

STEPPING OUT OF THE SOLICITOR GENERAL’S SHADOW: THE FEDERAL CIRCUIT AND THE SUPREME COURT IN A NEW ERA OF PATENT LAW

PAUL R. GUGLIUZZA
PYRY P. KOIVULA

| | |
|--|-----|
| INTRODUCTION | 461 |
| I. THE SOLICITOR GENERAL AND THE SUPREME COURT | 471 |
| <i>A. Generally</i> | 471 |
| <i>B. In Patent Cases</i> | 475 |
| II. METHODOLOGY AND SUMMARY STATISTICS | 480 |
| <i>A. Methodology</i> | 481 |
| 1. Supreme Court Federal Circuit Dataset | 481 |
| 2. CVSG Dataset | 484 |
| <i>B. Summary Statistics</i> | 484 |
| III. THE SOLICITOR GENERAL AT THE CERTIORARI STAGE | 490 |
| IV. THE SOLICITOR GENERAL ON THE MERITS | 493 |
| <i>A. SG Success Rates</i> | 494 |
| <i>B. The SG’s Advantages as an Amicus in Patent Cases</i> | 496 |
| <i>C. The SG’s Evolving Role in Patent Cases</i> | 499 |
| <i>D. The Changing Nature of the Supreme Court’s Patent Docket</i> | 503 |
| V. OUR NEW PATENT SYSTEM? | 507 |
| <i>A. A Federal Circuit No Longer in the Shadow of the SG</i> | 507 |
| <i>B. Peril—and Promise—in Our New Patent System</i> | 509 |
| CONCLUSION | 514 |
| APPENDIX A. SUPREME COURT PATENT CASES ORIGINATING IN THE FEDERAL CIRCUIT (1982–2022) | 516 |
| APPENDIX B. SUPREME COURT PATENT CASES NOT ORIGINATING IN THE FEDERAL CIRCUIT (1982–2022) | 519 |
| APPENDIX C. SUPREME COURT NON-PATENT CASES ORIGINATING IN THE FEDERAL CIRCUIT (1982–2022) | 520 |

STEPPING OUT OF THE SOLICITOR GENERAL'S SHADOW: THE FEDERAL CIRCUIT AND THE SUPREME COURT IN A NEW ERA OF PATENT LAW

PAUL R. GUGLIUZZA*
PYRY P. KOIVULA**

Abstract: Since Congress created the Federal Circuit forty years ago, the court has been praised for providing uniformity and expertise in patent law. But it has also been criticized for engaging in overly aggressive review of district courts and the Patent Office, disregarding Supreme Court precedent, and shaping patent law in ways that discourage innovation rather than promote it. The Solicitor General, who represents the executive branch in Supreme Court litigation, has been so successful at getting the Court to overturn Federal Circuit patent precedent that the circuit was, not long ago, said to “stand in the shadow of the Solicitor General.”

But those narratives may no longer be true. This Article, through a close study of patent cases decided by and cert. petitions presented to the Supreme Court, suggests that the era of a renegade Federal Circuit constantly being reined in by the Court and the Solicitor General may be over. In several recent cases, the Supreme Court has rejected arguments by the SG to undo Federal Circuit patent precedent—something that, until 2011, had happened only once. And, though the SG still wields significant influence over which patent cases the Court hears on the merits, that, too, may be changing: in 2022, the Supreme Court—for the first time ever—rejected the SG’s suggestion to grant certiorari in a patent case.

These developments have at least three implications. First, for patent doctrine, they suggest we are entering an era in which the Federal Circuit will have the last word on practically every issue—a potentially troubling dynamic because the court is uniquely vulnerable to interest-group capture and there are no other peer-level appellate courts to disrupt bad precedent. Second, for patent institutions, the

* Professor of Law, Temple University Beasley School of Law.

** J.D., Temple University Beasley School of Law.

For helpful comments, thanks to Jonas Anderson, Edith Beerdsen, T.J. Chiang, Chris Cotropia, Michael Donnell, Erika Douglas, John Golden, Craig Green, Duncan Hollis, Dmitry Karshedt, Megan La Belle, Jen Lee, Mark Lemley, Tom Lin, Jonathan Lipson, Salil Mehra, Tejas Narechania, Arti Rai, Jaya Ramji-Nogales, Spencer Rand, Rachel Rebouché, Pam Samuelson, Nina Srejovic, Neel Sukhatme, and Jay Thomas.

NOTE: Because not all platforms support tables and figures, the graphics appearing in this Article are also archived at https://www.bc.edu/content/dam/bc1/schools/law/pdf/law-review-content/BCLR/64-3/Gugliuzza_Koivula_graphics.pdf [<https://perma.cc/868S-WT7D>].

SG's litigation failures and the Supreme Court's reduced interest in patent cases means that power is shifting toward not only the Federal Circuit but also the Patent Office—an awkward site of authority given the agency's lack of power to promulgate substantive rules of patent law. Finally, the Supreme Court's skepticism of the SG in patent cases is part of a broader story about separation of powers—a newly emboldened Supreme Court that is dismissive of executive branch institutions and unapologetic in its willingness to chart its own path.

Yet the new institutional arrangement this Article identifies also presents opportunities. A Supreme Court that hears fewer patent cases could spur the Federal Circuit to fix problematic doctrines on its own, rather than waiting for—or begging for—the Court to intervene, as the circuit commonly does now. The modern Patent Office, despite formal limits on its power, is, as a practical matter, well situated to tune patent law to various policy objectives. Finally, the Supreme Court's hands-off approach to patent law and rebukes of the executive branch underscore the need to reform the Court as an institution.

INTRODUCTION

At the end of the 2021 Supreme Court Term, everyone was talking about abortion,¹ gun control,² climate change,³ and school prayer.⁴ For good reason—the outcomes of those cases were momentous. But, given the Court's political makeup, they weren't unexpected.⁵ For a genuinely surprising ruling, consider the Court's most significant patent decision of the Term—which wasn't even a decision on the merits.

The petition for a writ of certiorari in *American Axle v. Neapco* presented the question of whether a method of reducing vibration in an automobile drive shaft is the type of invention that is “eligible” for patenting.⁶ Eligibility doctrine is the hottest topic in patent law right now.⁷ After four Supreme Court rulings from 2010 through 2014 revived the eligibility requirement,⁸ lawyers,

¹ *Dobbs v. Jackson Women's Health Org.*, 142 S. Ct. 2228 (2022).

² *N.Y. State Rifle & Pistol Ass'n v. Bruen*, 142 S. Ct. 2111 (2022).

³ *West Virginia v. EPA*, 142 S. Ct. 2587 (2022).

⁴ *Kennedy v. Bremerton Sch. Dist.*, 142 S. Ct. 2407 (2022).

⁵ See, e.g., Josh Gerstein & Alexander Ward, *Supreme Court Has Voted to Overturn Abortion Rights, Draft Opinion Shows*, POLITICO, <https://www.politico.com/news/2022/05/02/supreme-court-abortion-draft-opinion-00029473> [<https://perma.cc/H6CW-WN93>] (May 3, 2022) (noting that many observers foresaw this outcome).

⁶ Petition for Writ of Certiorari at i, *Am. Axle & Mfg., Inc. v. Neapco Holdings LLC*, 142 S. Ct. 2902 (2022) (No. 20-891), 2019 WL 11611081, at *i.

⁷ See Paul R. Gugliuzza, *The Procedure of Patent Eligibility*, 97 TEX. L. REV. 571, 581–86 (2019) (summarizing the doctrine and the controversy surrounding it).

⁸ *Alice Corp. v. CLS Bank Int'l*, 573 U.S. 208, 212 (2014); *Ass'n for Molecular Pathology v. Myriad Genetics, Inc.*, 569 U.S. 576, 580 (2013); *Mayo Collaborative Servs. v. Prometheus Lab'ys, Inc.*, 566 U.S. 66, 72 (2012); *Bilski v. Kappos*, 561 U.S. 593, 612 (2010).

scholars, and government officials have praised⁹ and criticized¹⁰ the doctrine with equal force. Congress has held numerous hearings about eligibility law.¹¹ In the *American Axle* case itself, the Federal Circuit (which hears all patent appeals nationwide) divided six-to-six when asked to rehear en banc the panel's two-to-one decision¹² striking down the patent, with the court issuing five separate opinions at the en banc stage alone.¹³

After *American Axle* filed its cert. petition, the Supreme Court called for the views of the Solicitor General (SG), as it often does in cases that seem like plausible candidates for review.¹⁴ (The SG represents the federal government in all Supreme Court litigation, as we explain in more detail below.)¹⁵ After taking an unusually long time to file its brief (more than a year), the SG recommended granting the petition.¹⁶ In every one of the thirteen patent cases in which the SG had previously recommended granting review, the Supreme Court did so.¹⁷ *American Axle*'s petition was also accompanied by ten amicus briefs¹⁸ urging the Court to grant review—another important consideration in gauging the likelihood of cert. being granted.¹⁹ *American Axle*, in short, involved a deeply divided lower court on an important and controversial issue in which the Supreme Court has repeatedly shown interest and on which the SG—the so-called “Tenth Justice” because of the SG’s heavy influence on the

⁹ See, e.g., Paul R. Gugliuzza, *Quick Decisions in Patent Cases*, 106 GEO. L.J. 619, 655 (2018) (arguing that the eligibility requirement “provides a means for quickly and cheaply wiping out patents that are so likely to be invalidated under other requirements of patentability that discovery is not warranted”).

¹⁰ See, e.g., Brief of U.S. Senator Thom Tillis, Honorable Paul R. Michel, and Honorable David J. Kappos, as Amici Curiae in Support of Petition by American Axle & Manufacturing, Inc. for a Writ of Certiorari Directed to the U.S. Court of Appeals for the Federal Circuit at 2–3, *Am. Axle*, 142 S. Ct. 2902 (No. 20-891), 2021 WL 878075, at *2–3 (“The undue confusion and uncertainty in outcome-predictability . . . has become so ubiquitous as to render the U.S. patent system unstable and unreliable at its core . . .”).

¹¹ See, e.g., *Hearing on the State of Patent Eligibility in America: Part I: Hearing Before the Subcomm. on Intell. Prop. of the S. Comm. on the Judiciary*, 116th Cong. (2019), <https://www.judiciary.senate.gov/meetings/the-state-of-patent-eligibility-in-america-part-i> [<https://perma.cc/EPP2-4SZU>] (hearing testimony on proposed changes to patent eligibility law).

¹² *Am. Axle & Mfg., Inc. v. Neapco Holdings LLC*, 967 F.3d 1285, 1286 (Fed. Cir. 2020).

¹³ *Am. Axle & Mfg., Inc. v. Neapco Holdings LLC*, 966 F.3d 1347 (Fed. Cir. 2020) (denying rehearing en banc with two concurrences and three dissents).

¹⁴ *Am. Axle & Mfg., Inc. v. Neapco Holdings LLC*, 141 S. Ct. 2594 (2021).

¹⁵ See *infra* Section I.A.

¹⁶ Brief for the United States as Amicus Curiae at 1, *Am. Axle & Mfg., Inc. v. Neapco Holdings LLC*, 142 S. Ct. 2902 (No. 20-891), 2022 WL 1670811, at *1.

¹⁷ See *infra* Part III.

¹⁸ *Docket, American Axle, No. 20-891*, SUP. CT. OF THE U.S., <https://www.supremecourt.gov/docket/docketfiles/html/public/20-891.html> [<https://perma.cc/G528-TC2H>] (June 30, 2022).

¹⁹ See Allison Orr Larsen & Neal Devins, *The Amicus Machine*, 102 VA. L. REV. 1901, 1939 (2016) (finding that, in 2014, a cert. petition with at least one amicus brief in support was six times more likely to be granted than a petition without amicus support).

Court's decision-making²⁰—as well as numerous prominent private parties,²¹ thought the Supreme Court should weigh in. A grant seemed practically guaranteed.²²

But it didn't happen.²³

* * *

The cert. denial in *American Axle* may be the clearest signal yet that our patent system has entered a new era. Over the past two decades, patent law went mainstream. Once primarily the domain of hyperspecialized lawyers with backgrounds in the hard sciences,²⁴ patent law became one of the most significant pieces of the Supreme Court's shrinking plenary docket. Beginning in the early 2000s, the Court decided multiple patent cases nearly every Term.²⁵ But, as this Article goes to press, it's been nearly two years since the Court issued an opinion in a patent case.²⁶ And the lone patent case currently pending on the Court's merits docket, *Amgen Inc. v. Sanofi*, arrived there through an unusual sequence of events: the SG, like in *American Axle*, filed a cert.-stage amicus brief at the Court's invitation.²⁷ That brief recommended denying the petition.²⁸ But the Court *again* disregarded the SG's advice and granted certiorari.²⁹

It's not only at the cert. stage that institutional dynamics in patent cases are rapidly changing—it's happening on the merits, too. Take, for instance, the Court's two most recent patent decisions, both from the 2020 Term. In *United States v. Arthrex, Inc.*, the Court held that administrative patent judges (APJs)—

²⁰ LINCOLN CAPLAN, *THE TENTH JUSTICE: THE SOLICITOR GENERAL AND THE RULE OF LAW* (1987).

²¹ See, e.g., Brief of Biotechnology Innovation Organization and AUTM as Amici Curiae in Support of Petitioner, *Am. Axle*, 142 S. Ct. 2902 (No. 20-891), 2021 WL 878073.

²² For a tweet that aged poorly, see Paul R. Gugliuzza (@prgugliuzza), TWITTER (May 26, 2022, 10:19 AM), <https://twitter.com/prgugliuzza/status/1529829502578216960?ext=HHwWgMCYwfj0hbsqAAAA> [<https://perma.cc/4ABE-QBKY>] (“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] . . .”).

²³ See *Am. Axle*, 142 S. Ct. 2902 (denying certiorari).

²⁴ See Lee Petherbridge & David L. Schwartz, *The End of an Epithet? An Exploration of the Use of Legal Scholarship in Intellectual Property Decisions*, 50 *HOUS. L. REV.* 523, 552–53 (2012) (noting that “[t]hose who teach patent law are aware that to this day there exist the remnants of a culture that preferred attorneys with technical backgrounds to other attorneys”).

²⁵ See Paul R. Gugliuzza, *The Supreme Court Bar at the Bar of Patents*, 95 *NOTRE DAME L. REV.* 1233, 1234 (2020) (noting that, since 2004, the Court has decided more than forty patent cases, for an average of over three per Term). For a frequently updated list of Supreme Court patent decisions, see Lisa Larrimore Ouellette, Michael Risch & Camilla Hrdy, *Supreme Court Patent Cases*, WRITTEN DESCRIPTION, <https://writtendescription.blogspot.com/p/patents-sctous.html> [<https://perma.cc/DN7J-6LJH>].

²⁶ See *Minerva Surgical, Inc. v. Hologic, Inc.*, 141 S. Ct. 2298 (2021) (decided June 29, 2021).

²⁷ *Amgen Inc. v. Sanofi*, 142 S. Ct. 1666 (2022).

²⁸ Brief for the United States as Amicus Curiae at 1, *Amgen Inc. v. Sanofi*, 143 S. Ct. 399 (2022) (No. 21-757), 2022 WL 4386300, at *1.

²⁹ *Amgen*, 143 S. Ct. at 399.

Patent Office employees who decide appeals from examiner rejections and conduct proceedings to reassess the validity of issued patents—had been vested with too much decision-making authority to have not been appointed by the President and confirmed by the Senate.³⁰ In *Minerva Surgical, Inc. v. Hologic, Inc.*, the Court narrowed patent law’s doctrine of assignor estoppel, which can, in certain circumstances, prevent an inventor who assigned a patent from later challenging that patent’s validity.³¹

In both cases, the Solicitor General filed an amicus brief on the merits and participated in oral argument, as the SG does in about eighty percent of all Supreme Court cases.³² Overall, the SG wins sixty to eighty percent of the Supreme Court cases in which it participates at the merits stage.³³ The SG’s influence has, historically, been even more substantial in the field of patent law. Writing in 2010, John Duffy observed that, since around the turn of the twenty-first century, the Supreme Court had adopted the SG’s legal position in practically every patent case the Court had decided.³⁴ And this despite the existence of the Federal Circuit, which hears all appeals in patent cases nationwide and, therefore, might be viewed, quite plausibly, to be an expert in the field.³⁵

But the Supreme Court’s decisions in *Arthrex* and *Minerva*, like its cert. denial in *American Axle* and cert. grant in *Amgen*, hint at significant changes afoot. In *Arthrex*, the Court roundly rejected every argument made by the SG, instead agreeing (for the most part) with the Federal Circuit’s ruling that APJs exercised authority beyond that permitted by the Constitution’s Appointments

³⁰ 141 S. Ct. 1970, 1985 (2021) (holding that, under the Constitution’s Appointments Clause, “the unreviewable authority wielded by APJs during inter partes review is incompatible with their appointment by the Secretary [of Commerce] to an inferior office”).

³¹ 141 S. Ct. at 2311 (holding that assignor estoppel applies only “when an invalidity defense in an infringement suit conflicts with an explicit or implicit representation made in assigning patent rights”).

³² Darcy Covert & Annie J. Wang, *The Loudest Voice at the Supreme Court: The Solicitor General’s Dominance of Amicus Oral Argument*, 74 VAND. L. REV. 681, 684 (2021) (reporting that, since the 2001 Term, the SG argued, either as party or amicus, in 69%–88% of all Supreme Court cases).

³³ Andrew Pincus, *The Solicitor General’s Report Card*, SCOTUSBLOG (July 2, 2014), <https://www.scotusblog.com/2014/07/the-solicitor-generals-report-card> [<https://perma.cc/RV7D-RSXC>].

³⁴ See John F. Duffy, *The Federal Circuit in the Shadow of the Solicitor General*, 78 GEO. WASH. L. REV. 518, 540 (2010) (noting that “[i]n nine of [the thirteen] cases [in which the SG participated from 1996 through 2010], the Solicitor General . . . supported a different result than that reached by the Federal Circuit, and in every case the Supreme Court . . . agreed with the Solicitor General’s position over the Federal Circuit’s”).

³⁵ See John F. Duffy, *The Festo Decision and the Return of the Supreme Court to the Bar of Patents*, 2002 SUP. CT. REV. 273, 276 (“The Federal Circuit . . . was designed to become an expert court with the jurisdiction and capability to unify national patent law.”). See generally Paul R. Gugliuzza, *Rethinking Federal Circuit Jurisdiction*, 100 GEO. L.J. 1437, 1453–64 (2012) (providing an historical overview of the Federal Circuit’s creation).

Clause.³⁶ A few days later in *Minerva*, however, it was just like old times: the Court overturned a line of Federal Circuit precedent that made it impossible for an inventor to later challenge the validity of a patent it had assigned.³⁷ Instead, the Court restricted the doctrine of assignor estoppel to situations in which “an inventor says one thing (explicitly or implicitly) in assigning a patent and the opposite in litigating against the patent’s owner,”³⁸ which was precisely the outcome the SG requested.³⁹

Given the Federal Circuit’s reputation for poor performance in front of the Justices⁴⁰ and the SG’s historical record of success in patent cases,⁴¹ the contrasting results in *Minerva* and *Arthrex* might seem peculiar. And they don’t stand alone. In several other recent cases, the SG has seen its position roundly rejected by the Supreme Court and the Federal Circuit’s position affirmed.⁴² Yet the circuit’s batting average is by no means 1.000,⁴³ nor has the SG struck

³⁶ See *United States v. Arthrex, Inc.*, 141 S. Ct. 1970, 1981 (2021) (“The Government insists that the Director, by handpicking (and, if necessary, re-picking) [APJs to decide a particular case], can indirectly influence the course of inter partes review. That is not the solution. It is the problem.”).

³⁷ *Minerva Surgical, Inc. v. Hologic, Inc.*, 141 S. Ct. 2298, 2304 (2021). For a discussion of the relevant Federal Circuit case law—and a critique of the then-prevailing doctrine—see Mark A. Lemley, *Rethinking Assignor Estoppel*, 54 HOUS. L. REV. 513, 519–40 (2016).

³⁸ *Minerva*, 141 S. Ct. at 2304.

³⁹ Brief for the United States as Amicus Curiae Supporting Neither Party at 12–13, *Minerva*, 141 S. Ct. 2298 (No. 20-440) (“Courts should apply assignor estoppel only where (1) an inventor sells patent rights for valuable consideration in an arm’s-length transaction, then later contends that a patent claim is invalid; and (2) either the contested claim is materially identical to a claim issued or pending at the time of the relevant assignment, or the assignor’s invalidity defense otherwise contradicts earlier representations pertaining to the validity of the claim.”). In *Minerva*, the Supreme Court remanded the case for a determination of whether the issued patent claim was “materially broader” than the claim the inventor originally assigned. See 141 S. Ct. at 2310–11.

⁴⁰ See, e.g., Rebecca S. Eisenberg, *The Supreme Court and the Federal Circuit: Visitation and Custody of Patent Law*, 106 MICH. L. REV. FIRST IMPRESSIONS 28, 28 (2007), <https://repository.law.umich.edu/cgi/viewcontent.cgi?article=2206&context=articles> [<https://perma.cc/LBX9-ZQF6>] (“The increasing propensity of the Supreme Court to grant review in patent cases suggests that it is concerned about how good a job the Federal Circuit is doing.”).

⁴¹ See Duffy, *supra* note 34, at 540.

⁴² See, e.g., *Peter v. NantKwest, Inc.*, 140 S. Ct. 365, 369 (2019) (rejecting the government’s argument that it can recover its attorney’s fees in a civil action to obtain a patent); *Helsinn Healthcare S.A. v. Teva Pharms. USA, Inc.*, 139 S. Ct. 628, 634 (2019) (holding that “an inventor’s sale of an invention to a third party who is obligated to keep the invention confidential can qualify as prior art”). In *Helsinn*, the Court rejected the government’s argument that, for a sale to qualify as prior art, “either the inventive idea or physical embodiments of an invention [must be] placed in the public domain.” Brief for the United States as Amicus Curiae Supporting Petitioner at 12, *Helsinn*, 139 S. Ct. 628 (No. 17-1229).

⁴³ See, e.g., *TC Heartland LLC v. Kraft Foods Grp. Brands LLC*, 137 S. Ct. 1514, 1520 (2017) (reversing the Federal Circuit’s holding that venue is proper in patent infringement lawsuits against domestic corporations in any judicial district in which the corporation is subject to personal jurisdiction).

out in every case.⁴⁴ Likewise, though the cert. denial in *American Axle* over the SG's recommendation to grant was unprecedented,⁴⁵ and the cert. grant in *Amgen* over the SG's recommendation to deny had only happened twice before,⁴⁶ they're only two datapoints. Overall, as we show below, the Supreme Court follows the SG's recommendation about whether to grant or deny certiorari in patent cases over ninety percent of the time—much more frequently than in other types of cases.⁴⁷

This Article is the first to recognize—and to try to make sense of—the evolving dynamics among the Supreme Court, the executive branch, and the Federal Circuit in patent cases. It argues that these recent and ongoing changes mark the beginning of a new era in the patent system, one in which longstanding critiques of the Federal Circuit⁴⁸ and enduring narratives about the Supreme Court's role in shaping patent law⁴⁹ no longer hold. To support that claim, we present, among other evidence, a novel study of all Federal Circuit patent cases decided by and all patent-related cert. petitions presented to the Supreme Court over the past several decades.⁵⁰

⁴⁴ See, e.g., *WesternGeco LLC v. ION Geophysical Corp.*, 138 S. Ct. 2129, 2134 (2018) (holding that a patent owner may recover foreign lost profits); accord Brief for the United States as Amicus Curiae Supporting Petitioner at 8, *WesternGeco*, 138 S. Ct. 2129 (No. 16-1011) (“[T]he Patent Act permits recovery for harms occurring abroad as the result of domestic infringement.”).

⁴⁵ In a prior patent-eligibility case in which the Court called for the SG's views, the SG recommended denying cert. in that case and instead suggested that the Court consider granting cert. in another then-pending case. Brief for the United States as Amicus Curiae at 22–23, *Hikma Pharms. USA Inc. v. Vanda Pharms. Inc.*, 140 S. Ct. 911 (2020) (No. 18-817). But we read the SG's brief in *Hikma* as stopping short of recommending a *grant*—like the SG did in *American Axle*. See *id.* (“Whether in *Athena* or in another such case, further guidance from this Court [about the patent eligibility of medical diagnostics] is amply warranted.” (emphasis added)).

⁴⁶ See Paul R. Gugliuzza & Mark A. Lemley, *Myths and Reality of Patent Law at the Supreme Court* 85–86 (Jan. 5, 2023) (unpublished manuscript), <https://ssrn.com/abstract=4304442> [<https://perma.cc/AP35-TKNL>].

