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Rethinking Patent Law's Exclusive Appellate Jurisdiction

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RETHINKING PATENT LAW'S EXCLUSIVE APPELLATE JURISDICTION

CHRISTA LASER*

ABSTRACT

The United States Court of Appeals for the Federal Circuit was created in 1982 to unify and clarify patent law, *inter alia*. It was built from political compromise after the Hruska Commission, which studied the caseload crisis in the federal appellate courts in the 1970s, initially recommended creation of a new National Court of Appeals that would exist between the regional federal appellate circuits and the Supreme Court. The Federal Circuit judges admirably implemented these functions for four decades.

However, the initial function of the Federal Circuit might no longer be as needed in the current judicial climate. The environment that might have justified the Federal Circuit changed: the Supreme Court is more active in patent law and actively hostile towards the Federal Circuit, the Federal Circuit's docket shifted to large numbers of administrative patent appeals from the Patent Trial and Appeal Board (PTAB), the strength and competitive position of the U.S. patent system changed, forum and venue practices shifted, patents have become more mainstream, and the Federal Circuit provided nationally uniform decisions on many of the previously-unresolved issues in patent law.

Scholars have urged that the Federal Circuit's jurisdiction should be modified, such as by adding an additional circuit court by random assignment or litigant selection, expanding the Federal Circuit's subject matter to include more types of cases, or eliminating the court altogether. This Article proposes retaining the Federal Circuit to continue to hear administrative appeals in patent, trade, or other cases deemed appropriate (similar to the jurisdiction that existed before creation of the Federal Circuit) and returning jurisdiction over all district court patent appeals to the regional circuit courts. Moreover, if it is needed to maintain uniformity of law, the Article recommends creating a National Court of Appeals between the circuit courts

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and the Supreme Court to decide cases of all types with a need for nationwide uniformity, as was recommended by the Hruska Commission.

Although creation of a new court and modification of the old will likely face severe political hurdles, this Article urges that the uniformity problem should never have been addressed by eliminating regional appellate court jurisdiction in patent law. The problem was with the Supreme Court's inaction and inability to keep up with its unifying function in all, and especially in complex, areas of law. As the Hruska Commission recommended, any uniformity problem should have been addressed by focusing on the Supreme Court's structural inability to perform this function. And with changing times, there is no longer as much benefit of patent exceptionalism, particularly when other complex areas of federal law such as copyright, trademark, tax, environmental law, criminal law, and antitrust would also benefit from nationally uniform decisions and technically knowledgeable judges. These concerns could be addressed through the creation of the National Court of Appeals.

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I. INTRODUCTION

For the last forty years, the Federal Circuit has been the only federal appellate court with jurisdiction over patent appeals.¹ Appeals from every district court in the country in cases addressing a question of patent law are funneled to the Federal Circuit,² as are appeals from agencies such as the Patent and Trademark Office³ and International Trade Commission.⁴ Therefore, patent law decisions from the Federal Circuit are nationally binding before they reach the Supreme Court. Although the Federal Circuit's jurisdiction includes other specialized areas of law,⁵ patent appeals constitute the majority of the Federal Circuit's docket.⁶

Before the creation of the Federal Circuit in 1982, patent cases percolated like cases in most other areas of law through different regional circuit court jurisdictions.⁷ In other words, different judges and regional courts would decide an issue of law before it reached the Supreme Court. Percolation through regional appellate courts might allow the Supreme Court to use circuit splits to inform whether and when to accept a case for review⁸ and to see how appellate decisions in different jurisdictions

¹ 28 U.S.C. § 1295(a)(1) (2018) (“The United States Court of Appeals for the Federal Circuit shall have exclusive jurisdiction . . . of an appeal from a final decision of a district court . . . arising under . . . patents . . .”); S. REP. NO. 97-275, at 3 (1981) (“The Court of Appeals for the Federal Circuit differs from other federal courts of appeals . . . in that its jurisdiction is defined in terms of subject matter rather than geography.”).

² *Id.*

³ *E.g.*, 35 U.S.C. § 141(c) (2018) (stating appeals from final written decisions of the United States Patent Trial and Appeal Board in post-grant proceedings may only be funneled to the United States Court of Appeals for the Federal Circuit).

⁴ The Federal Circuit has exclusive jurisdiction over appeals from final determinations of United States International Trade Commission in Section 337 investigations, 28 U.S.C. § 1295(a)(6) (2018), including investigations into the importation into the United States of articles that infringe a U.S. patent. 19 U.S.C. § 1337 (2018).

⁵ *See* Paul R. Gugliuzza, *Rethinking Federal Circuit Jurisdiction*, 100 GEO. L.J. 1437, 1460–63 (2012) (surveying the non-patent docket of the Federal Circuit).

⁶ *Appeals Filed, by Category, FY 2021*, U.S. CT. OF APPEALS FOR THE FED. CIR. (2021), https://cafc.uscourts.gov/wp-content/uploads/reports-stats/caseload-by-category/Caseload_by_Category_FY2021.pdf.

⁷ *See infra* Part II.A.

⁸ SUP. CT. R. 10 (noting that 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” is a consideration for granting Supreme Court review); *see also* Christa Laser, *Certiorari in Patent Cases at the Supreme Court*, 48 AIPLA Q. J. 569, 577 (2020) (noting from interviews with clerks that the presence of a circuit split on an important issue is often considered a threshold to grant certiorari in non-patent cases); H.W. PERRY, *DECIDING TO DECIDE* 230, 247 (Harvard University Press 1991) (“Justices like the smell of well-percolated cases.”).

affect lower court reasoning differently, among other effects.⁹ Yet in the 1970s and early 1980s, the Supreme Court was simply not taking enough cases to perform any significant unifying role in patent law; as one commentator at the time noted, “the Supreme Court is just too busy to perform anything even resembling a monitoring function on patent-related issues.”¹⁰ In the 1970s and 1980s, the Supreme Court heard twice the number of total cases per year as it does today and yet took a third of the patent cases as it did in 2010s.¹¹ When the Federal Circuit was created, a key stated goal was to improve national uniformity of patent law in the face of the Supreme Court’s inaction.¹² Other goals for the Federal Circuit included limiting forum shopping for regional appellate law, improving the United States’ competitive position in innovation, and increasing expertise in a complex area of law.¹³

The Federal Circuit’s jurisdictional structure might have helped to create more uniform, predictable, and informed patent law, but no one appellate jurisdictional model can serve all goals or function in all circumstances.¹⁴ Former Chief Judge Markey emphasized the importance of monitoring the progress of the Federal Circuit experiment to ensure that it is functioning in service of the public: “The Bar, the law schools, other courts, the Executive Branch, judges, and the Congress should evaluate the performance of the Court in light of the considerations which impelled its creation. . . . [T]he Court welcomes watchers.”¹⁵ And, if the current structure of the Federal Circuit’s jurisdiction is deficient for today’s needs, we should be open to changing it—even if doing so might cause initial disruption; “fundamental institutional deficiencies call for fundamental institutional change” and “subtle tweaks to the provisions of the patent statute” might not be enough to effect institutional reform.¹⁶

Moreover, although Congress has spent significant effort trying to improve the quality of patents, such as by enabling more post-grant review of patents at the Patent

⁹ Adrian Vermeule, *Many-Minds Arguments in Legal Theory*, 1 J. LEGAL ANALYSIS 1, 1 (2009) (discussing the potential mechanisms and impacts of percolation of legal ideas); CASS R. SUNSTEIN, *INFOTOPIA 70* (Oxford University Press 2006) (same); Cass R. Sunstein, *Deliberative Trouble? Why Groups Go to Extremes*, 110 YALE L.J. 71, 74–75 (2000) (same).

¹⁰ COMM’N ON REVISION OF THE FED. CT. APP. SYS., *STRUCTURE AND INTERNAL PROCEDURES: RECOMMENDATIONS FOR CHANGE 15*, 152–53 (1975) (hereinafter “HRUSKA COMMISSION REPORT”) (quoting a letter from professor Gambrell and Mr. Dunner).

¹¹ Laser, *Certiorari in Patent Cases at the Supreme Court*, *supra* note 8, at 588–89.

¹² S. REP. NO. 97-275, at 5 (1981).

¹³ See *Infra* Part II.B.

¹⁴ See Michael E. Solimine, *Ideology and En Banc Review*, 61 N.C. L. REV. 29, 41 (1988) (“[N]o one model of appellate review can at the same time maximize procedural values such as finality, economy, consistency, impartiality, and power concentration.”) (citing Judith Resnik, *Tiers*, 51 S. CAL. L. REV. 837, 845–59, 874 (1984)).

¹⁵ Howard T. Markey, *Excerpts from Remarks by Hon. Howard T. Markey*, 1983 A.B.A. SEC. PAT. TRADEMARK AND COPYRIGHT L. PROC. 99, 100 (1983).

¹⁶ JAMES BESSEN & MICHAEL J. MEURER, *PATENT FAILURE: HOW JUDGES, BUREAUCRATS, AND LAWYERS PUT INNOVATORS AT RISK* 231 (Princeton University Press Princeton and Oxford 2008).

