over the 46-year period from 1978 through 2022).

<sup>&</sup>lt;sup>273</sup> *LabCorp*, 548 U.S. at 125.

<sup>&</sup>lt;sup>274</sup> 136 S. Ct. 2131 (2016).

<sup>&</sup>lt;sup>275</sup> See supra Table 1.

<sup>&</sup>lt;sup>276</sup> 571 U.S. 191 (2014).

<sup>&</sup>lt;sup>277</sup> 527 U.S. 150 (1999).

<sup>&</sup>lt;sup>278</sup> 570 U.S. 136 (2013).

<sup>&</sup>lt;sup>279</sup> It's not terribly surprising to see that the former administrative law professor—and at the time the most junior Justice on the Court—was assigned the opinion in *Dickinson v. Zurko*, which held that the Administrative Procedure Act's standards of review apply to PTO factfinding. 527 U.S. 150, 152 (1999). Similarly, it's not shocking to consider that, in *Actavis* (which was more of an antitrust case than a case about patent law anyway), Justice Kennedy (the senior Justice in the majority), assigned the opinion to Justice Breyer—a former Special Assistant to the U.S. Attorney General for Antitrust and likely a more moderate voice on competition issues than the other Justices in the majority (Ginsburg, Sotomayor, and Kagan). FTC v. Actavis, Inc., 570 U.S. 136, 140 (2013); *see also* SHAPIRO ET AL., *supra* note 72, ch. 1.3 (noting that, by custom, the opinion-writing assignment is made by the Chief Justice, if the Chief is in the majority, or, if the Chief is not in the majority, by the senior-most Associate Justice).

Justice Thomas had participated in 59 patent cases. He voted with the majority in 53 of those cases (90%). Similar to Justice Breyer, 32 of those decisions (60%) were unanimous, and 63% of cases in which Justice Thomas joined the majority opinion without writing separately were unanimous decisions.

But, where Justice Breyer wrote only six majority opinions, Justice Thomas has written 13. That is, Justice Thomas has written the Court's opinion in almost quarter of the patent cases in which he has been in the majority (24.5%)—a far greater percentage of majority opinions than we would expect a randomly selected Justice to write. Also, unlike Justice Breyer, who wrote the same number of dissents as majority opinions, Justice Thomas has found himself writing dissents far less frequently, penning only three dissenting opinions in his six times in dissent.<sup>280</sup>

Similar to Justice Breyer, Justice Thomas wrote two opinions that appear on the list of the ten Supreme Court patent cases most often cited by the Federal Circuit: *Alice* and *Warner-Jenkinson Co. v. Hilton Davis Chemical Co.*<sup>281</sup> And Justice Thomas's opinion in *TC Heartland*,<sup>282</sup> though cited only an average amount by the Federal Circuit, indisputably changed where patentees file infringement suits—ending the decade-long run of Marshall, Texas, as the capital of U.S. patent litigation<sup>283</sup> and pushing those cases to Delaware and (perhaps surprisingly)<sup>284</sup> the Western District of Texas.<sup>285</sup>

Justice Thomas also played a key role in what most lawyers would agree are the two most significant big-picture developments in patent law over the past twenty years: the Supreme Court's reinvigoration of the patentable subject matter requirement<sup>286</sup> and the AIA's expansion of post-issuance review proceedings at the PTO.<sup>287</sup> Though Justice Breyer's dissent from the dismissal of certiorari in *LabCorp* foreshadowed the developments in the law of patentable subject matter, Justice Breyer wrote only one of the four majority opinions on that issue (*Mayo*). Justice Thomas, however, wrote two: *Association for Molecular Pathology v. Myriad Genetics, Inc.*<sup>288</sup> and *Alice*. Likewise, Justice

<sup>283</sup> See Xuan-Thao Nguyen, Justice Scalia's "Renegade Jurisdiction": Lessons for Patent Law Reform, 83 TUL. L. REV. 111, 134 (2008).

<sup>&</sup>lt;sup>280</sup> Justice Thomas also wrote two concurring opinions.

<sup>&</sup>lt;sup>281</sup> 520 U.S. 17 (1997).

<sup>&</sup>lt;sup>282</sup> TC Heartland LLC v. Kraft Foods Grp. Brands LLC, 137 S. Ct. 1514, 1516 (2017).

<sup>&</sup>lt;sup>284</sup> See Anderson & Gugliuzza, supra note 36, at 421.

<sup>&</sup>lt;sup>285</sup> See DOCKET NAVIGATOR, supra note 133, at 16 (reporting that, in 2021, 24% of patent cases were filed in the Western District of Texas, 22% were filed in the District of Delaware, and 11% were filed in the Eastern District of Texas—down from 44% in 2015, see Anderson & Gugliuzza, supra note 36, at 444 fig.1).

<sup>&</sup>lt;sup>286</sup> For an overview of this development, see Jason D. Reinecke, *Is the Supreme Court's Patentable Subject Matter Test Overly Ambiguous? An Empirical Test*, 2019 UTAH L. REV. 581, 581.

<sup>&</sup>lt;sup>287</sup> See Jason Rantanen, *Administering Patent Law*, 104 IOWA L. REV. 2299, 2302 (2019) (discussing the effects of the AIA).

<sup>&</sup>lt;sup>288</sup> 569 U.S. 576 (2013).

Thomas wrote the opinion for a seven-Justice majority in *Oil States*—a case that could have declared administrative review of patent validity entirely unconstitutional.<sup>289</sup>

Justice Gorsuch, for his part, has been notable during his time on the Court for his high rate of dissent. He has dissented in four of the 11 patent cases in which he has participated from the time he took the bench in 2017 through the end of the 2022 Term, and he wrote dissents in three of those four. He also wrote two majority opinions over that time period,<sup>290</sup> meaning that Justice Gorsuch has written at least one opinion in nearly half of the patent cases he has decided.<sup>291</sup> Interestingly, only four of the 11 cases in which Justice Gorsuch has participated were decided unanimously.

As a matter of substance, Justice Gorsuch has made his skepticism of the AIA's regime of administrative review of patent validity clear, dissenting in both cases in which the Court upheld the regime against a constitutional challenge.<sup>292</sup> Whether these results reflect a general turn away from unanimity in patent cases, or whether Justice Gorsuch's penchant for dissenting has itself changed the norm of unanimity, remains to be seen.<sup>293</sup>

In sum, as with most of our analyses so far, the conclusions we can draw are complex. It's easy to look at Justice Breyer's background in IP law, the timing of his appointment, his noteworthy dissent in *LabCorp*, and his important majority opinion in *Mayo* and declare the modern era of patent law to be Justice Breyer's.

<sup>291</sup> By comparison, Justice Breyer wrote an opinion in 16 of the 56 patent cases in which he participated (29%) and Justice Thomas has written an opinion in 18 of 59 cases (31%).

<sup>&</sup>lt;sup>289</sup> Oil States Energy Servs., LLC v. Greene's Energy Grp., LLC, 138 S. Ct. 1365, 1370 (2018). Though Justice Breyer wrote the opinion in *Cuozzo*—another case involving the AIA—the stakes were lower: at issue was whether the federal courts could hear appeals of the PTO's decision to institute review (no) and whether the claim construction rules adopted by the PTO were a reasonable exercise of authority (yes). Cuozzo Speed Techs., LLC v. Lee, 136 S. Ct. 2131, 2136-37 (2016). For that matter, Justice Thomas also wrote a lower-stakes AIA opinion in *Helsinn Healthcare S.A. v. Teva Pharmaceuticals USA, Inc.*, 139 S. Ct. 628, 630 (2019), in which the Court held that the AIA did not change the rule that an invention may be "on sale"—and hence unpatentable—even if the sale does not make the details of the invention available to the public.

<sup>&</sup>lt;sup>290</sup> Amgen, Inc. v. Sanofi, 143 S. Ct. 1243, 1247 (2023); SAS Inst., Inc. v. Iancu, 138 S. Ct. 1348, 1352 (2018).

<sup>&</sup>lt;sup>292</sup> See Oil States, 138 S. Ct. at 1380 (Gorsuch, J., dissenting) (arguing that administrative review of patent validity violates Article III); United States v. Arthrex, Inc., 141 S. Ct. 1970, 1990 (2021) (Gorsuch, J., concurring in part and dissenting in part) (arguing that administrative patent review proceedings should be shut down because the method of appointing the PTO's administrative patent judges violates the Appointments Clause).

<sup>&</sup>lt;sup>293</sup> In the 53 patent cases decided by the Court between the creation of the Federal Circuit in 1982 and Justice Gorsuch's appointment in 2017, the Court issued a unanimous ruling in 31 of them (58%)—and that *doesn't* include three cases in which the Court was unanimous in its vote for the judgment, but at least one Justice didn't join the majority opinion, *see supra* note 267.

But the real story is more complicated. Though Justice Breyer was appointed a year before the Court heard *Markman*, Justice Thomas was appointed only three years before Justice Breyer. Of course, it's possible that Justice Thomas has received a lot of opinion assignments in patent cases not because he wants to write in those cases, but because, for much of his time on the Court, his extreme views made it impractical to assign him cases on more controversial topics.<sup>294</sup>

And Justice Gorsuch presents a chicken-or-egg problem. Yes, he's written a lot of opinions in patent cases. But he also happened to join the Court at the precise moment that, thanks to the AIA, patent cases involving agency powers—an issue on which Justice Gorsuch has long expressed strong views<sup>295</sup>—were making their way to the Court.

Thus, while some Justices may have had more impact on the development of patent law than others, and some Justices (such as Justice Breyer) may have stronger normative views about patent law than others, it seems implausible to claim that any single Justice has molded the Court's modern patent jurisprudence to that Justice's personal preferences.<sup>296</sup>

<sup>296</sup> Readers of this Article have also suggested we look at Justice Stevens—a former antitrust lawyer who therefore might have had a special interest in patents and their effect on market competition. Justice Stevens's record in patent cases is interesting, if somewhat ambiguous. He participated in 27 patent cases in our dataset and wrote only two majority opinions. Ill. Tool Works Inc. v. Indep. Ink, Inc., 547 U.S. 28, 29 (2006); Pfaff v. Wells Elecs., Inc., 525 U.S. 55, 56 (1998). But he wrote either a concurrence or a dissent in fully one-third of the patent cases in which he participated (five concurrences, four dissents). That data could be interpreted to mean that Justice Stevens *did* care about patent law, though he found himself unable to influence it very much.

Moreover, the tenure of Chief Justice Roberts, which began in 2005, roughly corresponds to the growth of patent-related cases on the Supreme Court's docket. And Chief Justice Roberts litigated several patent cases while he was in private practice, *e.g.*, Intergraph Corp. v. Intel Corp., 241 F.3d 1353, 1353 (Fed. Cir. 2001); Litton Sys., Inc. v. Honeywell Inc., 238 F.3d 1376, 1378 (Fed. Cir. 2001), suggesting that he understands patent law means a lot to the major corporations the Court has been said to be responsive to under his watch. *See, e.g.*, Jeffrey Toobin, *No More Mr. Nice Guy*, NEW YORKER (May 18, 2009), https://www.newyorker.com/magazine/2009/05/25/no-more-mr-nice-guy.

In short, there are many other Justice-specific theories one could posit; we'll leave that for future exploration. For now, our basic argument is that, unlike in prior eras, the modern era of Supreme Court patent law can't be said to be the making of any single Justice. *Cf.* Joseph P. Fishman, *Originality's Other Path*, 109 CALIF. L. REV. 861, 869 (2021) (discussing "Justice Joseph Story, early IP law's most influential jurist").