⁴⁷ Specifically, from 2002 through the end of the 2021 Term, the Supreme Court followed the SG's recommendation about whether to grant or deny cert. in all but three of the forty Federal Circuit patent cases (92.5%) in which the Court called for the SG's views. Overall, the Court agrees with the SG's recommendation in 78.8% of cases in which the SG files a cert.-stage amicus brief at the Court's invitation. See *infra* Part III.

⁴⁸ See, e.g., JAMES BESSEN & MICHAEL J. MEURER, *PATENT FAILURE: HOW JUDGES, BUREAUCRATS, AND LAWYERS PUT INNOVATORS AT RISK* 212–13 (2008) (arguing that the Federal Circuit has overseen a proliferation of patents on trivial advances in technology, particularly in the field of computer software).

⁴⁹ See, e.g., Peter Lee, *The Supreme Assimilation of Patent Law*, 114 MICH. L. REV. 1413, 1416 (2016) (arguing that “the Supreme Court's recent patent jurisprudence reflects a project of eliminating ‘patent exceptionalism’ and assimilating patent doctrine to general legal principles”).

⁵⁰ See *infra* Parts III and IV.

Our study makes plain that the new era of patent law began in 2011, with Congress's passage of the America Invents Act (AIA).⁵¹ Among other changes, the AIA revamped the proceedings through which the Patent Office can reassess the validity of patents it has already issued.⁵² These streamlined proceedings—designed as quicker and cheaper alternatives to district court litigation over patent validity⁵³—were initially viewed as a significant shift of power over patent law away from the courts and toward the executive branch.⁵⁴ But our study suggests that, in the longer run, the AIA has enhanced judicial skepticism of the executive branch on patent-related matters in ways that, to date, have not been discussed in the burgeoning literature on patents and the administrative state.⁵⁵

A brief summary of our key findings makes clear how the AIA changed the relationship among the Supreme Court, the Federal Circuit, and the SG. Between 1982 (the year the Federal Circuit began operating) and 2011 (the year Congress passed the AIA), the Supreme Court rejected the SG's arguments on the merits in only one patent case out of the sixteen in which the SG

⁵¹ America Invents Act, Pub. L. No. 112-29, 125 Stat. 284 (2011) (codified as amended in scattered sections of 35 U.S.C.).

⁵² See 35 U.S.C. §§ 311–319 (inter partes review); *id.* §§ 321–329 (post-grant review). For a detailed overview of the new proceedings created by the AIA, see Rochelle Cooper Dreyfuss, *Giving the Federal Circuit a Run for Its Money: Challenging Patents in the PTAB*, 91 NOTRE DAME L. REV. 235, 242–49 (2015).

⁵³ See H.R. REP. NO. 112-98, at 39–40 (2011) (explaining that the purpose of the new proceedings is to “provid[e] a more efficient system for challenging patents that should not have issued[] and reduc[e] unwarranted litigation costs”); see also Joe Matal, *A Guide to the Legislative History of the America Invents Act: Part II of II*, 21 FED. CIR. BAR J. 539, 601 (2012) (noting that one “reason for authorizing post-grant review of patents before the USPTO is simply that the ‘USPTO is a particularly appropriate venue for making validity determinations in a cost-effective and technically sophisticated environment’” (quoting *Perspective on Patents: Harmonization and Other Matters: Hearing Before the Subcomm. on Intell. Prop. of the S. Comm. on the Judiciary*, 109th Cong. 51 (2005) (statement of Q. Todd Dickinson, former director of the U.S. Patent and Trademark Office))).

⁵⁴ See, e.g., Sarah Tran, *Patent Powers*, 25 HARV. J.L. & TECH. 609, 613 (2012) (“[T]he America Invents Act serves as the latest and most clear-cut victory for the Patent Office vis-à-vis the courts in the struggle for power over patent law.”); Melissa F. Wasserman, *The Changing Guard of Patent Law: Chevron Deference for the PTO*, 54 WM. & MARY L. REV. 1959, 1965 (2013) (arguing that “the AIA rejects over two hundred years of court dominance in patent policy by anointing the PTO as the chief expositor of substantive patent law standards”); see also Stuart Minor Benjamin & Arti K. Rai, *Administrative Power in the Era of Patent Stare Decisis*, 65 DUKE L.J. 1563, 1573 (2016) (chronicling how, in AIA-related litigation, “the PTO has asserted power relative to” the Federal Circuit). *But cf.* John M. Golden, *Working Without Chevron: The PTO as Prime Mover*, 65 DUKE L.J. 1657, 1659 (2016) (arguing that the PTO is “a relatively weak administrative agency by modern standards” and that “recent additions to the Patent Act are unlikely to change courts’ perception of the level of PTO interpretive authority”).

⁵⁵ 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 *Forty-Sixth Annual Administrative Law Symposium: Intellectual Property Exceptionalism in Administrative Law*, 65 DUKE L.J. 1551 (2016).

participated. But, since that time, the Court has rejected the SG's arguments in eight patent cases arising from the Federal Circuit—over one-quarter of the thirty-one Federal Circuit 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—something that had never happened before 2011.⁵⁶

These numbers are, to be sure, not large. But it is nevertheless clear (1) that the SG's role in the case (as either an amicus or a party) is a primary variable affecting the SG's likelihood of success and (2) that the AIA has driven changes in the SG's role. When participating as an amicus, the Supreme Court agrees with the SG's recommendation on the merits over ninety percent of the time (in thirty-four of thirty-seven patent cases since the Federal Circuit began operating in 1982). When the SG argues as a party in litigation, however, the Supreme Court agrees with the SG less than half of the time (five out of twelve cases since 1982).⁵⁷ And, because unhappy patent owners have repeatedly challenged the AIA and the Patent Office's implementation of it (spurred by emerging Supreme Court precedent that is highly skeptical of administrative agencies in general)⁵⁸ the SG is participating in Supreme Court patent cases as a party more frequently today than at any time in the recent past.⁵⁹

The changes we document have at least three crucial implications, ranging from granular points about patent doctrine to high-level matters of constitutional theory and structure. First, for patent doctrine, they suggest we are entering an era in which the Federal Circuit will have the last word in practically every patent case. This is a potential problem. It's well known that specialized tribunals are vulnerable to interest-group capture,⁶⁰ a critique that has been lobbed at the Federal Circuit.⁶¹ Moreover, with all patent appeals centralized in one court, there are no other peer-level courts to identify or disrupt bad or outdated precedent—something we don't want in a field of law that's supposed to encourage technological innovation.⁶²

⁵⁶ See *infra* Section IV.A.

⁵⁷ See *id.*

⁵⁸ See, e.g., *Lucia v. Sec. & Exch. Comm'n*, 138 S. Ct. 2044, 2049 (2018) (holding that administrative law judges at the SEC are "principal officers" whom the President must appoint and the Senate must confirm); *Free Enter. Fund v. Pub. Co. Acct. Oversight Bd.*, 561 U.S. 477, 484 (2010) (holding that multilevel "good-cause" protection from removal violates Article II's vesting clause).

⁵⁹ See *infra* Sections IV.C–D.

⁶⁰ See LAWRENCE BAUM, *SPECIALIZING THE COURTS* 37 (2011).

⁶¹ See, e.g., Paul R. Gugliuzza, *The Federal Circuit: A Failed Experiment in Specialization?*, FEDCIRCUITBLOG (Feb. 28, 2022), <https://fedcircuitblog.com/2022/02/28/online-symposium-the-federal-circuit-a-failed-experiment-in-specialization> [<https://perma.cc/26VF-LUEU>].

⁶² See Diane P. Wood, *Is It Time to Abolish the Federal Circuit's Exclusive Jurisdiction in Patent Cases?*, 13 CHL.-KENT J. INTEL. PROP. 1, 10 (2013).

Second, for the institutional design of the patent system, the SG's litigation failures and the Supreme Court's reduced interest in patent law means that power is shifting not only to the Federal Circuit but also to the Patent Office. Yet the Patent Office can be an awkward site of authority because, unlike many administrative agencies, it lacks power to announce substantive rules of law.⁶³ Without the ability to clarify or change patent doctrine, the Patent Office's "power" may end up being useless in nudging patent doctrine to increase social welfare.⁶⁴

Finally, the Supreme Court's skepticism of the SG in patent cases is part of a broader story about separation of powers. In denying cert. in a case like *American Axle* (and granting cert. over the SG's recommendation to deny in *Amgen*), we see an emboldened Supreme Court dismissing the SG's expertise, even in a technical field like patent law.⁶⁵ We also see a Court that is unapologetic in its willingness to chart its own path⁶⁶—refusing to hear a case on an important and contentious issue that is largely a consequence of the Court's own prior decisions.⁶⁷

Despite these potential problems with patent law's new institutional arrangements, there is reason to think it will work out in the end. The Supreme Court, by more frequently affirming the Federal Circuit and shrinking its patent docket, is making clear that help is *not* on the way. So, despite deep disa-

⁶³ Merck & Co. v. Kessler, 80 F.3d 1543, 1549–50 (Fed. Cir. 1996).

⁶⁴ But cf. Wasserman, *supra* note 54, at 1965–66 (arguing that the Patent Office should receive deference for interpretations and articulations of patent law made during post-issuance review proceedings).

⁶⁵ For commentary on the current Supreme Court's skepticism of the administrative state, see Gary Lawson, *The Return of the King: The Unsavory Origins of Administrative Law*, 93 TEX. L. REV. 1521, 1521–22 (2015) (reviewing PHILIP HAMBURGER, IS ADMINISTRATIVE LAW UNLAWFUL? (2014)); Adrian Vermeule, No, 93 TEX. L. REV. 1547, 1548 (2015) (same); Craig Green, *Chevron Debates and the Constitutional Transformation of Administrative Law*, 88 GEO. WASH. L. REV. 654, 659–61 (2020); Ronald M. Levin, *The APA and the Assault on Deference*, 106 MINN. L. REV. 125, 126–28 (2021). See generally Christopher J. Walker, *Attacking Auer and Chevron Deference: A Literature Review*, 16 GEO. J.L. & PUB. POL'Y 103 (2018) (summarizing the arguments against judicial deference).

⁶⁶ See generally Mark A. Lemley, *The Imperial Supreme Court*, 136 HARV. L. REV. F. 97, 113–14 (2022), <https://harvardlawreview.org/wp-content/uploads/2022/11/136-Harv.-L.-Rev.-F.-97.pdf> [<https://perma.cc/5GY6-GRED>] (“A more plausible explanation [for many of the Supreme Court’s recent decisions] is that a newfound conservative majority is simply doing whatever it wants in the cases before it, consistent with a particularly strong form of the legal realist idea that judges just implement their own policy preferences.”); Merritt E. McAlister, *White-Collar Courts*, 76 VAND. L. REV. (forthcoming 2023) (manuscript at 1), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4211636 [<https://perma.cc/ED3T-EJUW>] (documenting the emergence of “a judicial culture that eschews restraint, as judges issue bolder, bigger rulings thought worthy of a high-profile federal judiciary”).

⁶⁷ See *supra* note 8 (listing Supreme Court rulings on eligibility requirements); see also Mark A. Lemley, Michael Risch, Ted Sichelman & R. Polk Wagner, *Life After Bilski*, 63 STAN. L. REV. 1315, 1318 (2011) (noting that, before the Supreme Court’s 2010 decision in *Bilski v. Kappos*, the patent eligibility requirement “was effectively a dead letter”).

greements among the Federal Circuit's judges on key issues of patent law,⁶⁸ they will have to do the work of getting doctrine in order.⁶⁹ That may mean going en banc more frequently to make definitive statements about controversial issues. The Federal Circuit has been noticeably unwilling to convene en banc in patent cases the past few years,⁷⁰ but the en banc mechanism could substitute for the idea percolation that is otherwise lacking in a regime of centralized appellate jurisdiction.⁷¹

Moreover, though the Patent Office doesn't have lawmaking authority, it is currently better positioned to be an influential voice than at any time in the recent past. The AIA created a tribunal of seasoned, expert judges to decide post-issuance review proceedings (the Patent Trial and Appeal Board),⁷² and the agency has shown a willingness to engage the public and craft guidance that, though lacking the force of law, could provide some of the certainty and predictability we expect from agency rules.⁷³

The broader flaws with the Supreme Court as an institution are harder to solve, of course. But the Court's recent actions in patent cases highlight the problems that a politically radical Supreme Court poses in *all* areas of federal law—including a seemingly technical and apolitical field like patent law. And they underscore the need for dramatic and rapid reform of the Court as an institution.⁷⁴

⁶⁸ See Gugliuzza, *supra* note 61 (providing examples).

⁶⁹ Of course, Congress could step into the Supreme Court's shoes and reform various aspects of patent law by statute, but that seems unlikely given deep disagreements between (a) companies in the computers and communications sectors and (b) companies in the pharmaceutical and biotechnology industries. See Rana Foroohar, *Big Tech vs Big Pharma: The Battle Over US Patent Protection*, FIN. TIMES (Oct. 16, 2017), <https://www.ft.com/content/6c5b2cca-ae8b-11e7-beba-5521c713abf4> [<https://perma.cc/AC8U-SLQ7>].

⁷⁰ In fact, the Federal Circuit has not decided a patent case en banc since 2018. See *NantKwest, Inc. v. Iancu*, 898 F.3d 1177, 1177 (Fed. Cir. 2018) (en banc), *aff'd*, 140 S. Ct. 365 (2019).

⁷¹ See Ryan Vacca, *Acting Like an Administrative Agency: The Federal Circuit En Banc*, 76 MO. L. REV. 733, 758 (2011) (suggesting that the Federal Circuit, with its expertise and by inviting briefing from all interested parties, could use its en banc process to be an effective patent policymaker).

⁷² 35 U.S.C. § 6(a).

⁷³ See, e.g., *Subject Matter Eligibility*, U.S. PAT. & TRADEMARK OFF., <https://www.uspto.gov/patents/laws/examination-policy/subject-matter-eligibility> [<https://perma.cc/4GA6-D5NZ>] (Oct. 5, 2022) (listing agency guidance and public comments); Press Release, U.S. Pat. & Trademark Off., Director Vidal Provides Clarity to Patent Trial and Appeal Board Practice on Discretionary Denials of Patent Challenges Based on Parallel Litigation (June 22, 2022), <https://www.uspto.gov/about-us/news-updates/director-vidal-provides-clarity-patent-trial-and-appeal-board-practice> [<https://perma.cc/RN9A-M4QB>].

⁷⁴ See generally Daniel Epps & Ganesh Sitaraman, *How to Save the Supreme Court*, 129 YALE L.J. 148, 152 (2019) (sketching reforms that would “preserve the Court’s role as a neutral arbiter of important questions of law”); LEE EPSTEIN, JAMES L. GIBSON & MICHAEL J. NELSON, PUBLIC RESPONSE TO PROPOSALS TO REFORM THE SUPREME COURT (2020), <https://static1.squarespace.com/static/60188505fb790b33c3d33a61/t/604af3977ee0a433fbaeca34/1615524760442/CourtReformSurvey>.

This Article proceeds in five parts. Part I provides important background, discussing the Solicitor General's influence on Supreme Court decision-making both in general and in the singular field of patent law. Part II describes the methodology of our comprehensive quantitative study of Supreme Court patent litigation and presents some initial results, including a comparison of the Court's decision-making in patent cases with other types of cases originating in the Federal Circuit. Part III then examines the Solicitor General's influence in patent cases at the certiorari stage of Supreme Court litigation, and Part IV examines the Solicitor General's influence at the merits stage. The results reported in Parts III and IV demonstrate that the SG's influence vis-à-vis the Federal Circuit has been waning in recent years, at least in a clearly identifiable subset of patent cases—a phenomenon we attribute largely to the changes wrought by the AIA. Part V concludes by discussing the implications of our quantitative research, suggesting steps the Federal Circuit and the Patent Office should take to account for this new world of patent law, and situating the Article's analysis within broader discourse about the Supreme Court as an institution and its relationship with the political branches.

I. THE SOLICITOR GENERAL AND THE SUPREME COURT

This part of the Article provides essential background on the Office of the Solicitor General and its role in Supreme Court litigation, both in general and in patent cases specifically.

A. Generally

Congress created the Office of the Solicitor General, along with the rest of the Department of Justice, in 1870.⁷⁵ By statute, the Solicitor General, appointed by the President and confirmed by the Senate, is to be “learned in the law, to assist the Attorney General in the performance of his duties.”⁷⁶ The Attorney General is authorized to send the Solicitor General to represent the United States in any court in any case in which the federal government has an interest.⁷⁷ Early Solicitors General occasionally tried cases before juries at the district court level, but, more recently, they have shifted their focus to appeals,

pdf[<https://perma.cc/ESM5-9ZWJ>] (reporting results of a nationally representative survey about how best to reform the Court).

⁷⁵ Act of June 22, 1870, ch. 150, § 2, 16 Stat. 162, 162.

⁷⁶ 28 U.S.C. § 505.

⁷⁷ *Id.* § 517.

particularly at the Supreme Court.⁷⁸ The modern-day SG is responsible for conducting all of the federal government's litigation in the Supreme Court.⁷⁹

The SG comes to participate in Supreme Court litigation in three principal ways: (1) litigating on behalf of the U.S. government as a party (both at the certiorari stage and the merits stage), (2) filing an amicus brief at the certiorari stage, opining, often at the Court's invitation, on whether the Court should hear a case in which the United States is not a party but federal interests may be implicated, and (3) participating as an amicus at the merits stage in cases important to the interests of the federal government.⁸⁰

As a party, the SG has wide latitude deciding in which cases the government will seek Supreme Court review. The Office of the Solicitor General is relatively small. In addition to the Solicitor General, the office consists of four deputy solicitors general, sixteen attorney assistants, and up to six recent law school graduates serving as fellows.⁸¹ It therefore must choose carefully which cases it deems worthy of petition to the Supreme Court.⁸² In his seminal 1987 book, *The Tenth Justice*, Lincoln Caplan noted that the SG rejects roughly five agency requests for each petition it files.⁸³ Even then, the SG may decide that the agency is wrong about the law and argue a position contrary to the agency's position in the court below.⁸⁴ Indeed, it's not unusual for the SG to confess error and, essentially, acquiesce in reversal of the lower court's judgment.⁸⁵

Traditionally, the SG has been highly successful as a party in Supreme Court litigation. A 2018 study by Lee Epstein and Eric Posner, for instance, found that the SG won nearly two-thirds of all cases in which the United States was a party at the Supreme Court over the eighty-four Terms from 1932

⁷⁸ CAPLAN, *supra* note 20, at 5.

⁷⁹ See generally *Office of the Solicitor General*, U.S. DEP'T OF JUST., <https://www.justice.gov/osg> [<https://perma.cc/3KFT-YGYX>].

⁸⁰ The Court has also, on occasion, asked former Solicitors General for advice in drafting court rules including the Federal Rules of Civil Procedure. CAPLAN, *supra* note 20, at 19–21.

⁸¹ *Employment Opportunities*, U.S. DEP'T OF JUST., <https://www.justice.gov/osg/employment-opportunities> [<https://perma.cc/7FXA-WSMX>] (Aug. 17, 2022).

⁸² See generally REBECCA MAE SALOKAR, *THE SOLICITOR GENERAL: THE POLITICS OF LAW* 63–67 (1992) (discussing the meticulous process the SG's office employs to decide which cases are appropriate for Supreme Court review).

⁸³ CAPLAN, *supra* note 20, at 5.

⁸⁴ See, e.g., Margaret H. Lemos, *The Solicitor General as Mediator Between Court and Agency*, 2009 MICH. ST. L. REV. 185, 198 (finding that, from 1964 through 2007, the SG filed a brief at the Supreme Court that “clearly diverged” from the position of the Equal Employment Opportunity Commission in fourteen of eighty-five cases).

⁸⁵ STEPHEN M. SHAPIRO ET AL., *SUPREME COURT PRACTICE* ch. 5.12(a) (11th ed. 2019). In these cases, the Court will often appoint an amicus to defend the judgment below. See Katherine Shaw, *Friends of the Court: Evaluating the Supreme Court's Amicus Invitations*, 101 CORNELL L. REV. 1533, 1535 (2016).

through 2016.⁸⁶ But the study also documented a sharp decline in the executive branch's win rate from over seventy percent during the Reagan administration to less than fifty percent during the Obama administration.⁸⁷ Epstein and Posner advanced various hypotheses for this declining win rate, including more extreme ideology among the Justices and the emergence of a specialized, elite Supreme Court bar increasingly litigating on behalf of private-sector clients (and increasingly comprised of alums of the SG's office).⁸⁸

The SG also participates in Supreme Court litigation as a "friend of the Court" by filing amicus briefs in cases in which the United States is not a party, both at the merits stage and the certiorari stage.⁸⁹ At the cert. stage, the Supreme Court occasionally invites the SG to file an amicus brief in what is colloquially called a "Call for the Views of the Solicitor General" or a "CVSG."⁹⁰ The CVSG mechanism reflects the Court's confidence in the SG to provide an informed and neutral viewpoint when the executive branch is not directly involved as a party in litigation.⁹¹ The CVSG procedure did not always exist. The first CVSG occurred in 1957, when Justice Harold Burton wrote "ask for response & ask sol. gen." in his notes considering whether to grant cert. in *Tennessee Burley Tobacco Growers Ass'n v. Range*.⁹² It's unclear why the Court decided to ask for the SG's views in that particular case. And it remains unclear precisely how many Justices' votes are required for the Court to issue a CVSG.⁹³ But, once the practice was established, the Supreme Court began to

⁸⁶ Lee Epstein & Eric A. Posner, *The Decline of Supreme Court Deference to the President*, 166 U. PA. L. REV. 829, 846–47 (2018); accord SALOKAR, *supra* note 82, at 29–30 (reporting a 67.6% win rate for the SG as a party).

⁸⁷ Epstein & Posner, *supra* note 86, at 845.

⁸⁸ See *id.* at 847–48. On the growth of the specialized Supreme Court bar and its effects on the law, see Richard J. Lazarus, *Advocacy Matters Before and Within the Supreme Court: Transforming the Court by Transforming the Bar*, 96 GEO. L.J. 1487, 1491–1502 (2008).

⁸⁹ The SG is permitted to file an amicus brief regardless of the parties' consent. See SUP. CT. R. 37 ("No motion for leave to file an *amicus curiae* brief is necessary if the brief is presented on behalf of the United States by the Solicitor General . . .").

⁹⁰ See Elliott Karr, *Independent Litigation Authority and Calls for the Views of the Solicitor General*, 77 GEO. WASH. L. REV. 1080, 1093–94 (2009) (discussing two unusual cases in which the Court issued a CVSG when one of the parties was a government agency).

⁹¹ See Thomas Brennan, Lee Epstein & Nancy Staudt, *The Political Economy of Judging*, 93 MINN. L. REV. 1503, 1510–11 (2009) (noting that the CVSG procedure reflects the Court's "high level of faith in the Solicitor General's ability to present informed and balanced legal arguments").

⁹² Stefanie A. Lepore, *The Development of the Supreme Court Practice of Calling for the Views of the Solicitor General*, 35 J. SUP. CT. HIST. 35, 45–46 (2010); see also *Tenn. Burley Tobacco Growers Ass'n v. Range*, 353 U.S. 981 (1957).

⁹³ Some sources report that four votes are required—the same number required to grant certiorari—but others report that only three votes are necessary for the Court to issue a CVSG. See 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, 272–73 (2009) (discussing conflicting reports). Another possibility is that the require-

issue CVSGs frequently, particularly in cases involving issues of civil rights and federal labor and employment law.⁹⁴ The CVSG process quickly became popular, with the Supreme Court issuing nearly fifty CVSGs between 1963 and 1969, approximately one hundred during the 1970s, two hundred during the 1980s, one hundred fifty during the 1990s, and over one hundred during the 2000s.⁹⁵ According to the dataset we describe in more detail below, the court issued over two hundred CVSG orders in the 2010s.⁹⁶

Responding to a CVSG is not considered optional.⁹⁷ SGs since the inception of the CVSG have always answered the call by filing an amicus brief.⁹⁸ And when the Court issues a CVSG, the Court listens to the SG. The Court agrees with the SG's recommendation to grant or deny certiorari over three-quarters of the time.⁹⁹ This influence arises from the fact that, when the Court issues a CVSG, "the Court is not seeking the advice of an advocate or a partisan but rather of an officer of [the] Court committed to providing his best judgment with respect to the matter at issue."¹⁰⁰ And the SG's judgment is deliberate. As one of us showed in a prior article, the SG recommended that the Court grant certiorari in only eighty out of 294 (27.2%) briefs it filed in response to a CVSG order from 2002 through 2016.¹⁰¹

When the SG participates as an amicus at the *merits* stage (often in cases in which there was a CVSG at the cert. stage, but sometimes not) the SG is practically treated like a third party to the litigation. The SG is allowed to not only file a brief arguing its position to the Court, but the Court almost always

ment is a "'soft four,' with a fourth Justice providing a courtesy vote if three other Justices feel strongly" about seeking the SG's views. SHAPIRO ET AL., *supra* note 85, ch. 6.41 n.177.