Office,¹⁷ little attention has been paid since the creation of the Federal Circuit to the quality of patent law and the institutional changes needed to obtain it. Perhaps we must trade off which goals we focus on depending upon their importance at different times in history. Today, perhaps the laboratories of ideas in patent law are needed more than uniformity at the appellate level. Moreover, perhaps the goal of predictability is not being met with the current relationship between the Federal Circuit and Supreme Court; the Supreme Court has been ten times as active in patent law over the last decade as it was at the time of the Federal Circuit's creation¹⁸ and "repeatedly rebuke[s] the Federal Circuit on issues of patent law."¹⁹ Moreover, without circuit splits to know when the Supreme Court will take review and competing opinions to know what law the Supreme Court might apply, unpredictability arises as to when and how patent law will change, undermining the certainty of business decisions. In an era of an active Supreme Court, and after many years of the Federal Circuit's unifying function, perhaps the goal of having more laboratories of ideas in patent law is needed again to form a basis for percolation of ideas in patent law. Structural change might be needed to improve the quality of patent law.

Previous proposals have been made to eliminate or modify the Federal Circuit's exclusive jurisdiction: Professors James Bessen and Michael Meurer urge that changes in technology and the balance of incentives for innovation have occurred since the 1980s, such that the institutional structures supporting patent law policy that were put in place in the 1980s might not be as effective today as they were at that time.²⁰ Moreover, they urge that the Federal Circuit has, instead of supporting certainty in patent law, undermined it by increasing its own power in areas such as claim construction.²¹ Professors Bessen and Meurer therefore urge that patent law should not be decided by a single appellate court with exclusive jurisdiction, but by multiple

¹⁷ See America Invents Act, Pub. L. No. 112-29, 125 Stat. 284 (2011) (codified as amended in scattered sections of 35 U.S.C.).

¹⁸ Christa Laser, *Certiorari in Patent Cases at the Supreme Court*, *supra* note 8, at 589–90, 590 fig.4 (2020) (showing that in the decade from 2010 to 2020, patent cases comprised more than 5% of issued Supreme Court opinions versus only 0.5% in the 1980s when the Federal Circuit was created).

¹⁹ See Gugliuzza, *Rethinking Federal Circuit Jurisdiction*, *supra* note 5, at 1441 & n.12.

²⁰ BESSEN & MEURER, *supra* note 16, at 216–17 (“[P]atents might have worked reasonably well as a property system as recently as the 1980s,” but in a book written shortly prior to the passage of the America Invents Act, Bessen and Meurer state that it was “unlikely that patents” at that time were “an effective policy instrument to encourage innovation overall,” in part because of the institutional structures in place at the time.); *id.* at 227–28 (“We fear the structure of the patent courts has actually contributed to the deterioration of patent notice. In particular, the courts have not responded well to notice problems posed by new technologies. The Court of Appeals for the Federal Circuit is a major source of the growing patent notice problem.”).

²¹ BESSEN & MEURER, *supra* note 16, at 228–29 (“[G]reater discretion by the appeals court implies the lower predictability of patent boundaries, leading to poor notice and a greater risk of litigation.”) (citing *Phillips v. AWH Corp.*, 415 F.3d 1303, 1330 (Fed. Cir. 2005) (en banc) (Mayer, J., dissenting) (“What we have wrought, instead, is the substitution of a black box, as it so pejoratively has been said of the jury, with the black hole of this court.”)).

courts of some kind.²² Professors Craig Nard and John Duffy also agreed with the proposal to eliminate exclusive jurisdiction, arguing that while many heaped praise on the uniformity provided by the Federal Circuit, the court's exclusive jurisdiction degraded the quality of patent law.²³ In particular, the patent law that developed was, they assert, low quality because it failed to take into account the role of patent law in spurring innovation, the potential risk to competition, and the need for predictability.²⁴ Several other proposals for changing the jurisdiction of the Federal Circuit, discussed further below, have also previously been suggested, but no other prior proposal urges returning district court appeals to all regional circuits, eliminating patent exceptionalism and returning patent law to a judicial structure that uses many minds to reach the highest quality law.

Under the proposed model, regional circuit courts would hear appeals from their respective district courts in patent cases and the Federal Circuit would also remain intact to continue to hear appeals from the Patent Trial and Appeal Board (PTAB), International Trade Commission (ITC), and Court of Federal Claims. Unlike past proposals to reform the Federal Circuit's jurisdiction, all regional circuit courts would have the opportunity to hear patent appeals and the Federal Circuit would still retain significant influence due to its review of agency and government cases. The forum for appeals would be predictable to litigants based on the forum of their trial court or agency action. This would return the patent jurisdiction of the courts to a similar condition as before the creation of the Federal Circuit.²⁵ The Federal Circuit could also continue to hear other non-patent matters that were added to the Federal Circuit's jurisdiction over the years and that Congress wishes to keep there.²⁶ This Article also recommends that if the desire for national uniformity in complex areas of law remains a concern after changing the jurisdiction of the Federal Circuit, Congress should adopt

²² BESSEN & MEURER, *supra* note 16, at 25; *see also id.* at 230 (“The court’s poor response to new technologies suggests that a single, centralized appeals court is not an effective institutional arrangement.”).

²³ Craig Allen Nard & John F. Duffy, *Rethinking Patent Law's Uniformity Principle*, 101 Nw. U. L. REV. 1619, 1620 (2007).

²⁴ *Id.*; *see also* Diane P. Wood, *Keynote Address: Is it Time to Abolish the Federal Circuit's Exclusive Jurisdiction in Patent Cases?*, 13 CHI.-KENT J. INTELL. PROP. 1, 9–10 (2013).

²⁵ Charles W. Adams, *The Court of Appeals for the Federal Circuit: More Than a National Patent Court*, 49 MO. L. REV. 44 (1984) (discussing the former jurisdiction and noting, “[t]he Federal Circuit . . . was formed by merging the Court of Claims and the Court of Customs and Patent Appeals” and adding exclusive jurisdiction over patent appeals from district courts); *U.S. Court of Customs and Patent Appeals, 1929-1982*, FED. JUD. CTR., <https://www.fjc.gov/history/courts/u.s.-court-customs-and-patent-appeals-1929-1982> [permalink: <https://perma.cc/R82Q-9TDB>] (last visited Aug. 26, 2021) (providing a history of the court).

²⁶ The Federal Circuit also hears, for example, appeals in veteran’s claims cases, but it is debatable whether these claims also suffer under exclusive appellate jurisdiction due to lack of appellate percolation and potential unfairness to litigants. *Cf.* Gugliuzza, *Rethinking Federal Circuit Jurisdiction*, *supra* note 5, at 1460–63 (noting concerns with the Federal Circuit’s insularity in veteran’s appeals).

the Hruska Commission's recommendation to create a National Court of Appeals.²⁷ The membership of this new court could be built from judges sitting on the Federal Circuit or those from other regional courts.

This proposal optimizes the experimentation, independent percolation, and cohesion of law that promote the development of quality law, consistent with the theory that “many minds” improve the quality of judging.²⁸ If regional circuits were to hear patent cases, some might have concern that patent law would become too uncertain, but in fact this change could increase the predictability of law particularly by making it easier to predict when law will be overturned by the Supreme Court and what rules will supplant it. Moreover, patent law might be better—more innovative, insightful, and thoughtful—if it is created by a judicial system with inter-circuit competition at the appellate level.

Details, support, and potential counterarguments for this proposal are discussed below. Part II discusses the history, goals, and changed circumstances of the Federal Circuit. Part III outlines the proposal and discusses differences from prior proposals to modify the Federal Circuit's jurisdiction. Part IV provides an overview of the benefits and drawbacks of exclusive jurisdiction and specialization. It also discusses why certainty and clarity of law are not required to give predictability of law and why quality and predictability is more important than immediate national clarity of the law. Furthermore, it sets out a framework of applying “many minds” to judging and describes an ideal federal court structure for promoting uniformity. Part V critically addresses counterpoints and logistical issues that might arise with the proposed new jurisdictional structure. It urges that the proposed jurisdictional change would be better than the current and previously proposed jurisdictional structures at promoting experimentation, percolation, and predictability of patent law.

II. THE FEDERAL CIRCUIT

A. *The Origins of a Court of Exclusive Jurisdiction*

Created in 1982 pursuant to the Federal Courts Improvement Act,²⁹ the Federal Circuit is the only circuit court of appeals with jurisdiction limited solely by subject matter rather than geography.³⁰ The Federal Circuit has exclusive jurisdiction of

²⁷ See *Infra* Part III.

²⁸ See *Infra* Parts IV and V.

²⁹ Federal Courts Improvement Act of 1982, Pub. L. No. 97-164, 96 Stat. 25 (1982) (codified in scattered sections of 28 U.S.C.A. (2018)).