<sup>&</sup>lt;sup>294</sup> See Toobin, supra note 270.

<sup>&</sup>lt;sup>295</sup> See, e.g., Neil M. Gorsuch, *Of Lions and Bears, Judges and Legislators, and the Legacy of Justice Scalia*, 66 CASE W. RSRV. L. REV. 905, 915 (2016) (decrying a case he described as "an executive agency acting in a faux-judicial proceeding and exercising delegated legislative authority purport[ing] to overrule an existing judicial declaration about the meaning of existing law and apply[ing] its new legislative rule retroactively to already completed conduct" (emphasis omitted)).

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## IV. Myths and Reality About the Solicitor General and Patent $$\rm Law$$

Just as the Supreme Court is not a monolithic entity but a group of nine individuals, the Court doesn't act on patent law in isolation. For that reason, we now explore the role of other key actors in Supreme Court patent litigation: the Federal Circuit and, starting in this part, the Solicitor General, whose office represents the executive branch in all Supreme Court litigation.

The Solicitor General participates in Supreme Court patent cases both at the cert stage and on the merits. At the cert stage, the SG occasionally petitions for certiorari in cases in which the federal government is a party and is dissatisfied with the result below.<sup>297</sup> More commonly, however, the SG files amicus briefs in cases in which it is not a party in response to an order by the Court "calling for the views of the Solicitor General" (a "CVSG," in Supreme Court parlance). At the merits stage, the SG similarly participates as a party or as an amicus (often in cases in which the SG filed an amicus brief at the cert stage in response to a CVSG, but not always).

#### A. Does the SG Always Get Its Way at the Cert Stage?<sup>298</sup>

Across all cases (not just patent cases) the Court agrees with the SG's recommendation about whether to grant or deny certiorari nearly 80% of the time.<sup>299</sup> The Court agrees with the SG even more frequently in patent cases. From 1982 through the end of the 2020 Term, the SG filed briefs in 40 Federal Circuit patent cases in response to a CVSG order.<sup>300</sup> The Court agreed with the SG's recommendation in all but two, for an agreement rate of 95%. And, in one of the two cases in which the Court didn't follow the SG's recommendation to deny certiorari, the Court later dismissed certiorari as improvidently granted.<sup>301</sup> In short, over most of the Federal Circuit's existence, the conventional wisdom that the SG practically always gets its way at the cert stage seems correct.

Recent events, however, raise questions about whether the SG's influence is waning. In the 2021 and 2022 Terms, the Court disagreed with the SG's cert-stage recommendation in a remarkable *five* cases. In four of those cases, the

<sup>&</sup>lt;sup>297</sup> There are five cases in our dataset involving a petition filed by the SG. *See infra* Appendix A.

<sup>&</sup>lt;sup>298</sup> See Paul R. Gugliuzza (@prgugliuzza), X (May 26, 2022, 10:19 AM), https://twitter.com/prgugliuzza/status/1529829502578216960 [https://perma.cc/P645-RG7J] ("Strong likelihood that SCT will grant cert in Am Axle . . . . SCT has not followed SG's rec in only two patent cases . . . out of 37 [since 2002] . . . ."). *But see* Am. Axle & Mfg., Inc. v. Neapco Holdings LLC, 142 S. Ct. 2902, 2902 (2022) (making that tweet look bad).

<sup>&</sup>lt;sup>299</sup> Gugliuzza, *supra* note 88, at 1256 (78.9% from 2002 through 2016); David C. Thompson & Melanie F. Wachtell, *An Empirical Analysis of Supreme Court Certiorari Petition Procedures: The Call for Response and the Call for the Views of the Solicitor General*, 16 GEO. MASON L. REV. 237, 275-76 (2009) (78.5% from 1998 through 2004).

<sup>&</sup>lt;sup>300</sup> For a complete list of Federal Circuit patent cases involving a call for the views of the Solicitor General, see *infra* Appendix C.

<sup>&</sup>lt;sup>301</sup> Lab'y Corp. of Am. Holdings v. Metabolite Lab'ys, Inc., 548 U.S. 124, 125 (2006).

Court denied cert over the SG's recommendation to grant—something that had never before happened in a Federal Circuit patent case. And all five cases in which the Court disagreed with the SG's recommendation involved issues at the substantive, common-law core of patent law<sup>302</sup> on which, as we show below, the SG has historically been highly successful, at least on the merits. Though this is a small population of cert-stage decisions, it could suggest that the SG is losing its influence, perhaps because of ideological differences between the political party in the White House and the majority of the Court.<sup>303</sup> Or perhaps it's simply because a majority of Justices don't trust *anyone* but themselves.<sup>304</sup>

## B. Does the SG Always Win on the Merits?<sup>305</sup>

In the Federal Circuit era of the 1980s and early 1990s, we saw a laissez faire Supreme Court and a nigh invisible Solicitor General.<sup>306</sup> That quickly transitioned to frequent Supreme Court reversals of the Federal Circuit—often at the SG's urging—in the Supreme Court (or SG) era.<sup>307</sup> Overall, the Solicitor General has done well across the entire time period of our study. From 1982 (the year the Federal Circuit began operating) through 2023, the Supreme Court agreed with the SG's arguments in 40 of the 49 patent cases (82%) in which the SG filed a brief on the merits.<sup>308</sup> The SG has done particularly well in cases we

<sup>303</sup> See Gugliuzza & Koivula, *supra* note 162, at 492 fig.4 (charting increasing cert-stage disagreement between the Court and the SG—in all types of cases, not just patent cases— after the Obama Administration took office in 2009).

<sup>304</sup> See Lemley, *supra* note 39, at 97 ("[T]he Court has not been favoring one branch of government over another, or favoring states over the federal government, or the rights of people over governments. Rather, it is withdrawing power from all of them at once.").

<sup>&</sup>lt;sup>302</sup> Am. Axle, 142 S. Ct. at 2902 (patentable subject matter; denying certiorari despite the SG's recommendation to grant); Amgen Inc. v. Sanofi, 143 S. Ct. 399, 399 (2022) (enablement; granting certiorari despite the SG's recommendation to deny); Interactive Wearables, LLC v. Polar Electro Oy, 143 S. Ct. 2482, 2482 (2023) (patentable subject matter; denying certiorari despite the SG's recommendation to grant); Tropp v. Travel Sentry, Inc., 143 S. Ct. 2483, 2483-84 (2023) (patentable subject matter; denying certiorari despite the SG's recommendation to grant); Tropp v. Travel Sentry, Inc., 143 S. Ct. 2483, 2483-84 (2023) (patentable subject matter; denying certiorari despite the SG's recommendation to grant); Teva Pharms. USA, Inc. v. GlaxoSmithKline LLC, 143 S. Ct. 2483, 2483 (2023) (induced infringement; denying certiorari despite the SG's recommendation to grant).

<sup>&</sup>lt;sup>305</sup> See Duffy, supra note 18, at 551 (writing in 2010: "The Solicitor General's extraordinary winning streak in [patent] cases provides one of the best barometers of the respective influence that the Federal Circuit and the Solicitor General have in Supreme Court patent cases.").

<sup>&</sup>lt;sup>306</sup> The SG participated in only one patent case from 1982 through 1996. Asgrow Seed Co. v. Winterboer, 513 U.S. 179, 180 (1995).

<sup>&</sup>lt;sup>307</sup> See supra Section I.B.

<sup>&</sup>lt;sup>308</sup> One difficult coding decision worth noting is *FTC v. Actavis, Inc.*, 570 U.S. 136 (2013), which arose from the Eleventh Circuit, not the Federal Circuit. In *Actavis*, the Supreme Court reversed the lower court's judgment that the so-called reverse payment settlement at issue was immune from antitrust scrutiny, delivering a victory to the petitioner, the Federal Trade Commission ("FTC"). *Id.* at 160. The brief filed by the SG on behalf of the FTC, however,

categorized as falling within the core of patent law: The Court agreed with the SG over 90% of the time (in 24 cases out of 26).<sup>309</sup>

That's not terribly surprising. It's well documented that the Solicitor General—the so-called Tenth Justice<sup>310</sup>—sees the Supreme Court adopt its position in the vast majority of cases in which it participates.<sup>311</sup> Indeed, given patent law's reputation as a specialized, technical field, we might expect the Court to be particularly inclined to defer to the SG's considered advice on substantive patent law issues<sup>312</sup>—which is precisely what we see in core cases.<sup>313</sup>

But a closer look at the Supreme Court patent cases in which the SG participated on the merits reveals important nuance. In terms of timing, things started to change around the time Duffy wrote his 2010 article arguing that the Federal Circuit stood in the Solicitor General's shadow.<sup>314</sup> From 1982 through 2010 (the year before Congress passed the AIA), the Supreme Court rejected the SG's arguments on the merits in only one patent case out of the 16 in which the

<sup>312</sup> See William N. Eskridge, Jr. & Lauren E. Baer, *The Continuum of Deference: Supreme Court Treatment of Agency Statutory Interpretations from* Chevron *to* Hamdan, 96 GEO. L.J. 1083, 1113 (2008) (noting that the SG's amicus briefs are "particularly influential" in "technical areas such as patents, transportation, and communications").

<sup>313</sup> Colleen Chien attributes the SG's remarkable success to its status as an "outsider" to the patent system-someone who can highlight "the impact of patent law jurisprudence on consumer welfare, competition, and related interests." Chien, supra note 128, at 429-32. Cf. Samuelson, supra note 18, at 2-4, 47-50 (noting that the SG's success rate in copyright cases is much lower than in patent cases, perhaps because the SG supports stronger copyright protection as a policy matter rather than approaching the issue neutrally). It's worth noting that the SG typically includes PTO lawyers on its briefs in patent cases, which might give the Court an additional reason to defer to the SG's views. Interestingly, however, there have been at least a couple cases in which PTO officials did not appear on the SG's brief. See Narechania, supra note 9, at 871 (discussing the lack of PTO representation on the SG's brief in Myriad, which presented the question of whether human genes are patentable subject matter). A particularly intriguing recent example is the SG's brief in response to a CVSG in Amgen Inc. v. Sanofi. That brief-on which no PTO official appeared-recommended the Court deny a petition raising questions about Federal Circuit case law on the Patent Act's enablement requirement. Brief for the United States as Amicus Curiae at 1, Amgen Inc. v. Sanofi, 143 S. Ct. 1243 (2023) (No. 21-757), 2022 WL 4386300, at \*1. Despite the SG's recommendation to deny, the Court granted the petition. Amgen Inc. v. Sanofi, 143 S. Ct. 399, 399 (2022).

<sup>314</sup> Duffy, *supra* note 18, at 520.

focused mainly the argument that reverse payment agreements should be presumptively unlawful and reviewed only under a "quick look" approach. Brief for the Petitioner at 40, *Actavis*, 570 U.S. 136 (No. 12-416). The Court rejected the SG's position in part, instead holding that courts must apply a full, "rule of reason" analysis. *Actavis*, 570 U.S. at 158-59. Ultimately, for the purpose of this Article, we treat *Actavis* as an instance of Supreme Court agreement with the SG, though we note the partial nature of that agreement in Appendix A.

<sup>&</sup>lt;sup>309</sup> The two core cases in which the Court disagreed with the SG were *Helsinn* and *Mayo*.

<sup>&</sup>lt;sup>310</sup> CAPLAN, *supra* note 128, at 3.