⁹⁴ Lepore, *supra* note 92, at 47.

⁹⁵ *Id.*

⁹⁶ See *infra* Subsection II.A.2.

⁹⁷ See SALOKAR, *supra* note 82, at 142–43 (interviewing one former SG's office staff member who described the CVSG as "not an invitation; it's an invitation from the king. You don't turn it down").

⁹⁸ Timothy R. Johnson, *The Supreme Court, the Solicitor General, and the Separation of Powers*, 31 AM. POL. RSCH. 426, 427 (2003).

⁹⁹ See Thompson & Wachtell, *supra* note 93, at 275–76 (reporting an agreement rate of 78.5% between the SG and the Supreme Court on cert. petitions involving CVSGs, using data from 1998 through 2004); Gugliuzza, *supra* note 25, at 1256 (reporting a similar agreement rate of 78.9% from 2002 through 2016).

¹⁰⁰ Drew S. Days III, *In Search of the Solicitor General's Clients: A Drama with Many Characters*, 83 KY. L.J. 485, 488 (1994) (citing CAPLAN, *supra* note 20, at 257–58).

¹⁰¹ Gugliuzza, *supra* note 25, at 1258.

grants the SG's request to participate in oral argument¹⁰²—a privilege rarely granted to other amici.¹⁰³

Just like at the cert. stage, the SG tends to be highly successful as an amicus on the merits. Many scholars have examined the influence of the SG on Supreme Court decision-making, and the consensus is this: if the SG files an amicus brief on the merits in support of a party, that party is highly likely to win the case.¹⁰⁴ Most studies put the number around eighty percent.¹⁰⁵ The SG may also disagree with both parties and file an amicus in support of neither party. In that context, too, the SG's arguments are highly persuasive, as illustrated by several of the patent cases in the dataset we describe below.

B. In Patent Cases

Patent law is unique in many respects, not least because the Federal Circuit has exclusive jurisdiction over all patent appeals nationwide, including cases that arise from the federal district courts and from the Patent Office.¹⁰⁶ That means there are no circuit splits in patent cases—a usual indicator of cert. worthiness codified in the Supreme Court's procedural rules.¹⁰⁷ From the time

¹⁰² Covert & Wang, *supra* note 32, at 700 (finding that the Court granted all of the SG's motions to participate in oral argument from 2011 through 2020).

¹⁰³ *Id.* (finding that the Court granted only 41% of motions for amicus argument by state and local governments, 19% of motions by organizations, and 8% of motions by individuals since 1960).

¹⁰⁴ See, e.g., Joseph D. Kearney & Thomas W. Merrill, *The Influence of Amicus Curiae Briefs on the Supreme Court*, 148 U. PA. L. REV. 743, 811 (2000) (noting roughly a two-fold increase in win probability for petitioners supported by an SG amicus brief, using a dataset covering the years 1946–1995); Jeffrey A. Segal, *Amicus Curiae Briefs by the Solicitor General During the Warren and Burger Courts: A Research Note*, 41 W. POL. Q. 135, 138–39 (1988) (finding a 65.1% to 87.5% SG amicus win rate from the 1950s to the 1980s); Ryan Juliano, Note, *Policy Coordination: The Solicitor General as Amicus Curiae in the First Two Years of the Roberts Court*, 18 CORNELL J.L. & PUB. POL'Y 541, 552 (2009) (finding an 89.06% win rate for parties supported by the SG as amicus); SALOKAR, *supra* note 82, at 146 (finding a 71.87% win rate of litigants supported by an SG amicus brief from 1959 to 1986); see also Sri Srinivasan & Bradley W. Joondeph, *Business, the Roberts Court, and the Solicitor General: Why the Supreme Court's Recent Business Decisions May Not Reveal Very Much*, 49 SANTA CLARA L. REV. 1103, 1105 (2009) (finding, in a study covering 2006 to 2009, that despite the Roberts Court's reputation as “pro-business,” “in cases where the [SG] and the United States Chamber of Commerce filed opposing amicus briefs[,] the Roberts Court overwhelmingly sided with the government”).

¹⁰⁵ See, e.g., Pincus, *supra* note 33 (finding a 77% win rate); ROBERT SCIGLIANO, *THE SUPREME COURT AND THE PRESIDENCY* 180 (1971) (finding a 71% win rate between 1958 and 1967, and as high as an 87% win rate in a few post-World-War-II terms); Segal, *supra* note 104, at 140 (finding a 74% win rate).

¹⁰⁶ 28 U.S.C. § 1295(a)(1), (4).

¹⁰⁷ SUP. CT. R. 10(a) (explaining that one consideration in granting cert. is whether “a United States court of appeals has entered a decision in conflict with the decision of another United States court of appeals on the same important matter”). For an argument that patent-related cert. grants are, in fact, influenced by splits—just not between different circuits, see Tejas N. Narechania, *Certiorari, Universality, and a Patent Puzzle*, 116 MICH. L. REV. 1345, 1348 (2018) (“The Supreme Court’s

of its creation in 1982 until the early 2000s, the Federal Circuit was the dominant force in U.S. patent law¹⁰⁸—giving little deference to the Patent Office or to district courts¹⁰⁹ and rarely being reviewed by the Supreme Court.¹¹⁰ Then the Court woke up: its renewed interest in patent law was the lead story of the twenty-first century's first decade.¹¹¹ Still, though the Supreme Court has heard

patent-related certiorari decisions seem still to be strongly influenced by the existence of a split. These splits, however, are of a different sort. Rather than consider whether two courts of appeals have decided the same issue differently, the Supreme Court appears to consider, at least in part, whether two fields of law apply the same transsubstantive doctrine differently.”) and see also Christa J. Laser, *Certiorari in Patent Cases*, 48 AIPLA Q.J. 569, 602–03 (2020) (noting that “the Supreme Court is more likely to act on certiorari in patent cases where there is a narrative that the Federal Circuit has issued a decision in patent law that conflicts with Supreme Court precedent in other areas of law”).

¹⁰⁸ For a pathmarking study of the Federal Circuit's work in the first several years of its existence, see generally Rochelle Cooper Dreyfuss, *The Federal Circuit: A Case Study in Specialized Courts*, 64 N.Y.U. L. REV. 1 (1989).

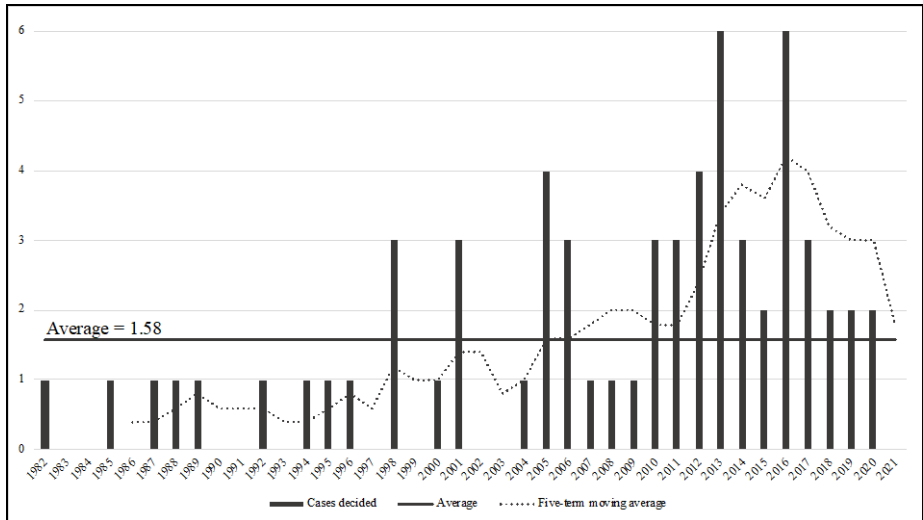
¹⁰⁹ See Arti K. Rai, *Engaging Facts and Policy: A Multi-institutional Approach to Patent System Reform*, 103 COLUM. L. REV. 1035, 1037 (2003) (chronicling the Federal Circuit's “relatively vigorous de novo review” of district courts and the Patent Office); Stuart Minor Benjamin & Arti K. Rai, *Who's Afraid of the APA? What the Patent System Can Learn from Administrative Law*, 95 GEO. L.J. 269, 271 (2007) (identifying the Federal Circuit as “the primary expositor of patent law and policy”).

¹¹⁰ Timothy B. Dyk, *Does the Supreme Court Still Matter?*, 57 AM. U. L. REV. 763, 764 (2008) (“In the first ten years [of the Federal Circuit's existence], the Supreme Court only reviewed three Federal Circuit patent decisions, and one of those was decided summarily without oral argument.” (first citing *Eli Lilly & Co. v. Medtronic, Inc.*, 496 U.S. 661, 661–62 (1990); then citing *Christianson v. Colt Indus.*, 486 U.S. 800, 801 (1988); and then citing *Dennison Mfg. Co. v. Panduit Corp.*, 475 U.S. 809, 811 (1986))). For additional commentary recognizing the supremacy of the Federal Circuit in the domain of patent law, see Mark D. Janis, *Patent Law in the Age of the Invisible Supreme Court*, 2001 U. ILL. L. REV. 387, 387 (“The Court of Appeals for the Federal Circuit, created in 1982, has become the de facto supreme court of patents.”); 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)); Paul R. Gugliuzza, *The Federal Circuit as a Federal Court*, 54 WM. & MARY L. REV. 1791, 1795 (2013) (noting that the Federal Circuit “has supplemented [the] already significant authority” it has by virtue of its near-exclusive jurisdiction over patent appeals “by impeding other government institutions from shaping patent law”); Mark J. Abate & Edmund J. Fish, *Supreme Court Review of the United States Court of Appeals for the Federal Circuit 1982–1992*, 2 FED. CIR. BAR J. 307, 308 (1992) (“[T]he Court appears to accord more deference to pronouncements of the Federal Circuit on substantive patent law issues than on other substantive law issues.”).

¹¹¹ See, e.g., John M. Golden, *The Supreme Court as “Prime Percolator”: A Prescription for Appellate Review of Questions in Patent Law*, 56 UCLA L. REV. 657, 671 (2009) (“[W]ithin the last several years, the [Supreme] Court has plunged deep into the heart of patent law.”); Gregory A. Castanias, Lawrence D. Rosenberg, Michael S. Fried & Todd R. Geremia, *Survey of the Federal Circuit's Patent Law Decisions in 2006: A New Chapter in the Ongoing Dialogue with the Supreme Court*, 56 AM. U. L. REV. 793, 798 (2007) (“[W]e appear to be in the midst of a ‘third wave’ in the ongoing dialogue between the Supreme Court and the Federal Circuit over the content of U.S. patent law—a wave marked by more aggressive Supreme Court review of the substance of patent law and patent procedure and less deference to the Federal Circuit's views of what the content of U.S. patent law should be.”); Rochelle Cooper Dreyfuss, *What the Federal Circuit Can Learn from the Supreme Court—and Vice Versa*, 59 AM. U. L. REV. 787, 792 (2010) (“In the first twenty or so years [of the Federal Circuit's existence], [the Supreme Court's] review of the Federal Circuit was largely intermit-

far more patent cases in the past couple decades than in the several decades prior, the Court has decided only sixty-three patent cases in the forty years since the Federal Circuit began operating in 1982, as Figure 1 below illustrates.¹¹²

Figure 1. Patent Cases Decided by the Supreme Court, 1982 Through 2021 Terms



The SG has been an important player in Supreme Court patent cases in the modern era. As we discuss in more detail below, the Supreme Court regularly calls for the SG's views in patent cases, often multiple times in a single Term.¹¹³ Patent law's lack of circuit splits and its reputation for being a specialized, technical field of practice¹¹⁴ may be two reasons why the Court looks to

tent and confined to *procedural* issues However, the Court has recently begun to intervene regularly; it has begun to address the substance of patent law; and it has reversed, vacated, or questioned nearly every decision"); see also Greg Reilly, *How Can the Supreme Court Not "Understand" Patent Law?*, 16 CHI.-KENT J. INTELL. PROP. 292, 294 (2017) (collecting critiques of the Supreme Court's decision-making in patent cases).

¹¹² For a full list of patent-related Supreme Court cases, see *infra* Appendix A. In general, we considered a case to be a "patent case" if it involved a live claim arising under patent law, even if the particular question decided by the Court was not a question of patent law. For example, we considered cases raising questions about jurisdiction over or remedies in patent cases to be patent cases. See, e.g., *Gunn v. Minton*, 568 U.S. 251, 253 (2013) (subject matter jurisdiction in malpractice disputes involving patent lawyers); *eBay Inc. v. MercExchange, L.L.C.*, 547 U.S. 388, 390 (2006) (standard for granting injunctive relief upon a finding a patent infringement). For more on our methodology for coding Supreme Court patent cases, see Gugliuzza, *supra* note 25, at 1242.

¹¹³ See *infra* Figure 3.

¹¹⁴ See Peter Lee, *Patent Law and the Two Cultures*, 120 YALE L.J. 2, 76–77 (2010) (noting that "[f]ar from being a quasi-specialized court like the Federal Circuit," "the Supreme Court hears relatively few patent disputes" and that "[t]he generalist Court approaches technology as a neophyte").

the SG for guidance at the cert. stage.¹¹⁵ And the Court listens. As noted, overall, the Court agrees with the SG's recommendation to grant or deny cert. after a CVSG slightly less than eighty percent of the time.¹¹⁶ In patent cases, however, the Court has agreed with the SG's recommendation more than ninety percent of the time over the past few decades.¹¹⁷ From 2002 through the end of the 2021 Term, the Court didn't follow the SG's recommendation about granting or denying cert. in only three Federal Circuit patent cases out of forty.¹¹⁸

The SG's substantial influence over patent cases has, in the not-too-distant past, extended to the merits. As John Duffy noted in his 2010 study, the SG had, at the time, participated in thirteen patent cases since 1996, as either a party or an amicus.¹¹⁹ The Solicitor General urged a different outcome than the Federal Circuit had reached in nine of those cases.¹²⁰ And, in all nine cases, the Court agreed with the Solicitor General.¹²¹ Adding in cases in which the Solicitor General agreed with the Federal Circuit's result but not its reasoning, Duffy concluded that "the Federal Circuit has . . . never seen the Supreme Court agree with its position where the Solicitor General has opposed that position."¹²² Duffy also catalogued several examples where the Court not only reached the SG's preferred outcome, but also adopted the SG's recommendations for substantive tests and doctrines, sometimes going so far as to give explicit credit to the SG.¹²³

¹¹⁵ For a discussion of the difficulties of case selection and the Supreme Court's lack of expertise with patent law, see Rochelle Cooper Dreyfuss, *In Search of Institutional Identity: The Federal Circuit Comes of Age*, 23 BERKELEY TECH. L.J. 787, 807–08 (2008).

¹¹⁶ See *supra* note 105 (listing studies that have examined this agreement rate).

¹¹⁷ Gugliuzza, *supra* note 25, at 1255.

¹¹⁸ See *id.* (finding a 93.3% agreement rate through 2016). The three Federal Circuit patent cases in which the Court did not follow the SG's recommendation are *Bowman v. Monsanto Co.*, 568 U.S. 936 (2012), *Laboratory Corp. of America Holdings v. Metabolite Laboratories, Inc.*, 546 U.S. 999 (2005), and *American Axle & Manufacturing, Inc., v. Neapco Holdings LLC*, 142 S. Ct. 2902 (2022). In *Bowman* and *Laboratory Corp.*, the Court granted cert. over the SG's recommendation to deny. See Brief for the United States as Amicus Curiae at 1, *Bowman*, 568 U.S. 936 (No. 11-796) (recommending denying certiorari); Brief for the United States as Amicus Curiae at 1, *Lab'y Corp.*, 546 U.S. 999 (No. 04-607) (recommending denying certiorari). Ironically, in *Laboratory Corp.*, the Court ultimately dismissed the writ of certiorari as improvidently granted. 548 U.S. 124, 125 (2006) (*per curiam*). *American Axle*, as mentioned in the introduction, was the first patent case in which the Court denied cert. despite the SG's recommendation to grant. Outside cases arising from the Federal Circuit, the Court granted cert. over the SG's recommendation to deny in *Kimble v. Marvel Entertainment, Inc.*, 135 S. Ct. 2401 (2015), a patent-related case from the Ninth Circuit. See Brief for the United States as Amicus Curiae at 1, *Kimble*, 135 S. Ct. 2401 (No. 13-720).

¹¹⁹ Duffy, *supra* note 34, at 540.

¹²⁰ *Id.*

¹²¹ *Id.*

¹²² *Id.* at 541.

¹²³ See *id.* at 541–42 (citing, among other cases, *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 535 U.S. 722, 740 (2002)). In *Festo*, "the Court summarized its holding and immediately acknowledged that '[t]his is the approach advocated by the United States, see Brief for United States

Is the SG's influence over patent law a good thing? On the one hand, with no possibility of circuit splits, the SG can provide a useful substitute—a percolator, so to speak¹²⁴—flagging problematic Federal Circuit doctrines that need disruption or reversal.¹²⁵ And the SG, of course, can only express its views in the context of actual cases and controversies—seemingly giving the office little opportunity to pursue a broader political agenda.¹²⁶ Indeed, the involvement of the SG in patent-related Supreme Court litigation can supplement the executive branch's sometimes limited direct control over patent law and policy.¹²⁷

Duffy, however, observed that patent law is different than other areas of federal law because the Patent Office, unlike many administrative agencies, has no substantive rulemaking power and receives no *Chevron* deference for its views about patent doctrine.¹²⁸ Thus, even the incremental shift in power toward the executive branch that comes from Supreme Court deference to the SG in a handful of patent cases could be significant. Ultimately, however, Duffy concluded that this subtle power shift was superior to, say, giving the Patent Office rulemaking power because it “injects into . . . patent law a more modest and more *stable* amount of political influence.”¹²⁹

as *Amicus Curiae* 22–28, and we regard it to be sound.” *Id.* (alteration in original). For another study noting that the SG's amicus briefs in patent cases “predicted the winner 90% of the time at the Supreme Court” from 1999 to 2009, see Colleen V. Chien, *Patent Amicus Briefs: What the Courts' Friends Can Teach Us About the Patent System*, 1 U.C. IRVINE L. REV. 395, 426–27 (2011).

¹²⁴ For a summary of the perceived benefits of doctrinal percolation, see Samuel Estreicher & John E. Sexton, *A Managerial Theory of the Supreme Court's Responsibilities: An Empirical Study*, 59 N.Y.U. L. REV. 681, 699 n.68 (1984) (“The percolation process has four principal benefits: (1) it encourages the courts of appeals to examine and criticize each other's decisions . . . ; (2) it often provides the Supreme Court with a number of independent analyses of legal issues . . . ; (3) it permits the courts of appeals to experiment with different legal rules, which can provide the Supreme Court with concrete information about the consequences of various options; and (4) it can allow the circuit courts to resolve conflicts by themselves, without Supreme Court intervention.”). For a contrary view about the normative desirability of percolation, see Paul M. Bator, *What Is Wrong with the Supreme Court?*, 51 U. PITT. L. REV. 673, 689–91 (1990).

¹²⁵ Cf. Golden, *supra* note 111, at 662, 709–10 (arguing that the Supreme Court should act as “prime percolator” of patent law by identifying cases in which: “(1) the substantive question involved is not currently subject to meaningful debate in the courts below; (2) there is good reason to suspect that the Federal Circuit's settled approach to that question is substantially inferior to a legally permissible alternative; and (3) the case at hand is a good vehicle for addressing the substantive question as part of determining the outcome of a dispute between the specific parties involved”).

¹²⁶ Cf. Arti K. Rai, *Patent Validity Across the Executive Branch: Ex Ante Foundations for Policy Development*, 61 DUKE L.J. 1237, 1240 (2012) (“In many respects . . . the SG is a generalist actor that refines and arbitrates among the views of underlying agencies that have more specialized expertise in the legal questions at issue.”).

¹²⁷ See Ben Picozzi, *The Government's Fire Dispatcher: The Solicitor General in Patent Law*, 33 YALE L. & POL'Y REV. 427, 444 (2015).

¹²⁸ Duffy, *supra* note 34, at 545.

¹²⁹ *Id.* at 549.

More recently, Tejas Narechania has questioned the significant power the SG wields over patent law, both on the process ground that the SG formulates its legal positions behind closed doors (in consultation with other executive branch entities), and on the substantive ground that the SG has no special expertise in patent law or innovation policy.¹³⁰ Narechania thus concluded that Congress (or the Supreme Court) should instead give the Patent Office more substantial lawmaking power that would then be exercised and reviewed consistent with normal principles of administrative law and deference.¹³¹

Regardless of whether the SG's influence over patent law is a good thing or a bad thing, the descriptive consensus is that the SG is, in fact, a significant player in the patent system. But a lot has changed over the past decade. Congress passed the America Invents Act.¹³² There's been substantial judicial turnover on both the Federal Circuit¹³³ and the Supreme Court.¹³⁴ And the SG's office has, by some accounts, begun to abandon its traditionally restrained role in favor of procedural aggression and political partisanship, at least in some areas of the law.¹³⁵ So, is the conventional wisdom about the SG's influence in patent law still true? Does the Federal Circuit still stand "in the shadow of the Solicitor General," as Duffy argued?¹³⁶ And is the current state of affairs good for the patent system and for the innovation it is supposed to promote? In the remainder of this Article, we attempt to answer those questions.

II. METHODOLOGY AND SUMMARY STATISTICS

This part of the Article describes the methodology we used to conduct our study of the SG's and the Federal Circuit's respective performances at the Supreme Court. It also provides some initial summary statistics before moving on to a more detailed analysis in Parts III and IV.

¹³⁰ Tejas N. Narechania, *Defective Patent Deference*, 95 WASH. L. REV. 869, 874 (2020).

¹³¹ *Id.* at 876–77.

¹³² See *supra* note 51 and accompanying text (discussing the America Invents Act).

¹³³ Since 2010, nine new judges have taken the bench at the Federal Circuit. (The circuit currently has twelve active judgeships.) 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/H35M-5E8S>] (Dec. 8, 2022). One of those new judges has since taken senior status (Judge Wallach), and another retired from the court in March 2022 (Judge O'Malley). See *id.*; *Circuit Judge Kathleen M. O'Malley Retires from the Federal Circuit*, U.S. CT. OF APPEALS FOR THE FED. CIR. (Mar. 14, 2022), <https://cafc.uscourts.gov/circuit-judge-kathleen-m-omalley-retires-from-the-federal-circuit/> [<https://perma.cc/G2X2-SJAG>].

¹³⁴ Five new Justices have taken the bench since 2010. See *Current Members*, SUP. CT. OF THE U.S., <https://www.supremecourt.gov/about/biographies.aspx> [<https://perma.cc/3FEJ-6GJH>].

¹³⁵ See Stephen I. Vladeck, *The Solicitor General and the Shadow Docket*, 133 HARV. L. REV. 123, 127 (2019) (noting also that the Court itself "is responsible for enabling (if not affirmatively encouraging) the Solicitor General's unprecedented behavior").

¹³⁶ Duffy, *supra* note 34, at 518.

A. Methodology

For this study, we created two datasets: (1) a dataset containing all Supreme Court decisions that originated in the Federal Circuit since the circuit began operating in 1982¹³⁷ and (2) a dataset containing all cert. petitions (from all lower courts, not just the Federal Circuit) on which the Supreme Court issued a call for the views of the Solicitor General from the 2002 Term through the 2019 Term.

Consistent with best practices on data accessibility,¹³⁸ we have disclosed our key coding and data in an appendix to this Article. Further information can be found in an online, public archive.¹³⁹

1. Supreme Court Federal Circuit Dataset

The first dataset contains all decisions by the Supreme Court originating in the Federal Circuit, including cases from all the various lower tribunals over which the Federal Circuit has jurisdiction: the federal district courts (mostly patent cases), the Patent and Trademark Office (in both patent and trademark matters), the Court of Federal Claims, the Court of Appeals for Veterans Claims, the Merit Systems Protection Board, the Court of International Trade, the International Trade Commission, and others.¹⁴⁰ We constructed this dataset by searching Westlaw's Supreme Court database for the term "Court of Appeals for the Federal Circuit" because that term appears in the synopsis that accompanies every Supreme Court opinion posted on Westlaw when the Court is reviewing the Federal Circuit. That search also captures miscellaneous orders entered by the Court in cases arising from the Federal Circuit (for instance, orders granting or denying certiorari),¹⁴¹ so we then conducted a manual review to limit the results to Supreme Court decisions on the merits, along

¹³⁷ We supplemented this dataset with the small number of Supreme Court patent cases that arose from other lower courts, as discussed below. See *infra* note 150.