³⁰ Compare 28 U.S.C. § 1295(a), with *id.* § 1294 (“Except as [otherwise] provided . . . appeals for reviewable decisions of the district . . . courts shall be taken . . . to the court of appeals for the circuit embracing the district . . .”); S. REP. NO. 97-275, at 3 (1981) (“The Court of Appeals for the Federal Circuit differs from other federal courts of appeals . . . in that its jurisdiction is defined in terms of subject matter rather than geography.”). The District of Columbia Circuit has exclusive jurisdiction over some types of administrative appeals, as well as appeals based on geographic location, so although administrative appeals are more common in this circuit, they do not comprise a majority of the docket or exclude ordinary district court cases. See LAWRENCE BAUM, *SPECIALIZING THE COURTS* 11 (Univ. of Chicago Press 2011) (surveying judicial specialization). Additionally, some circuit courts tend to have more of certain types of cases; for example, the Ninth and Second Circuits have higher proportions of

appeals of claims arising under patent law.³¹ The Federal Circuit also has jurisdiction over a small but significant amount of non-patent government cases such as veteran's benefits, takings, government contracts, government employment law, and administrative trademark appeals.³² Nonetheless, patent appeals constitute a majority of the Federal Circuit's docket.³³ Administrative appeals from the Patent and Trademark Office alone constitute 35% of the Federal Circuit's docket, although this was not always the case.³⁴

Prior to the creation of the Federal Circuit, patent appeals were decided like appeals in most any other area of law: decisions from federal district courts were appealed to a regional circuit United States Court of Appeals associated with the geographic area of the district court before getting appealed to the Supreme Court.³⁵ When the Federal Circuit was created, it took the appellate jurisdiction for patent appeals from these regional circuits.³⁶ The Federal Circuit also absorbed the appellate jurisdiction of several specialized courts: the Court of Customs and Patent appeals, which heard patent agency appeals and appeals in disputes of international trade,³⁷ and

immigration appeals than other circuits and the Eleventh Circuit has more labor standards cases. *Id.*

³¹ 28 U.S.C. § 1295(a)(1) (2018) (“The United States Court of Appeals for the Federal Circuit shall have exclusive jurisdiction . . . of an appeal from a final decision of a district court . . . in any civil action arising under, or in any civil action in which a party has asserted a compulsory counterclaim arising under, any Act of Congress relating to patents . . .”). The Federal Circuit also has jurisdiction over patent appeals from forums other than district courts: the Federal Circuit has exclusive jurisdiction over appeals from final determinations of United States International Trade Commission in Section 337 investigations, 28 U.S.C. § 1295(a)(6) (2018), including investigations into the importation into the United States of articles that infringe a U.S. patent. 19 U.S.C. § 1337 (2018). Additionally, the Federal Circuit has exclusive jurisdiction over appeals from final written decisions of the United States Patent Trial and Appeal Board in post-grant proceedings such as *inter partes* review. 35 U.S.C. § 141(c) (2018).

³² Gugliuzza, *Rethinking Federal Circuit Jurisdiction*, *supra* note 5, at 1460–63.

³³ *Appeals Filed, by Category, FY 2021*, U.S. CT. OF APPEALS FOR THE FED. CIR. (2021), https://cafc.uscourts.gov/wp-content/uploads/reports-stats/caseload-by-category/Caseload_by_Category_FY2021.pdf.

³⁴ *Id.*; *see also Year-to-Date Activity as of June 30, 2022*, U.S. CT. OF APPEALS FOR THE FED. CIR. (2022) <https://cafc.uscourts.gov/wp-content/uploads/reports-stats/FY2022/FY2022YTDActivity09.pdf>.

³⁵ *See generally* 13 CHARLES A. WRIGHT ET AL., *FEDERAL PRACTICE AND PROCEDURE* § 3504 (Thomson/West ed., 3d ed. 2008) (providing a history of the Federal Courts of Appeal, noting that Regional Circuit Courts of Appeal were established with the goals of promoting independent consideration of legal issues at different levels and reducing the burdens on Supreme Court justices who previously had to “ride circuit”—sit on lower court panels).

³⁶ 28 U.S.C. § 1295(a).

³⁷ *See generally* GILES S. RICH, *A BRIEF HISTORY OF THE UNITED STATES COURT OF CUSTOMS AND PATENT APPEALS* 6–7 (Committee on the Bicentennial of Independence and the Constitution 1980) (discussing the history of the Court of Customs and Patent Appeals). Before creation of the Court of International Trade and the Court of Customs Appeals, district courts

the Court of Claims, which heard trial and appellate matters on suits against the federal government including those involving patents.³⁸ Along with the creation of the Federal Circuit, what was previously the Court of Claims was broken up to allow appeals to go to new Federal Circuit and the trial level proceedings to be held in a new Article I trial court, the Court of Federal Claims.³⁹

Progress towards the creation of the Federal Circuit began in part with the Hruska Commission's 1975 report of the caseload crisis in the Federal Courts,⁴⁰ although various suggestions to create specialized courts had percolated earlier.⁴¹ The Hruska Commission's report highlighted the large number of unresolved inter-circuit conflicts of law and long delays in the Supreme Court resolving those conflicts, concluding that the Supreme Court lacked capacity to decide all of the issues in need of uniform decision-making.⁴² The Hruska Commission's report emphasized "the absence of authoritative decisions on recurring issues of national law" as a critical problem facing American law.⁴³

The Hruska Commission recommended creation of a new National Court of Appeals, which would hear cases of all types that were either referred to it by the Supreme Court or transferred from the regional courts of appeals on issues of national importance.⁴⁴ Decisions from the National Court of Appeals would be binding on regional circuits and district courts and reviewable by the Supreme Court.⁴⁵ The Hruska Commission's recommendation was never adopted, but "one observation of the Hruska Commission would be a cornerstone for the founding of the Federal Circuit": the Supreme Court's inability to unify the law created notable confusion in patent law.⁴⁶

In 1978, Professor Daniel J. Meador proposed an alternative to address the problem of the Supreme Court failing to create sufficient uniformity of law: a new court of appeals with nationwide jurisdiction over patent law, tax law, and environmental

where ports were located handled disputes regarding international trade and regional circuit courts handled those appeals. *Id.*

³⁸ Adams, *supra* note 25, at 44 (discussing the former jurisdiction and noting, "the Federal Circuit . . . was formed by merging the Court of Claims and the Court of Customs and Patent Appeals, two article III courts located in Washington, D.C." and adding exclusive jurisdiction over patent appeals from district courts, which previously were appealed to regional circuit courts of appeal).

³⁹ Adams, *supra* note 25, at 44.

⁴⁰ HRUSKA COMMISSION REPORT, *supra* note 10, at 15.

⁴¹ LAWRENCE BAUM, *SPECIALIZING THE COURTS* 179 (Univ. of Chicago Press 2011).

⁴² *Id.* at 76.

⁴³ HRUSKA COMMISSION REPORT, *supra* note 10, at 76.

⁴⁴ *Id.* at vii, 30.

⁴⁵ *Id.* at 30.

⁴⁶ Gugliuzza, *Rethinking Federal Circuit Jurisdiction*, *supra* note 5, at 1455; HRUSKA COMMISSION REPORT, *supra* note 10, at 153.

law.⁴⁷ Letters exchanged with Professor Meador around this time even suggest that he was considering the court to be a national science court that would decide certain issues requiring technical expertise.⁴⁸ The scope of the proposed jurisdiction of the Federal Circuit was eventually narrowed to eliminate proposed exclusive jurisdiction for tax and environmental law.⁴⁹ In parallel, the Domestic Policy Review initiated by President Carter out of concern for the United States' international standing on innovation had recommended a court for patent appeals, with one participant in the review noting that "patents could never serve as reliable investment incentives when their fate in the courts was so unpredictable, and the judicial attitude in general so hostile."⁵⁰ The accident of patent jurisdiction ending up exclusively at the Federal Circuit was a combination of strategy by patent industry groups and Presidential administrations and alignment of political interests with potential solutions like Professor Meador's.⁵¹ On April 2, 1982, President Ronald Reagan signed the Federal Courts Improvement Act into law, creating the Federal Circuit.⁵²

B. Goals and Benefits of the Federal Circuit

The Federal Circuit was not born from a single Congressional intent or a single defining purpose, but from a consensus among different interests and desires to solve different problems.⁵³ Nonetheless, when the Federal Circuit was created, many hoped that the Federal Circuit would help bring uniformity, certainty, and expertise to the appellate law of patents.⁵⁴

⁴⁷ THE U.S. JUD. CONF. COMM. ON THE BICENTENNIAL OF THE CONST. OF THE U.S., THE UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT: A HISTORY, 1982-1990 4-5 (Marion T. Bennett ed., 1991) [hereinafter JUD. CONF. COMM.].

⁴⁸ Letter from Charles R. Haworth to Daniel Meador (Jan. 11, 1978) (on file with author) ("Pursuant to our meeting on December 15, 1977, I propose the following topics to be investigated and researched as part of an appellate court project: 1. The feasibility and potential jurisdiction of specialized courts in the areas of the environment, science, and taxes . . .").

⁴⁹ *Id.* at 5-6. However, tax and environmental law questions continue to arise at the Federal Circuit on occasion in its review of cases from the United States Court of Federal Claims, which has jurisdiction over actions for money damages brought against the United States. See *About the Court*, U.S. CT. OF FED. CLAIMS, <https://www.uscfc.uscourts.gov/about-court> [<https://perma.cc/XN52-CJLH>] (last visited Aug. 22, 2020) (explaining types of cases frequently heard at the court).