<sup>&</sup>lt;sup>311</sup> See, e.g., Andrew Pincus, *The Solicitor General's Report Card*, SCOTUSBLOG (July 2, 2014, 3:40 PM), https://www.scotusblog.com/2014/07/the-solicitor-generals-report-card [https://perma.cc/RD3M-LREP] (77% in 2013 Term).

SG participated.<sup>315</sup> But, since that time, the Court has rejected the SG's arguments in eight patent cases—roughly a quarter of the 33 patent cases in which the SG has participated on the merits. And, in four of those eight cases, the Supreme Court affirmed the Federal Circuit over the SG's recommendation to reverse<sup>316</sup>—something that had never happened before 2011.

The SG's performance also varies depending on whether it is participating in the case as a party or an amicus. There are 12 cases in our dataset in which the SG participated as a party. The Court agreed with the SG in only six. And four of the six disagreements have occurred since 2018.<sup>317</sup> Conversely, the Court agreed with the SG as an amicus in a remarkable 34 of 37 cases (92%).

Similarly, as we step away from cases in patent law's core, the SG's performance becomes less exceptional. In cases we categorized as peripheral, the Court agreed with the SG in 16 of 23—a 70% agreement rate that is consistent with data on the SG's success rate across all types of cases.<sup>318</sup>

Conversely, the SG does extremely well in cases involving the common law of patents and issues of jurisdiction and procedure. The Court agreed with the SG in 28 out of the 30 cases we placed in those two categories combined (93%).<sup>319</sup> Indeed, the SG was eight for eight in the jurisdiction/procedure cases in which it participated.<sup>320</sup>

That latter result—the SG's perfect record in cases involving questions of jurisdiction or procedure—is particularly intriguing in light of our finding that the SG did *worse* in peripheral cases as compared to core patent cases. It turns out that the SG's poor record in peripheral cases is driven almost entirely by a poor performance in peripheral cases involving statutory interpretation or

<sup>318</sup> See Pincus, supra note 311 (reporting a 60-80% win rate for the SG).

<sup>319</sup> The only disagreements were *Mayo Collaborative Services v. Prometheus Laboratories, Inc.*, 566 U.S. 66, 89-90 (2012), and *Hyatt*, 566 U.S. at 432-33.

<sup>&</sup>lt;sup>315</sup> See Fla. Prepaid Postsecondary Educ. Expense Bd. v. Coll. Sav. Bank, 527 U.S. 627, 629-30 (1999) (holding that it was unconstitutional for Congress to abrogate the states' sovereign immunity from claims for patent infringement).

<sup>&</sup>lt;sup>316</sup> Helsinn Healthcare S.A. v. Teva Pharms. USA, Inc., 139 S. Ct. 628, 630 (2019); Peter v. NantKwest, Inc., 140 S. Ct. 365, 369 (2019); Kappos v. Hyatt, 566 U.S. 431, 432-33 (2012); Bd. of Trs. of Leland Stanford Jr. Univ. v. Roche Molecular Sys., Inc., 563 U.S. 776, 779 (2011). In addition, the Court agreed with the Federal Circuit's analysis of the Appointments Clause issue and disagreed with the SG in *United States v. Arthrex, Inc.*, 141 S. Ct. 1970, 1973, 1975 (2021).

<sup>&</sup>lt;sup>317</sup> Arthrex, 141 S. Ct. at 1973-75; NantKwest, 140 S. Ct. at 369; Return Mail, Inc. v. USPS, 139 S. Ct. 1853, 1857-58 (2019); SAS Inst., Inc. v. Iancu, 138 S. Ct. 1348, 1351-52 (2018).

<sup>&</sup>lt;sup>320</sup> Sandoz Inc. v. Amgen Inc., 137 S. Ct. 1664, 1668 (2017); Teva Pharms. USA, Inc. v. Sandoz, Inc., 574 U.S. 318, 320-21 (2015); Highmark Inc. v. Allcare Health Mgmt. Sys., Inc., 572 U.S. 559, 559-60 (2014); Medtronic, Inc. v. Mirowski Fam. Ventures, LLC, 571 U.S. 191, 193 (2014); Caraco Pharm. Lab'ys, Ltd. v. Novo Nordisk A/S, 566 U.S. 399, 402-03 (2012); MedImmune, Inc. v. Genentech, Inc., 549 U.S. 118, 119 (2007); Unitherm Food Sys., Inc. v. Swift-Eckrich, Inc., 546 U.S. 394, 396 (2006); Dickinson v. Zurko, 527 U.S. 150, 151 (1999).

nonpatent substantive issues, where the SG saw its position rejected six out of 12 times.<sup>321</sup> And, in four of those six cases, the SG was participating on behalf of the federal government as a party.<sup>322</sup>

Overall, the SG's performance on questions of statutory interpretation hasn't been too bad—the Court has agreed with the SG in nine of 14 statutory interpretation cases since 1982. But four of the five disagreements have occurred in the last five years,<sup>323</sup> and three of those four involved the AIA.<sup>324</sup> And the SG was a party in three of four of those cases.<sup>325</sup> Likewise, the SG lost in two of the three cases we categorized as involving questions of constitutional law, two of which involved the AIA.<sup>326</sup>

To summarize: the conventional wisdom that the SG is highly influential on the merits in patent-related Supreme Court cases is broadly correct, but with some crucial caveats. Namely, the SG is most successful in cases in the common law core of patent law and when it is participating as an amicus. By contrast, as a party and in cases involving statutory interpretation or jurisdiction and procedure, the SG's performance is unexceptional at best.

#### V. MYTHS AND REALITY ABOUT THE FEDERAL CIRCUIT AND PATENT LAW

We've already shown how, on balance, the Supreme Court is less favorable to patentees than the Federal Circuit and how the Supreme Court tends to favor standards over rules—though perhaps not as much as commonly perceived.

In this part, we look to how the Federal Circuit fits into the framework of the court system. Many observers have surmised that the Federal Circuit—predictably for an expert, specialized tribunal—has been reluctant to follow the Supreme Court's commands.<sup>327</sup> The Supreme Court itself spurred some of that speculation, with the Justices openly criticizing the Federal Circuit at oral

<sup>&</sup>lt;sup>321</sup> Arthrex, 141 S. Ct. at 1973-75; NantKwest, 140 S. Ct. at 369; Return Mail, 139 S. Ct. at 1857-58; SAS, 138 S. Ct. at 1351-52; Stanford v. Roche, 563 U.S. at 779; Fla. Prepaid Postsecondary Educ. Expense Bd. v. Coll. Sav. Bank, 527 U.S. 627, 629-30 (1999).

<sup>&</sup>lt;sup>322</sup> Arthrex, 141 S. Ct. at 1973-75; NantKwest, 140 S. Ct. at 369; Return Mail, 139 S. Ct. at 1857-58; SAS, 138 S. Ct. at 1351-52.

<sup>&</sup>lt;sup>323</sup> *NantKwest*, 140 S. Ct. at 369; *Return Mail*, 139 S. Ct. at 1857-58; Helsinn Healthcare S.A. v. Teva Pharmaceuticals USA, Inc., 139 S. Ct. 628, 630 (2019); *SAS*, 138 S. Ct. at 1351-52.

<sup>324</sup> Helsinn, 139 S. Ct. at 628; Return Mail, 139 S. Ct. at 1853; SAS, 138 S. Ct. at 1351.

<sup>&</sup>lt;sup>325</sup> The SG argued but was not a party in *Helsinn*. 139 S. Ct. at 628.

<sup>&</sup>lt;sup>326</sup> Losses: *Arthrex*, 141 S. Ct. at 1973-75 (AIA) and *Florida Prepaid*, 527 U.S. at 629. Win: *Oil States Energy Services*, *LLC v. Greene's Energy Group*, *LLC*, 138 S. Ct. 1365, 1369-70 (2018) (AIA).

<sup>&</sup>lt;sup>327</sup> See Golden, supra note 11, at 659 (citing commentary).

argument<sup>328</sup> and raising questions in opinions about how the circuit's subjectmatter specialization might negatively affect development of the law.<sup>329</sup>

But is it true that the Supreme Court hardly ever agrees with the Federal Circuit? And can changes in the relationship between the two courts be explained not by the actions of the Supreme Court, but by changes to the Federal Circuit itself? We attempt to answer those questions in this part.

## A. Is the Federal Circuit One of the Supreme Court's Favorite Punching Bags?<sup>330</sup>

The conventional wisdom for a while has been that the Federal Circuit is the new Ninth Circuit—among the Supreme Court's favorite targets for harsh reversals.<sup>331</sup> Overall, that notion has a kernel of truth: The Supreme Court agreed with the Federal Circuit, in whole or in part, in only 30% (18 of 60) of patent decisions from 1982 through 2023.<sup>332</sup>

But breaking the cases apart by type reveals some interesting distinctions. Setting aside for the moment cases involving the AIA, the circuit's' performance looks consistent: The Supreme Court agreed with the Federal Circuit in 25% of the cases we coded as peripheral (six of 24)<sup>333</sup> and in 28% of cases we coded as core (eight of 29).<sup>334</sup> The AIA complicates the story, however. The Court agreed with the Federal Circuit (in whole or in part) in three of six peripheral cases that

<sup>&</sup>lt;sup>328</sup> See supra notes 121-22 and accompanying text.

<sup>&</sup>lt;sup>329</sup> See, e.g., Holmes Grp., Inc. v. Vornado Air Circulation Sys., Inc., 535 U.S. 826, 839 (2002) (Stevens, J., concurring in part and concurring in the judgment) ("[O]ccasional decisions [on issues of patent law] by courts with broader jurisdiction will provide an antidote to the risk that the specialized court may develop an institutional bias.").

<sup>&</sup>lt;sup>330</sup> See, e.g., Lucas S. Osborn, *Instrumentalism at the Federal Circuit*, 56 ST. LOUIS U. L.J. 419, 452 (2012) ("Not only does the Supreme Court reverse the Federal Circuit often, but also its rhetoric toward the Federal Circuit has been described as 'severely critical' and 'testy,' increasingly disdainful,' and 'harsh'...." (first quoting Dreyfuss, *supra* note 8, at 800-01, and then quoting John M. Golden, *The Federal Circuit and the D.C. Circuit: Comparative Trials of Two Semi-Specialized Courts*, 78 GEO. WASH. L. REV. 553, 559 (2010))); Christa Laser, *Rethinking Patent Law's Exclusive Appellate Jurisdiction*, 71 CLEV. ST. L. REV. 19, 39 (2022).

<sup>&</sup>lt;sup>331</sup> Arthur J. Gajarsa & Lawrence P. Cogswell, III, *The Federal Circuit and the Supreme Court*, 55 AM. U. L. REV. 821, 842 (2006); *see also Why Does the U.S. Supreme Court Keep Reversing the Federal Circuit?*, OBWB (Mar. 31, 2017), https://www.obwbip.com/ newsletter/why-does-the-u-s-supreme-court-keep-reversing-the-federal-circuit [https://perma.cc/3GCZ-VRH3].

<sup>&</sup>lt;sup>332</sup> The figures reported in this Section include three patent-related cases that did not arise from the Federal Circuit but in which the Supreme Court explicitly considered Federal Circuit case law. FTC v. Actavis, Inc., 570 U.S. 136, 146-47 (2013), Gunn v. Minton, 569 U.S. 251, 251-52 (2011), and Bonito Boats, Inc. v. Thunder Craft Boats, Inc., 489 U.S. 141, 144 (1989) (all disapproving). *See supra* note 223.

<sup>&</sup>lt;sup>333</sup> The six agreements were: *NantKwest, Kappos v. Hyatt, Stanford v. Roche, i4i,* and *Christianson. See infra* Appendix A.