¹³⁸ See Jason Rantanen, *Empirical Analyses of Judicial Opinions: Methodology, Metrics, and the Federal Circuit*, 49 CONN. L. REV. 227, 282 (2016); Jason M. Chin et al., *The Transparency of Quantitative Empirical Legal Research (2018–2020)* (B.U. Sch. of L. Rsch. Paper Series, Paper No. 22-4, 2021), https://scholarship.law.bu.edu/faculty_scholarship/1330/ [<https://perma.cc/6C54-45DM>].

¹³⁹ Replication Data for: *Stepping Out of the Solicitor General's Shadow: The Supreme Court and the Federal Circuit in a New Era of Patent Law*, HARVARD DATAVERSE, <https://doi.org/10.7910/DVN/FBPUDE>.

¹⁴⁰ See 28 U.S.C. § 1295(a) (outlining the Federal Circuit's jurisdiction).

¹⁴¹ E.g., *Infineum USA L.P. v. Chevron Oronite Co.*, 142 S. Ct. 707 (2021) (granting certiorari, vacating the Federal Circuit's judgment, and remanding for further consideration in light of *United States v. Arthrex, Inc.*, 141 S. Ct. 1970 (2021)).

with three Federal Circuit cases in which the Supreme Court granted certiorari but ultimately dismissed the writ as improvidently granted.¹⁴²

We coded the 117 resulting cases for the following fields:

- Tribunal of origin¹⁴³
- Case subject matter, including whether the case was a patent case¹⁴⁴
- Whether the United States was a party
- Whether the United States participated as an amicus at the merits stage
- The Supreme Court's disposition (affirmed or not affirmed)¹⁴⁵
- Where applicable, whether the Supreme Court agreed with the SG's recommendation on the merits¹⁴⁶

For the purpose of measuring the Supreme Court's agreement with the SG, we adopted a binary coding approach. That is, all decisions were coded as either "agree" or "disagree." Of course, in some instances, the Supreme Court's decision tended to align with the SG's recommendations but did not adopt certain aspects of the SG's argument. We coded cases as "agree" if the Supreme Court agreed with all or most of the SG's recommendation, particularly on the legal question at the heart of the case.¹⁴⁷ It's worth noting that these "partly agree" cases were few and far between, totaling six cases out of the forty-nine Supreme Court patent cases in which the SG was involved. And, even in those cases, the holding of the Supreme Court was only different in terminology, not in substantive effect, so we coded them all as "agree."¹⁴⁸ In

¹⁴² These so-called "DIG'd" (dismissed as improvidently granted) cases were: *Laboratory Corp. of America Holdings v. Metabolite Laboratories, Inc.*, 548 U.S. 124, 125 (2006), *Izumi Seimitsu Kogyo Kabushiki Kaisha v. U.S. Philips Corp.*, 510 U.S. 27, 28 (1993), and *Van Drasek v. Webb*, 481 U.S. 738, 738 (1987).

¹⁴³ We coded tribunal of origin as the tribunal in which the case was decided immediately before the Federal Circuit. Thus, some cases that were initially proceedings at the PTO but culminated in district court litigation, for example, *Peter v. NantKwest, Inc.*, 140 S. Ct. 365, 370 (2019), were considered to be of district court origin, not PTO origin.

¹⁴⁴ For more detail on the subject matter categories, see *infra* Table 1. And for an explanation of how we determined whether a case was a patent case, see *supra* note 112.

¹⁴⁵ We coded the Court's disposition in a binary fashion. We coded as affirmances only full affirmances and affirmance-and-remands. (For an example of an affirmance-and-remand, see *Eli Lilly & Co. v. Medtronic, Inc.*, 496 U.S. 661, 679 (1990).) All other dispositions (e.g., affirm in part, reverse in part, or cases involving vacatur) were coded as non-affirmance.

¹⁴⁶ There were a total of fifteen (out of 117) cases originating in the Federal Circuit where the SG took no part in the litigation on the merits. Of these cases, only three were non-patent cases. It should be noted that most of the non-patent cases originating in the Federal Circuit are cases in which the United States is a party in litigation because most of these cases involve challenges to decisions of federal administrative agencies.

¹⁴⁷ Our evaluation of the SG's recommendation was based solely on the SG's written briefs, not on any representations made at oral argument.

¹⁴⁸ The six "partly agree" patent cases were *Impression Products, Inc. v. Lexmark International, Inc.*, 137 S. Ct. 1523, 1529 (2017) (adopting the SG's recommendation except for the SG's proposal

non-patent cases, there were five instances out of fifty-five cases in which the SG participated that were, arguably, “partly agree” situations. Ultimately, however, we coded them all as “agree,” too.¹⁴⁹

Finally, to ensure our dataset included all Supreme Court patent law decisions, we supplemented our dataset of Supreme Court cases arising from the Federal Circuit with the small number of patent cases that originated in state supreme courts and the regional circuits.¹⁵⁰

that a patent owner can expressly reserve the right to prevent foreign-sale patent exhaustion), *Samsung Electronics Co. v. Apple Inc.*, 137 S. Ct. 429, 436 (2016) (agreeing with the SG that the owner of an infringed design patent is not automatically entitled to recover total profits from the defendant’s end product but not deciding the specific test for determining the relevant “article of manufacture,” as the SG had recommended the Court do), *Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 901 (2014) (adopting a “reasonable certainty” test to determine patent indefiniteness instead of the (similar) “reasonable understanding” test the SG recommended), *Bilski v. Kappos*, 561 U.S. 593, 604 (2010) (agreeing that the business method patent at issue did not recite patent-eligible subject matter but holding that the machine-or-transformation test was a “useful and important clue” to determining patent eligibility, not the dispositive test, as the SG had recommended), *eBay Inc. v. MercExchange, L.L.C.*, 547 U.S. 388, 394 (2006) (adopting the SG’s test for injunctive relief but not applying the test to the facts of the case, as the SG had recommended), and *Pfaff v. Wells Electronics, Inc.*, 525 U.S. 55, 67, 68 n.14 (1998) (adopting a “ready for patenting” test for applying the on-sale bar; the SG’s recommended test was whether the article sold “embodies the invention” (quoting Brief for the United States as Amicus Curiae Supporting Respondent at 10–11, *Pfaff*, 525 U.S. 55 (No. 97-1130))).

¹⁴⁹ The non-patent “partly agree” cases were *Kisor v. Wilkie*, 139 S. Ct. 2400, 2408, 2424 (2019) (agreeing with the SG on applicability of *Auer* deference but remanding the case, whereas the SG recommended affirmance), *Shinseki v. Sanders*, 556 U.S. 396, 414 (2009) (agreeing with the SG that 38 U.S.C. § 7261 incorporates the APA’s prejudicial error rule but vacating one veteran’s case instead of reversing as SG had recommended), *United States v. Mead Corp.*, 533 U.S. 218, 221 (2001) (the SG argued for *Chevron* deference or, alternatively, *Skidmore* deference, and the Court ultimately adopted *Skidmore* deference for agency interpretive bulletins), *United States v. Hatter*, 532 U.S. 557, 561 (2001) (agreeing with the SG that Article III judges’ salaries may be subjected to Medicare tax but disagreeing that judges could be subject to “special retroactivity-related Social Security rules that Congress enacted . . . [that] effectively singled out then-sitting federal judges for unfavorable treatment”), and *United States v. Haggard Apparel Co.*, 526 U.S. 380, 383, 395 (1999) (agreeing with the SG that a regulation adopted by the Treasury Department was subject to *Chevron* deference but remanding the case to the Federal Circuit to determine if the Treasury’s interpretation was reasonable instead of affirming, as the SG recommended).

¹⁵⁰ Since the Federal Circuit began operating in 1982, a total of five patent-related Supreme Court cases arose from courts besides the Federal Circuit: *Kimble v. Marvel Entertainment, LLC*, 135 S. Ct. 2401, 2406 (2015) (originating in the Ninth Circuit), *Gunn v. Minton*, 568 U.S. 251, 256 (2013) (Texas Supreme Court), *Federal Trade Commission v. Actavis, Inc.*, 570 U.S. 136, 141 (2013) (Eleventh Circuit), *Bonito Boats, Inc. v. Thunder Craft Boats, Inc.*, 489 U.S. 141, 145 (1989) (Florida Supreme Court), and *General Motors Corp. v. Devex Corp.*, 461 U.S. 648, 650 (1983) (Third Circuit). Patent-related cases sometimes escape the Federal Circuit’s (and the federal district courts’) exclusive jurisdiction because not all patent-related disputes “arise under” patent law, as the relevant jurisdictional statutes require. See Paul R. Gugliuzza, *Rising Confusion About “Arising Under” Jurisdiction in Patent Cases*, 69 EMORY L.J. 459, 461 (2019) (discussing the pertinent Supreme Court and Federal Circuit case law); see also 28 U.S.C. § 1295(a)(1) (granting the Federal Circuit exclusive jurisdiction over any “final decision of a district court of the United States . . . in any civil action arising under . . . any Act of Congress relating to patents” (emphasis added)); *id.* § 1338(a) (“The district courts shall

2. CVSG Dataset

We also created a dataset of *all* cert. petitions (not just in patent-related cases or cases arising from the Federal Circuit) on which the Supreme Court issued a call for the views of the Solicitor General from the 2002 through 2019 Terms. To create this dataset, we used the Supreme Court's journal¹⁵¹ to identify petitions on which the Court issued a CVSG.¹⁵² We then reviewed the Solicitor General's brief to determine its recommendation on the petition (grant, deny, "grant, vacate, and remand" (GVR),¹⁵³ or a more nuanced recommendation, such as to hold the petition pending a decision in another case). Most of the SG's briefs were available on Westlaw; others were available on the SG's website. We then used Westlaw or the Supreme Court's docket to determine the Court's action on the petition and to code for whether the Court agreed or disagreed with the SG's recommendation. Ultimately, this dataset consisted of 373 cases in which the Supreme Court issued a CVSG and the SG filed a brief in response.

In addition to the dataset containing all cert. petitions on which the Court issued a CVSG, we created a supplemental dataset that included all CVSGs in Federal Circuit patent cases since the circuit's establishment in 1982 through the 2021 Term. This supplemental dataset contained forty-eight cases.

B. Summary Statistics

From the time the Federal Circuit began operating in 1982 through the end of the 2021 Term in June 2022, the Supreme Court granted certiorari in 117 cases arising from the Federal Circuit (including three cases in which the Supreme Court dismissed the cert. petition as improvidently granted).¹⁵⁴ As Table 1 below illustrates, roughly fifty percent of those cases have been patent cases—far more than any other type of Federal Circuit case resolved by the Supreme Court.

have original jurisdiction of any civil action *arising under* any Act of Congress relating to patents" (emphasis added)).

¹⁵¹ *Journal*, SUP. CT. OF THE U.S., <https://www.supremecourt.gov/orders/journal.aspx> [<https://perma.cc/SQ9M-K79T>].

¹⁵² The Supreme Court's Journal contains the official minutes of the Court from each day the Court is in session. Gugliuzza, *supra* note 25, at 1237 n.19.

¹⁵³ The most common reason the Supreme Court will grant cert., vacate the decision below, and remand is if the Court has issued a plenary ruling that is potentially relevant to the question presented in the petition. *See, e.g.,* *Medinol Ltd. v. Cordis Corp.*, 137 S. Ct. 1372, 1372 (2017) (GVR'ing in light of *SCA Hygiene Products Aktiebolag v. First Quality Baby Products, LLC*, 137 S. Ct. 954, 959 (2017), which held that laches cannot be asserted as a defense to a claim for damages for patent infringement). Less commonly, the Court will GVR if the case becomes moot (usually due to settlement) while the cert. petition is pending. *See, e.g.,* *LG Elecs., Inc. v. InterDigital Commc'ns, LLC*, 572 U.S. 1056 (2014).

¹⁵⁴ *See supra* note 142.

Table 1. All Supreme Court Cases Arising from the Federal Circuit, 1982 Through 2022, by Subject Matter¹⁵⁵

| | Number of Cases | % of Total Cases |
|------------------------------|-----------------|------------------|
| Patents | 58 | 49.6% |
| Federal Claims | 35 | 30.0% |
| Employment | 9 | 7.7% |
| Veterans Benefits | 6 | 5.1% |
| International Trade | 4 | 3.4% |
| Trademark | 3 | 2.6% |
| Copyright | 1 | 0.9% |
| Antitrust/Unfair Competition | 1 | 0.9% |
| Total | 117 | 100% |

Table 2. All Supreme Court Cases Arising from the Federal Circuit, 1982 Through 2022, by Tribunal of Origin

| | Number of Cases | % of Total Cases |
|--|-----------------|------------------|
| District Court | 54 | 46.2% |
| Court of Federal Claims ¹⁵⁶ | 32 | 27.4% |
| Patent and Trademark Office ¹⁵⁷ | 11 | 9.4% |
| Merit Systems Protection Board | 7 | 6.0% |
| Court of Appeals for Veterans Claims | 6 | 5.1% |
| Court of International Trade | 4 | 3.4% |
| Board of Contract Appeals | 2 | 1.7% |
| Office of Personnel Management | 1 | 0.9% |
| Total | 117 | 100% |

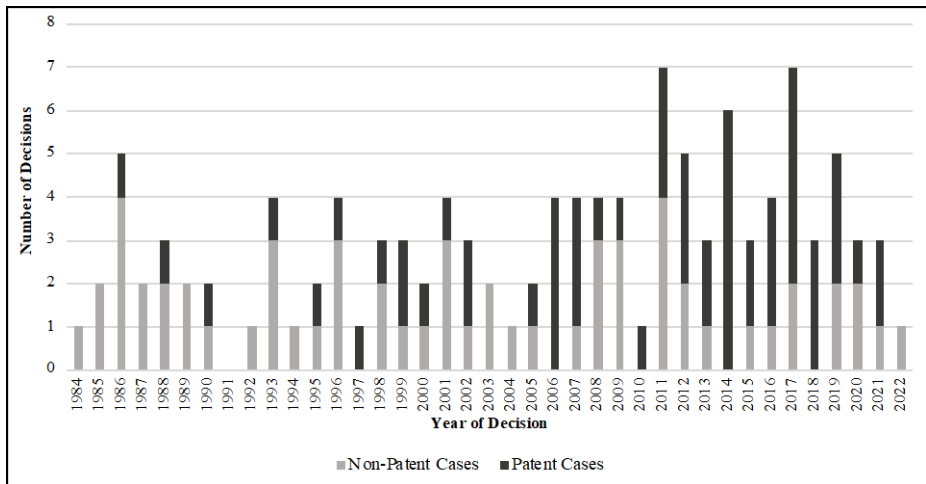
¹⁵⁵ We based our subject matter coding on the topic of the live claims remaining in the case when it reached the Supreme Court. So, for instance, a case like *Google LLC v. Oracle America, Inc.*, 141 S. Ct. 1183, 1194 (2021), which was appealed to the Federal Circuit because the original complaint included a patent infringement claim, we coded as copyright. Similarly, *Izumi Seimitsu Kogyo Kabushiki Kaisha v. U.S. Philips Corp.*, 510 U.S. 27, 29 (1993), which originally involved a patent claim, was coded as antitrust/unfair competition because those were the only live claims in the case when it reached the Supreme Court.

¹⁵⁶ Including cases arising from the Claims Court, the Court of Federal Claims’ predecessor.

¹⁵⁷ Including cases arising from the Patent Trial and Appeal Board (PTAB), which was created in 2011 by the America Invents Act to hear appeals in both patent examination proceedings and in the new post-issuance proceedings the Act created, as well as the PTAB’s predecessor, the Board of Patent Appeals and Interferences, and the Trademark Trial and Appeal Board, which is the Patent and Trademark Office’s internal appellate tribunal for trademark proceedings.

The proportion of Federal Circuit cases at the Supreme Court that are patent cases has not remained constant over time, however. In the first twenty years after the Federal Circuit began operating, the most common type of Supreme Court cases arising from the Federal Circuit were federal claims cases.¹⁵⁸ Around 2000, however, the Supreme Court started taking more interest in patent law, as Figure 2 below illustrates.¹⁵⁹ Few would dispute that patent cases have become a major part of the Supreme Court's docket under Chief Justice Roberts.¹⁶⁰

Figure 2. Supreme Court Decisions Originating in the Federal Circuit, Patent Versus Non-patent Cases



As the figure makes clear, beginning in the early 2000s, the Supreme Court's Federal Circuit docket became much more patent heavy. From 1982 through 1999, the Court decided only ten Federal Circuit patent cases total (or 0.59 patent cases per year). From 2000 through 2009, however, the Court decided fourteen Federal Circuit patent cases (1.4 per year). And from 2010 through 2019, the Court decided an astounding thirty-one Federal Circuit patent cases (3.1 per year).

In terms of outcomes, the Supreme Court affirms in roughly one-quarter of all cases arising from the Federal Circuit, as indicated in Table 3 below.¹⁶¹

¹⁵⁸ See the full case list in the appendices, *infra*.

¹⁵⁹ See also *supra* Figure 1 (charting all patent cases decided by the Supreme Court since 1982).

¹⁶⁰ See Tejas N. Narechania, *Certiorari in Important Cases*, 122 COLUM. L. REV. 923, 961–63 (2022).

¹⁶¹ Table 3 excludes the three Federal Circuit cases that the Supreme Court dismissed as improvidently granted, which is why it reflects on 114 cases, not 117 like Tables 1 and 2.

Table 3. Supreme Court Affirmance Rate of Federal Circuit Decisions on the Merits, 1982 Through 2022

| | Affirmance | Non-Affirmance |
|------------------|------------|----------------|
| Patent Cases | 26.3% (15) | 73.7% (42) |
| Non-patent Cases | 28.1% (16) | 72.0% (41) |
| Total | 27.2% (31) | 72.8% (83) |

Just like the total number of patent versus non-patent cases, Supreme Court affirmance rates for Federal Circuit patent cases and Federal Circuit non-patent cases are similar. Moreover, the Federal Circuit’s respectable affirmance rate of about 26% counters the conventional wisdom that Federal Circuit patent decisions are one of the Supreme Court’s favorite targets for reversal.¹⁶² Indeed, the Federal Circuit’s affirmance rates, both in patent and non-patent cases, are relatively middle-of-the-road compared to other circuits. One study examining Supreme Court affirmance rates from the 2010 through 2019 Terms found that the Court affirmed the circuit below in 30.5% of decisions, slightly lower than the 31.1% affirmance rate that study reported for the Federal Circuit.¹⁶³ By comparison, the Ninth Circuit had the lowest affirmance rate at 19.9%, and the Fourth Circuit had the highest affirmance rate at 54.3%.¹⁶⁴

¹⁶² See, e.g., Donald R. Dunner, *The Supreme Court: A Help or a Hindrance to the Federal Circuit’s Mission?*, 17 J. MARSHALL REV. INTELL. PROP. L. 298, 304 (2018) (noting that, “whatever the Supreme Court’s motivation in subjecting the Federal Circuit to review of its patent holdings, most of which have resulted in reversals . . . the Supreme Court has significantly undermined the Federal Circuit in achieving its goal” of achieving uniformity in patent law); Steven Seidenberg, *Troubled Federal Circuit Hobbles US Patent System*, INTELL. PROP. WATCH (July 31, 2017), <https://clippingsme-assets-1.s3.amazonaws.com/cuttingpdfs/662943/ff8c808c0634f9db4d09df516b77865e.pdf?> [<https://perma.cc/S6UK-BADM>] (“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.”); see also Lucas S. Osborn, *Instrumentalism at the Federal Circuit*, 56 ST. LOUIS U. L.J. 419, 452–53 (2012) (collecting additional examples of commentary about Supreme Court reversals of the Federal Circuit). An oft-cited example of the Supreme Court’s disdain for the Federal Circuit is an exchange between Chief Justice Roberts and Justice Scalia at oral argument in the landmark nonobviousness case, *KSR International Co. v. Teleflex, Inc.*, 550 U.S. 398, 409 (2007), in which the Justices lambasted the relevant circuit precedent as “meaningless,” “worse than meaningless,” “misleading,” “gobbledygook,” and “irrational.” Transcript of Oral Argument at 36–41, *KSR Int’l Co.*, 550 U.S. 398 (No. 04-1350). Likewise, in *Carlsbad Technology, Inc. v. HIF Bio, Inc.*, 556 U.S. 635, 636 (2009), a case about the appealability of orders by federal district courts remanding cases to state court, Chief Justice Roberts somewhat jokingly observed: “They”—meaning the 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. (Laughter.)” Transcript of Oral Argument at 18, *Carlsbad Tech.*, 556 U.S. 635 (No. 07-1437).

¹⁶³ See Paul Goldstein & Joseph Palmore, *How the Federal Circuit (and Its Judges) Fare at the Supreme Court*, JD SUPRA (Oct. 1, 2020), <https://www.jdsupra.com/legalnews/how-the-federal-circuit-and-its-judges-53090> [<https://perma.cc/6ESM-EM7A>] (showing that the Federal Circuit ranked seventh in affirmance rates among the thirteen federal courts of appeals).

¹⁶⁴ *Id.*

The Federal Circuit’s relatively average performance is particularly surprising because of the Federal Circuit’s exclusive jurisdiction over most of the areas of law in which it hears cases, which means that most Federal Circuit cases heard by the Supreme Court don’t involve a circuit split. One might think that the Court would rarely grant cert. in that circumstance simply to affirm the Federal Circuit’s judgment.¹⁶⁵ But affirmance, in fact, occurs in Federal Circuit cases with about the same frequency as it occurs in cases arising from other circuits.

When we segment our Federal Circuit affirmance data by case subject matter, it is clear that the Supreme Court affirms Federal Circuit decisions in patent cases at average rates compared to other types of Federal Circuit cases (and to court of appeals decisions overall). For patents, the affirmance rate of 26.3% is, as noted, just below the Federal Circuit’s overall affirmance rate of 27.2%. Among the most common types of Federal Circuit cases the Supreme Court reviews, the patent-case affirmance rate is slightly lower than in federal claims cases arising mainly from the Court of Federal Claims but higher than the affirmance rate in government employment cases arising mainly from the Merit Systems Protection Board.

Table 4. Supreme Court Affirmance Rates of the Federal Circuit, 1982 Through 2022, by Case Subject Matter¹⁶⁶

| | Affirmance | Non-Affirmance |
|---------------------|------------|----------------|
| Patents | 26.3% (15) | 73.7% (42) |
| Federal Claims | 29.4% (10) | 70.6% (24) |
| Trademarks | 66.7% (2) | 33.3% (1) |
| Employment | 12.5% (1) | 87.5% (7) |
| Copyright | 0.0% (0) | 100% (1) |
| Veterans Appeals | 33.3% (2) | 66.6% (4) |
| International Trade | 25.0% (1) | 75.0% (3) |

¹⁶⁵ See generally Ryan Stephenson, Note, *Federal Circuit Case Selection at the Supreme Court: An Empirical Analysis*, 102 GEO. L.J. 271, 288 (2013) (noting “[t]he special need for error correction” in cases arising from the Federal Circuit due to the court’s exclusive jurisdiction).

¹⁶⁶ Here we again excluded the three cases that the Court dismissed as improvidently granted. See *supra* note 142.