⁵⁰ LAWRENCE BAUM, *SPECIALIZING THE COURTS* 180-81 (University of Chicago Press 2011).

⁵¹ *Id.* at 5; FRANK P. CIHLAR, *THE COURT AMERICAN BUSINESS WANTED AND GOT: THE UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT* 111 (1982).

⁵² Federal Courts Improvement Act of 1982, Pub. L. No. 97-164, 96 Stat. 25 (1982) (codified in scattered sections of 28 U.S.C.A. (2018)).

⁵³ BAUM, *supra* note 50, at 181-82.

⁵⁴ Nard & Duffy, *supra* note 23, at 1619-20.

1. Uniformity and the Federal Circuit's Perceived Mandate

As noted above, the Hruska Commission identified uniformity as a particular problem for patent law: the Supreme Court was not considering the need for nationally binding judgments on issues of patent law, and not sufficiently active in patent law, resulting in non-uniform patent law in different regional circuits.⁵⁵ One of Congress's goals in establishing the Federal Circuit, therefore, was to address the uncertainty of inconsistent law across geographic regions.⁵⁶ Some in Congress expressed a hope that business planning would be easier if patent law were not so dependent on geography and litigants could not forum shop for circuit law to find what was either pro- or anti-patent.⁵⁷ Uniformity also provides more clarity to litigants.⁵⁸ National uniformity of law is particularly impactful in an area of nationwide property rights like patents, where incoherent boundaries could alter their value.

In hearings leading up to the creation of the Federal Circuit, Judge Markey, who became the Federal Circuit's first Chief Judge, emphasized, "there is a crying need for uniform judicial interpretation of the national law of patents, an interpretation on which our citizens may rely and plan with some certainty."⁵⁹ The Senate Report stated, "[t]he creation of the Court of Appeals for the Federal Circuit will produce desirable

⁵⁵ See HRUSKA COMMISSION REPORT, *supra* note 10, at 152 (1975) (quoting a letter from Professor Gambrell and Mr. Dunner, stating, "[i]t is our view that the principal cause of circuit-to-circuit deviations in the patent field stems from a lack of guidance and monitoring by a single court whose judgments are nationally binding. True, the Supreme Court technically fills this role but in practice it has not and, indeed, it cannot. The few decisions it renders in critical patent law areas, e.g., obviousness, have done little to provide the circuit courts with meaningful guidance."); see also Rochelle Cooper Dreyfuss, *The Federal Circuit: A Case Study in Specialized Courts*, 64 N.Y.U. L. REV. 1, 6 (1989).

⁵⁶ Charles W. Adams, *The Court of Appeals for the Federal Circuit: More Than a National Patent Court*, 49 MO. L. REV. 43, 44 (1984) ("[T]he new court should reduce the contradiction and confusion in patent law that many believed had been generated by the twelve other courts of appeals.").

⁵⁷ H.R. REP. NO. 97-312, at 4-5 (1981) (discussing the existing problems of disuniformity and noting that "some circuit courts are regarded as 'pro-patent' and others 'anti-patent,' and much time and money is expended in 'shopping' for a favorable venue," and "the validity of a patent is too dependent upon geography (i.e., the accident of judicial venue) to make effective business planning possible."). *But see* Cecil D. Quillen, Jr., *Innovation and the U.S. Patent System*, 1 VA. L. & BUS. REV. 207, 228 (2006) (arguing that the forum shopping problem in the 1970s was overstated).

⁵⁸ Ruth B. Ginsburg & Peter W. Huber, *The Intercircuit Committee*, 100 HARV. L. REV. 1424-25 (1987) ("Uniformity promotes the twin goals of equity and judicial integrity.") (quoting Note, *Intercircuit Conflicts and the Enforcement of Extracircuit Judgments*, 95 YALE L.J. 1505 (1986)).

⁵⁹ *Court of Appeals for the Federal Circuit: Hearing on H.R. 4205 Before the Subcomm. on Courts, Civil Liberties and the Admin. of Justice of the H. Comm. on the Judiciary*, 97th Cong., 362 (1981) [hereinafter *Hearing on H.R. 4205*] (statement of the Hon. Howard T. Markey, C.J., Court of Customs and Patent Appeals).

uniformity in this area of . . . [patent] law”⁶⁰ and “provides . . . a forum for appeals from throughout the country in areas of the law where Congress determines that there is special need for national uniformity.”⁶¹

Against this backdrop, early Federal Circuit judges perceived a mandate to clarify and unify patent law and to write clear and authoritative rules.⁶² Former Chief Judge Markey noted that in the early days of the Federal Circuit, its judges sought to “offer commentary” on the misstatements or incomplete statements of patent law in district court opinions even when they “may be irrelevant as far as the outcome is concerned.”⁶³ He expressed a desire, which he viewed as stemming from the purposes of the creation of the court, to give guidance to lower court judges and to provide clear standards from which litigants and courts can craft jury instructions in patent cases.⁶⁴ The Federal Circuit judges also sought to educate district court judges on the basic nomenclature and burdens in patent law.⁶⁵

2. Easing the Caseload Crisis

Congress also sought to address the caseload crisis faced by the federal courts and the Supreme Court. As a House Report noted, the federal caseload had nearly

⁶⁰ S. REP. NO. 97-275, at 5 (1981).

⁶¹ S. REP. NO. 97-275, at 4 (1981); *see also* THE U.S. JUD. CONF. COMM. ON THE BICENTENNIAL OF THE CONST. OF THE U.S., THE UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT: A HISTORY, 1982-1990 xi (Marion T. Bennett ed., 1991).

⁶² Howard T. Markey, *The Federal Circuit and Congressional Intent*, 41 AM. U. L. REV. 577 (1992); *see also* Michael Loney & James Nurton, *Fordham IP Conference Day 2 – live*, MANAGING IP (April 1, 2016), <https://www.managingip.com/article/b1kbpc9wplx7f3/fordham-ip-conference-day-2-live> [permalink: <https://perma.cc/958T-PC3W>] (quoting Federal Circuit Judge Pauline Newman as stating, “[o]n our Court we feel an obligation to speak out because we’re the only national court . . . [I]t’s important to the nation that we have a uniform approach to the policy, particularly on patent law,” Dissents can help that process, she adds.”); Jeremy W. Bock, *Restructuring the Federal Circuit*, 3 N.Y.U. J. INTELL. PROP. & ENT. L. 197, 212–13; Timothy R. Holbrook, *The Supreme Court’s Complicity in Federal Circuit Formalism*, 20 SANTA CLARA COMPUTER & HIGH TECH. L.J. 1, 1 (2004) (“The root of this bias likely derives from the court’s Congressional mandate to promote uniformity and certainty in patent law.”).

⁶³ Markey, *Remarks*, *supra* note 15, at 102 (“We are bending that SOP slightly in patent cases from the district courts. . . . The fact that a district judge has made a statement which will not hold water in light of the statute in a patent case, for example, itself may be irrelevant as far as the outcome is concerned; but, to forestall repetition of that approach, the Court has reached out, as you will see in the opinions that will be coming out—and there were six of them last week—and offered commentary even after disposing of the matter, pointing up where certain statements won’t stand up under the statute. In those instances in which the judge reached the right conclusion anyway, the judgment was affirmed.”).

⁶⁴ *Id.* at 103 (“[D]own the road I hope that the Court will have so spoken, when the occasion arises, that both lawyers and district judges will find a set of reliable and unchallengeable instructions and forms of instructions from which to choose.”).

⁶⁵ *Id.* at 103 (discussing educating district courts on how district courts do not find patents valid, but instead find that the defendant failed to carry the burden to prove the patent invalid in that instance).

quadrupled in the two decades leading up to creation of the Federal Circuit.⁶⁶ Although a number of federal judgeships had been added to existing courts, more and more decisions were in need of Supreme Court review and unification, resulting in what the House Report called “a crisis that actually is worsening.”⁶⁷ Moreover, as then-Chief Justice Warren Burger explained in comments to the Hruska Commission’s report, the Supreme Court might be prohibited from further expanding its own capacity to hear more cases, such as by deciding cases using panels of only some Justices, because of both political opposition and potential conflict with the Constitutional mandate of “one Supreme Court.”⁶⁸

3. Legal Specialization and Technical Expertise

The Federal Circuit was given jurisdiction over appeals in other areas of law beyond patent law in part to avoid the dangers of excessive specialization.⁶⁹ However, others, particularly the early Federal Circuit judges, viewed specialized knowledge as valuable for the difficult and highly technical cases that the Federal Circuit would handle. Judge Markey highlighted the benefits of specialization in patent law with this analogy: “[I]f I am doing brain surgery every day, day in and day out, chances are very good that I will do your brain surgery much quicker, or a number of them, than someone who does brain surgery once every couple of years.”⁷⁰

Few other courts at any level have judges with comparable scientific educations or experience as the judges on the Federal Circuit.⁷¹ Multiple Federal Circuit judges have at least undergraduate degrees in the sciences and a number have advanced degrees.⁷²

⁶⁶ H.R. REP. NO. 96-1307, pt. 1, at 3 (1980).