<sup>&</sup>lt;sup>334</sup> The eight agreements were: *Amgen v. Sanofi, Alice, Bowman v. Monsanto, Myriad* (partial), *Bilski, J.E.M. Ag Supply, Warner-Jenkinson* (partial), and *Eli Lilly. See id.* 

involved the AIA.<sup>335</sup> The Court also agreed with the Federal Circuit in the one AIA case on a core issue.<sup>336</sup> Including that AIA case and excluding the five remedies cases that we, with hesitation, categorized as 'core,'<sup>337</sup> the circuit saw its position adopted by the Supreme Court over a third of the time in core cases.

The differences across the nature of the question presented are starker. In cases we categorized as involving the common law of patents, the Supreme Court agreed with the Federal Circuit, in whole or in part, in eight out of 22 cases, or 36%. (Remove three remedies cases from that group and the agreement rate increases to 42%.)<sup>338</sup> The figures for cases involving statutory interpretation are similar—the Supreme Court agreed with the Federal Circuit in six out of 16 cases, or 38%. Where the Federal Circuit fared terribly (in addition to the remedies cases) was in cases we coded as involving jurisdiction or procedure: the Supreme Court disagreed with the Federal Circuit in 15 of 16, the only exception being the 1988 decision in *Christianson v. Colt Industries Operating Corp.*<sup>339</sup>

We've thrown lots of numbers around on the past few pages, so, to summarize, a few key takeaways from this analysis of the relationship between the Supreme Court and the Federal Circuit. First, considering all the flak the Federal Circuit catches for flouting the Supreme Court, the evidence is surprisingly equivocal. If we exclude cases about jurisdiction or procedure, the Supreme Court agrees with the Federal Circuit at a respectable clip of 39% (17 of 44 cases). Throw out the five cases about remedies for patent infringement and that agreement rate increases to 44%. And the Supreme Court-Federal Circuit agreements include five of the ten most-cited cases of the past several decades: *Markman, Warner-Jenkinson* (partial agreement), *Alice, Cuozzo*, and *Arthrex* (partial agreement).<sup>340</sup>

Second, the Federal Circuit's poor performance before the Supreme Court such as it is—is driven largely by cases that aren't really "patent cases," particularly cases about jurisdiction and procedure. And it's questionable how important those cases are. The Supreme Court's 16 patent-related jurisdiction or

<sup>&</sup>lt;sup>335</sup> United States v. Arthrex, 141 S. Ct. 1970, 1976 (2021) (partial); Oil States Energy Servs., LLC v. Greene's Energy Grp., LLC, 138 S. Ct. 1365, 1379 (2021); Cuozzo Speed Techs., LLC v. Lee, 136 S. Ct. 2131, 2146 (2016).

<sup>&</sup>lt;sup>336</sup> Helsinn Healthcare SA v. Teva Pharms. USA, Inc., 139 S. Ct. 628, 634 (2019).

<sup>&</sup>lt;sup>337</sup> *See supra* note 172.

<sup>&</sup>lt;sup>338</sup> If we were to treat the five borderline common law/statutory interpretation cases that we coded as common law as, instead, statutory interpretation, *see supra* notes 182-87, and stuck to our coding of remedies cases as 'common law,' the Supreme Court-Federal Circuit agreement rate in common law cases would be 35%, because the Court agreed with the circuit in two of the borderline common law/statutory interpretation cases (*Bilski* and *i4i*).

<sup>&</sup>lt;sup>339</sup> 486 U.S. 800 (1988). The 15 disagreements: *TC Heartland, Amgen v. Sandoz, Teva v. Sandoz, Highmark, Medtronic, Gunn v. Minton, Caraco, Carlsbad, MedImmune, Unitherm, Holmes Group, Nelson v. Adams, Zurko, Cardinal Chemical, and Dennison v. Panduit. See infra Appendix A.* 

<sup>&</sup>lt;sup>340</sup> See supra Table 1.

procedure cases have been cited by the Federal Circuit, on average, 3.9 times per year, noticeably less than the average Supreme Court patent case (5.0).<sup>341</sup>

Moreover, there are plausible arguments that even the highly cited cases in that group of 16 jurisdiction or procedure cases haven't mattered very much. For instance, though the Court relaxed the standard of appellate review for claim construction in Teva v. Sandoz,<sup>342</sup> it's not clear that those changes have significantly affected practice on the ground.<sup>343</sup> Similarly, though the Court in Dickinson v. Zurko mandated that the Federal Circuit apply the Administrative Procedure Act's standards of review when reviewing factfinding by the PTO,<sup>344</sup> the end result was that the "clear error" standard of review was replaced by the "substantial evidence" standard<sup>345</sup>—a difference that we suspect is rarely outcome-determinative.<sup>346</sup> Likewise, the Court made it easier for potential infringers to file declaratory judgment suits in MedImmune, Inc. v. Genentech, Inc.<sup>347</sup> But declaratory judgment actions account for only a fraction of patent cases in the federal courts, and the AIA further reduced their importance by creating new opportunities for infringers to seek post-issuance review in relatively inexpensive and streamlined proceedings at the PTO, as opposed to challenging validity in federal district court litigation.<sup>348</sup>

Finally, the Federal Circuit has fared well in recent Supreme Court cases involving the AIA, regardless of the type of case or nature of the question presented. This could, perhaps, be due to changing membership on the Federal Circuit itself, the topic we turn to next.

<sup>&</sup>lt;sup>341</sup> See supra Section III.D.

<sup>&</sup>lt;sup>342</sup> 574 U.S. at 322 (holding that the Federal Circuit must apply clear error review, not de novo review, to the factual aspects of claim construction).

<sup>&</sup>lt;sup>343</sup> *Cf.* Lee Petherbridge & R. Polk Wagner, Teva *and the Process of Claim Construction*, 70 FLA. L. REV. 379, 381 (2018) ("[T]]he Supreme Court's resolution of how much deference is due a district court's claim construction decision is likely to have only very modest effects on the incidence of deference to district court claim construction . . . . And yet, *Teva* is still an important case . . . because it is likely to have a substantial impact on the incentives that drive the *methodology* of patent claim construction.").

<sup>&</sup>lt;sup>344</sup> Dickinson v. Zurko, 527 U.S. 150, 154 (1999).

<sup>&</sup>lt;sup>345</sup> In re Gartside, 203 F.3d 1305, 1312 (Fed. Cir. 2000).

<sup>&</sup>lt;sup>346</sup> For one study finding different reversal rates under the two standards (albeit by different reviewing tribunals), see Paul R. Verkuil, *An Outcomes Analysis of Scope of Review Standards*, 44 WM. & MARY L. REV. 679, 719 (2002).

<sup>&</sup>lt;sup>347</sup> 549 U.S. 118, 121 (2007).

<sup>&</sup>lt;sup>348</sup> See Ryan Davis, Venue Ruling May Spur Patent Owners To Sue First, Talk Later, LAW360 (May 24, 2021, 12:31 PM), https://www.law360.com/articles/1387388/venue-ruling-may-spur-patent-owners-to-sue-first-talk-later (reporting that fewer than 150 patent declaratory judgment suits were filed in 2018 and 2019, down from about 350 per year before Congress enacted the AIA).

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### B. What About the Changing Membership of the Federal Circuit, or, the "Rader Effect"?<sup>349</sup>

A major contribution of this Article is to assess the Supreme Court's patent agenda and jurisprudence holistically. But, as we wrote in the first part, there is also a temporal aspect to the story about the Supreme Court and patent law.

One common hypothesis is that the specialized Federal Circuit went rogue and the Supreme Court has been trying to correct it. From a qualitative perspective, if the Federal Circuit was ever really a rogue court, that tendency was most apparent during the tenure of Chief Judge Randall Rader from 2010 through 2014. The Supreme Court's remarkable sequence of patentable subject matter cases during that time frame was arguably prompted not by dramatic interest in the topic—litigants have tried dozens of times since *Alice* to get the Court to take another patentable subject matter case, to no avail<sup>350</sup>—but to frustration with an appellate court that didn't seem to want to follow decisions many of its judges clearly viewed as ill-conceived. Indeed, the Federal Circuit's judges were not (and have not been) shy about voicing their displeasure with the Supreme Court's case law on patentable subject matter,<sup>351</sup> further fueling perceptions of an intermediate appellate court out of control.

The Supreme Court arguably granted cert in *Mayo* because the Federal Circuit panel in that case denied that the Court's patentable subject matter decision the year before in *Bilski* had any bearing on the different technology at issue there.<sup>352</sup> The Court took *Myriad* two years later because a split Federal Circuit refused to apply *Mayo*, which involved a patent on a *process* of medical

<sup>&</sup>lt;sup>349</sup> See Craig E. Countryman, 2015 Patent Decisions of the Federal Circuit, 65 AM. U. L. REV. 769, 775 (2016) ("With the confirmation of Judge Kara F. Stoll [in 2015], a majority of active judges are now President Obama's appointees. . . . Those judges often provided critical votes in [2015] split decisions, and they will help shape patent law for many years to come.").

<sup>&</sup>lt;sup>350</sup> See Brian R. Matsui & Seth W. Lloyd, Supreme Court Refuses (Again) To Jump Back into the 101 Fray, FEDERAL CIRCUITRY (June 30, 2022), https://federalcircuitry.mofo.com/ topics/supreme-court-refuses-again-to-jump-back-into-the-101-fray [https://perma.cc/L7WZ-KHXF].

<sup>&</sup>lt;sup>351</sup> See, e.g., Ariosa Diagnostics, Inc. v. Sequenom, Inc., 788 F.3d 1371, 1380 (Fed. Cir. 2015) (Linn, J., concurring) ("I am bound by the sweeping language of the test set out in [*Mayo*]. In my view the breadth of the . . . test was unnecessary . . . ."); Interval Licensing LLC v. AOL, Inc., 896 F.3d 1335, 1348 (Fed. Cir. 2018) (Plager, J., concurring in part and dissenting in part) ("I concur in the carefully reasoned opinion by my colleagues in the majority, even though the state of the law is such as to give little confidence that the outcome is necessarily correct."); Berkheimer v. HP Inc., 890 F.3d 1369, 1374 (Fed. Cir. 2018) (Lourie, J., concurring in denial of the petition for rehearing en banc) ("[T]he panel, and the court, are bound to follow the script that the Supreme Court has written for us in § 101 cases. However, I believe the law needs clarification by higher authority, perhaps by Congress . . . .").

<sup>&</sup>lt;sup>352</sup> See Prometheus Lab'ys, Inc. v. Mayo Collaborative Servs., 628 F.3d 1347, 1355 (Fed. Cir. 2010), *rev'd*, 566 U.S. 66 (2012).

diagnosis, to *products*—isolated and synthetic DNA.<sup>353</sup> And it took *Alice* the following year because the Federal Circuit, en banc, split five-five on how to apply the teachings of *Bilski*, *Mayo*, and *Myriad*.<sup>354</sup>

Perceptions of Federal Circuit resistance have slowly changed in the past decade, both because Chief Judge Rader left the court after ethical lapses<sup>355</sup> and because President Obama appointed seven judges to the Federal Circuit and President Biden appointed two more. Many of those judges have broad and varied backgrounds practicing federal law and litigation.<sup>356</sup>

Overall, nine new judges joined the twelve-member Federal Circuit from 2010 through 2022. (In fact, some of those new judges have already retired<sup>357</sup> or taken senior status<sup>358</sup> and been replaced by other new judges.<sup>359</sup>) Their ranks include two district judges,<sup>360</sup> several patent litigators,<sup>361</sup> a Solicitor of the Patent and Trademark Office,<sup>362</sup> a high-level Department of Justice litigator,<sup>363</sup> and a judge on the Court of International Trade.<sup>364</sup> In other words, the Federal Circuit now includes lots of people who have spent time in federal court and might seem unlikely to stray from Supreme Court precedent on bread-and-butter issues of federal litigation.