Table 5. Supreme Court Affirmance Rates of the Federal Circuit, 1982 Through 2022, by Tribunal of Origin

| | Affirmance | Non-Affirmance |
|--|------------|----------------|
| District Court | 21.6% (11) | 78.3% (40) |
| Patent and Trademark Office | 44.4% (4) | 55.5% (5) |
| Merit Systems Protection Board | 14.3% (1) | 85.7% (6) |
| Court of Appeals for Veterans Claims | 33.3% (2) | 66.6% (4) |
| Court of International Trade | 25.0% (1) | 75.0% (3) |
| Court of Federal Claims ¹⁶⁷ | 31.3% (10) | 68.8% (22) |
| Office of Personnel Management | 0.0% (0) | 100% (1) |
| Board of Contract Appeals | 0.0% (0) | 100% (2) |

To foreshadow the discussion below about the waning success of the SG in Supreme Court patent cases vis-à-vis the Federal Circuit, it’s worth noting that the affirmance rate in Supreme Court patent cases arising from the Federal Circuit has increased over the past decade. As Table 6 below makes clear, from the 1982 through 1999 Terms, the Supreme Court affirmed the Federal Circuit’s patent decisions about one-quarter of the time: in three of eleven cases, or 27.3% of the time. For the next decade, however—as the Supreme Court took an increasing interest in patent law from the 2000 through 2009 Terms—affirmance was rare, taking place in only two of thirteen Federal Circuit patent cases, or 15.4% of the time. Though the number of Supreme Court patent cases from 1982 through 2009 was, to be sure, somewhat small, the affirmance rate increased markedly—to 30.3%—from the 2010 through 2021 Terms (ten of thirty-three cases).¹⁶⁸

Table 6. Supreme Court Affirmance Rates of the Federal Circuit

| | 1982 through 1999 | | | 2000 through 2009 | | | 2010 through 2021 | | |
|------------|-------------------|------------|----------|-------------------|------------|----------|-------------------|------------|----------|
| | Affirm | Non-affirm | Affirm % | Affirm | Non-affirm | Affirm % | Affirm | Non-affirm | Affirm % |
| Patent | 3 | 8 | 27.3% | 2 | 11 | 15.4% | 10 | 23 | 30.3% |
| Non-patent | 8 | 17 | 32.0% | 3 | 12 | 20.0% | 5 | 12 | 29.4% |
| Total | 11 | 25 | 30.6% | 5 | 23 | 17.9% | 15 | 35 | 30.0% |

Lastly, a brief note on the parties in Supreme Court cases arising from the Federal Circuit. In non-patent cases, the United States is usually a party to the litigation because the Federal Circuit’s non-patent jurisdiction is almost entirely appellate review of agency decisions and Article I courts

¹⁶⁷ Including cases arising from the Claims Court, the Court of Federal Claims’ predecessor.
¹⁶⁸ We chose the cutoff points in Table 6 because the 2000 Term, arguably, marked the beginning of the Supreme Court’s renewed interest in patent law and because the America Invents Act, which, we argue below, has changed the institutional dynamics of the patent system, became law during the 2010 Term. See *supra* Figure 1; *infra* Part IV.

where the federal government inevitably participates. The United States was not a party in non-patent cases originating in the Federal Circuit in only three out of the fifty-nine Supreme Court decisions in our dataset.¹⁶⁹ By contrast, most patent cases that make their way to the Supreme Court are infringement or declaratory-judgment suits between private parties, so the United States was a party in only eleven of the fifty-eight Federal Circuit patent cases in our dataset.¹⁷⁰ As described in the next part, however, the United States, through the Solicitor General, plays a crucially important role as an amicus in many patent cases in which the United States is not a party.

III. THE SOLICITOR GENERAL AT THE CERTIORARI STAGE

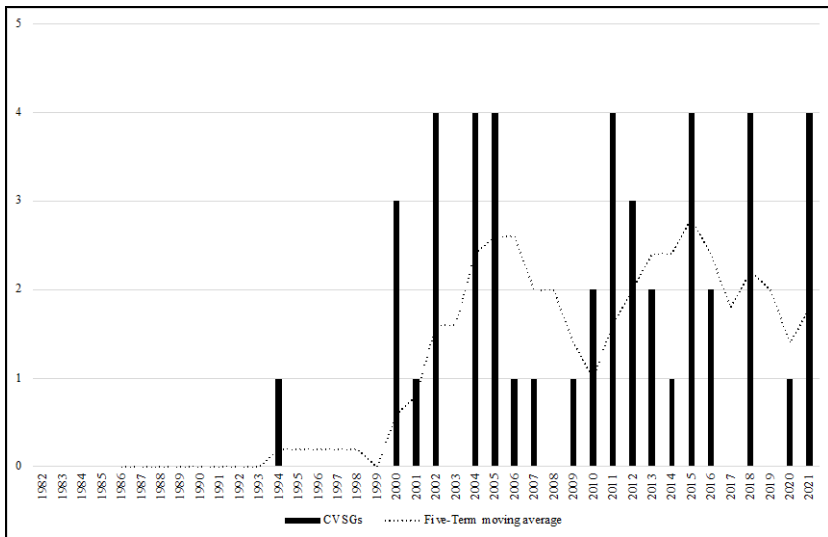
One of the key findings of our study is that, in patent cases, the Supreme Court relies heavily on the SG's advice, as an amicus, about which patent cases it should hear. As the figure below illustrates, since 2000, the Court has issued an average of two CVSGs in Federal Circuit patent cases per Term, issuing at least one in every Term except four. Over that time period, it has not been uncommon for the Supreme Court to issue as many as four patent case CVSGs in a single Term, doing so seven times.¹⁷¹

¹⁶⁹ *Izumi Seimitsu Kogyo Kabushiki Kaisha v. U.S. Philips Corp.*, 510 U.S. 27, 28 (1993) (anti-trust/unfair competition, ultimately dismissed as improvidently granted); *Romag Fasteners, Inc. v. Fossil, Inc.*, 140 S. Ct. 1492, 1493 (2020) (trademark); *Google LLC v. Oracle Am., Inc.*, 141 S. Ct. 1183, 1187 (2021) (copyright).

¹⁷⁰ Ten of the eleven were appeals from proceedings that began at the PTO: *Dickinson v. Zurko*, 527 U.S. 150, 152 (1999), *Bilski v. Kappos*, 561 U.S. 593, 599–600 (2010), *Kappos v. Hyatt*, 566 U.S. 431, 435 (2012), *Cuozzo Speed Technologies, LLC v. Lee*, 136 S. Ct. 2131, 2138 (2016), *SAS Institute Inc. v. Iancu*, 138 S. Ct. 1348, 1354 (2018), *Oil States Energy Services, LLC v. Greene's Energy Group, LLC*, 138 S. Ct. 1365, 1372 (2018), *Return Mail, Inc. v. U.S. Postal Service*, 139 S. Ct. 1853, 1861 (2019), *Peter v. NantKwest, Inc.*, 140 S. Ct. 365, 370 (2019), *Thryv, Inc. v. Click-to-Call Technologies, LP*, 140 S. Ct. 1367, 1371 (2020), and *United States v. Arthrex, Inc.*, 141 S. Ct. 1970, 1978 (2021). The eleventh case was one in which the United States intervened to defend the constitutionality of a federal statute abrogating the states' sovereign immunity from patent infringement lawsuits. *Fla. Prepaid Postsecondary Educ. Expense Bd. v. Coll. Sav. Bank*, 527 U.S. 627, 632–33 (1999). In addition, the federal government was a party in a patent-related antitrust case involving the Federal Trade Commission, which was appealed to the Supreme Court from the Eleventh Circuit, not the Federal Circuit. *Fed. Trade Comm'n v. Actavis, Inc.*, 570 U.S. 136, 140–41 (2013).

¹⁷¹ As this Article goes to press, there are four CVSGs outstanding Federal Circuit patent cases, all issued in the 2022 Term. *Interactive Wearables, LLC v. Polar Electro Oy*, 143 S. Ct. 78 (2022); *Teva Pharms. USA, Inc. v. Glaxo-SmithKline LLC*, 143 S. Ct. 80 (2022); *Tropp v. Travel Sentry, Inc.*, 143 S. Ct. 361 (2022); *Apple Inc. v. Cal. Inst. of Tech.*, No. 22-203, 2023 WL 191996 (U.S. Jan. 17, 2023).

Figure 3. CVSGs in Federal Circuit Patent Cases, by Term Order Was Issued



Overall, our dataset contains forty Federal Circuit patent cases in which the SG submitted a cert.-stage amicus brief in response to a CVSG. The Supreme Court followed the SG's recommendation in all but three of those cases, for an agreement rate of 92.5%.¹⁷² By contrast, across all cases (not just patent cases) from the 2002 through 2019 Terms, the Supreme Court agreed with the SG's recommendation 78.8% of the time (272 of 345 cases).¹⁷³

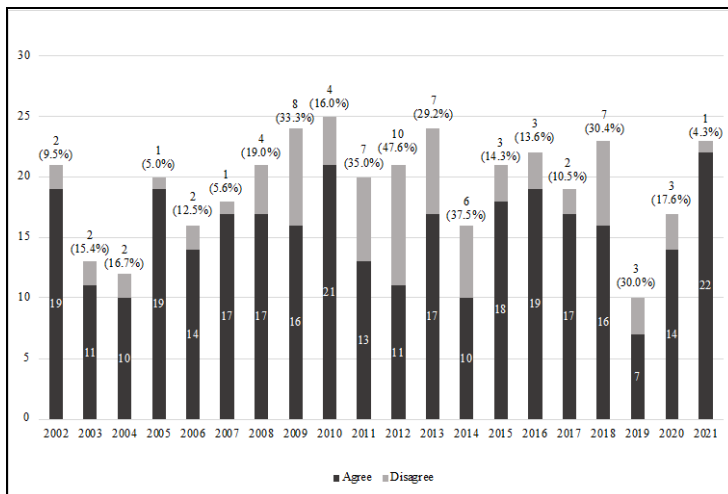
¹⁷² In this analysis, we treat each cert. petition as a separate case (that is, as a separate instance of agreement or disagreement), even if the SG filed a single brief containing recommendations for multiple petitions. *See, e.g.*, Brief for the United States as Amicus Curiae at 1, *Commil USA, LLC v. Cisco Sys., Inc.*, 575 U.S. 632 (2015) (Nos. 13-896, 13-1044) (patent case, recommending partial grant of the petition in No. 13-896 and denial of the cross-petition in No. 13-1044). We did this because the SG often recommends different actions on different petitions in a single brief, even if those petitions present the same question. *See, e.g.*, Brief for the United States as Amicus Curiae at 20, *Am. Trucking Ass'n, Inc. v. Mich. Pub. Serv. Comm'n*, 545 U.S. 429 (2005) (Nos. 03-1230, 03-1234, 03-1250) (non-patent case, recommending different actions on each of three petitions challenging a single decision of the Michigan Court of Appeals). It's also worth noting that a few patent cases in which the Supreme Court issued a CVSG settled or were dismissed before the SG filed its brief, so they are not included in the agreement/disagreement analysis. *See, e.g.*, *Apotex Inc. v. Pfizer, Inc.*, 549 U.S. 970 (2006).

¹⁷³ Limiting the Federal Circuit dataset to the time period covered by our dataset of *all* cases involving a CVSG doesn't change the results much: from the 2002 through 2019 Terms, the Supreme Court agreed with the SG in thirty-three of the thirty-five Federal Circuit patent cases in which the SG submitted a brief in response to a CVSG (94.3%). Like other studies examining the Supreme Court's agreement rate with the SG at the cert. stage, we limit our analysis to cases in which the SG recommended a straight grant or denial, and we exclude cases with a more complex recommendation, for instance, a recommendation to GVR, or to hold the petition pending resolution of another case. *See, e.g.*, Thompson & Wachtell, *supra* note 93, at 275–76; *see also supra* note 153.

Moreover, until the recent cert. denial in the *American Axle* case discussed in the introduction, the Court had followed the SG's recommendation to grant certiorari in every single Federal Circuit patent case in which the brief in response to a CVSG made that recommendation—thirteen of thirteen cases. And, until the recent cert. grant in *Amgen* over the SG's recommendation to deny, the Court followed the SG's recommendation to deny certiorari 92.3% of the time (twenty-five of twenty-seven cases).

Another interesting finding of our study is that, despite the recent examples of the Court disregarding the SG's cert.-stage advice in *American Axle* and *Amgen*, the Solicitor General's sway in Federal Circuit patent cases has held steady over time, even as the SG's cert.-stage influence overall appears to have diminished. The Supreme Court has disagreed with the SG's amicus recommendation on cert. in only four Federal Circuit patent cases ever. Yet, looking at *all* cases involving a CVSG order during the time period of our study (not just patent cases), the Court has become far more likely to disagree with the SG's recommendation. As Figure 4 below indicates, in no Term from 2002 through 2008 did the Court disagree with the SG's cert.-stage recommendation in more than twenty percent of cases overall, and the disagreement rate was often below ten percent. From 2009 through 2019, however, the disagreement rate grew markedly: the Court disagreed with the SG's recommendation 26.3% of the time (in fifty-nine of 224 cases), with the disagreement rate in some Terms reaching over 35% or 40%.

Figure 4. Supreme Court Agreement with Solicitor General Recommendation on Cert. in All Cases with a CVSG, Term by Term¹⁷⁴



¹⁷⁴ Note that, as of December 31, 2022, there is still one outstanding CVSG for the 2021 Term.

There are numerous possible explanations for the Supreme Court's increasing tendency to disagree with the SG's recommendation on petitions involving a CVSG: the changing political makeup of the Court, a wider ideological divergence between the Court and the SG (particularly during the administration of President Obama from 2008 through 2016), an overall decreasing success rate at the Supreme Court for the executive branch, and the emergence of a specialized private Supreme Court bar comprising alums of the SG's office.

Though patent cases appear to have been mostly immune from these cert.-stage trends, the recent cert. decisions in *American Axle* and *Amgen* could indicate that change is afoot. Moreover, when looking at Supreme Court *merits* decisions in patent cases, the story of judicial deference to the SG and the executive branch has *already* changed substantially in the past decade, as we discuss next.

IV. THE SOLICITOR GENERAL ON THE MERITS

As suggested by the *Arthrex* and *Minerva* cases discussed in the introduction, the SG in recent years has not been as successful on the merits in patent cases as it has historically been. At first glance, the biggest difference between cases like *Arthrex* (in which the Court roundly rejected the SG's position) and *Minerva* (in which the Court adopted the SG's arguments wholesale) is the SG's role. In *Arthrex*, the SG argued as a party, defending the constitutionality of the appointment procedure for administrative patent judges.¹⁷⁵ By contrast, in *Minerva*, the SG participated as an amicus (at the Court's invitation), arguing that, though the doctrine of assignor estoppel should not be abolished, the Federal Circuit had applied it too broadly—a position falling between the more extreme arguments advanced by the parties.¹⁷⁶

Our study makes plain that this party-versus-amicus distinction is, in fact, key to determining the likelihood the Supreme Court will agree or disagree with the SG in a patent case. Perhaps this finding seems like common sense: it's well documented that the SG fares better when participating as an amicus as opposed to litigating as a party.¹⁷⁷ But, as we show below, the *magnitude* of

¹⁷⁵ *United States v. Arthrex, Inc.*, 141 S. Ct. 1970, 1981 (2021).

¹⁷⁶ Brief for the United States as Amicus Curiae Supporting Neither Party, *supra* note 39, at 12–13. To be fair, the petitioner in *Minerva* did argue, in the alternative, that if the Court did not eliminate the doctrine of assignor estoppel, it should narrow the doctrine, similar to the SG's suggestion. See Brief of Petitioner at 4–5, *Minerva*, 141 S. Ct. 2298 (No. 20-440).

¹⁷⁷ See, e.g., Pincus, *supra* note 33 (reporting a SG win rate of 61% as a party and 77% as an amicus); see also RYAN C. BLACK & RYAN J. OWENS, THE SOLICITOR GENERAL AND THE UNITED STATES SUPREME COURT: EXECUTIVE BRANCH INFLUENCE AND JUDICIAL DECISIONS 132 (2012)

the difference in success rates for the SG in patent cases is quite large: as an amicus, the SG persuades the Court to adopt its position on the merits over ninety percent of the time; as a party, the SG prevails less than half the time. And the underlying mechanics of *how* the SG comes to litigate at the Supreme Court, whether as an amicus or as a party, provide valuable insight into the changing power dynamics within the patent system.

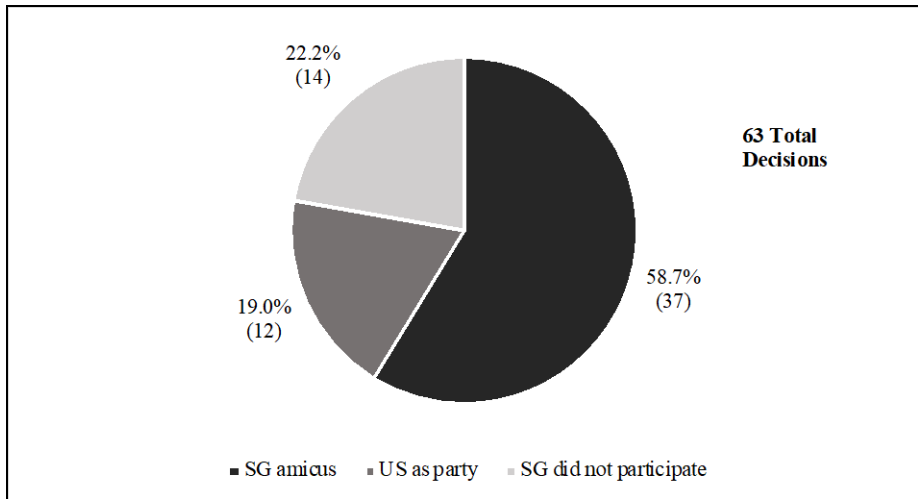
This Part of the Article proceeds in four steps. First, we present our basic empirical findings: that the SG was—and still is—highly successful on the merits at the Supreme Court when it participates as an amicus, but not so much when it is a party. Second, we discuss one common-sense explanation for those results, namely, the strategic choices the SG must make when it litigates as a party as opposed to an amicus. Third, we dig deeper to explore *why* the SG has increasingly litigated as a party as opposed to an amicus, linking this change in the SG's usual litigating position to the America Invents Act. Finally, we connect our results both to changes in the nature of the patent cases being decided by the Supreme Court and to the broader discourse about the Court as an institution, namely, its skepticism of administrative agencies and the federal bureaucracy.

A. SG Success Rates

Since the Federal Circuit began operating in 1982, the Supreme Court has decided a total of sixty-three patent cases on the merits, including five cases arising from tribunals other than the Federal Circuit and excluding one case dismissed as improvidently granted. As Figure 5 below indicates, the SG participated in forty-nine of those cases (77.8%) and did not participate in fourteen (22.2%). In the decisions in which the SG participated, the SG was an amicus in thirty-seven and a party in twelve.

(explaining that the SG “appears most influential as an invited amicus, next most influential as a voluntary amicus, and least influential as a party”).

Figure 5. Merits Stage SG Participation in Supreme Court Patent Decisions, 1982 Through 2021 Terms



In patent cases in which the SG participated as an amicus, the Supreme Court agreed with the SG's recommendation on the merits 91.9% of the time—in thirty-four of thirty-seven cases.¹⁷⁸ The only three cases in which the Court disagreed with the SG's recommendation were:

- *Board of Trustees of the Leland Stanford Junior University v. Roche Molecular Systems, Inc.*, in which the SG argued that an inventor may not transfer ownership of their invention to a third party when a federal contractor has elected for title under the Bayh-Dole Act, but the Court held that the Act does not automatically vest title in federal contractors, affirming the Federal Circuit's ruling;¹⁷⁹
- *Mayo Collaborative Services v. Prometheus Laboratories, Inc.*, in which the SG argued that a patent on a medical diagnostic test recited patent-eligible subject matter, but the Court ruled that the patent was impermissibly directed to a law of nature and contained no "inventive concept",¹⁸⁰ and

¹⁷⁸ It should be noted that the SG has been successful as an amicus even when the Supreme Court disagrees with the SG's recommendation at the cert. stage in response to a CVSG. In the three cases where the Supreme Court granted cert. over the SG's recommendation to deny, the Court agreed with the SG's merits recommendations in two cases and determined that the petition was improvidently granted in the other. See *supra* note 118.

¹⁷⁹ 563 U.S. 776, 780, 786–87 (2011).

¹⁸⁰ 566 U.S. 66, 72, 89 (2012).

- *Helsinn Healthcare S.A. v. Teva Pharmaceuticals USA, Inc.*, in which the SG argued that language added by the America Invents Act to the Patent Act's novelty provision meant that a sale must be public to qualify as prior art, but the Court ruled that the AIA did not alter the statute's meaning and so a confidential sale could serve as invalidating prior art, affirming the Federal Circuit.¹⁸¹

When the SG argued as a party in litigation, however, the Supreme Court agreed with the SG only 41.7% of the time—five out of twelve cases. The Court disagreed with the SG's recommendation on issues ranging from the admissibility of evidence in civil suits challenging the rejection of a patent application,¹⁸² to whether Congress could abrogate the states' sovereign immunity to suits for patent infringement,¹⁸³ to whether the federal government may seek post-issuance review of a patent's validity at the Patent Office,¹⁸⁴ to the required scope of the Patent Office's decision in post-issuance review.¹⁸⁵ (One case we coded as a disagreement, involving the standard for assessing the legality of settlements of patent infringement litigation under the antitrust laws, was a close call because the Court reversed the court of appeals, which was the outcome the SG requested.¹⁸⁶ But, though reasonable minds might differ, we read the Court's opinion as rejecting most if not all of the legal arguments in the SG's brief.¹⁸⁷)

B. The SG's Advantages as an Amicus in Patent Cases

These disparities in outcomes raise the question of: why? Why is the SG more than twice as successful at persuading the Court when it is an amicus in a patent case as compared to when it is a party? For starters, the roles are inherently different. When the SG is an amicus, it adopts the role of a "mediator" or

¹⁸¹ 139 S. Ct. 628, 630 (2019); Brief for the United States as Amicus Curiae Supporting Petitioner at 11–12, *Helsinn*, 139 S. Ct. 628 (No. 17-1229).

¹⁸² *Kappos v. Hyatt*, 566 U.S. 431, 433–34 (2012).

¹⁸³ *Fla. Prepaid Postsecondary Educ. Expense Bd. v. Coll. Sav. Bank*, 527 U.S. 627, 630 (1999).

¹⁸⁴ *Return Mail, Inc. v. U.S. Postal Serv.*, 139 S. Ct. 1853, 1858–59 (2019).

¹⁸⁵ *SAS Inst., Inc. v. Iancu*, 138 S. Ct. 1348, 1352–53 (2018).

¹⁸⁶ *Fed. Trade Comm'n v. Actavis, Inc.*, 570 U.S. 136, 158–60 (2013).

¹⁸⁷ In *Actavis*, which arose from the Eleventh Circuit, not the Federal Circuit, the 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, was entirely devoted to the argument that reverse payment agreements should be presumptively unlawful and reviewed only under a "quick look" approach. See Brief for the Petitioner at 40, *Actavis*, 570 U.S. 136 (No. 12-416). The Court explicitly rejected the SG's position, instead holding that courts must apply a full, "rule of reason" analysis. *Actavis*, 570 U.S. at 158–59.

“advisor” to the Supreme Court and is expected to take the “long view,”¹⁸⁸ even sometimes presenting arguments that contravene the practices of the federal government. For instance, in *Ass’n for Molecular Pathology v. Myriad Genetics, Inc.*,¹⁸⁹ the SG’s position—which the Supreme Court ultimately adopted—was that isolated DNA is not patent-eligible subject matter because it is a “natural phenomenon” but that artificially created DNA sequences (so-called cDNA) are sufficiently man-made to be patent eligible.¹⁹⁰ In its brief, the SG explained that, though the Patent Office had been issuing patents on isolated DNA for several years, the litigation had “prompted the United States to reevaluate whether such patents are consistent with the settled principle that patent protection does not extend to products of nature” and that, “[b]ased on that review, the United States concluded that . . . isolated DNA is not patent-eligible subject matter.”¹⁹¹ Notably, officials from the Patent Office were not listed on the cover of the SG’s brief, as is customary in patent cases¹⁹² and other cases in which a federal agency is involved.¹⁹³

As *Myriad* suggests, the SG, when participating as an amicus,¹⁹⁴ has significant flexibility to adapt its position in ways that are appealing to the Court. The recent *Minerva* case provides another example. The petitioner in *Minerva*, who had been accused of infringement in the district court, spent twenty-five pages of its brief arguing that the Supreme Court should abolish altogether the doctrine of assignor estoppel (which had limited the petitioner’s ability to challenge the validity of the patent it was accused of infringing).¹⁹⁵ Only in the final five pages did the petitioner suggest, as an alternative, that the doctrine could be saved, if it was “tightly constrained.”¹⁹⁶ On the other hand, the respondent (the patent owner) lodged an unqualified defense of assignor estoppel (which protected its patent against a validity challenge in the case at hand),

¹⁸⁸ CAPLAN, *supra* note 20, at 7.

¹⁸⁹ 569 U.S. 576, 580 (2013).

¹⁹⁰ Brief for the United States as Amicus Curiae in Support of Neither Party at 12–13, *Myriad*, 569 U.S. 576 (No. 12-398).

¹⁹¹ *Id.* at 13.

¹⁹² See, e.g., Brief for the United States as Amicus Curiae Supporting Respondent, *eBay Inc. v. MercExchange, L.L.C.*, 547 U.S. 388 (No. 05-130) (including the names of the General Counsel, Solicitor, and Associate Solicitors of the Patent and Trademark Office on the cover).

¹⁹³ Cf. Lemos, *supra* note 84, at 197–98 (finding that the EEOC did not join the SG’s brief in thirteen of eighty-five employment-related Supreme Court cases between 1964 and 2007).