⁶⁷ H.R. REP. NO. 96-1307, pt. 1, at 2 (1980).

⁶⁸ See HRUSKA COMMISSION REPORT, *supra* note 10, at 173 (comments of the Chief Justice, May 29, 1975) (“It has occasionally been proposed that the Supreme Court be enlarged so that the Court could sit in divisions or panels, but any such proposals would meet with almost universal opposition, even assuming their constitutionality. Such a change would appear to alter the basic concept of ‘one supreme Court’ under Article III.”).

⁶⁹ See Dreyfuss, *supra* note 55, at 2–4; JUD. CONF. COMM., *supra* note 47, at xi (discussing purpose of establishing the Federal Circuit).

⁷⁰ *Court of Appeals for the Federal Circuit – 1981: Hearings on H.R. 2405 Before the Subcomm. on Cts., C.L. and the Admin. of Just. of the H. Comm. on the Judiciary*, 97th Cong., 42–43 (1981) (statement of the Hon. Howard T. Markey, C.J., Court of Customs and Patent Appeals); Daniel J. Meador, *An Appellate Court Dilemma and a Solution Through Subject Matter Organization*, 16 U. MICH. J.L. REFORM 471, 481–82 (1983). *But see* Rochelle Cooper Dreyfuss, *In Search of Institutional Identity: The Federal Circuit Comes of Age*, 23 BERKELEY TECH. L.J. 787, 788 n.4 (2008) (noting potential for overspecialization).

⁷¹ See Biographical Directory of Article III Federal Judges: Export, FED. JUD. CTR. DATABASE, <https://www.fjc.gov/history/judges/biographical-directory-article-iii-federal-judges-export> (select “Education” under “Format 2: Organized by Category (Relational Database)” to view the listing of judges’ educational backgrounds). The author has an article in progress cataloging the technical expertise of judges in the United States.

⁷² *E.g.*, Alan D. Lourie, *Circuit Judge*, U.S. CT. OF APPEALS FOR THE FED. CIR., <http://www.cafc.uscourts.gov/judges/alan-d-lourie-circuit-judge> [<https://perma.cc/SCD9->

The Federal Circuit judges do not all have technical training, but as a whole the Federal Circuit is a court of appeals that has many judges with an understanding of technology.⁷³ Additionally, nearly all judges of the Federal Circuit hire at least one clerk with a scientific degree, and frequently more.⁷⁴ This gives the Federal Circuit the technical expertise necessary to understand highly complex issues that often arise in patent disputes, such as interpretation of technical claims and patent eligibility of new technologies.⁷⁵

4. Improving U.S. Competitiveness and Strengthening U.S. Patents

Judge Markey also warned, in hearings prior to the creation of the Federal Circuit, that the relative position of the United States in international trade and innovation had fallen since the mid twentieth century, but the trend could be reversed by “investment in new products, technology, under some encouragement that can be relied upon.”⁷⁶ President Carter and his Domestic Policy Review likewise viewed the creation of a single appellate court for patent appeals as necessary to improve the predictability and reliability of U.S. patents for U.S. businesses and encourage domestic invention.⁷⁷ The final bill for creation of the Federal Circuit drew support from a diverse range of U.S. business interest groups, particularly The National Association of Manufacturers.⁷⁸ Businesses largely viewed early nationwide certainty of patent law as critical to development and commercialization.⁷⁹ After the creation of the Federal Circuit, many believe that its precedents helped to increase the role of patents in society and support a boom of innovation: Federal Circuit judge Pauline Newman noted, “I marvel at the rapidity with which industrial and entrepreneurial activity responded to the restoration

Q7HE?view-mode=client-side] (last visited Sept. 9, 2020) (noting, for example, that Judge Lourie has a Ph.D. in chemistry from the University of Pennsylvania).

⁷³ Laser, *Certiorari in Patent Cases at the Supreme Court*, *supra* note 8, at 606.

⁷⁴ *See id.* at 605.

⁷⁵ *E.g.*, *Wisconsin Alumni Rsch. Found. v. Apple Inc.*, 905 F.3d 1341, 1345 (Fed. Cir. 2018) (example of a patent case rising and falling on a highly technical issue: whether a hashed load tag in speculation prediction circuitry in a computer processor is associated with a “particular” load instruction and thereby infringes the patent).

⁷⁶ *Court of Appeals for the Federal Circuit – 1981: Hearings on H.R. 2405 Before the Subcomm. on Cts., C.L. and the Admin. of Just. of the H. Comm. on the Judiciary*, 97th Cong., 12 (1981) (statement of the Hon. Howard T. Markey, C.J., Court of Customs and Patent Appeals).

⁷⁷ BAUM, *supra* note 50, at 180–81.

⁷⁸ 127 CONG. REC. H8391–92 (daily ed. Nov. 17, 1981) (remarks of Congressman Tom Railsback of Illinois); CIHLAR, *supra* note 51, at iii.

⁷⁹ *Hearings on the Court of Appeals for the Federal Circuit Before the Subcomm. on Cts., C.L. and the Admin. of Just. of the H. Comm. on the Judiciary*, 97th Cong. 198–206 (1981); *Hearings on the Federal Courts Improvement Act of 1981—S.21 and State Justice Institute Act of 1981—S.5337 Before the S. Judiciary Subcomm. on Courts*, 97th Cong. 226–27 (1981).

of basic stability to patent law.”⁸⁰ During the Federal Circuit’s existence, rates of patenting in the United States increased dramatically.⁸¹

C. Changed Roles and Changing Needs

The legal environment in which the Federal Circuit was formed has changed: the Federal Circuit’s docket has shifted, the Supreme Court has become more active, the Federal Circuit has resolved many of the issues in patent law that were previously unresolved at a national level, and the public’s and lawmaker’s interest in patents has shifted. These changes have implications for whether the Federal Circuit’s exclusive jurisdiction is still justified today, despite many positive effects over the last four decades of its existence.

1. PTAB and the Federal Circuit’s Changing Docket

The Federal Circuit’s docket, once dominated by appeals from district courts, has shifted dramatically in the last decade and is now inundated with Patent Trial and Appeal Board (PTAB) appeals since the creation of new post-grant review proceedings under the America Invents Act of 2011.⁸² In 2010, appeals from U.S. district courts were the largest portion of the Federal Circuit’s docket, constituting about a third of the Federal Circuit’s overall docket.⁸³ Today, more than twice as many of the Federal Circuit’s patent appeals are appeals from the Patent and Trademark Office as from district courts.⁸⁴ Appeals from the United States Patent and Trademark Office (USPTO) now constitute more than a third of the Federal Circuit’s docket.⁸⁵

⁸⁰ Pauline Newman, *The Federal Circuit in Perspective*, 54 AM. U. L. REV. 821, 826–27 (2005) (“This history demonstrates that the appropriate application of patent law can indeed be a force for industrial and scientific advance.”).

⁸¹ See *U.S. Patent Statistics Chart Calendar Years 1963 – 2020*, U.S. PAT. AND TRADEMARK OFFICE, https://www.uspto.gov/web/offices/ac/ido/oeip/taf/us_stat.htm (May 2021); Paul R. Gugliuzza, *The Federal Circuit as a Federal Court*, 54 WM. & MARY L. REV. 1791, 1855 (2013).

⁸² *Compare Appeals Filed, Terminated, and Pending During the Twelve-Month Period Ended September 30, 2010*, U.S. CT. OF APPEALS FOR THE FED. CIR., <http://cafc.uscourts.gov/wp-content/uploads/reports-stats/appeals/AppealsFY2010.pdf> (last visited Nov. 3, 2020) (showing 79/1195 appeals originated from the Patent and Trademark Office, versus 394/1195 appeals arising from U.S. district courts) *with Year-to-Date Activity as of June 30, 2022*, U.S. CT. OF APPEALS FOR THE FED. CIR., <http://cafc.uscourts.gov/wp-content/uploads/reports-stats/FY2022/FY2022YTDActivity09.pdf> (showing 424/1073 docketed appeals originated from the Patent and Trademark Office, versus 242/1073 docketed appeals arising from U.S. district courts).

⁸³ *Appeals Filed, Terminated, and Pending During the Twelve-Month Period Ended September 30, 2010*, U.S. CT. OF APPEALS FOR THE FED. CIR., <http://cafc.uscourts.gov/wp-content/uploads/reports-stats/appeals/AppealsFY2010.pdf> (last visited Nov. 3, 2020).

⁸⁴ *Appeals Filed, by Category, FY 2021*, U.S. CT. OF APPEALS FOR THE FED. CIR. (2021), https://cafc.uscourts.gov/wp-content/uploads/reports-stats/caseload-by-category/Caseload_by_Category_FY2021.pdf.

⁸⁵ *Id.*

Combined, appeals in patent cases are more than half of the Federal Circuit's docket.⁸⁶ In five of the recent years (2015 to 2019) patent appeals constituted more than 60% of the Federal Circuit's docket.⁸⁷

YEAR	DISTRICT COURT PATENT APPEALS	USPTO PATENT APPEALS	TOTAL DISTRICT COURT AND USPTO PATENT APPEALS
2009	30%	4%	34%
2010	34%	6%	40%
2011	33%	9%	42%
2012	35%	8%	43%
2013	36%	9%	45%
2014	38%	15%	53%
2015	37%	24%	61%
2016	29%	33%	62%
2017	29%	33%	62%
2018	29%	38%	67%
2019	22%	43%	65%
2020	21%	38%	59%
2021	16%	35%	51%

Table 1: Patent Cases as a Percentage of Federal Circuit Cases⁸⁸

⁸⁶ *Id.*

⁸⁷ See *infra* Table 1.