To that end, it's worth noting that all but two peripheral cases in which the Supreme Court agreed with the Federal Circuit were decided from 2011 onward.<sup>365</sup> Indeed, from 2011 through 2022, the Supreme Court agreed with the Federal Circuit in nearly 40% of the cases we coded as peripheral (seven of 18).

<sup>356</sup> For biographical information about the Federal Circuit's judges, see *Judge Biographies*, U.S. CT. OF APPEALS FOR THE FED. CIR., https://cafc.uscourts.gov/home/the-court/judges/judge-biographies [https://perma.cc/GRH8-B96U] (last visited Apr. 3, 2024).

<sup>357</sup> Judge O'Malley. *See Kathleen O'Malley*, SULLIVAN & CROMWELL LLP, https://www.sullcrom.com/Lawyers/Kathleen-O-Malley [https://perma.cc/QHE5-M288] (last visited Apr. 3, 2024).

<sup>&</sup>lt;sup>353</sup> See Ass'n for Molecular Pathology v. U.S. Pat. & Trademark Off., 689 F.3d 1303, 1331 (Fed. Cir. 2012), *aff'd in part, rev'd in part sub nom*. Ass'n for Molecular Pathology v. Myriad Genetics, Inc., 569 U.S. 576 (2013).

<sup>&</sup>lt;sup>354</sup> CLS Bank Int'l v. Alice Corp., 717 F.3d 1269, 1273 (Fed. Cir. 2013) (en banc), *aff'd*, 573 U.S. 208 (2014).

<sup>&</sup>lt;sup>355</sup> See Nick Divito, Early Retirement for Embattled Federal Judge, COURTHOUSE NEWS SERV. (June 17, 2014), https://www.courthousenews.com/early-retirement-for-embattled-federal-judge [https://perma.cc/VB4G-8E5D].

<sup>&</sup>lt;sup>358</sup> Judge Wallach. Judge Biographies, supra note 356.

<sup>&</sup>lt;sup>359</sup> Judges Cunningham and Stark. Id.

<sup>&</sup>lt;sup>360</sup> Judges O'Malley and Stark. Id.; Kathleen O'Malley, supra note 357.

<sup>&</sup>lt;sup>361</sup> Judges Taranto, Chen, Stoll, and Cunningham. Judge Biographies, supra note 356.

<sup>&</sup>lt;sup>362</sup> Judge Chen. Id.

<sup>&</sup>lt;sup>363</sup> Judge Hughes. Id.

<sup>&</sup>lt;sup>364</sup> Judge Wallach. Id.

<sup>&</sup>lt;sup>365</sup> Arthrex (partial), NantKwest, Oil States, Cuozzo, Kappos v. Hyatt, Stanford v. Roche, and *i4i*. The only pre-2011 peripheral cases in which the Supreme Court agreed with the Federal Circuit were Markman (1996) and Christianson (1988). See infra Appendix A.

Compare the 17% agreement rate in peripheral cases (two of 12) from 1982 through 2010.

On first glance, that development seems to confirm the conventional wisdom: a new cohort of Federal Circuit judges has tamed the court's roguish tendencies and is more faithful to Supreme Court precedent, particularly on transsubstantive issues. But it turns out that the "Rader court" may not have been particularly roguish after all.

To see how the relationship between the Supreme Court and the Federal Circuit has evolved over time, we divided the population of Supreme Court patent cases into three eras: a Federal Circuit 'founding era' (from 1982 through 1994), a 'Rader' era (from 1995 through 2014), and a 'modern' era (from 2014 through 2022). We chose those time periods because they correspond with distinct sets of Federal Circuit judges. During the founding era, both chief judges,<sup>366</sup> as well as most other judges who served on the court, were either founding members or appointed within the court's first three years.<sup>367</sup> The Rader era covers most of Judge Rader's tenure, including his five years as chief judges,<sup>368</sup> as well as the tenure of almost all of the court's 'second generation' of judges (those appointed roughly ten to 20 years after the court's founding).<sup>369</sup> And the modern era captures a court that quickly became staffed by a majority of judges appointed by President Obama and, later, President Biden.<sup>370</sup>

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<sup>&</sup>lt;sup>366</sup> Chief Judges Howard Markey (1982-90) and Helen Nies (1990-94).

<sup>&</sup>lt;sup>367</sup> One notable appointment in that time frame was Judge Pauline Newman, who was appointed in 1984 and, in 2023, at age 96, was suspended from hearing new cases after a contentious battle over her mental fitness. *See* Michael Levenson, *Federal Judge, 96, Is Suspended Amid Concerns About Her Mental Fitness*, N.Y. TIMES (Sept. 20, 2023), https://www.nytimes.com/2023/09/20/us/judge-pauline-newman-suspended.html.

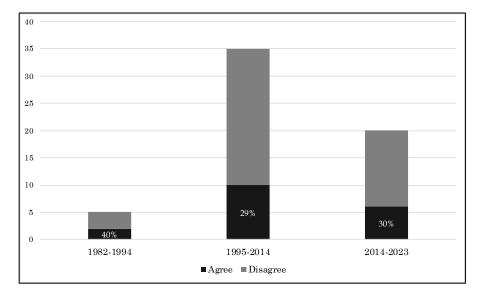
<sup>&</sup>lt;sup>368</sup> He was appointed in 1990, served as chief judge from 2010 through 2014, and left the Court in 2014. *See Judge Randall R. Rader (Former)*, FEDARB, https://www.fedarb.com/professionals/judge-randall-r-rader-retired/ [https://perma.cc/KDS2-F8H4] (last visited Apr. 3, 2024).

<sup>&</sup>lt;sup>369</sup> The period from 1995 through 2014 covers most or all of the period of active service of the following judges: Judge Alan Lourie (1990-present), Judge Rader (*see supra* note 368), Judge Alvin Schall (1992-2009), Judge William Bryson (1994-2013), Judge Arthur Gajarsa (1997-2011), Judge Paul Michel (1998-2010, chief from 2004-10), Judge Richard Linn (1999-2012), Judge Timothy Dyk (2000-present), and Judge Sharon Prost (2001-present, chief from 2014-21). *Judge Biographies, supra* note 356. The tenures of the Federal Circuit's current chief judge, Kimberly Moore (2006-present, chief from 2021-present), as well as Judges Lourie, Dyk, and Prost, straddle the Rader era and the modern era. And Judges Jay Plager (1989-2000) and Ray Clevenger (1990-06) straddle the founding era and the Rader era. Judge Newman (1984-present) has been around for all three eras. *Id*.

<sup>&</sup>lt;sup>370</sup> Judge Kathleen O'Malley (2010-22), Judge Jimmie Reyna (2011-present), Judge Evan Wallach (2011-21), Judge Richard Taranto (2013-present), Judge Ray Chen (2013-present), Judge Todd Hughes (2013-present), and Judge Kara Stoll (2015-present). President Biden's two appointees, Judges Tiffany Cunningham (2021-present) and Leonard Stark (2022-present), are not terribly relevant to our analysis given that the Supreme Court has decided only one patent case since 2021. President Trump appointed no judges to the court. *Id.* 

Given the narrative of the rogue Rader court, we were surprised by the results. As Figure 4 below makes plain, the Supreme Court agreed with the Federal Circuit at pretty much the same rate during the Rader era as during the modern era: 29% of the time from 1995 through 2014 versus 30% of the time from 2014 through 2023.

Figure 4. Supreme Court Agreement/Disagreement with the Federal Circuit in Patent Cases.



Digging deeper into the Rader era, we can see distinct subsets of cases. Of the ten cases during that timeframe in which the Supreme Court agreed with the Federal Circuit (in whole or, in two cases, in part)<sup>371</sup> three were decided from 1996 through 2001372 and the other seven were decided from 2010 through 2014—during the tenure of Judge Rader as chief.<sup>373</sup> So the notion of a "rogue" Federal Circuit is true-but only from 2002 through 2009, an eight-year span during which the Federal Circuit went zero for ten at the Supreme Court.<sup>374</sup>

The current Federal Circuit is also more roguish than the conventional wisdom might suggest. Take away four AIA-related cases in which the Supreme

<sup>&</sup>lt;sup>371</sup> Myriad and Warner-Jenkinson. See discussion supra note 224.

<sup>&</sup>lt;sup>372</sup> Markman v. Westview Instruments, Inc., 515 U.S. 1191 (1996); Warner-Jenkinson Co. v. Hilton Davis Chem. Co., 520 U.S. 17 (1998); J.E.M. Ag Supply, Inc. v. Pioneer Hi-Bred Int'l, Inc, 534 U.S. 124 (2001).

<sup>&</sup>lt;sup>373</sup> Alice (2014), Myriad (2013), Bowman v. Monsanto (2013), Kappos v. Hyatt (2012), Stanford v. Roche (2011), i4i (2011), Bilski (2010). See Appendix A.

<sup>&</sup>lt;sup>374</sup> Carlsbad (2009), Quanta (2008), KSR (2007), MedImmune (2007), Microsoft v. AT&T (2007), eBay (2006), Unitherm (2006), Merck (2005), Festo (2002), Holmes Group (2002). See id.

Court agreed with the Federal Circuit,<sup>375</sup> and the circuit was two for 16 from 2015 through 2022.<sup>376</sup>

In short, the notion of a "Rader effect," like most of the conventional wisdoms we've tested in this Article, has a degree of truth. But the reality isn't as simple as it's sometimes portrayed.<sup>377</sup>

### VI. ADDITIONAL IMPLICATIONS AND OBSERVATIONS

It can be dangerous to draw broad inferences about the state of the law or the legal system from the tiny fraction of cases that make it to the Supreme Court.<sup>378</sup> Yet, in patent law, the Supreme Court is widely perceived to have played an outsized role for the past two decades. Its revival of the patent-eligibility requirement placed entire technological fields outside the bounds of patent protection.<sup>379</sup> Its reworking of venue law caused huge changes in where patentees file infringement suits.<sup>380</sup> And its engagement with the AIA has inspired constant statutory and constitutional challenges to the PTO's power.<sup>381</sup>

As we've shown, however, the Supreme Court's influence may be overstated. While the Court has decided several cases that changed the law in important ways, including *Markman* (placing patent claim construction solely in the hands of the judge) and *eBay* (making it more difficult for patentees who don't practice their inventions to get injunctions) as well as the eligibility and venue cases just mentioned, less than half of the Supreme Court's patent cases involve the substantive core of patent law, and many Supreme Court patent cases—core cases included—concern niche issues that don't come up very often or simply don't end up mattering that much. The Court's decisions in *Peter v. NantKwest*,

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<sup>&</sup>lt;sup>375</sup> Arthrex (2021), Helsinn (2019), Oil States (2018), and Cuozzo (2016). See id.

<sup>&</sup>lt;sup>376</sup> The agreements were *Peter v. NantKwest* (2019), in which the Court held that the PTO may not recover its attorneys' fees in a disappointed patent applicant's civil action to obtain a patent, and *Amgen v. Sanofi* (2023), in which the Court held that a patent's specification must enable a person of ordinary skill in the art to make and use the "full scope" of the claimed invention.