¹⁹⁴ Although, in *Myriad*, the PTO was named as a party in the lower courts, we coded it as an amicus case because the Supreme Court’s opinion explicitly identifies the SG as participating as an amicus. See 569 U.S. at 578.

¹⁹⁵ Brief for Petitioner, *supra* note 176, at 17–41.

¹⁹⁶ *Id.* at 41–47.

arguing that the doctrine should be neither eliminated nor narrowed.¹⁹⁷ Faced with those extremes, there was obvious appeal to the SG's middle ground position: assignor estoppel should remain on the books, but it should be narrowed so it doesn't stop an inventor-assignor from challenging patent validity when there is "no logical inconsistency between a later invalidity argument and any explicit or implicit representation that was made at the time of the assignment."¹⁹⁸ In the end, the Supreme Court recited its new, narrower standard for assignor estoppel in almost precisely the same terms as the SG did in its brief: "Assignor estoppel applies when an invalidity defense . . . conflicts with an explicit or implicit representation made in assigning patent rights. But absent that kind of inconsistency, an invalidity defense raises no concern of fair dealing—so assignor estoppel has no place."¹⁹⁹

The SG can compound its inherent advantages as an amicus at the merits stage through strategic action at the cert. stage, most notably by encouraging the Court to grant review only when a case presents a high likelihood of success for the SG's position.²⁰⁰ Recent SG amicus briefs in patent cases demonstrate how the SG can pick favorable cases in which to encourage the Supreme Court to grant review. For instance, in *Retractable Technologies, Inc. v. Becton, Dickinson & Co.*, the SG recommended that the Court deny a petition presenting a question about the appropriate standard of appellate review for factual findings made by a district court during the process of construing a patent's claims.²⁰¹ Though the SG's brief noted that "[t]he question whether deferential

¹⁹⁷ Brief for Respondents at 13–15, *Minerva Surgical, Inc. v. Hologic, Inc.*, 141 S. Ct. 2298 (2021) (No. 20-440).

¹⁹⁸ Brief for the United States as Amicus Curiae Supporting Neither Party, *supra* note 39, at 25.

¹⁹⁹ *Minerva*, 141 S. Ct. at 2311.

²⁰⁰ See generally Margaret Meriwether Cordray & Richard Cordray, *The Solicitor General's Changing Role in Supreme Court Litigation*, 51 B.C. L. REV. 1323, 1329–30 (2010) (noting that "the Solicitor General considers whether the facts of a particular case present the issues and the government's position favorably"); Daniel Epps & William Ortmann, *The Defender General*, 168 U. PA. L. REV. 1469, 1484–85 (2020) (noting that, in criminal cases, the SG exercises its influence "by choosing which cases to appeal," allowing the SG to "choose a vehicle that frames an issue for the Justices in the most favorable light").

²⁰¹ Brief for the United States as Amicus Curiae at 7–8, *Retractable Techs., Inc. v. Becton, Dickinson & Co.*, 568 U.S. 1084 (2013) (No. 11-1154). Claim construction is the process through which the district court determines the precise meaning of the patent's claims—the stylized, numbered sentences that appear at the end of the patent document and that define the scope of the patentee's exclusive rights. See *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 372 (1996). See generally David L. Schwartz, *Practice Makes Perfect? An Empirical Study of Claim Construction Reversal Rates in Patent Cases*, 107 MICH. L. REV. 223, 228–30 (2008) (describing the components of the patent document and the basic principles of patent claim construction). The district court's claim construction order is thus hugely important to determining both the validity of the patent and whether the defendant infringes it. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 989 (Fed. Cir. 1995) (en banc) (Mayer, J., concurring in the judgment) ("[T]o decide what the claims mean is nearly always to decide the case."), *aff'd*, 517 U.S. 370.

review is appropriate . . . is of substantial and ongoing importance in patent law,” it concluded that the case was a poor vehicle for resolving that question because the district court below did not make any relevant factual findings.²⁰² The Court followed the SG’s recommendation and denied cert.²⁰³ But, the very next Term, without even consulting the SG, the Court granted certiorari in *Teva Pharmaceuticals USA, Inc. v. Sandoz, Inc.* and decided the question of the appropriate standard of appellate review for district court patent claim construction.²⁰⁴ On the merits, the Court in *Teva* adopted precisely the position the SG recommended in its amicus brief: patent claim construction is ultimately a question of law reviewed de novo on appeal, but any fact-finding underlying that construction should be reviewed for clear error under Federal Rule of Civil Procedure 52(a)(6).²⁰⁵

C. The SG’s Evolving Role in Patent Cases

In the first two decades of the Federal Circuit’s existence, the Supreme Court rarely heard patent cases, leaving patent law mostly in the hands of the Federal Circuit. After all, putting complex patent cases and difficult questions of patent law into the domain of experts was one of the main reasons Congress created the Federal Circuit in the first place.²⁰⁶ In the few patent cases that made it to the Supreme Court, the United States was rarely a party. It was not until the 1998 Term that the Supreme Court decided a patent case on the merits in which the United States was a party.²⁰⁷ And from that Term until the passage of the AIA in 2011, the United States was a party in only one other patent case.²⁰⁸

To be sure, the United States was a party in *Federal Circuit* patent litigation often. Indeed, before the AIA’s new post-issuance proceedings expanded the number of Patent Office disputes between private parties, the federal gov-

²⁰² Brief for the United States as Amicus Curiae, *supra* note 201, at 7–8.

²⁰³ *Retractable Techs.*, 568 U.S. at 1084.

²⁰⁴ 574 U.S. 318, 324–25 (2015).

²⁰⁵ Brief for the United States as Amicus Curiae Supporting Neither Party at 8–9, *Teva*, 574 U.S. 318 (No. 13-854).

²⁰⁶ See H.R. REP. NO. 97-312, at 22–23 (1981) (“Directing patent appeals to the new court will have the beneficial effect of removing these unusually complex, technically difficult, and time-consuming cases from the dockets of the regional courts of appeals.”); Pauline Newman, *The Federal Circuit in Perspective*, 54 AM. U. L. REV. 821, 823 (2005) (“It was believed that a national appellate court with experience in the complexities of technology would understand the policies underlying the patent law, eliminate forum differences, and contribute stability and thus incentive to patent-based commerce.”).

²⁰⁷ The Court actually decided two patent cases involving the United States as a party in the 1998 Term: *Dickinson v. Zurko*, 527 U.S. 150, 150 (1999), and *Florida Prepaid Postsecondary Education Expense Board v. College Savings Bank*, 527 U.S. 627, 633 (1999).

²⁰⁸ *Bilski v. Kappos*, 561 U.S. 593, 593 (2010).

ernment was a respondent in practically every appeal from the Patent Office—a primary source of Federal Circuit cases.²⁰⁹ But those cases didn't interest the Supreme Court.

The Supreme Court's ambivalence toward government-involved patent cases has changed in recent years, however, and our data suggest that the enactment of the AIA played a key role. It's not simply that there is a greater number of Federal Circuit cases arising from the Patent Office—though that has definitely occurred.²¹⁰ The new Patent Office proceedings (in particular, a proceeding called inter partes review) have been immensely popular (over ten thousand petitions for inter partes review have been filed since 2013)²¹¹ and are frequently used by defendants in infringement litigation to challenge the validity of the patents they have been accused of infringing.

But it's not the *quantity* of Patent Office litigation at the Federal Circuit that is reshaping the Supreme Court's patent docket. Instead, the AIA has changed the *nature* of government-involved litigation at the Federal Circuit, in turn leading to more government-involved patent cases at the Supreme Court. The new post-issuance proceedings created by the AIA are not spurring the Court to hear cases involving the Patent Office's articulation or application of the substantive standards of patentability that are the ultimate issue in those proceedings, day in and day out.²¹² Rather, the AIA has raised questions of statutory interpretation, judicial deference to administrative agencies, and con-

²⁰⁹ See U.S. CT. OF APPEALS FOR THE FED. CIR., APPEALS FILED, BY CATEGORY FY 2021, https://cafc.uscourts.gov/wp-content/uploads/reports-stats/caseload-by-category/Caseload_by_Category_FY2021.pdf [<https://perma.cc/E5E5-4PA2>] (reporting that thirty-five percent of appeals to the Federal Circuit came from the PTO). Even after the AIA, the Patent Office often intervenes in private party appeals to the Federal Circuit to defend the Patent Trial and Appeal Board's decision. See 35 U.S.C. § 143 (granting the PTO director the right to intervene in appeals from PTAB decisions in inter partes review or post-grant review); Saurabh Vishnubhakat, *When Can the Patent Office Intervene in Its Own Cases?*, 73 N.Y.U. ANN. SURV. AM. L. 201, 241 (2018) (finding that the PTO intervened in roughly one hundred Federal Circuit appeals from 2013 through 2017).

²¹⁰ See Jason Rantenen, *Federal Circuit Dataset & Stats: 2021 Update*, PATENTLY-O (Jan. 10, 2022), <https://patentlyo.com/patent/2022/01/federal-circuit-statistics-package.html> [<https://perma.cc/59SG-TJMS>] (showing that the number of appeals from the PTO to the Federal Circuit more than doubled between 2013 and 2021).

²¹¹ U.S. PAT. & TRADEMARK OFF., TRIAL STATISTICS: IPR, PGR, CBM 3 (2020), https://www.uspto.gov/sites/default/files/documents/Trial_Statistics_20200630_.pdf [<https://perma.cc/8P3X-M5LL>].

²¹² In inter partes review a challenger can argue that an issued patent lacks novelty under § 102 of the Patent Act or is obvious under § 103 based on printed prior art (such as patents and publications). 35 U.S.C. § 311(b). In another new AIA proceeding, post-grant review, a petitioner can argue that an issued patent is invalid on any ground (including not only lack of novelty or obviousness but failure to recite patent-eligible subject matter or to satisfy the disclosure requirements of § 112 of the Patent Act) based on any type of prior art (including not just patents and publications, but prior uses and sales). *Id.* § 321(b). Post-grant review, however, must be initiated within nine months of when the patent issues. *Id.* § 321(c).

stitutional law that the Supreme Court seems eager, or at least obligated, to review.²¹³

Table 7 below summarizes all Supreme Court cases involving the AIA. Since the Act's passage, the Supreme Court has heard a total of seven AIA-related cases. As the table indicates, the United States was a party in all but one. As a party, the SG has seen its position rejected in three of six cases, and the Court also rejected the SG's position in the one AIA case in which it participated as an amicus. Though the population of decisions is small, the SG's 50% success rate as a party in AIA cases is far lower than the 91.9% success rate for the SG as an amicus in patent cases, reported above. It's even below the 60% or higher success rate that the SG enjoys when litigating as a party across all areas of law.²¹⁴

²¹³ In 2008, three years before Congress passed the AIA, Federal Circuit Judge Timothy Dyk presciently remarked that “[i]f major legislative change occurs, the [Supreme] Court is likely to consider itself obligated to interpret the terms of the statute.” Dyk, *supra* note 110, at 770; *see also* Narechania, *supra* note 160, at 935 (explaining that “notable actions by the political branches—passage, say, of major reforms to the patent statutes—can raise ‘important question[s] of federal law that ha[ve] not been, but should be, settled by th[e] Court’”) (alterations in original) (quoting SUP. CT. R. 10(c)).

²¹⁴ *See supra* note 86.

Table 7. Supreme Court Decisions Involving the AIA

| Year of Decision | Case Name | SCOTUS Disposition | US litigating position | SCOTUS agreed with SG? | SCOTUS agreed with Fed. Cir.? |
|------------------|--|-----------------------|------------------------|------------------------|-------------------------------|
| 2021 | United States v. Arthrex, Inc. | Vacated and remanded | Petitioner | No | Yes ²¹⁵ |
| 2020 | Thryv, Inc. v. Click-to-Call Techs., LP | Vacated and remanded | Respondent | Yes | No |
| 2019 | Return Mail Inc. v. U.S. Postal Serv. | Reversed and remanded | Respondent | No | No |
| 2019 | Helsinn Healthcare S.A. v. Teva Pharms. USA, Inc. | Affirmed | Amicus | No | Yes |
| 2018 | Oil States Energy Servs., LLC v. Greene's Energy Grp., LLC | Affirmed | Respondent | Yes | Yes |
| 2018 | SAS Inst. Inc. v. Lee | Reversed and remanded | Respondent | No | No |
| 2016 | Cuozzo Speed Techs., LLC v. Lee | Affirmed | Respondent | Yes | Yes |

Why might the SG be particularly unsuccessful in AIA-related litigation? For starters, the AIA changed the nature of patent cases that are plausible candidates for Supreme Court review. Before the AIA, the typical Supreme Court patent case involved a transsubstantive issue of procedure, jurisdiction, or remedies;²¹⁶ a court-made patent-law doctrine, like the “implicit exception” to patent-eligible subject matter under § 101 of the Patent Act;²¹⁷ or an “interpretation” of some broad, ambiguous provision of the relatively sparse patent statute.²¹⁸ AIA cases, however, often present issues of administrative law,²¹⁹

²¹⁵ Though the Supreme Court ultimately vacated the Federal Circuit’s decision in *Arthrex*, we indicate agreement here because the Court agreed with the Federal Circuit on the merits of the constitutional claim (that the process for selecting APJs violated the Appointments Clause); the Court disagreed with the Federal Circuit only on the remedy for the violation. See *United States v. Arthrex, Inc.*, 141 S. Ct. 1970, 1985–86 (2021).

²¹⁶ Paul R. Gugliuzza, *How Much Has the Supreme Court Changed Patent Law?*, 16 CHI.-KENT J. INTEL. PROP. 330, 335 (2017).

²¹⁷ The Court decided four cases on that issue in the span of five years from 2010 through 2014. See *supra* note 8.

²¹⁸ E.g., *Halo Elecs., Inc. v. Pulse Elecs., Inc.*, 136 S. Ct. 1923, 1931 (2016) (ruling on the standard for awarding enhanced damages under § 284 of the Patent Act, which provides that “the court may increase the damages up to three times the amount found or assessed” by the judge or jury (quoting 35 U.S.C. § 284)); *Glob.-Tech Appliances, Inc. v. SEB S.A.*, 563 U.S. 754, 757 (2011) (ruling on the standard for infringement under § 271(b), which imposes liability on anyone who “actively induces infringement of a patent” (quoting 35 U.S.C. § 271(b))); *Microsoft Corp. v. i4i Ltd. P’ship*, 564 U.S.

constitutional law,²²⁰ or pure statutory interpretation (that is, interpretation of a relatively detailed statutory provision²²¹ or a statutory term that isn't simply a hook for what is fundamentally a common law doctrine).²²²

Indeed, the AIA may have actually put a spotlight on a dynamic that had long existed, just at a magnitude that was too small to notice. Despite the SG's long track record of success as an amicus in patent cases,²²³ in the six non-AIA patent cases in which the government was a *party*, the Court agreed with the SG only twice.²²⁴ And, of the four disagreements, three raised issues beyond the realm of "common law" patent adjudication, including questions of statutory interpretation,²²⁵ constitutional law,²²⁶ and patent-related antitrust law.²²⁷

D. The Changing Nature of the Supreme Court's Patent Docket

As this discussion suggests, it's not just that the SG's role has been different in the Supreme Court's recent patent cases. Unlike when the SG is participating as an amicus and can pick and choose which cases present the most favorable facts and allow it to formulate its legal position to optimize the odds of

91, 95 (2011) (determining whether § 282, which states that "[a] patent shall be presumed valid," requires an accused infringer to prove invalidity by clear and convincing evidence (quoting 35 U.S.C. § 282)). On the Patent Act as, fundamentally, "a common law enabling statute," see Craig Allen Nard, *Legal Forms and the Common Law of Patents*, 90 B.U. L. REV. 51, 53 (2010).

²¹⁹ *E.g.*, *Cuozzo Speed Techs., LLC v. Lee*, 136 S. Ct. 2131, 2143–45 (2016) (examining whether a Patent Office regulation setting out the standard for claim construction in AIA proceedings should receive *Chevron* deference).

²²⁰ *E.g.*, *Oil States Energy Servs., LLC v. Greene's Energy Grp., LLC*, 138 S. Ct. 1365, 1370 (2018) (determining whether the AIA's proceedings for administrative review of patent validity violate Article III or the Seventh Amendment).

²²¹ *E.g.*, *Thryv, Inc v. Click-to-Call Techs., LP*, 140 S. Ct. 1367, 1370 (2020) (interpreting 35 U.S.C. § 314(d), which states that the Patent Office's decision about whether to institute inter partes review "shall be final and nonappealable").

²²² *E.g.*, *Helsinn Healthcare S.A. v. Teva Pharms. USA, Inc.*, 139 S. Ct. 628, 630 (2019) (determining a question about the meaning of the AIA's amendments to the Patent Act's novelty provision, § 102(a)(1)).

²²³ See *supra* note 178 and accompanying text.

²²⁴ *Bilski v. Kappos*, 561 U.S. 593, 604 (2010); *Dickinson v. Zurko*, 527 U.S. 150, 152 (1999).

²²⁵ *Peter v. NantKwest, Inc.*, 140 S. Ct. 365, 369 (2019) (examining whether a statute requiring the applicant to pay all "expenses" of a civil action to obtain a patent includes the salaries of Patent Office lawyers and paralegals).

²²⁶ *Fla. Prepaid Postsecondary Educ. Expense Bd. v. Coll. Sav. Bank*, 527 U.S. 627, 630 (1999) (ruling on whether Congress can use the Fourteenth Amendment to abrogate state sovereign immunity from patent infringement suits).

²²⁷ *Fed. Trade Comm'n v. Actavis, Inc.*, 570 U.S. 136, 141 (2013) (determining in which circumstances a settlement of patent infringement litigation violates the antitrust laws); see also *supra* notes 186–187 and accompanying text (explaining our decision to code the *Actavis* case as a disagreement between the Court and the SG). The other disagreement case in which the government was a party was *Kappos v. Hyatt*, 566 U.S. 431, 433–34 (2012), which raised multiple questions about the admissibility of evidence in a civil action to obtain a patent and the decisional standards in those proceedings.

success, in AIA cases, the SG has often been forced to defend the constitutionality of the statute²²⁸ or the permissibility of the Patent Office's interpretation of it.²²⁹ The AIA cases are also *substantively* different, presenting the sorts of questions on which less judicial deference to the SG is understandable. On the statutory interpretation side, the cases have focused on questions raised by particularized, concrete statutory language: does a provision making the Patent and Trademark Office Director's decision about whether to institute inter partes review "final and non-appealable" permit *any* judicial review of that decision?²³⁰ Does a provision requiring the Patent Office, at the conclusion of inter partes review, to "issue a final written decision with respect to the patentability of *any* patent claim challenged by the petitioner" require the Patent Office to rule on *all* the claims challenged?²³¹ Did the AIA's amendment to the Patent Act's novelty provision, § 102(a), change what it means for an invention to have been "on sale" and hence anticipated?²³² Is the federal government a "person" who is permitted to file a petition for post-issuance review at the Patent Office?²³³ The Supreme Court—particularly one committed to the notion that legal language has one objective, discernable meaning²³⁴—might not need or care about the SG's advice in these sorts of cases. The Justices can read the statutory text and decide for themselves.

In addition, the AIA cases in which the SG litigates as a party often involve issues of administrative law or constitutional law that are not strictly patent related. The Court has twice decided constitutional challenges to aspects of the AIA: rejecting an Article III and Seventh Amendment challenge to the entire system of post-issuance review of patent validity²³⁵ but holding that the process of selecting the administrative patent judges who conduct and decide AIA post-issuance proceedings violated the Appointments Clause.²³⁶ The Court has also determined that the Patent Office is entitled to *Chevron* deference

²²⁸ *E.g.*, *Oil States Energy Servs., LLC v. Greene's Energy Grp., LLC*, 138 S. Ct. 1365, 1370 (2018).

²²⁹ *E.g.*, *Cuozzo Speed Techs., LLC v. Lee*, 136 S. Ct. 2131, 2136 (2016).

²³⁰ *See id.* (examining 35 U.S.C. § 314(d)).

²³¹ *SAS Inst., Inc. v. Iancu*, 138 S. Ct. 1348, 1352–53 (2018) (internal quotation marks omitted) (quoting 35 U.S.C. § 318(a)).

²³² *Helsinn Healthcare S.A. v. Teva Pharms. USA, Inc.*, 139 S. Ct. 628, 630 (2019) (examining 35 U.S.C. § 102(a)(1)).

²³³ *Return Mail, Inc. v. U.S. Postal Serv.*, 139 S. Ct. 1853, 1858–59 (2019) (examining 35 U.S.C. § 311(a)).

²³⁴ *See* Mark A. Lemley, *Chief Justice Webster*, 106 IOWA L. REV. 299, 299 (2020) ("The Solicitor General may long have been the 'tenth Justice,' but in the twenty-first century the Chief Justice of the Supreme Court may as well be, not John Roberts, but Noah Webster." (footnote omitted) (citing CAPLAN, *supra* note 20, at 5)).

²³⁵ *Oil States Energy Servs., LLC v. Greene's Energy Grp., LLC*, 138 S. Ct. 1365, 1370 (2018).

²³⁶ *United States v. Arthrex, Inc.*, 141 S. Ct. 1970, 1985 (2021).

when it interprets a provision of the AIA permitting it to “prescribe regulations . . . establishing and governing inter partes review.”²³⁷ These sorts of issues don’t require any special knowledge of or expertise about patent law. Supreme Court justices know how to do statutory interpretation—they don’t need the SG’s help, especially if all that matters is the “plain meaning” of the statutory text.²³⁸ Moreover, constitutional law and administrative law cases involve political considerations that render the SG’s *legal* advice less relevant. At minimum, the Justices likely have strong priors in those fields, which leads them to place less weight on the SG’s arguments.

It’s also interesting to note that the Federal Circuit has fared relatively well in the AIA cases the Supreme Court has decided. The Supreme Court has agreed with the Federal Circuit’s decision, in whole or in significant part, in four of seven (57.1%) AIA cases. Though it’s a small number, it contrasts with the overall reversal rate of about seventy-five percent in Federal Circuit patent cases decided by the Supreme Court.

The Court’s disagreement with the SG on the merits in AIA cases, and its higher-than-average agreement with the Federal Circuit, is arguably part of a story that transcends patent law. In “pure patent law” cases, like *Minerva* (the recent case about assignor estoppel), the SG seems to enjoy continued success. In cases like *Arthrex*, however, which involve general principles of constitutional or administrative law, the SG tends not to be so successful. Recent decisions by the Supreme Court, not related to patents, have demonstrated the Court’s skepticism of the power structure of administrative agencies.²³⁹ The reasoning of those cases is echoed in *Arthrex*, which emphasized the need for a “a clear and effective chain of command” to ensure that “the lowest officers, the middle grade, and the highest, will depend, as they ought, on the President, and the President on the community.”²⁴⁰ Though the Court in *Cuozzo* granted

²³⁷ 35 U.S.C. § 316(a)(4); *Cuozzo Speed Techs., LLC v. Lee*, 136 S. Ct. 2131, 2143–44 (2016).

²³⁸ *E.g.*, *SAS Inst., Inc. v. Iancu*, 138 S. Ct. 1348, 1354 (2018) (Gorsuch, J.) (finding “that the plain text of [35 U.S.C.] § 318(a) supplies a ready answer”—yes—to the question of whether the PTAB must issue a final decision about the validity of *every* claim challenged in a petition for inter partes review).

²³⁹ *See, e.g.*, *Seila Law LLC v. Consumer Fin. Prot. Bureau*, 140 S. Ct. 2183, 2192, 2194 (2020) (holding that CFPB director’s “for cause” removal provision violated separation of powers); *Lucia v. Sec. & Exch. Comm’n*, 138 S. Ct. 2044, 2049 (2018) (holding that SEC ALJs are principal officers and thus subject to the Appointments Clause). Individual justices have also aired their grievances with the administrative state. *See, e.g.*, *Seila*, 140 S. Ct. at 2218 (Thomas, J., concurring in part) (“[U]naccountable independent agencies . . . currently exercise vast executive power outside the bounds of our constitutional structure.”); *Gutierrez-Brizuela v. Lynch*, 834 F.3d 1142, 1149 (10th Cir. 2016) (Gorsuch, J., concurring) (“[m]aybe the time has come to face the behemoth” of *Chevron*).