⁸⁸ Table of statistics for each year from 2009 to 2021, collected from the Federal Circuit database. *E.g.*, *Appeals Filed, by Category, FY 2021*, U.S. CT. OF APPEALS FOR THE FED. CIR. (2021), https://cafc.uscourts.gov/wp-content/uploads/reports-stats/caseload-by-category/Caseload_by_Category_FY2021.pdf. The court statistics only separately tracked district court and USPTO appeals from 2009 onwards.

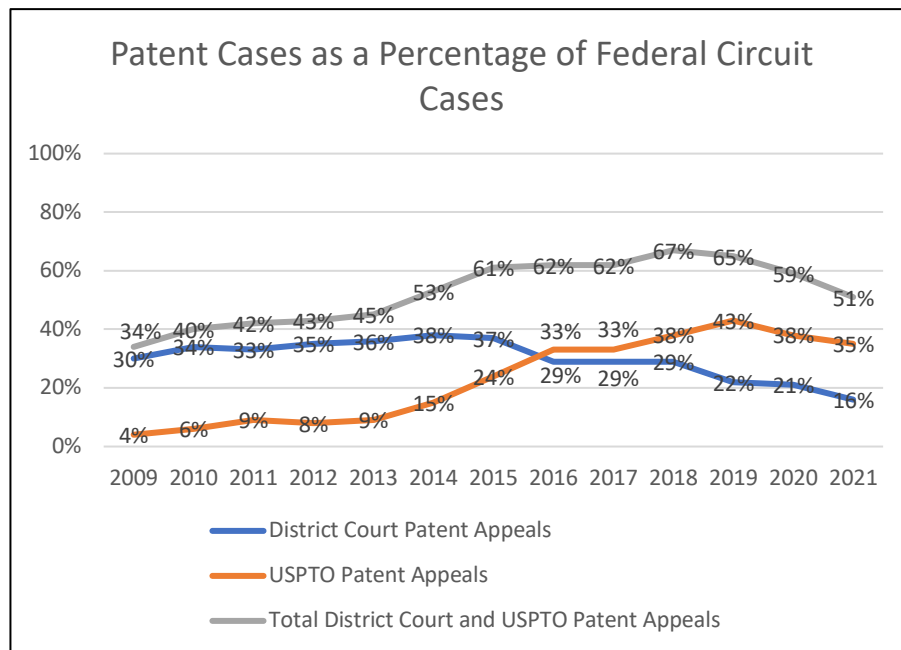


Figure 1: Patent Cases as a Percentage of Federal Circuit Cases⁸⁹

This increase of appeals from the USPTO largely resulted due to changes to post-grant proceedings as part of the Leahy-Smith America Invents Act (AIA).⁹⁰ Among other changes, the AIA granted the USPTO the authority to conduct new forms of adversarial challenges to an issued patent including *inter partes* review (IPR).⁹¹ Use of IPRs and other post-grant proceedings became wildly popular, with thousands of petitions being filed every year.⁹² Litigants in these new post-grant proceedings are entitled to mandatory appeal of final decisions to the Federal Circuit.⁹³ Moreover, because many infringement suits are now resolved by the patent at issue first being invalidated in post-grant proceedings at the USPTO, patent appeals from U.S. district courts have fallen by half since passage of the AIA.⁹⁴ The Federal Circuit's docket has

⁸⁹ *Id.*

⁹⁰ See Leahy-Smith America Invents Act, Pub. L. No. 112-29, 125 Stat. 284 (2011) (codified as amended in scattered sections of 35 U.S.C.).

⁹¹ See H.R. REP. NO. 112-98, pt. 1, at 39–40, 46–48, 54 (2011).

⁹² See Matthew Johnson, *Final FY 2020 PTAB Statistics Posted*, JONES DAY SUPRA (Oct. 26, 2020), <https://www.jdsupra.com/legalnews/final-fy-2020-ptab-statistics-posted-56588/>.

⁹³ 35 U.S.C. § 141.

⁹⁴ *Filings of Patent Infringement Appeals from U.S. District Courts*, U.S. CT. OF APPEALS FOR THE FED. CIR. (2021), https://cafc.uscourts.gov/wp-content/uploads/reports-stats/Patent_Filings_Historical_FY21.pdf.

shifted to encompass a large percentage of patent administrative appeals from the USPTO.⁹⁵

The Federal Circuit's total number of appeals has not shifted much since the initial years of its creation.⁹⁶ However, with a larger portion of the Federal Circuit's docket constituting administrative patent appeals,⁹⁷ the Federal Circuit can no longer be thought of as a court whose only role in patent law is to ease the disuniformity of regional circuit court precedent in patent appeals from district courts.⁹⁸ Of course, the Federal Circuit can still serve the function of unifying district court patent law, but it now comprises a measly 16% of the Federal Circuit's caseload—hardly enough to justify a specialized circuit court.⁹⁹ Moreover, with less diversity of cases, the dangers of a specialized court become more pronounced.¹⁰⁰

2. The Federal Circuit's Role as the Court of Last Resort in Patent Law Has Changed with a More Active Supreme Court

The Federal Circuit's first Chief Judge, Howard Markey, expressed a belief held by many on the court that a core mandate of the Federal Circuit was to provide guidance on patent law, even if that guidance extended beyond what was necessary to decide the appeal.¹⁰¹ The Federal Circuit frequently provides what scholars refer to as “formalist” or “maximalist” opinions in patent law, which might be entirely appropriate for a court with a mandate to increase the predictability of law.¹⁰² For

⁹⁵ See *supra* Figure 1.

⁹⁶ *Historical Caseload*, U.S. CT. OF APPEALS FOR THE FED. CIR. (2021), https://cafc.uscourts.gov/wp-content/uploads/reports-stats/Historical_Caseload_Graph_83-21.pdf (showing the Federal Circuit's caseload remained steady at roughly 1500 cases per year on average, other than a large spike to 2430 shortly after its creation, since 1983); *Appeals Filed in Major Origins*, U.S. CT. OF APPEALS FOR THE FED. CIR. (2021), https://cafc.uscourts.gov/wp-content/uploads/reports-stats/Historical_Caseload_by_Origin_FY21.pdf (showing appeals from the USPTO increasing from about 130 in 2012 to over 500 in 2021).

⁹⁷ See *supra* Figure 1.

⁹⁸ See H.R. REP. NO. 96-1307, pt. 1 at 601 (1980) (“The new Court of Appeals for the Federal Circuit will provide nationwide uniformity in patent law, will make the rules applied in patent litigation more predictable and will eliminate the expensive, time-consuming and unseemly forum-shopping that characterizes litigation in the field.”).

⁹⁹ See *supra* Table 1.

¹⁰⁰ See *infra* Part V.C.; Cf. Dreyfuss, *supra* note 70, at 2–4, 7–8 (discussing the addition of other areas of law to the Federal Circuit's jurisdiction to avoid the dangers of specialization).

¹⁰¹ Markey, *Remarks*, *supra* note 15, at 102, 103; Howard T. Markey, *The Phoenix Court*, 10 AM. PAT. L. ASS'N Q.J.227, 231 (1982) (noting the Federal Circuit “ha[d] its work cut out for it in achieving that part of its mission which entails removal from the field of patent law . . . the high costs of ifs.”).

¹⁰² See *supra* Part II.B.1; Bock, *supra* note 62, at 212–13 (“A ‘maximalist’-style of opinion-writing that makes broad, sweeping pronouncements could be viewed by some Federal Circuit judges as wholly appropriate, if not obligatory, for a court whose primary mission is to provide

several decades, the Supreme Court was largely deferential to the Federal Circuit on issues of substantive patent law and did not question the Federal Circuit's more rigid, rule-based approach.¹⁰³

However, in the last two decades, the Supreme Court's rate of review of patent cases rose rapidly; in the decade from 2010 to 2019, the Supreme Court decided more patent law cases than in the prior three decades combined and nearly twice that of any prior decade since the 1952 Patent Act.¹⁰⁴ Not only did the rate of review increase during this time, but the Supreme Court repeatedly reversed the Federal Circuit in ways that scholars characterized as "harsh" and "disdainful."¹⁰⁵ Most commonly, the Supreme Court corrected what it viewed as overly rigid rules in patent law, instructing the Federal Circuit to instead apply more flexible standards.¹⁰⁶ This hostility might be

uniform guidance on patent law."); Arti Rai, *Engaging Facts and Policy: A Multi-Institution Approach to Patent Law*, COLUM. L. REV. 1035, 1103–04 (2003).