<sup>&</sup>lt;sup>377</sup> Cf. Timothy B. Lee, *How a Rogue Appeals Court Wrecked the Patent System*, ARS TECHNICA (Sept. 30, 2012, 4:30 PM), https://arstechnica.com/tech-policy/2012/09/how-a-rogue-appeals-court-wrecked-the-patent-system [https://perma.cc/UZU5-7DJ8] ("Obviously, the Federal Circuit can't 'overrule' a Supreme Court decision. But with enough persistence, it can, and often does, subvert the principles enunciated by the nation's highest court.").

<sup>&</sup>lt;sup>378</sup> Cf. Ori Aronson, Inferiorizing Judicial Review: Popular Constitutionalism in Trial Courts, 43 U. MICH. J.L. REFORM 971, 972 (2010) ("While the prominence of the Supreme Court in any account of constitutional law is of course understandable, it is less justifiable in normative discussions of institutional design . . . .").

<sup>&</sup>lt;sup>379</sup> Paul R. Gugliuzza, *The Procedure of Patent Eligibility*, 97 TEX. L. REV. 571, 581-86 (2019).

<sup>&</sup>lt;sup>380</sup> J. Jonas Anderson, Paul R. Gugliuzza & Jason A. Rantanen, *Extraordinary Writ or Ordinary Remedy? Mandamus at the Federal Circuit*, 100 WASH U. L. REV. 327, 342-43 (2022).

<sup>&</sup>lt;sup>381</sup> See Greg Reilly, The PTAB's Problem, 27 TEX. INTELL. PROP. L.J. 31, 35-41 (2019).

*Inc.*<sup>382</sup> (no, the Patent Office can't recover its attorneys' fees for defending against a civil action to obtain a patent), *Return Mail, Inc. v. USPS*<sup>383</sup> (no, the Post Office can't seek post-issuance review of patent validity at the PTO), and *Board of Trustees of the Leland Stanford Junior University v. Roche Molecular Systems, Inc.*<sup>384</sup> (no, the Bayh-Dole Act doesn't automatically confer ownership of federally-funded inventions on federal contractors) fit into those categories, as do the Court's three decisions on the obscure infringement provision of 35 U.S.C. § 271(f).<sup>385</sup>

As for the Federal Circuit, it's interesting that the Supreme Court agrees with the circuit at least at the same rate—if not a higher rate—than it affirms decisions from the regional circuits. Where the Federal Circuit performs exceptionally poorly (at least in the eyes of the Supreme Court) is on issues that lie far afield from patent law's substantive core, particularly on questions of jurisdiction and procedure, as well as on matters of remedies for patent infringement.

The Federal Circuit's disparate performance in cases about patent validity, infringement, and claim construction versus cases about jurisdiction, procedure, and remedies may tell us something about the proclivities of the semi-specialized Federal Circuit and the judges who have served on it. As we might expect from a court with exclusive jurisdiction over patent cases (and that was created in part to provide expertise in patent law),<sup>386</sup> the court performs reasonably well on pure patent law issues, at least from the perspective of the Supreme Court. Where the Federal Circuit has caught grief from the Justices is on the trans-substantive issues that are an important part of the docket of any federal court but are perhaps not the types of issues that would attract focus from specialists in patent law or any of the other areas within the Federal Circuit's exclusive jurisdiction. And the remedies cases? They've often involved some patent-specific, bright-line rule that, the conventional wisdom correctly suggests, is particularly likely to catch the Supreme Court's ire.<sup>387</sup>

As for the Solicitor General, the SG's good-but-unexceptional performance in peripheral cases provides important context for its repeated inability to persuade the Supreme Court in cases involving the AIA. The SG, despite being

<sup>&</sup>lt;sup>382</sup> 140 S. Ct. 365, 369 (2019).

<sup>&</sup>lt;sup>383</sup> 139 S. Ct. 1853, 1858-59 (2019).

<sup>&</sup>lt;sup>384</sup> 563 U.S. 776, 780 (2011).

<sup>&</sup>lt;sup>385</sup> Though it's a rare patent case that raises a § 271(f) issue, the Supreme Court's infatuation with those cases is consistent with its more general interest in the extraterritorial application of U.S. statutes. *See* Timothy R. Holbrook, *Is There a New Extraterritoriality in Intellectual Property*?, 44 COLUM. J.L. & ARTS 457, 479 (2021).

<sup>&</sup>lt;sup>386</sup> Rochelle C. Dreyfuss, *Percolation, Uniformity, and Coherent Adjudication: The Federal Circuit Experience*, 66 SMU L. REV. 505, 506 (2013).

<sup>&</sup>lt;sup>387</sup> Good examples include the two-part test for proving willful infringement (*Halo*), a similar two-part test for obtaining attorneys' fees (*Octane Fitness*), and the "general rule" that a prevailing patentee is entitled to an injunction (*eBay*). Halo Elecs., Inc. v. Pulse Elecs., Inc., 136 S. Ct. 1923, 1928 (2016); Octane Fitness, LLC v. Icon Health & Fitness, Inc., 572 U.S. 545, 548 (2014); eBay, Inc. v. MercExchange, LLC, 547 U.S. 388, 393-94 (2006).

a significant force in patent cases overall, has *never* done as well on issues outside the core of patent law. This suggests that any appearance of the SG's waning influence—driven mainly by loses in cases under the AIA—may be highlighting a phenomenon that has long existed, but in cases too few and far apart to notice.

On common law patent issues (including both core validity and infringement doctrines and more peripheral questions), as well as jurisdictional and procedural issues relevant to patent disputes, the Court is highly deferential to the SG. That may suggest a reluctance to second-guess the SG's advice about intricate, technical, specialized issues about which the Justices might not view themselves to have significant expertise. But in areas where the Justices might view *themselves* to be the experts—interpreting the words of a recently enacted statute or addressing issues of constitutional law or antitrust law—the SG's advice seems less relevant. That observation, though drawn from patent-related cases, accords with arguments that the current Supreme Court's top priority is arrogating as much power to itself as possible.<sup>388</sup>

#### CONCLUSION

One thing our analysis makes plain is that there's no grand unified theory explaining the Supreme Court's recent interventions in patent law. The Court has decided a few cases that have altered the patent system in profound ways but many more of its patent decisions have been inconsequential. The Court's rulings tend to favor accused infringers over patentees and legal standards over legal rules, but not always. The Solicitor General wins a lot, but not in every case. The Federal Circuit loses a lot, but not in every case. And the circuit fares surprisingly well in the most important cases about substantive patent law. Moreover, because of changes in membership on both the Federal Circuit and the Supreme Court, as well as changes in the types of patent cases making their way to the Court, the institutional relationships among the Court, the circuit, and the SG are rapidly evolving.

On balance, this nuanced, multifaceted story about the Supreme Court and patent law is probably good news. With all appeals centralized in the Federal Circuit, it's not the worst thing to have seemingly random disruptions from time to time that require the courts and the PTO to reassess the content of patent law and the participants in the patent system to adjust their behavior.<sup>389</sup>

<sup>&</sup>lt;sup>388</sup> E.g., Jamelle Bouie, Opinion, *The Supreme Court Is Turning into a Court of First Resort*, N.Y. TIMES (Dec. 7, 2022), https://www.nytimes.com/2022/12/07/opinion/supreme-court-student-loan-forgiveness.html ("The conservative majority is working to make the [Supreme Court] the leading institution in American politics, with total control over the meaning of the Constitution and its application to American life.").

<sup>&</sup>lt;sup>389</sup> See Golden, supra note 11, at 662 (discussing how Supreme Court can prevent ossification of Federal Circuit patent doctrine); *cf.* Ori Aronson, *Forum by Coin Flip: A Random Allocation Model for Jurisdictional Overlap*, 45 SETON HALL L. REV. 63, 106 (2015) (exploring the benefits of randomizing assignment of cases to courts).

In addition, by showing that the Supreme Court's patent decisions, though large in number, are often unimportant, we underscore the dangers of fixating on the Court in formulating critiques in any area of the law. In patent law, for instance, the Federal Circuit decides hundreds more cases every year than the Supreme Court does, and the circuit's case law affects the primary behavior of innovators, patentees, and potential infringers in incalculably greater ways. Likewise, the concentration of patent litigation in a small handful of federal district courts means that those courts' procedural practices affect the resolution of many more patent disputes than any given Supreme Court decision. It is the lower federal courts, along with the PTO, whose rules and rulings set the incentives and determine the litigation costs that matter most to the innovators the patent system is supposed to motivate.

That may not be news an "imperial" Supreme Court wants to hear,<sup>390</sup> but it's not a myth—it's reality.

<sup>&</sup>lt;sup>390</sup> Lemley, *supra* note 39, at 97.