²⁴⁰ *Arthrex*, 141 S. Ct. at 1979 (internal quotation marks omitted) (first quoting *Free Enter. Fund v. Pub. Co. Acct. Oversight Bd.*, 561 U.S. 477, 498 (2010); and then quoting 1 ANNALS OF CONG. 499 (1789) (Joseph Gales ed., 1834)).

the Patent Office *Chevron* deference in its interpretation of a provision of the AIA empowering it to adopt procedural rules to govern inter partes review,²⁴¹ the contested administrative and constitutional law facets of these cases make plain why the SG may not as easily dance to victory as it does when participating as an amicus on some seemingly “arcane” question of pure patent law.²⁴²

The membership of the Court (and the federal bench as a whole) is also now more skeptical of administrative agencies and the executive branch in general.²⁴³ If *Arthrex* is any indication, the SG may be fighting an uphill battle in these institutional challenges to the Patent Office. Indeed, in two recent trademark cases arising out of the Federal Circuit, the Supreme Court rejected the SG’s efforts to defend the constitutionality of longstanding provisions of the Lanham Act that prohibited registration of “immoral” or “scandalous” marks²⁴⁴ and marks that “disparage[d]” other people.²⁴⁵ In both cases, the Supreme Court affirmed the judgment of the Federal Circuit below ruling against the federal government.²⁴⁶ *Arthrex* and these trademark cases hint that the Supreme Court’s view of the Patent and Trademark Office is fundamentally shifting. Earlier decisions of the Court indicated that it respected the specialized expertise of the Patent and Trademark Office,²⁴⁷ but these more recent decisions suggest the Court is now more concerned with the agency’s accountability to the political process.²⁴⁸ This observation comports with the recent trend of the Court limiting the powers of administrative agencies more generally.²⁴⁹

²⁴¹ *Cuozzo*, 136 S. Ct. at 2143–45; cf. *Kisor v. Wilkie*, 139 S. Ct. 2400, 2408 (2019) (“reinforc[ing] [the] limits” of *Auer* deference, under which agencies receive deference for their “reasonable readings of genuinely ambiguous regulations”).

²⁴² Cf. JOHN G. ROBERTS, JR., 2021 YEAR-END REPORT ON THE FEDERAL JUDICIARY 3, 5 (2021), <https://www.supremecourt.gov/publicinfo/year-end/2021year-endreport.pdf> [<https://perma.cc/6UYX-Z8BQ>] (flagging the “arcane but important matter” of “judicial assignment and venue for patent cases” as a topic that “will receive focused attention from the Judicial Conference” (of which he is the chair) in 2022); see also J. Jonas Anderson & Paul R. Gugliuzza, *Federal Judge Seeks Patent Cases*, 71 DUKE L.J. 419, 453–55 (2021) (discussing the problems that arise from non-random assignment of patent cases among district judges).

²⁴³ See Levin, *supra* note 65, at 127–28 (discussing examples).

²⁴⁴ *Iancu v. Brunetti*, 139 S. Ct. 2294, 2297 (2019).

²⁴⁵ *Matal v. Tam*, 137 S. Ct. 1744, 1751 (2017).

²⁴⁶ *Brunetti*, 139 S. Ct. at 2302; *Matal*, 137 S. Ct. at 1765.

²⁴⁷ See Tejas N. Narechania, *Arthrex and the Politics of Patents*, 12 CALIF. L. REV. ONLINE 65, 67–68 (2022), https://californialawreview.org/wp-content/uploads/2022/02/2022.01.06-Narechania-65-73_Final-Edits-January-24-1.pdf [<https://perma.cc/AF97-T7FA>] (discussing *Dickinson v. Zurko*, 527 U.S. 150 (1999), and *J.E.M. Ag Supply, Inc. v. Pioneer Hi-Bred International, Inc.*, 534 U.S. 124 (2001)).

²⁴⁸ See *id.* at 68–69 (discussing *United States v. Arthrex, Inc.*, 141 S. Ct. 1970 (2021), among other cases).

²⁴⁹ For but one recent example, see generally the Court’s 2022 decision limiting the EPA’s authority to combat climate change, *West Virginia v. EPA*, 142 S. Ct. 2587 (2022).

V. OUR NEW PATENT SYSTEM?

The study presented in this Article suggests that the balance of power over patent law—among the Supreme Court, the Federal Circuit, and the executive branch—is shifting. The Federal Circuit seems to have escaped the Solicitor General's shadow, at least somewhat. In patent cases today, the Supreme Court increasingly disagrees with the SG and increasingly agrees with Federal Circuit. This shift has important implications for patent law doctrine, the institutional structure of the patent system, and broader debates about the Supreme Court's role in our democracy.

A. A Federal Circuit No Longer in the Shadow of the SG

John Duffy's claim that the Federal Circuit stood in the SG's shadow was undoubtedly correct when he made it. From 1982 through 2010, the Supreme Court affirmed the Federal Circuit in a patent case only four times out of twenty-three cases, for an affirmance rate of 17.4%. And the Court disagreed with the SG in only one of the sixteen patent cases in which the SG participated. Since then, the Supreme Court has affirmed the Federal Circuit twelve times out of thirty-four cases, for an affirmance rate of 35.3%. In four of those twelve affirmances, the Supreme Court sided with the Federal Circuit *over* the SG.²⁵⁰ Moreover, in *Arthrex*, though the Court technically vacated the Federal Circuit's judgment, it agreed with the circuit's holding that the structure of the Patent Trial and Appeal Board violated the Appointments Clause.²⁵¹

That the Supreme Court now regularly sides with the Federal Circuit over the SG is perhaps the most striking observation from our study. At the time of Duffy's article, the Court had *never* sided with the Federal Circuit in a patent case in when SG urged the Court not to do so.²⁵² But that has now happened five times in the past decade.

In the cases in which the Supreme Court agrees with the Federal Circuit, the question presented tends to be a matter of pure statutory interpretation, administrative law, or constitutional law²⁵³—not really a question of “patent

²⁵⁰ *Bd. of Trs. of the Leland Stanford Jr. Univ. v. Roche Molecular Sys., Inc.*, 563 U.S. 776, 780, 786–87 (2011); *Kappos v. Hyatt*, 566 U.S. 431, 446 (2012); *Peter v. NantKwest, Inc.*, 140 S. Ct. 365, 374 (2019); *Helsinn Healthcare S.A. v. Teva Pharms. USA, Inc.*, 139 S. Ct. 628, 634 (2019).

²⁵¹ 141 S. Ct. at 1979, 1988.

²⁵² Duffy, *supra* note 34, at 541.

²⁵³ See, e.g., *id.* at 539–41; *NantKwest*, 140 S. Ct. at 369 (holding that a provision of the Patent Act permitting PTO to recover “expenses” of civil suits to obtain a patent does not permit the PTO to recover attorney's fees); *Oil States Energy Servs., LLC v. Greene's Energy Grp, LLC*, 138 S. Ct. 1365, 1370 (2018) (upholding the constitutionality of inter partes review, affirming the Federal Circuit and agreeing with the SG); *Hyatt*, 566 U.S. at 436 (considering the admissibility of evidence and standards of review in court proceedings to challenge the PTO's rejection of a patent application).

law.” On questions of substantive patent doctrine, it could be that the Federal Circuit has become more “subservient” to the Supreme Court. That is, the Federal Circuit is increasingly following the guidance of the Supreme Court in patent decisions, even when it thinks that application of a Supreme Court-made patent doctrine is untenable or unwise.²⁵⁴

One example lies in Federal Circuit jurisprudence relating to patent-eligible subject matter under § 101 of the Patent Act. On that issue, the Federal Circuit has sometimes begrudgingly followed the Supreme Court’s decisions in the seminal cases of *Mayo* and *Alice*.²⁵⁵ For example, in *Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, a 2015 case in which the Federal Circuit invalidated a patent directed to a method of detecting genetic mutations in a fetus, Judge Linn, writing in concurrence stated: “I am bound by the sweeping language of the test set out in *Mayo* . . . [but] [i]n my view the breadth of the . . . test was unnecessary”²⁵⁶ Similarly, in the 2018 case *Interval Licensing LLC v. AOL, Inc.*, Judge Plager went as far as to state that the “emperor has no clothes,” referring to the patent-eligibility test set out by the Supreme Court in *Alice*.²⁵⁷ But he nevertheless agreed with the result in the case: “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.”²⁵⁸ Similarly, in the 2018 case *Berkheimer v. HP, Inc.*, Judge Lourie concurred in the order denying the parties’ petition for en banc review, despite lamenting that “the 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.”²⁵⁹ And the empirical evidence indicates that, whatever misgivings Federal Circuit judges have about the state of eligibility doctrine, in practice, they uphold rulings of ineligibility very frequently.²⁶⁰

²⁵⁴ See Timothy R. Holbrook, *The Federal Circuit’s Acquiescence(?)*, 66 AM. U. L. REV. 1061, 1082 (2017).

²⁵⁵ See *supra* note 8.

²⁵⁶ *Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1380 (Fed. Cir. 2015) (Linn, J., concurring).

²⁵⁷ *Interval Licensing LLC v. AOL, Inc.*, 896 F.3d 1335, 1353 (Fed. Cir. 2018) (Plager, J., concurring in part and dissenting in part).

²⁵⁸ *Id.* at 1348.

²⁵⁹ *Berkheimer v. HP Inc.*, 890 F.3d 1369, 1374 (Fed. Cir. 2018) (Lourie, J., concurring in the denial of the petition for rehearing en banc).

²⁶⁰ See Paul R. Gugliuzza & Mark A. Lemley, *Can a Court Change the Law by Saying Nothing?*, 71 VAND. L. REV. 765, 765 (2018) (finding that, in the three years after *Alice*, the Federal Circuit ruled the patent to be invalid in over 90% of its eligibility decisions); Mark A. Lemley & Samantha Zyontz, *Does Alice Target Patent Trolls?*, 18 J. EMPIRICAL LEGAL STUD. 47, 73 (2021) (finding that the Federal Circuit ruled the patent to be ineligible in 88.9% of cases over a slightly longer time period).

In addition, Tim Holbrook has chronicled the Federal Circuit's recent acquiescence in Supreme Court decisions on issues as varied as infringement under the doctrine of equivalents, nonobviousness, and injunctive relief.²⁶¹ It's also becoming clear that the Federal Circuit is affirming district court rulings on nonobviousness—the most important requirement of patentability—more often than in the recent past, arguably in response to the Supreme Court's criticism of Federal Circuit doctrine (and its mode of appellate review) on the question.²⁶² This acquiescence may create a feedback loop: the Federal Circuit obeys Supreme Court precedent in one area (even if begrudgingly), so the Supreme Court upholds Federal Circuit precedent in another (or denies certiorari altogether, as in the *American Axle* case and several other recent eligibility decisions).²⁶³

But it's also worth noting how AIA-related cases are different from other patent cases presented to the Supreme Court. On pure patent law issues, and even on non-patent law issues that arise in patent disputes, one can understand how the judges of the Federal Circuit, who specialize in patent law, might go astray (at least in the view of some Supreme Court Justices) by adopting unusual, patent-specific doctrines.²⁶⁴ But on issues of constitutional law, administrative law, or statutory interpretation, the Justices of the Supreme Court might be just as likely to see eye to eye with the judges of the Federal Circuit as they are with the judges of any other federal court of appeals. All of this reduces the enormous sway the Solicitor General, and the executive branch the SG represents, formerly enjoyed in patent cases arising out of the Federal Circuit.

B. Peril—and Promise—in Our New Patent System

The changes we have documented in this Article present at least three potential challenges for the patent system.

First, for patent doctrine, they suggest we are entering an era in which the Federal Circuit will have the final word on almost all issues of patent law. Though the Federal Circuit is designed to be an expert tribunal in the field, interest-group capture and the lack of peer-level courts could make that arrangement problematic. Given the perpetual uncertainty about whether the patent system facilitates more innovation than we'd get without it,²⁶⁵ and about

²⁶¹ Holbrook, *supra* note 254, at 1082–85.

²⁶² See Jason Rantanen, Lindsay Kriz & Abigail A. Matthews, *Studying Nonobviousness*, 73 HASTINGS L.J. 667, 711–12 (2022) (discussing this phenomenon and possible explanations).

²⁶³ See *infra* note 280.

²⁶⁴ Kelly Casey Mullally, *Legal (Un)certainty, Legal Process, and Patent Law*, 43 LOY. L.A. L. REV. 1109, 1144 (2010) (“Congress’s creation of the Federal Circuit as a unique forum for patent appeals reinforced the impression that patent law has special, or at least singular, status.”).

²⁶⁵ See Lisa Larrimore Ouellette, *Patent Experimentalism*, 101 VA. L. REV. 65, 76–87 (2015).

whether changes in the substance of patent law actually affect the behavior of inventors,²⁶⁶ one reasonable suggestion is that we should design the patent system to reduce the cost of (seemingly inevitable) patent litigation as much as possible.²⁶⁷ But the Federal Circuit—staffed by many former patent lawyers and potentially sensitive to the preferences of the patent bar²⁶⁸—may have precisely the opposite incentive: to shape the law (consciously or not) to ensure patent law remains a profitable and high-profile area law practice.²⁶⁹

Second, for the institutional design of the patent system, the SG's litigation failures and the Supreme Court's emerging apathy toward patent law means that power is shifting not only to the Federal Circuit but also to the Patent Office. This, too, could be a problem. The Patent Office, unlike many administrative agencies, lacks power to announce substantive rules of law, so it may be unable to shape patent doctrine to align with particular policy objectives.²⁷⁰ And, though the administrative proceedings created by the AIA promise an efficient means for reassessing patent validity,²⁷¹ the Patent Office will likely continue to endure assaults by patent owners relying on more general Supreme Court case law undercutting the power of administrative agencies.²⁷²

Finally, and more broadly, in denying cert. in a case like *American Axle*, we see an emboldened Supreme Court dismissing the expertise of the SG (even in a technical area like patent law) and refusing to clarify an important and contentious issue that is largely a consequence of the Court's own prior decisions.²⁷³ This is an abdication of an important role played by the Supreme

²⁶⁶ See Mark A. Lemley, *The Surprising Resilience of the Patent System*, 95 TEX. L. REV. 1, 2 (2016).

²⁶⁷ See *id.* at 54–56.

²⁶⁸ See LAWRENCE BAUM, JUDGES AND THEIR AUDIENCES: A PERSPECTIVE ON JUDICIAL BEHAVIOR 100 (2006) (“[L]awyers who appear frequently in a court are a key audience for judges [The bar’s] influence might be easiest to discern in courts with narrow jurisdiction. If judges in those courts orient themselves toward the specialized lawyers who appear before them, . . . this orientation will be reflected in the evolution of the values they express and support in their decisions.”); see also Paul R. Gugliuzza & Jonas Anderson, *Why Do Judges Compete for (Patent) Cases?* 40–42 (Jan. 19, 2023) (unpublished manuscript), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4331055 [<https://perma.cc/J7KV-RE93>] (discussing how federal judges sometimes seek fame and popularity from the bar that practices before them).

²⁶⁹ See Gugliuzza, *supra* note 61 (exploring how the Federal Circuit has increased the importance of patents and the patent law field).

²⁷⁰ See *supra* notes 63–64.

²⁷¹ Cf. Paul R. Gugliuzza, *(In)valid Patents*, 92 NOTRE DAME L. REV. 271, 272–75 (2016) (describing the goals of the AIA but also noting procedural complications).

²⁷² For but one recent example, see *Arthrex, Inc. v. Smith & Nephew, Inc.*, 35 F.4th 1328, 1339 (Fed. Cir. 2022) (rejecting the argument that review of the PTAB by the Commissioner for Patents, in the absence of a Senate-confirmed Director of the Patent and Trademark Office, violated separation of powers).

²⁷³ See *supra* note 8.

Court—managing federal statutory law²⁷⁴—while at the same time pursuing a nakedly political agenda on issues like abortion and gun control.²⁷⁵

To be sure, it remains to be seen if the Supreme Court's denial of cert. in *American Axle* over the SG's recommendation to grant—as well as the grant of cert. in *Amgen* over the SG's recommendation to deny—are aberrations or foreshadow an increased disagreement between the Court and the SG. In the current, 2022 Term, the Court has issued four CVSGs in patent cases, two involving issues of patent eligibility similar to those raised in *American Axle*,²⁷⁶ one involving induced infringement by generic drug manufacturers,²⁷⁷ and another involving the estoppel effects of AIA review proceedings.²⁷⁸ Those cases will go a long way toward helping us gauge whether the SG's influence over the Court, the Court's interest in patent cases—or both—are truly waning.

In addition, each of the three challenges we sketched above contain potential promise for a better patent system, and federal judicial system, going forward.

First, the Supreme Court, by more frequently affirming the Federal Circuit and shrinking its patent docket, is making clear that the Federal Circuit is now in charge. Despite deep disagreements among the Federal Circuit's judges on key issues of patent law, they will have to get doctrine in order themselves. This may mean, for example, going en banc more frequently to make definitive statements about controversial issues—something that hasn't happened much in the past decade²⁷⁹—but that could substitute for the idea percolation that's otherwise lacking in a regime of centralized appellate jurisdiction. Prime issues for full Federal Circuit consideration in the near future include patent-eligible subject matter, on which the Supreme Court, in recent years, has denied certiorari in numerous cases that were plausible candidates for review,²⁸⁰

²⁷⁴ See generally Estreicher & Sexton, *supra* note 124, at 717 (arguing that the Supreme Court should conceptualize its role as a “manager of a system of courts”).

²⁷⁵ See, e.g., Greg Stohr, *US Braces for New Round of Divisive Supreme Court Clashes*, BLOOMBERG L. (Sept. 26, 2022), <https://news.bloomberglaw.com/us-law-week/us-braces-for-new-round-of-divisive-supreme-court-clashes> [<https://perma.cc/K5VH-4427>] (quoting Erwin Chemerinsky, who observed that the Court's recent case selection has been based not on circuit splits, but on a conservative agenda amounting to “an aggressive reaching out to change the law in the way that they want to change the law”); see also Tejas N. Narechania, *Certiorari in the Roberts Court*, 67 ST. LOUIS U. L.J. (forthcoming 2023) (manuscript at 1, 18), <https://ssrn.com/abstract=4291247> [<https://perma.cc/VZ6S-XJYK>] (discussing the Court's “historically unparalleled interest in using its docket discretion to select cases for the purpose of revisiting, and perhaps overruling, precedent”).

²⁷⁶ *Interactive Wearables, LLC v. Polar Electro Oy*, 143 S. Ct. 78 (2022); *Tropp v. Travel Sentry, Inc.*, 143 S. Ct. 361 (2022).

²⁷⁷ *Teva Pharms. USA, Inc. v. Glaxo-SmithKline LLC*, 143 S. Ct. 80 (2022).

²⁷⁸ *Apple Inc. v. Cal. Inst. of Tech.*, No. 22-203, 2023 WL 191996 (U.S. Jan. 17, 2023).

²⁷⁹ See *supra* note 70.

²⁸⁰ In addition to *American Axle*, the Court issued CVSGs in two cases raising eligibility issues in 2019. *HP Inc. v. Berkheimer*, 139 S. Ct. 860 (2019); *Hikma Pharms. USA Inc. v. Vanda Pharms. Inc.*,

and the disclosure requirements of § 112 of the Patent Act,²⁸¹ on which the Federal Circuit has issued several noteworthy decisions²⁸² that have drawn the ire of experts on patent law and innovation, particularly in the pharmaceutical and biotechnology sectors.²⁸³ Though the pending *Amgen* case involves one of § 112's disclosure requirements (enablement), the Court refused to hear a similar case involving another equally controversial § 112 requirement (written description),²⁸⁴ so it seems unlikely the *Amgen* decision will settle things once and for all. Given the decreased willingness of the Supreme Court to hear cases involving hot-button patent law issues, the Federal Circuit should reassess its reluctance to rehear those sorts of cases en banc.

Second, though the Patent Office lacks lawmaking authority, it is currently in a better position to be an influential voice than at any time in the recent

139 S. Ct. 1368 (2019). The SG recommended denying certiorari in both cases, but also noted that the *Hikma* case “implicate[d] important and recurring questions on which the Court’s recent . . . decisions have fostered substantial uncertainty” and suggested that the Court could grant review in another eligibility case in which a cert. petition was then pending before the Court. Brief for the United States as Amicus Curiae 8, 22, *Hikma*, 140 S. Ct. 911 (No. 18-817); see also Brief for the United States as Amicus Curiae 1, *Berkheimer*, 140 S. Ct. 911 (No. 18-415) (recommending denial); *supra* note 45 (discussing the SG’s brief in *Hikma* in more detail). *Hikma* was decided by a split, two-to-one panel of the Federal Circuit, *Vanda Pharms. Inc. v. West-Ward Pharms. Int’l Ltd.*, 887 F.3d 1117, 1120 (Fed. Cir. 2018), and *Berkheimer* spurred three separate opinions upon denial of rehearing en banc, *Berkheimer v. HP Inc.*, 890 F.3d 1369, 1369 (Fed. Cir. 2018). But the Court denied certiorari in those cases, too. *HP Inc. v. Berkheimer*, 140 S. Ct. 911 (2020); *Hikma Pharms. USA Inc. v. Vanda Pharms. Inc.*, 140 S. Ct. 911 (2020), denying cert. in *Vanda Pharms. Inc.*, 887 F.3d 117. Other high-profile eligibility cases in which the Court denied certiorari include *Sequenom, Inc. v. Ariosa Diagnostics, Inc.*, 136 S. Ct. 2511 (2016), in which the courts had invalidated an important patent on a method of prenatal genetic testing and the cert. petition was accompanied by a remarkable twenty-two amicus briefs. See Gugliuzza, *supra* note 25, at 1276 n.168. Also included is *Athena Diagnostics, Inc. v. Mayo Collaborative Services, LLC*, 140 S. Ct. 855 (2020), in which the Federal Circuit denied rehearing en banc by a vote of seven-to-five, with the court’s judges issuing eight separate opinions, mostly lamenting the state of eligibility doctrine. *Athena Diagnostics, Inc. v. Mayo Collaborative Servs., LLC*, 927 F.3d 1333, 1334–71 (Fed. Cir. 2019).

²⁸¹ Section 112, in brief, requires the patentee to fully disclose the invention so that a person of ordinary skill in the art could make and use it, and to demonstrate “possession” of the invention at the time of filing the patent application. See 35 U.S.C. § 112(a) (“The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains . . . to make and use the same . . .”).

²⁸² See, e.g., *Amgen Inc. v. Sanofi*, 987 F.3d 1080, 1082 (Fed. Cir. 2021), cert. granted, 143 S. Ct. 399 (2022); *GlaxoSmithKline LLC v. Teva Pharms. USA, Inc.*, 7 F.4th 1320, 1323 (Fed. Cir. 2021), CVSG issued, 143 S. Ct. 80 (2022); *Biogen Int’l GMBH v. Mylan Pharms. Inc.*, 18 F.4th 1333, 1335 (Fed. Cir. 2021), cert. denied, 143 S. Ct. 112 (2022); *Juno Therapeutics, Inc. v. Kite Pharma, Inc.*, 10 F.4th 1330 (Fed. Cir. 2021), cert. denied, 143 S. Ct. 402 (2022).

²⁸³ See, e.g., Mark A. Lemley & Jacob S. Sherkow, *The Antibody Patent Paradox*, 132 YALE L.J. (forthcoming 2023) (manuscript at 33–34), <https://ssrn.com/abstract=4032912> [<https://perma.cc/FY2K-QW4S>]; Dmitry Karshtedt, Mark A. Lemley & Sean B. Seymore, *The Death of the Genus Claim*, 35 HARV. J.L. & TECH. 1, 4 (2021).

²⁸⁴ *Juno*, 143 S. Ct. at 402.

past. The AIA created a tribunal of expert judges to decide post-issuance review proceedings: the Patent Trial and Appeal Board (PTAB).²⁸⁵ As the PTAB develops its own set of administrative patent law decisions, those decisions, though not binding on the federal courts, will guide patent prosecution and practice before the PTAB itself.²⁸⁶ The agency has also lately shown a willingness to engage the public and craft guidance that, though lacking the force of law, provides some of the certainty and predictability the patent system's stakeholders demand.²⁸⁷ For example, under director Kathi Vidal, the Patent Office has issued guidance on the PTAB's discretion to decline to review the validity of patents that are the subject of concurrent litigation in court²⁸⁸ and on the use of specific types of prior art references in PTAB proceedings.²⁸⁹ In addition, the Patent Office has issued a significant amount of guidance on patent-eligible subject matter in recent years,²⁹⁰ and rumors are that additional guidance—both on eligibility and other topics—is forthcoming.²⁹¹ And even if the courts do not give that guidance deference in the formal, *Chevron* sense,²⁹² the PTAB may (or at least ought to) receive a more practical form of deference

²⁸⁵ 35 U.S.C. § 6(a).