¹⁰³ Laser, *Certiorari in Patent Cases at the Supreme Court*, *supra* note 8, at 584, 595; Gugliuzza, *Rethinking Federal Circuit Jurisdiction*, *supra* note 5, at 1441 ("[T]he Supreme Court . . . pa[id] little attention to patent cases for the first twenty years of the Federal Circuit's existence . . ."); *see also* Arthur J. Gajarsa & Lawrence P. Cogswell, *The Federal Circuit and the Supreme Court*, 55 AM. U. L. REV. 821, 824–28 (2006) (discussing the early history of the Supreme Court's review of Federal Circuit cases); Mark D. Janis, *Patent Law in the Age of the Invisible Supreme Court*, 2001 U. ILL. L. REV. 387, 387 (referring to the Federal Circuit as "the de facto supreme court of patents"); *see also* William C. Rooklidge & Matthew F. Weil, *En Banc Review, Horror Pleni, and the Resolution of Patent Law Conflicts*, 40 SANTA CLARA L. REV. 787, 815 (2000); *Dickinson v. Zurko*, 527 U.S. 150, 1823 (1999) ("[W]hen a Federal Circuit judge reviews PTO factfinding, he or she often will examine that finding through a lens of patent-related experience—and properly so, for the Federal Circuit is a specialized court."); William Rehnquist, *Remarks at the Eleventh Annual Federal Circuit Judicial Conference*, 153 F.R.D. 177, 184 (1993) ("[T]he Federal Circuit... has made good progress in its aspiration to combine careful decisionmaking with a willingness to correct its own error in order to produce a substantial and consistent body of jurisprudence, which should rarely require Supreme Court review."); *see also* Allan N. Litman, *Restoring the Balance of Our Patent System*, 37 IDEA 545, 565 (1997).

¹⁰⁴ Laser, *Certiorari in Patent Cases at the Supreme Court*, *supra* note 8, at 587.

¹⁰⁵ Paul R. Gugliuzza, *Rethinking Federal Circuit Jurisdiction*, *supra* note 5, at 1441 n.12; John M. Golden, *The Federal Circuit and the D.C. Circuit: Comparative Trials of Two Semi-Specialized Courts*, 78 GEO. WASH. L. REV. 553, 559 (2010) (noting that the language of recent Supreme Court opinions has been "disdainful" and "harsh" (quoting Gretchen S. Sween, *Who's Your Daddy? A Psychoanalytic Exegesis of the Supreme Court's Recent Patent Jurisprudence*, 7 NW. TECH. J. & INTELL. PROP. 204, 204-05 (2009)); Debra D. Peterson, *Can This Brokered Marriage Be Saved? The Changing Relationship Between the Supreme Court and Federal Circuit in Patent Law Jurisprudence*, 2 J. MARSHALL REV. INTELL. PROP. L. 201, 245 (2003)); Paul E. Schaafsma, *High Court Displaying Patent Mistrust*, 21 NAT'L L.J. 18, 18 (1999) ("[T]he Supreme Court's emerging lack of trust of the Federal Circuit could inject new uncertainty into issues the patent bar believes are settled."); *Contra* Thomas K. Landry, *Certainty and Discretion in Patent Law: The On Sale Bar, the Doctrine of Equivalents, and Judicial Power in the Federal Circuit*, 67 CAL. L. REV. 1151, 1153 (1994).

¹⁰⁶ Gugliuzza, *Rethinking Federal Circuit Jurisdiction*, *supra* note 5, at 1441 ("Almost invariably, the Court has intervened to reject a bright-line rule adopted by the Federal Circuit in favor of a more holistic standard."); Gregory A. Castanias et al., *2010 Patent Law Decisions of the Federal Circuit: "The Advent of The Rader Court"*, 60 AM. U. L. REV. 845, 857 (2011)

a natural result of the different perspectives between a generalist high court versus a specialist and expert intermediate court.¹⁰⁷ In the shadow of the Supreme Court's activism in patent law, particularly its frequent overturning of key Federal Circuit precedents, the Federal Circuit has not been able to provide the certainty it once gave to patent stakeholders because market participants are unsure when the Supreme Court will change the law of the Federal Circuit.¹⁰⁸

The Supreme Court's activism in patent law could change with a changing Supreme Court. The ideological distribution of the Supreme Court has changed dramatically in the last two years, with conservative-leaning justices now in a firm 6-3 majority.¹⁰⁹ If patent disputes were once seen as safe havens of unanimity for an ideologically divided court,¹¹⁰ then one might expect patent cases to drop with a less divided court. Indeed, in the 2020-2021 term, the Court decided one patent case and in 2021-2022 term, the Court decided none. The Court also denied certiorari in several petitions for review of patent eligibility or Section 101 decisions,¹¹¹ which this author suspects is also partially because patent eligibility doctrine is one area of patent law that Congress has signaled potential interest in addressing,¹¹² so the Court likely wants to stay out of this area until Congress acts. Nonetheless, the Supreme Court's hostility toward the Federal Circuit is unlikely to change; a generalist Supreme Court and expert intermediate court are bound to clash. So long as there remains a threat of the Supreme Court overturning Federal Circuit precedent, and often in dramatic ways, the

("The Federal Circuit keeps endorsing rules, and the Supreme Court, despite its general preference for rules over standards, responds by correcting the Federal Circuit's rule-based decisions and replacing those rules with more malleable, more open-ended standards."); Kelly Casey Mullally, *Legal (Un)Certainty, Legal Process, and Patent Law*, 43 LOY. L.A. L. REV. 1109, 1130 (2010) ("Indeed, recent Supreme Court opinions on issues that do not relate solely to patents demonstrate a marked preference for flexible standards in patent law."); Peter Lee, *Patent Law and the Two Cultures*, 120 YALE L.J. 2, 46 (2010); Donald S. Chisum, *Weeds and Seeds In the Supreme Court's Business Method Patents Decision: New Directions for Regulating Patent Scope*, 15 LEWIS & CLARK L. REV. 11, 23-24 (2011) ("[T]he Federal Circuit has tended to reject indefiniteness charges, applying its extraordinarily lenient standard which allows claims to pass muster unless they are not amenable to construction' or are 'insolubly ambiguous.'").

¹⁰⁷ BAUM, *supra* note 50, at 177.

¹⁰⁸ David O. Taylor, *Formalism and Antiformalism in Patent Law Adjudication: Rules and Standards*, 46 CONN. L. REV. 415, 419 (2013); Nard & Duffy, *supra* note 23, at 1632.

¹⁰⁹ Marcia Coyle, *US Supreme Court Is More Conservative Than Most Americans, Trio of Surveys Find*, NAT'L L.J. (Jun. 07, 2022, 8:28 AM), <https://www.law.com/nationallawjournal/2022/06/07/u-s-supreme-court-is-more-conservative-than-most-americans-trio-of-surveys-find/>.

¹¹⁰ Laser, *Certiorari in Patent Cases at the Supreme Court*, *supra* note 8, at 574 (finding that those on the Supreme Court generally view patent cases as ideologically neutral).

¹¹¹ See, e.g., *Am. Axle v. Neapco Holdings, LLC*, 967 F.3d 1285 (Fed. Cir. 2019), *cert denied*, 142 S. Ct. 2902 (2022).

¹¹² KEVIN J. HICKEY, CONG. RSCH. SERV., R45918, PATENT-ELIGIBLE SUBJECT MATTER REFORM IN THE 116TH CONGRESS 33-37 (2019).

Federal Circuit cannot serve as a court of last resort in patent law or create uniform law that innovators can rely upon to structure transactions.

Additionally, many of the core legal issues that were undecided in 1982 have been ruled upon; a number of issues that were open and unclear before the creation of the Federal Circuit have now been resolved after four decades of specialized expertise.¹¹³ The need for the Federal Circuit to unify patent law might therefore not be as acute as it once was. Patent law might no longer need the national uniformity provided by the exclusive jurisdiction of the Federal Circuit, even if it might have been needed when the Federal Circuit was created and when the Supreme Court was less active.

3. Forum Shopping in Patent Law Has Changed

One concern that contributed to the creation of the Federal Circuit was a belief that litigants would forum shop for favorable appellate law.¹¹⁴ One value of nationally uniform law, therefore, was seen to be the prevention of forum shopping for regional circuit appellate law in patent cases.¹¹⁵ However, forum shopping for appellate law is not the only source of any forum shopping problem in patent law. Patentees may forum shop for issues such as favorable trial procedures and discovery rules, like early disclosures of prior art and faster time to trial,¹¹⁶ and access to judges and juries that are believed to be more patentee-friendly, such as those in the Eastern District of Texas.¹¹⁷ Long after the creation of the Federal Circuit, forum shopping for district court law, procedures, and sympathetic judges and juries remained.¹¹⁸ Moreover, significant changes to venue in patent law have altered the forum shopping risk that existed at the time of creation of the Federal Circuit.¹¹⁹

¹¹³ *E.g.*, Michael J. Meurer & Craig A. Nard, *Invention, Refinement and Patent Claim Scope: A New Perspective on the Doctrine of Equivalents*, 93 GEO L.J. 1947, 1953-54, 1970, 1979, 2005, 2008 (2005) (discussing the Federal Circuit's clarification of doctrine of equivalents).

¹¹⁴ H.R. REP. NO. 97-312, at 20-22 (1981).