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Year	Case	Tribunal below	Case type	Issue type	Sup. Ct. agree with SG?	Sup. Ct. agree with Fed. Cir.?	Fed. Cir. Cites per year	Petition lawyer arguments
2023 2021	Amgen Inc. v. Sanofi Minerva Surgical, Inc. v.	Fed. Cir. Fed. Cir.	Core	C/L patent C/L patent	Yes Yes	Yes No	n/a 1	24
	Hologic, Inc.							-
2021	United States v. Arthrex, Inc.	Fed. Cir.	Peripheral (AIA)	Con law	No	Partial	19	[SG petition]   26   9
2020	Thryv, Inc. v. Click-to-Call Techs., LP	Fed. Cir.	Peripheral (AIA)	Statutory interp. (procedure)	Yes	No	3	1
2019	Helsinn Healthcare S.A. v. Teva Pharms, USA, Inc.	Fed. Cir.	Core (AIA)	Statutory interp.	No	Yes	1.67	33
2019	Peter v. NantKwest Inc.	Fed. Cir.	Peripheral	Statutory interp. (procedure)	No	Yes	0.33	[SG petition]
2019	Return Mail Inc. v. USPS.	Fed. Cir.	Peripheral (AIA)	Statutory interp. (procedure)	No	No	1.67	0
2018	WesternGeco LLC v. Ion Geophysical Corp.	Fed. Cir.	Core	Statutory interp. (remedies)	Yes	No	0.75	106
2018	Oil States Energy Servs. LLC v. Greene's Energy Grp., LLC	Fed. Cir.	Peripheral (AIA)	Con law	Yes	Yes	4	4
2018	SAS Inst. v. Iancu	Fed. Cir.	Peripheral (AIA)	Statutory interp. (procedure)	No	No	17.75	5
2017	Life Techs. Corp. v. Promega Corp.	Fed. Cir.	Core	Statutory interp.	Yes	No	0.2	72
2017	Impression Prods., Inc. v.	Fed. Cir.	Core	C/L patent	Yes	No	0.2	19
2017	Lexmark Int'l, Inc. SCA Hygiene Prods. Aktiebolag v. First Quality Baby Prods., LLC	Fed. Cir.	Core	Statutory interp.	n/a	No	3.4	1
2017	Sandoz Inc. v. Amgen Inc.	Fed. Cir.	Peripheral	Jurisdiction/	Yes	No	1	0   14
2017	TC Heartland LLC v. Kraft Foods Grp. Brands LLC	Fed. Cir.	Peripheral	procedure Jurisdiction/ procedure	n/a	No	4.4	4
2016	Halo Elecs. Inc. v. Pulse Elecs., Inc.	Fed. Cir.	Core	C/L patent (remedies)	Yes	No	5	0   0
2016	Samsung Elecs. Co. v. Apple Inc.	Fed. Cir.	Core	Statutory interp. (remedies)	Yes	No	0.5	10
2016	Cuozzo Speed Techs., LLC v. Lee	Fed. Cir.	Peripheral (AIA)	Statutory interp. (part procedure)	Yes	Yes	24.67	30
2015	Commil USA, LLC v. Cisco Sys., Inc.	Fed. Cir.	Core	C/L patent	Yes	No	4.14	1
2015	Teva Pharms. USA, Inc. v. Sandoz, Inc.	Fed. Cir.	Peripheral	Jurisdiction/ procedure	Yes	No	18.86	18
2015	Kimble v. Marvel Enters., Inc.	9th Cir.	Peripheral	C/L patent	Yes	n/a	1.43	1
2014 2014	Alice Corp. v. CLS Bank Int'l Nautilus, Inc. v. Biosig Instruments, Inc.	Fed. Cir. Fed. Cir.	Core	C/L patent C/L patent	Yes Yes	Yes No	13.5 9.63	72
2014	Limelight Networks, Inc. v. Akami Techs., Inc.	Fed. Cir.	Core	C/L patent	Yes	No	2.25	6
2014	Octane Fitness, LLC v. Icon Health & Fitness, Inc.	Fed. Cir.	Core	C/L patent (remedies)	Yes	No	10	1
2014	Medtronic, Inc. v. Mirowski Fam. Ventures, LLC	Fed. Cir.	Peripheral	Jurisdiction/ procedure	Yes	No	2.13	0
2014	Highmark Inc. v. Allcare Health Mgmt. Sys., Inc.	Fed. Cir.	Peripheral	Jurisdiction/ procedure	Yes	No	8.25	44
2013 2013	Bowman v. Monsanto Co. Ass'n for Molecular Pathology	Fed. Cir. Fed. Cir.	Core Core	C/L patent C/L patent	Yes Yes	Yes Partial	0.55 4.56	1
2013	v. Myriad Genetics, Inc. Gunn v. Minton	Tex. Sup.	Peripheral	Jurisdiction/	n/a	No	2.78	1
2013	FTC v. Actavis, Inc.	Ct. 11th Cir.		procedure	n/a Yes		0.33	-
			Peripheral	Antitrust	(par- tial)	No		[SG petition]
2012	Mayo Collaborative Servs. v. Prometheus Lab'ys, Inc.	Fed. Cir.	Core	C/L patent	No	No	14.7	10
2012 2012	Kappos v. Hyatt Caraco Pharm. Lab'ys, Ltd. v.	Fed. Cir. Fed. Cir.	Peripheral	C/L patent Jurisdiction/	No Yes	Yes No	1.7	[SG petition] 2
2012	Caraco Pharm. Lab'ys, Ltd. v. Novo Nordisk A/S Global-Tech Appliances, Inc. v.	Fed. Cir. Fed. Cir.	Peripheral Core	C/L patent	Y es n/a	No	3.45	2
2011	SEB S.A. Bd. of Trs. of the Leland	Fed. Cir.	Peripheral	Statutory	n/a No	Yes	0.09	0
2011	Stanford Jr. Univ. v. Roche Molecular Sys., Inc. Microsoft Corp. v. i4i Ltd	Fed. Cir.	Peripheral	interp.	Yes	Yes	7.64	26
2011	Microsoft Corp. v. i4i Ltd. P'ship	reu. Cir.	renpierdi	C/L patent (procedure)	1 08	105	/.04	20

### APPENDIX A: PATENT-RELATED SUPREME COURT DECISIONS, 1982 THROUGH 2022: SUBJECT MATTER, SUPREME COURT AGREEMENT, FEDERAL CIRCUIT CITATIONS, AND PETITIONER LAWYER EXPERIENCE

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Year	Case	Tribunal below	Case type	Issue type	Sup. Ct. agree with SG?	Sup. Ct. agree with Fed. Cir.?	Fed. Cir. Cites per year	Petition lawyer arguments
2010	Bilski v. Kappos	Fed. Cir.	Core	C/L patent	Yes	Yes	8.08	1
2009	Carlsbad Tech., Inc. v. HIF Bio, Inc.	Fed. Cir.	Peripheral	Jurisdiction/ procedure	n/a	No	0.38	1
2008	Quanta Comput., Inc. v. LG Elecs., Inc.	Fed. Cir.	Core	C/L patent	Yes	No	1.07	17
2007	KSR Int'l Co. v. Teleflex Inc.	Fed. Cir.	Core	C/L patent	Yes	No	20.6	4
2007	Microsoft Corp. v. AT&T Corp.	Fed. Cir.	Core	Statutory interp.	Yes	No	1.67	57
2007	MedImmune, Inc. v. Genentech, Inc.	Fed. Cir.	Peripheral	Jurisdiction/ procedure	Yes	No	6.2	0
2006	eBay Inc. v. MercExchange, L.L.C.	Fed. Cir.	Core	C/L patent (remedies)	Yes	No	5.81	72
2006	Lab'y Corp. of Am. Holdings v. Metabolite Lab'ys, Inc.	Fed. Cir.	Core	C/L patent	n/a	n/a	0.18	7
2006	Unitherm Food Sys., Inc. v. Swift-Eckrich, Inc.	Fed. Cir.	Peripheral	Jurisdiction/ procedure	Yes	No	1	1
2006	Ill. Tool Works Inc. v. Independent Ink, Inc.	Fed. Cir.	Peripheral	Antitrust	Yes	n/a	0.13	16
2005	Merck KgaA v. Integra Lifesciences I, Ltd.	Fed. Cir.	Core	Statutory interp.	Yes	No	0.82	1
2002	Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.	Fed. Cir.	Core	C/L patent	Yes	No	7.9	-
2002	Holmes Grp., Inc. v. Vornado Air Circulation Sys., Inc.	Fed. Cir.	Peripheral	Jurisdiction/ procedure	n/a	No	0.45	-
2001	JEM Ag Supply, Inc. v. Pioneer Hi-Bred Int'l, Inc.	Fed. Cir.	Core	Statutory interp.	Yes	Yes	0.62	-
2000	Nelson v. Adams USA, Inc.	Fed. Cir.	Peripheral	Jurisdiction/ procedure	n/a	No	0.77	-
1999	Fla. Prepaid Post Secondary Educ. Expense Bd. v. Coll. Sav. Bank	Fed. Cir.	Peripheral	Con law	No	No	1.26	-
1999	Dickinson v. Zurko	Fed. Cir.	Peripheral	Jurisdiction/ procedure	Yes	No	6.04	[SG petition]
1998	Pfaff v. Wells Elecs., Inc.	Fed. Cir.	Core	C/L patent	Yes	No	2.5	-
1997	Warner-Jenkinson Co. v. Hilton Davis Chem. Co.	Fed. Cir.	Core	C/L patent	Yes	Partial	10.68	-
1996	Markman v. Westview Instruments, Inc.	Fed. Cir.	Peripheral	Con law	n/a	Yes	25.04	-
1995	Asgrow Seed Co. v. Winterboer	Fed. Cir.	Peripheral	Statutory interp.	Yes	No	0.56	-
1993	Cardinal Chem. Co. v. Morton Int'l, Inc.	Fed. Cir.	Peripheral	Jurisdiction/ procedure	n/a	No	1.55	-
1990	Eli Lilly & Co v. Medtronic, Inc.	Fed. Cir.	Core	Statutory interp.	n/a	Yes	0.38	-
1989	Bonito Boats, Inc. v. Thunder Craft Boats, Inc.	Fla. Sup. Ct.	Peripheral	Con law	n/a	No	1.82	-
1988	Christianson v. Colt Indus. Operating Corp.	Fed. Cir.	Peripheral	Jurisdiction/ procedure	n/a	Yes	7.35	-
1986	Dennison Mfg. Co. v. Panduit Corp.	Fed. Cir.	Core	Jurisdiction/ procedure	n/a	No	0.47	-
1983	Gen. Motors Corp. v. Devex Corp.	3d Cir.	Peripheral	Statutory interp. (remedies)	n/a	n/a	0.05	-

PATENT LAW AT THE SUPREME COURT

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Year	Case	Pro- patentee?	Standard over rule?	Unanimous?	Breyer	Thomas	Gorsuch	Stevens
2023	Amgen Inc. v. Sanofi	No	n/a	Yes	n/a	Majority	Majority opinion	n/a
2021	Minerva Surgical, Inc. v. Hologic, Inc.	No	Yes	No	Majority	Dissent	Dissent	n/a
2021	United States v. Arthrex, Inc.	Mixed	n/a	No	Dissent	Dissent opinion	Majority	n/a
2020	Thryv, Inc. v. Click-to- Call Techs., LP	Yes	n/a	No	Majority	Majority	Dissent Opinion	n/a
2019	Helsinn Healthcare S.A. v. Teva Pharms. USA, Inc.	No	n/a	Yes	Majority	Majority opinion	Majority	n/a
2019	Peter v. NantKwest Inc.	n/a	n/a	Yes	Majority	Majority	Majority	n/a
2019	Return Mail Inc. v. USPS	Yes	n/a	No	Dissent opinion	Majority	Majority	n/a
2018	WesternGeco LLC v. Ion Geophysical Corp.	Yes	Yes	No	Dissent	Majority opinion	Dissent opinion	n/a
2018	Oil States Energy Servs. LLC v. Greene's Energy Grp., LLC	No	n/a	No	Majority	Majority opinion	Dissent opinion	n/a
2018	SAS Inst. v. Iancu	Yes	No	No	Dissent opinion	Majority	Majority opinion	n/a
2017	Life Techs. Corp. v. Promega Corp.	No	No	Yes	Majority	Majority	n/a	n/a
2017	Impression Prods., Inc. v. Lexmark Int'l, Inc.	No	Yes	No	Majority	Majority	n/a	n/a
2017	SCA Hygiene Prods. Aktiebolag v. First Qual- ity Baby Prods., LLC	Yes	No	No	Dissent opinion	Majority	n/a	n/a
2017	Sandoz Inc. v. Amgen Inc.	Mixed	n/a	Yes	Concurrenc e opinion	Majority opinion	Majority	n/a
2017	TC Heartland LLC v. Kraft Foods Grp. Brands LLC	No	No	Yes	Majority	Majority opinion	n/a	n/a
2016	Halo Elecs. Inc. v. Pulse Elecs., Inc.	No	Yes	Yes	Concurrenc e opinion	Majority	n/a	n/a
2016	Samsung Elecs. Co. v. Apple Inc.	No	Yes	Yes	Majority	Majority	n/a	n/a
2016	Cuozzo Speed Techs., LLC v. Lee	Yes	n/a	No	Majority opinion	Concurrence opinion	n/a	n/a
2015	Commil USA, LLC v. Cisco Sys., Inc.	Yes	No	No	n/a	Majority	n/a	n/a
2015	Teva Pharms. USA, Inc. v. Sandoz, Inc.	Mixed	Yes	No	Majority opinion	Dissent opinion	n/a	n/a
2015	Kimble v. Marvel En- ters., Inc.	No	No	No	Majority	Dissent	n/a	n/a
2014	Alice Corp. v. CLS Bank Int'l	No	Yes	Yes	Majority	Majority opinion	n/a	n/a
2014	Nautilus, Inc. v. Biosig Instruments, Inc.	No	Yes	Yes	Majority	Majority	n/a	n/a
2014	Limelight Networks, Inc. v. Akami Techs., Inc.	No	Yes	Yes	Majority	Majority	n/a	n/a
2014	Octane Fitness, LLC v. Icon Health & Fitness, Inc.	No	Yes	Yes	Majority	Majority	n/a	n/a
2014	Medtronic, Inc. v. Mirowski Fam. Ven- tures, LLC	No	n/a	Yes	Majority opinion	Majority	n/a	n/a
2014	Highmark Inc. v. Allcare Health Mgmt. Sys., Inc.	Mixed	Yes	Yes	Majority	Majority	n/a	n/a
2013	Bowman v. Monsanto Co.	Yes	No	Yes	Majority	Majority	n/a	n/a
2013	Ass'n for Molecular Pa- thology v. Myriad Ge- netics, Inc.	No	Yes	Yes	Majority	Majority opinion	n/a	n/a
2013	Gunn v. Minton	n/a	Yes	Yes	Majority	Majority	n/a	n/a
2013	FTC v. Actavis, Inc.	No	Yes	No	Majority opinion	Dissent	n/a	n/a
2012	Mayo Collaborative Servs. v. Prometheus Lab'ys, Inc.	No	Yes	Yes	Majority opinion	Majority	n/a	n/a
2012	Kappos v. Hyatt	n/a	Yes	Yes	Majority	Majority opinion	n/a	n/a
2012	Caraco Pharm. Lab'ys, Ltd. v. Novo Nordisk A/S	No	n/a	Yes	Majority	Majority	n/a	n/a
2011	Global-Tech Appliances, Inc. v. SEB S.A.	Mixed	Yes	No	Majority	Majority	n/a	n/a
2011	Bd. of Trs. of the Leland Stanford Jr. Univ. v.	Mixed	n/a	No	Dissent opinion	Majority	n/a	n/a