²⁸⁶ Indeed, the PTAB has developed a process for designating selected opinions as precedential and explicitly binding on the PTO. *See generally* U.S. PAT. & TRADEMARK OFF., PATENT TRIAL AND APPEAL BOARD, STANDARD OPERATING PROCEDURE 2 (REVISION 10) (2018), <https://www.uspto.gov/sites/default/files/documents/SOP2%20R10%20FINAL.pdf> [<https://perma.cc/LW63-Z9N3>].

²⁸⁷ *See* David O. Taylor, *Formalism and Antiformalism in Patent Law Adjudication: Rules and Standards*, 46 CONN. L. REV. 415, 473 (2013).

²⁸⁸ Memorandum from Katherine K. Vidal, Under Sec'y of Com. for Intell. Prop. & Dir. of the U.S. Pat. & Trademark Off. to Members of the Pat. Trial and Appeal Bd., Interim Procedure for Discretionary Denials in AIA Post-Grant Proceedings with Parallel District Court Litigation 1–2 (June 21, 2022), https://www.uspto.gov/sites/default/files/documents/interim_proc_discretionary_denials_aia_parallel_district_court_litigation_memo_20220621_.pdf [<https://perma.cc/533B-RNQD>].

²⁸⁹ Memorandum from Katherine K. Vidal, Under Sec'y of Com. for Intell. Prop. & Dir. of the U.S. Pat. & Trademark Off. to Members of the Pat. Trial and Appeal Bd., Updated Guidance on the Treatment of Statements of the Applicant in the Challenged Patent in Inter Partes Reviews Under § 311 at 1 (June 9, 2022), https://www.uspto.gov/sites/default/files/documents/20220609updatedAIPA_memo.pdf [<https://perma.cc/Z2SW-XVZB>].

²⁹⁰ *See supra* note 73.

²⁹¹ *See* Ryan Davis, *Patent Cases to Watch in the Second Half of 2022*, LAW360 (July 15, 2022), <https://www.law360.com/ip/articles/1509995/patent-cases-to-watch-in-the-second-half-of-2022> [<https://perma.cc/VY9V-3RCF>] (quoting former Administrative Patent Judge Jessica Kaiser); Riddhi Setty, *Patent Eligibility Needs Congressional Action, PTO Director Says*, BLOOMBERG L. (Sept. 19, 2022), <https://news.bloomberglaw.com/ip-law/patent-eligibility-needs-congressional-action-ptd-director-says> [<https://perma.cc/H5WU-3WRH>] (discussing potential guidance on eligibility as well as “computer-implemented inventions and the conditions for patentability and non-obvious subject matter more broadly”).

²⁹² *See generally* Benjamin & Rai, *supra* note 54, at 1597 (noting the Supreme Court's and Federal Circuit's “lack of interest . . . in applying conventional administrative law principles in the patent context” and that “[t]he problem may be particularly acute with respect to *Chevron*”).

from the Federal Circuit in the form of relatively high affirmance rates in PTAB proceedings.²⁹³

Finally, the broader problems with the Supreme Court as an institution are harder to solve. But the Court's recent actions in patent cases highlight the threat that an unconstrained Supreme Court poses to *all* areas of federal law—including areas that seem relatively far removed from politics, like patent law.²⁹⁴ Judging by the last Term, this Court views itself as a warrior for radically conservative politics: overturning regulations designed to help prevent a climate catastrophe and depriving pregnant persons of bodily autonomy while encouraging the proliferation of guns and dismantling the barriers between church and state.²⁹⁵ At the same time, the Court is paying less attention to an area of federal law—patent law—on which guidance from the Court would be uniquely useful to numerous stakeholders.²⁹⁶ The Court's enthusiasm for pursuing an extreme political agenda—and its apparent apathy for the more mundane tasks of the Supreme Court as an institution, like keeping an eye on patent law, underscore the need to reform the Court, even if that reform is, unfortunately, unlikely to happen.²⁹⁷

CONCLUSION

To date, the history of the U.S. Court of Appeals for the Federal Circuit has been told as a story of two eras. First, an initial period from 1982 until the late 1990s and early 2000s, when the Supreme Court largely ignored patent cases, the Federal Circuit had free reign, and the Federal Circuit's case law sometimes went off the rails in ways that were not surprising for a specialized appellate court.²⁹⁸ Then a second period beginning around the turn of the mil-

²⁹³ See Rebecca S. Eisenberg, *A Functional Approach to Judicial Review of PTAB Rulings on Mixed Questions of Law and Fact*, 104 IOWA L. REV. 2387, 2416 (2019) (noting that relatively strict standards of review for appeals from the PTAB remain on the books but arguing that those standards “seem[] like a waste of judicial resources” and “threaten[] to undermine the effectiveness of the AIA in providing a quicker, cheaper, and more expert alternative to district court litigation”).

²⁹⁴ *But cf.* Kara W. Swanson, *Patents, Politics, and Abortion* 20–23 (Ne. Univ. Sch. of L., Research Paper No. 161-2013, 2017), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2337062# [<https://perma.cc/768M-57VX>] (reviewing the history of patents on living organisms and arguing that the Patent Office has been remarkably successful at hiding the political implications of its work).

²⁹⁵ See *supra* notes 1–4.

²⁹⁶ See Golden, *supra* note 111, at 662 (arguing that the Supreme Court's “primary role” in patent law “should be to combat undesirable ossification of legal doctrine”).

²⁹⁷ See Lemley, *supra* note 66, at 116–17 (outlining several possible changes that could be made to the Court but concluding that they all “require[] a working Congress with a will to actually protect our system of government”).

²⁹⁸ See Craig Allen Nard & John F. Duffy, *Rethinking Patent Law's Uniformity Principle*, 101 NW. U. L. REV. 1619, 1644 (2007) (“[T]here is a growing sense among court watchers and patent players that the Federal Circuit has fallen out of rhythm with some of the technological communities

lennium in which the Supreme Court frequently heard patent cases, and, often at the urging of the Solicitor General, rejected various rules developed by the Federal Circuit, on issues of substantive patent law²⁹⁹ and on jurisdictional,³⁰⁰ procedural,³⁰¹ and remedial³⁰² issues that arise in patent disputes.

We've posited in this Article that the Federal Circuit story has entered a new, third era, one marked by reduced Supreme Court interest in patent law, diminished influence of the Solicitor General, a newly empowered Federal Circuit (now staffed largely by judges whose appointment coincided with or post-dated the AIA),³⁰³ and a Patent Office that will continue to explore the boundaries of its power. These changes, though not without potential downsides, could improve the patent system, particularly by decreasing litigation costs. Patent law, for better or worse, can at least be *settled* by the Federal Circuit, and disputes can be definitively *resolved* in cheaper and faster administrative proceedings at the Patent Office.

In all events, it's clear that changes are afoot in the patent system's institutional dynamics. Unpackaging the consequences of those changes will be a key task for patent lawyers and scholars for many years to come.

its decisions affect because the court has retreated into its own legal formalisms at the expense of gaining a good understanding of industrial and technological needs.” (citing Rai, *supra* note 109, at 1037)).

²⁹⁹ *E.g.*, KSR Int'l Co. v. Teleflex Inc., 550 U.S. 398, 415 (2007) (validity); Limelight Networks, Inc. v. Akamai Techs., Inc., 572 U.S. 915, 917 (2014) (infringement).

³⁰⁰ *E.g.*, MedImmune, Inc. v. Genentech, Inc., 549 U.S. 118, 120–21 (2007) (standing to bring a declaratory judgment suit).

³⁰¹ *E.g.*, Teva Pharms. USA, Inc. v. Sandoz, Inc., 574 U.S. 318, 321–22 (2015) (standards of appellate review).

³⁰² *E.g.*, eBay Inc. v. MercExchange, L.L.C., 547 U.S. 388, 390 (2006) (standard for granting injunctive relief).

³⁰³ Seven of the court's twelve active judges were appointed in 2011 or later. *See Judge Biographies*, *supra* note 133.

APPENDIX A. SUPREME COURT PATENT CASES ORIGINATING IN THE FEDERAL CIRCUIT
(1982–2022)

| Year of Decision | Case Name | Tribunal of Origin | US as Party | US as Amicus | SCOTUS Disposition | Agree with SG |
|------------------|---|--------------------|-------------|--------------|-----------------------|---------------|
| 1986 | Dennison Mfg. v. Panduit | DCT | No | No | Vacated and remanded | N/A |
| 1988 | Christianson v. Colt Indus. Operating Corp. | DCT | No | No | Vacated and remanded | N/A |
| 1990 | Eli Lilly & Co. v. Medtronic, Inc. | DCT | No | No | Affirmed and remanded | N/A |
| 1993 | Cardinal Chem. Co. v. Morton Int'l, Inc. | DCT | No | No | Vacated and remanded | N/A |
| 1995 | Asgrow Seed Co. v. Winterboer | DCT | No | Yes | Reversed | Yes |
| 1996 | Markman v. Westview Instruments, Inc. | DCT | No | No | Affirmed | N/A |
| 1997 | Warner-Jenkinson Co. v. Hilton Davis Chem. Co. | DCT | No | Yes | Reversed and remanded | Yes |
| 1998 | Pfaff v. Wells Elecs., Inc. | DCT | No | Yes | Affirmed | Yes |
| 1999 | Dickinson v. Zurko | BPAI | Yes | No | Reversed and remanded | Yes |
| 1999 | Fla. Prepaid Postsecondary Educ. Expense Bd. v. Coll. Sav. Bank | DCT | Yes | No | Reversed and remanded | No |
| 2000 | Nelson v. Adams | DCT | No | No | Reversed and remanded | N/A |
| 2001 | JEM Ag Supply, Inc. v. Pioneer Hi-Bred Int'l, Inc. | DCT | No | Yes | Affirmed | Yes |
| 2002 | Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co. | DCT | No | Yes | Vacated and remanded | Yes |
| 2002 | Holmes Grp., Inc. v. Vornado Air Circulation Sys., Inc. | DCT | No | No | Vacated and remanded | N/A |
| 2005 | Merck KGaA v. Integra Lifesciences I, Ltd. | DCT | No | No | Vacated and remanded | Yes |
| 2006 | Unitherm Food Sys., Inc. v. Swift-Eckrich, Inc. | DCT | No | Yes | Reversed | Yes |
| 2006 | Ill. Tool Works Inc. v. Indep. Ink, Inc. | DCT | No | Yes | Vacated and remanded | Yes |

| Year of Decision | Case Name | Tribunal of Origin | US as Party | US as Amicus | SCOTUS Disposition | Agree with SG |
|------------------|--|--------------------|-------------|--------------|--|---------------|
| 2006 | Lab'y Corp. of Am. Holdings v. Metabolite Lab'ys, Inc. | DCT | No | Yes | Dismissed | Yes |
| 2006 | eBay Inc. v. MercExchange, L.L.C. | DCT | No | Yes | Vacated and remanded | Yes |
| 2007 | Medimmune, Inc. v. Genentech, Inc. | DCT | No | Yes | Reversed and remanded | Yes |
| 2007 | KSR Int'l Co. v. Teleflex Inc. | DCT | No | Yes | Reversed and remanded | Yes |
| 2007 | Microsoft Corp. v. AT&T Corp. | DCT | No | Yes | Reversed | Yes |
| 2008 | Quanta Comput., Inc. v. LG Elecs., Inc. | DCT | No | Yes | Reversed | Yes |
| 2009 | Carlsbad Tech., Inc. v. HIF Bio, Inc. | DCT | No | No | Reversed and remanded/vacated and remanded | N/A |
| 2010 | Bilski v. Kappos | BPAI | Yes | No | Affirmed | Yes |
| 2011 | Glob.-Tech Appliances, Inc. v. SEB S.A. | DCT | No | No | Affirmed | N/A |
| 2011 | Bd. of Trs. of the Leland Stanford Jr. Univ. v. Roche Molecular Sys., Inc. | DCT | No | Yes | Affirmed | No |
| 2011 | Microsoft v. i4i Ltd. P'ship | DCT | No | Yes | Affirmed | Yes |
| 2012 | Kappos v. Hyatt | BPAI | Yes | No | Affirmed and remanded | No |
| 2012 | Caraco Pharm. Lab'ys, Ltd. v. Novo Nordisk A/S | DCT | No | Yes | Reversed and remanded | Yes |
| 2012 | Mayo Collaborative Servs. v. Prometheus Lab'ys, Inc. | DCT | No | Yes | Reversed | No |
| 2013 | Bowman v. Monsanto Co. | DCT | No | Yes | Affirmed | Yes |
| 2013 | Ass'n for Molecular Pathology v. Myriad Genetics, Inc. | DCT | No | Yes | Affirmed in part and reversed in part | Yes |
| 2014 | Medtronic, Inc. v. Mirowski Fam. Ventures, LLC | DCT | No | Yes | Reversed and remanded | Yes |
| 2014 | Octane Fitness, Inc. v. Icon Health & Fitness, Inc. | DCT | No | Yes | Reversed and remanded | Yes |
| 2014 | Highmark Inc. v. | DCT | No | Yes | Vacated and | Yes |

| Year of Decision | Case Name | Tribunal of Origin | US as Party | US as Amicus | SCOTUS Disposition | Agree with SG |
|------------------|--|--------------------|-------------|--------------|---|---------------|
| | Allcare Health Mgmt. Sys., Inc. | | | | remanded | |
| 2014 | Alice Corp. v. CLS Bank Int'l | DCT | No | Yes | Affirmed | Yes |
| 2014 | Nautilus, Inc. v. Biosig Instruments, Inc. | DCT | No | Yes | Vacated and remanded | Yes |
| 2014 | Limelight Networks, Inc. v. Akamai Techs., Inc. | DCT | No | Yes | Reversed and remanded | Yes |
| 2015 | Teva Pharms. USA, Inc. v. Sandoz, Inc. | DCT | No | Yes | Vacated and remanded | Yes |
| 2015 | Commil USA, LLC v. Cisco Sys., Inc. | DCT | No | Yes | Vacated and remanded | Yes |
| 2016 | Halo Elecs., Inc. v. Pulse Elecs., Inc./Stryker Corp. v. Zimmer, Inc., | DCT | No | Yes | Vacated and remanded | Yes |
| 2016 | Cuozzo Speed Techs., LLC v. Lee | PTAB | Yes | No | Affirmed | Yes |
| 2016 | Samsung Elecs. Co. v. Apple Inc. | DCT | No | Yes | Reversed and remanded | Yes |
| 2017 | SCA Hygiene Prods. Aktiebolag v. First Quality Baby Prods., LLC | DCT | No | No | Vacated in part and remanded | N/A |
| 2017 | Life Techs. Corp. v. Promega Corp. | DCT | No | Yes | Reversed and remanded | Yes |
| 2017 | Impression Prods., Inc. v. Lexmark Int'l, Inc. | DCT | No | Yes | Reversed and remanded | Yes |
| 2017 | TC Heartland LLC v. Kraft Foods Grp. Brands LLC | DCT | No | No | Reversed and remanded | N/A |
| 2017 | Amgen Inc. v. Sandoz Inc./Sandoz Inc. v. Amgen Inc. | DCT | No | Yes | Vacated in part, reversed in part, and remanded | Yes |
| 2018 | SAS Institute Inc. v. Lee | PTAB | Yes | No | Reversed and remanded | No |
| 2018 | Oil States Energy Servs., LLC v. Greene's Energy Grp., LLC | PTAB | Yes | No | Affirmed | Yes |
| 2018 | WesternGeco LLC v. Ion Geophysical Corp. | DCT | No | Yes | Reversed | Yes |
| 2019 | Helsinn | DCT | No | Yes | Affirmed | No |

| Year of Decision | Case Name | Tribunal of Origin | US as Party | US as Amicus | SCOTUS Disposition | Agree with SG |
|------------------|---|--------------------|-------------|--------------|-----------------------|---------------|
| | Healthcare S.A. v. Teva Pharms. USA, Inc. | | | | | |
| 2019 | Return Mail Inc. v. U.S. Postal Serv. | PTAB | Yes | No | Reversed and remanded | No |
| 2019 | Peter v. NantKwest Inc. | DCT | Yes | No | Affirmed | No |
| 2020 | Thryv, Inc. v. Click-to-Call Techs., LP | PTAB | Yes | No | Vacated and remanded | Yes |
| 2021 | United States v. Arthrex, Inc. | PTAB | Yes | No | Vacated and remanded | No |
| 2021 | Minerva Surgical, Inc. v. Hologic, Inc. | DCT | No | Yes | Vacated and remanded | Yes |

APPENDIX B. SUPREME COURT PATENT CASES NOT ORIGINATING IN THE FEDERAL CIRCUIT (1982–2022)

| Year of Decision | Case Name | Tribunal of Origin | US as Party | US as Amicus | SCOTUS Disposition | Agree with SG |
|------------------|---|-----------------------|-------------|--------------|-----------------------|---------------|
| 1983 | Gen. Motors Corp. v. Devex Corp. | Third Circuit | No | No | Affirmed | N/A |
| 1989 | Bonito Boats, Inc. v. Thunder Craft Boats, Inc. | Florida Supreme Court | No | No | Affirmed | N/A |
| 2013 | FTC v. Actavis, Inc. | Eleventh Circuit | Yes | No | Reversed and remanded | No |
| 2013 | Gunn v. Minton | Texas Supreme Court | No | No | Reversed and remanded | N/A |
| 2015 | Kimble v. Marvel Enters., Inc. | Ninth Circuit | No | No | Affirmed | Yes |

APPENDIX C. SUPREME COURT NON-PATENT CASES ORIGINATING IN THE FEDERAL CIRCUIT
(1982–2022)

| Year of Decision | Case Name | Tribunal of Origin | US as Party | US as Amicus | SCOTUS Disposition | Agree with SG |
|------------------|---|-------------------------|-------------|--------------|-----------------------|---------------|
| 1984 | United States v. Morton | Claims Court | Yes | No | Reversed | Yes |
| 1985 | Lindahl v. Off. of Pers. Mgmt. | MSPB | Yes | No | Reversed and remanded | No |
| 1985 | Cornelius v. Nutt | Arbitration (OPM) | Yes | No | Reversed | Yes |
| 1986 | United States v. City of Fulton | Claims Court | Yes | No | Reversed | Yes |
| 1986 | United States v. Am. Coll. of Physicians | Claims Court | Yes | No | Reversed | Yes |
| 1986 | United States v. Hughes Props., Inc. | Claims Court | Yes | No | Affirmed | No |
| 1986 | United States v. Am. Bar Endowment | Claims Court | Yes | No | Reversed and remanded | Yes |
| 1987 | Van Drasek v. Webb | DCT | No | No | Dismissed | N/A |
| 1987 | United States v. Gen. Dynamics Corp. | Claims Court | Yes | No | Reversed | Yes |
| 1988 | United States v. Fausto | Claims Court | Yes | No | Reversed | Yes |
| 1988 | Dep't of Navy v. Egan | MSPB | Yes | No | Reversed | Yes |
| 1989 | United States v. Sperry Corp. | Claims Court | Yes | No | Reversed and remanded | Yes |
| 1989 | United States v. Goodyear Tire & Rubber Co. | Claims Court | Yes | No | Reversed and remanded | Yes |
| 1990 | Off. of Pers. Mgmt. v. Richmond | MSPB | Yes | No | Reversed | Yes |
| 1992 | United States v. Thompson/Center Arms Co. | Claims Court | Yes | No | Affirmed | No |
| 1993 | United States v. Hill | Claims Court | Yes | No | Reversed | Yes |
| 1993 | Izumi Seimitsu Kogyo Kabushiki Kaisha v. U.S. Philips Corp. | DCT | No | No | Dismissed | N/A |
| 1993 | Keene Corp. v. United States | Claims Court | Yes | No | Affirmed | Yes |
| 1994 | Brown v. Gardner | CAVC | Yes | No | Affirmed | No |
| 1995 | Shalala v. Whitecotton | Court of Federal Claims | Yes | No | Reversed and remanded | Yes |
| 1996 | Hercules Inc. v. United States | Court of Federal Claims | Yes | No | Affirmed | Yes |
| 1996 | United States v. Int'l Bus. Machs. Corp. | Court of Federal Claims | Yes | No | Affirmed | No |

| Year of Decision | Case Name | Tribunal of Origin | US as Party | US as Amicus | SCOTUS Disposition | Agree with SG |
|------------------|---|--|-------------|--------------|--|---------------|
| 1996 | United States v. Winstar Corp. | Court of Federal Claims | Yes | No | Affirmed and remanded | No |
| 1998 | LaChance v. Erickson | MSPB | Yes | No | Reversed | Yes |
| 1998 | United States v. U.S. Shoe Corp. | CIT | Yes | No | Affirmed | No |
| 1999 | United States v. Haggar Apparel Co. | CIT | Yes | No | Vacated and remanded | Yes |
| 2000 | Mobil Oil Expl. & Producing S.E., Inc. v. United States | Court of Federal Claims | Yes | No | Reversed and remanded | No |
| 2001 | United States v. Hatter | Court of Federal Claims | Yes | No | Affirmed in part, reversed in part, and remanded | Yes |
| 2001 | United States v. Mead Corp. | CIT | Yes | No | Vacated and remanded | Yes |
| 2001 | U.S. Postal Serv. v. Gregory | MSPB | Yes | No | Vacated and remanded | Yes |
| 2002 | Franconia Assocs. v. United States | Court of Federal Claims | Yes | No | Reversed and remanded | No |
| 2003 | United States v. White Mountain Apache Tribe | Court of Federal Claims | Yes | No | Affirmed and remanded | No |
| 2003 | United States v. Navajo Nation | Court of Federal Claims | Yes | No | Reversed and remanded | Yes |
| 2004 | Scarborough v. Principi | CAVC | Yes | No | Reversed and remanded | No |
| 2005 | Cherokee Nation of Okla. v. Leavitt | Board of Contract Appeals/10th Circuit | Yes | No | Affirmed in part and reversed in part and remanded | No |
| 2007 | Hinck v. United States | Court of Federal Claims | Yes | No | Affirmed | Yes |
| 2008 | John R. Sand & Gravel Co. v. United States | Court of Federal Claims | Yes | No | Affirmed | Yes |
| 2008 | United States v. Clintwood Elkhorn Min. Co. | Court of Federal Claims | Yes | No | Reversed | Yes |
| 2008 | Richlin Sec. Serv. Co. v. Chertoff | Board of Contract Appeals | Yes | No | Reversed and remanded | No |
| 2009 | United States v. Eurodif S.A. | CIT | Yes | No | Reversed and remanded | Yes |
| 2009 | United States v. Navajo Nation | Court of Federal Claims | Yes | No | Reversed and remanded | Yes |
| 2009 | Shinseki v. Sanders | CAVC | Yes | No | Reversed and remanded/vacated and remanded | Yes |

| Year of Decision | Case Name | Tribunal of Origin | US as Party | US as Amicus | SCOTUS Disposition | Agree with SG |
|------------------|---|-------------------------|-------------|--------------|-----------------------|---------------|
| 2011 | Henderson v. Shinseki | CAVC | Yes | No | Reversed and remanded | No |
| 2011 | United States v. Tohono O'Odham Nation | Court of Federal Claims | Yes | No | Reversed and remanded | Yes |
| 2011 | Gen. Dynamics Corp. v. United States | Court of Federal Claims | Yes | No | Vacated and remanded | No |
| 2011 | United States v. Jicarilla Apache Nation | Court of Federal Claims | Yes | No | Reversed and remanded | Yes |
| 2012 | United States v. Bormes | DCT | Yes | No | Vacated and remanded | Yes |
| 2012 | Ark. Game & Fish Comm'n v. United States | Court of Federal Claims | Yes | No | Reversed and remanded | No |
| 2013 | Sebelius v. Cloer | Court of Federal Claims | Yes | No | Affirmed | No |
| 2015 | Dep't of Homeland Sec. v. MacLean | MSPB | Yes | No | Affirmed | No |
| 2016 | Kingdomware Techs., Inc. v. United States | Court of Federal Claims | Yes | No | Reversed and remanded | No |
| 2017 | Matal v. Tam | PTO/TTAB | Yes | No | Affirmed | No |
| 2017 | Perry v. MSPB | MSPB | Yes | No | Reversed and remanded | No |
| 2019 | Iancu v. Brunetti | PTO/TTAB | Yes | No | Affirmed | No |
| 2019 | Kisor v. Wilkie | CAVC | Yes | No | Vacated and remanded | Yes |
| 2020 | Romag Fasteners, Inc v. Fossil, Inc. | DCT | No | No | Vacated and remanded | N/A |
| 2020 | Me. Cmty. Health Options v. United States | Court of Federal Claims | Yes | No | Reversed and remanded | No |
| 2021 | Google LLC v. Oracle Am., Inc. | DCT | No | Yes | Reversed and remanded | No |
| 2022 | George v. McDonough | CAVC | Yes | No | Affirmed | Yes |