# APPENDIX B: PATENT-RELATED SUPREME COURT DECISIONS, 1982 THROUGH 2022: NATURE OF DECISION, UNANIMITY, JUSTICE VOTES, AND OPINIONS

BOSTON UNIVERSITY LAW REVIEW

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Year	Case	Pro- patentee?	Standard over rule?	Unanimous?	Breyer	Thomas	Gorsuch	Stevens
	Roche Molecular Sys., Inc.							
2011	Microsoft Corp. v. i4i Ltd. P'ship	Yes	No	No	Concurrenc e opinion	Concurrence opinion	n/a	n/a
2010	Bilski v. Kappos	No	Yes	No	Concurrenc e opinion	Majority	n/a	Concurrence opinion
2009	Carlsbad Tech., Inc. v. HIF Bio, Inc.	n/a	n/a	Yes	Majority	Majority opinion	n/a	Concurrence opinion
2008	Quanta Comput., Inc. v. LG Elecs., Inc.	No	Yes	Yes	Majority	Majority opinion	n/a	Majority
2007	KSR Int'l Co. v. Tele- flex Inc.	No	Yes	Yes	Majority	Majority	n/a	Majority
2007	Microsoft Corp. v. AT&T Corp.	No	Yes	No	Majority	Majority	n/a	Dissent opinion
2007	MedImmune, Inc. v. Genentech, Inc.	No	Yes	No	Majority	Dissent opinion	n/a	Majority
2006	eBay Inc. v. Mer- cExchange, L.L.C.	No	Yes	Yes	Concurrenc e	Majority	n/a	Concurrence
2006	Lab'y Corp. of Am. Holdings v. Metabolite Lab'ys, Inc.	Yes	n/a	No	Dissent opinion	Majority	n/a	Dissent
2006	Unitherm Food Sys., Inc. v. Swift-Eckrich, Inc.	n/a	n/a	No	Majority	Majority opinion	n/a	Dissent opinion
2006	Ill. Tool Works Inc. v. Indep. Ink, Inc.	Yes	Yes	Yes	Majority	Majority	n/a	Majority opinion
2005	Merck KgaA v. Integra Lifesciences I, Ltd.	No	n/a	Yes	Majority	Majority	n/a	Majority
2002	Festo Corp. v. Shoketsu Kinzoku Kogyo Ka- bushiki Co.	Yes	Yes	Yes	Majority	Majority	n/a	Majority
2002	Holmes Grp., Inc. v. Vornado Air Circulation Sys., Inc.	n/a	n/a	No	Majority	Majority	n/a	Concurrence opinion
2001	JEM Ag Supply, Inc. v. Pioneer Hi-Bred Int'l, Inc.	Yes	n/a	No	Dissent opinion	Majority opinion	n/a	Dissent
2000	Nelson v. Adams USA, Inc.	n/a	n/a	Yes	Majority	Majority	n/a	Majority
1999	Fla. Prepaid Post Sec- ondary Educ. Expense Bd. v. Coll. Sav. Bank	No	No	No	Dissent	Majority	n/a	Dissent opinion
1999	Dickinson v. Zurko	n/a	n/a	No	Majority opinion	Majority	n/a	Majority
1998	Pfaff v. Wells Elecs., Inc.	No	Yes	Yes	Majority	Majority	n/a	Majority opinion
1997	Warner-Jenkinson Co. v. Hilton Davis Chem. Co.	No	Yes	Yes	Majority	Majority opinion	n/a	Majority
1996	Markman v. Westview Instruments, Inc.	Mixed	n/a	Yes	Majority	Majority	n/a	Majority
1995	Asgrow Seed Co. v. Winterboer	Yes	n/a	No	Majority	Majority	n/a	Dissent opinion
1993	Cardinal Chem. Co. v. Morton Int'l, Inc.	No	Yes	Yes	n/a	Majority	n/a	Majority
1990	Eli Lilly & Co v. Med- tronic, Inc.	No	n/a	No	n/a	n/a	n/a	Majority
1989	Bonito Boats, Inc. v. Thunder Craft Boats, Inc.	n/a	No	Yes	n/a	n/a	n/a	Majority
1988	Chistianson v. Colt In- dus. Operating Corp.	n/a	Yes	Yes	n/a	n/a	n/a	Concurrence opinion
1986	Dennison Mfg. Co. v. Panduit Corp.	n/a	n/a	No	n/a	n/a	n/a	Majority
1983	Gen. Motors Corp. v. Devex Corp.	Yes	No	Yes	n/a	n/a	n/a	Concurrence opinion

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Term CVSG Order Issued	Case	SG Rec.	Outcome	Sup. Ct. agree?
2022	Apple Inc. v. Cal. Inst. of Tech.	Deny	Denied	Yes
2022	Teva Pharms. USA, Inc. v. GlaxoSmithKline LLC	Grant	Denied	No
2022	Tropp v. Travel Sentry, Inc.	Grant	Denied	No
2022	Interactive Wearables, LLC v. Polar Electro Oy	Grant	Denied	No
2021	Amgen Inc. v. Sanofi Inc.	Deny	Granted	No
2021	Apple Inc. v. Qualcomm Inc.	Deny	Denied	Yes
2021	PersonalWeb Techs., LLC v. Patreon, Inc.	Deny	Denied	Yes
2021	Olaf Sööt Design, LLC v. Daktronics, Inc.	Deny	Denied	Yes
2020	Am. Axle & Mfg., Inc. v. Neapco Holdings LLC	Grant	Denied	No
2018	Hikma Pharms. USA Inc. v. Vanda Pharms. Inc.	Deny or hold	Denied	Yes
2018	HP Inc. v. Berkheimer	Deny or hold	Denied	Yes
2018	Tex. Advanced Optoelectronic Sols., Inc. v. Renesas Elecs. Am., Inc.	Deny	Denied	Yes
2018	Ariosa Diagnostics, Inc v. Illumina, Inc.	Deny	Denied	Yes
2017	EVE-USA, Inc. v. Mentor Graphics Corp.	Dismissed	Dismissed	n/a
2016	Samsung Elecs. Co. v. Apple Inc.	Deny	Denied	Yes
2016	WesternGeco LLC v. Ion Geophysical Corp.	Grant	Granted	Yes
2015	Impression Prods., Inc. v. Lexmark Int'l, Inc.	Grant	Granted	Yes
2015	Sandoz Inc. v. Amgen Inc.	Grant	Granted	Yes
2015	Amgen Inc. v. Sandoz Inc.	Grant	Granted	Yes
2015	Life Techs. Corp. v. Promega Corp.	Grant in part	Granted	Yes
2014	Google, Inc. v. Vederi, LLC	Deny	Denied	Yes
2013	Cisco Sys., Inc. v. Commil USA, LLC	Deny	Denied	Yes
2013	Commil USA, LLC v. Cisco Sys., Inc.	Grant in part	Granted	Yes
2012	Limelight Networks, Inc. v. Akami Techs., Inc.	Grant	Granted	Yes
2012	Akami Techs., Inc. v. Limelight Networks, Inc.	Deny	Denied	Yes
2012	Sony Comput. Ent. Am. LLC v. 1st Media, LLC	Deny	Denied	Yes
2011	GlaxoSmithKline v. Classen Immunotherapies, Inc.	Deny	Denied	Yes
2011	Retractable Techs., Inc. v. Becton, Dickinson & Co.	Deny	Denied	Yes
2011	Saint-Gobain Ceramics & Plastics, Inc. v. Siemens Med. Sols. USA, Inc.	Deny	Denied	Yes
2010	Applera Corp. v. Enzo Biochem, Inc.	Deny	Denied	Yes
2010	Caraco Pharm. Lab'ys, Ltd. v. Novo Nordisk A/S	Grant	Granted	Yes
2009	Bd. of Trs. of the Leland Stanford Jr. Univ. v. Roche Molecular Sys., Inc.	Grant	Granted	Yes
2007	Biomedical Pat. Mgmt. Corp. v. Cal. Dep't of Health Servs.	Deny	Denied	Yes
2006	Quanta Comput., Inc. v. LG Elecs., Inc.	Grant	Granted	Yes
2005	Apotex Inc. v. Pfizer, Inc.	Settled	Denied	n/a
2005	Microsoft Corp. v. AT&T Corp.	Grant	Granted	Yes
2005	SmithKline Beecham Corp. v. Apotex Corp.	Deny	Denied	Yes
2005	KSR Int'l Co. v. Teleflex, Inc.	Grant	Granted	Yes
2004	Lab'y Corp. of Am. Holdings v. Metabolite Lab'ys, Inc.	Deny	Granted then DIG'd	No
2004	McFarling v. Monsanto Co.	Deny	Denied	Yes
2004	Honeywell Int'l Inc. v. Hamilton Sundstrand Corp.	Deny	Denied	Yes
2004	Merck KgaA v. Integra Lifesciences I, Ltd.	Grant	Granted	Yes
2002	Dethmers Mfg. Co. v. Automatic Equip. Mfg. Co.	Deny	Denied	Yes
2002	Monsanto Co. v. Bayer CropScience, S.A.	Deny	Denied	Yes
2002	Duke Univ. v. Madey	Deny	Denied	Yes
2002	Micrel, Inc. v. Linear Tech. Corp.	Deny	Denied	Yes
2001	Fin Control Sys., Pty. v. Surfco Haw.	Deny	Denied	Yes
2000	J.E.M. Ag Supply, Inc. v. Pioneer Hi-Bred Int'l, Inc.	Deny	Granted	No
2000	Atl. Richfield Co. v. Union Oil Co. of Cal.	Deny	Denied	Yes
2000	CSU L.L.C. v. Xerox Corp.	Deny	Denied	Yes
1994	Barr Lab'ys v. Burroughs Wellcome Co.	Deny	Denied	Yes

## APPENDIX C: FEDERAL CIRCUIT PATENT CASES IN WHICH THE SUPREME COURT ISSUED A CVSG, 1982 THROUGH 2022 TERMS