¹¹⁵ *Id.*

¹¹⁶ For example, the United States District Court for the Northern District of California has Patent Local Rules, including special discovery procedures for patent cases, that "apply to all civil actions filed in or transferred to this Court which allege infringement of a utility patent . . . or which seek a declaratory judgment that a utility patent is not infringed, is invalid or is unenforceable." N.D. CAL. PAT. L.R. 1-2.

¹¹⁷ Jonas Anderson & Paul Gugliuzza, *Federal Judge Seeks Patent Cases*, 71 DUKE L.J. 419, 432, 438, 440-41 (2021).

¹¹⁸ Kimberley Moore, *Forum Shopping in Patent Cases: Does Geographic Choice Affect Innovation*, 79 N.C. L. REV. 889, 892 (2001).

¹¹⁹ *See* TC Heartland LLC v. Kraft Foods Grp. Brands LLC, 137 S. Ct. 1514, 1520 (2017).

III. A PROPOSAL TO CHANGE THE FEDERAL CIRCUIT'S EXCLUSIVE JURISDICTION AND ADD A NATIONAL COURT OF APPEALS

A. *Contours of the Proposal for Expanded Patent Law Jurisdiction*

This Article's proposal is to modify the Federal Circuit's patent jurisdiction so that regional circuit courts would hear appeals from their respective district courts in patent cases, instead of those appeals going to the Federal Circuit. The Federal Circuit would remain intact to continue to hear appeals from the USPTO, International Trade Commission (ITC), and Court of Federal Claims, among others. This would return patent jurisdiction to a similar condition as before the creation of the Federal Circuit, where district court appeals were handled by regional circuit courts and appeals from certain administrative determinations went to the Court of Claims and the Court of Customs and Patent Appeals.¹²⁰ The forum for appeals would be highly predictable to litigants based on the forum of their trial court or agency action.

The Federal Circuit could continue to hear other non-patent matters that were added to the Federal Circuit's jurisdiction over the years and that Congress wishes to keep there.¹²¹ However, by removing district court patent appeals, which currently constitute about 16% of the Federal Circuit's docket,¹²² the Federal Circuit's balance of patent cases versus other categories of cases would return to a closer balance as existed earlier in the Federal Circuit's existence. Rather than hearing a majority of its cases as patent cases as it does now, the Federal Circuit would have a more equal balance between patent, veterans, personnel, and other categories of disputes.¹²³ Administrative patent disputes, which currently constitute 35% of the court's caseload, would likely remain the single largest portion of the Federal Circuit's docket.¹²⁴

The Federal Circuit would still retain significant influence, despite patent cases now circulating through the regional circuit courts as well, due to the Federal Circuit's continued review of agency and government patent cases and its expertise. The proposed structure would support percolation of patent law through multiple courts, creating a diverse body of law in patent disputes. Ultimately, the law would reach a nationally uniform result, with a circuit split being reconciled by the Supreme Court

¹²⁰ Adams, *supra* note 56, at 44 (discussing the former jurisdiction and noting, "the Federal Circuit . . . was formed by merging the Court of Claims and the Court of Customs and Patent Appeals" and adding exclusive jurisdiction over patent appeals from district courts); *U.S. Court of Customs and Patent Appeals, 1929-1982*, FED. JUD. CTR., <https://www.fjc.gov/history/courts/u.s.-court-customs-and-patent-appeals-1929-1982> (last visited Aug. 7, 2021) (providing a history of the court).

¹²¹ The Federal Circuit also hears, for example, appeals in veteran's claims cases. *Cf. Gugliuzza, Rethinking Federal Circuit Jurisdiction at the Supreme Court*, *supra* note 5, at 1461-64 (noting concerns with the Federal Circuit's insularity in veteran's appeals).

¹²² *See supra* Table 1.

¹²³ *Appeals Filed, by Category, FY 2021*, U.S. CT. OF APPEALS FOR THE FED. CIR. (2021), https://cafc.uscourts.gov/wp-content/uploads/reports-stats/caseload-by-category/Caseload_by_Category_FY2021.pdf.

¹²⁴ *Id.*

or another forum that could serve the uniformity function¹²⁵ or by the appellate courts reaching a consensus on the law.¹²⁶ With this added percolation, patent law could potentially be higher quality because of the additional diversity of thought that would go into its creation.¹²⁷ Benefits and potential criticisms of this proposed modification are discussed further below.¹²⁸ Concerns of the caseload and ability of the Supreme Court to perform the unifying function in patent law are better addressed through other structural changes that permit appellate percolation, such as the proposal for a National Court of Appeals discussed below.

B. Differences from Previous Proposals

The proposal here differs from those that other scholars previously proposed, primarily because it includes a structure of many jurisdictions percolating independently to create multiple laboratories of patent law. Specifically, both the Federal Circuit and regional circuit courts will be afforded some jurisdiction over patent law appeals. Moreover, unlike proposals that urge random assignment of appeals, the structure proposed here would allow litigants and trial judges to reliably predict which appellate court will decide their appeal and which laboratory's law will apply. Appeals from agency decisions would go to the Federal Circuit and appeals from district courts would go to their respective regional circuit, just as they do in almost every other area of law.

Bessen and Meurer's proposal, one of the earliest suggesting elimination of Federal Circuit's exclusive jurisdiction, does not suggest a specific structural remedy but generally calls for the use of multiple circuit courts of appeal.¹²⁹ Building on Bessen and Meurer's proposal, Nard and Duffy propose having one or two additional circuit courts in addition to the Federal Circuit, with random assignments of appeals between circuits.¹³⁰ This does not allow the district court sub-experimentation that would show the value and impact of the circuit law in each jurisdiction. Although some experimentation could play out as between district courts and the lower courts leading to the Federal Circuit (PTAB, ITC, and Court of Claims), ideally law could percolate through both appellate and lower courts, seeing the effects in lower courts of having different law in different regional appellate court jurisdictions. Moreover, each of these proposals perpetuates patent exceptionalism; there is no reason that

¹²⁵ As discussed *infra* pp. 21–24, another alternative to the Supreme Court alone providing this cohesion is to create a National Court of Appeals to assist the Supreme Court.

¹²⁶ See *infra* Part IV for a discussion of the ideal structure of courts to allow percolation, diversity, and uniformity.

¹²⁷ See *id.*; Vermeule, *Many-Minds Arguments in Legal Theory*, *supra* note 9, at 39.

¹²⁸ See *infra* Parts IV, V.

¹²⁹ BESSEN & MEURER, *supra* note 16, at 25 (“We thus think it likely that effective reform will require structural changes, including, possibly, multiple appellate courts, specialized district courts, and greater deference to fact-finders,” particularly on issues of claim construction).

¹³⁰ Nard & Duffy, *supra* note 23, at 1664 (proposing one to three courts), 1668 (proposing random assignment).

patent law should be treated differently than any other law in this regard, such as environmental or immigration law, and have fewer than the normal number of regional circuit courts, as is discussed *infra*. Having patent law follow the same procedures for appeal as other areas of law would also reduce the jurisdictional disputes that might otherwise arise where a case raises issues of both patent law and other areas of law such as antitrust, copyright, trade secrets, unfair trade practices, or other business torts that are commonly raised alongside patent claims.

Judge Diane Wood urges a procedure in which appellants would choose to appeal to either the Federal Circuit or a regional circuit court, with the Judicial Panel on Multidistrict Litigation deciding the circuit court of appeal in the event of a dispute over the same patent proceeding in multiple jurisdictions simultaneously.¹³¹ However, Judge Wood's proposal does not allow for the testing of appellate circuit law and would create confusion for district courts. Specifically, district courts would be uncertain as to which court a case would be appealed—and thus which law would apply—when issuing their decisions. As discussed further below, experimentation that plays out within the district courts in each jurisdiction is a critical component of effective percolation. Judge Wood's proposal would also encourage forum shopping for appellate law as between the Federal Circuit and the regional appellate courts while lacking the benefit of percolation and experimentation that is normally its counter-consideration.

Professor Gugliuzza urges that there is already effective percolation in patent law, for example because of input from Congress, the solicitor general, dissents, and district courts, as well as the Supreme Court.¹³² However, this type of percolation does not allow as much experimental testing of the quality of patent laws before the Supreme Court decides issues as a system of multiple appellate courts would. As Professor Gugliuzza notes, the law misses out on important and potentially influential voices when the learned judges of other regional circuits, such as Judge Wood, are not directly involved in the development of patent doctrine.¹³³

In a comment, Quillen argued for abolishing the Federal Circuit and having all patent appeals heard by regional circuits.¹³⁴ However, the Federal Circuit should be retained because without the Federal Circuit, many critical administrative appeals would need to be assigned to a regional circuit court such as the D.C. Circuit that is already overloaded and lacks technical background. The Federal Circuit can continue to provide a unique perspective in appeals from the USPTO, ITC, and Court of Federal Claims. In particular, the influence of a court with technically trained judges is an alternative valuable perspective in patent law, such that including this diverse and knowledgeable viewpoint among other, generalist viewpoints might enhance the quality and percolation of patent law.

¹³¹ Diane P. Wood, *Keynote Address: Is it Time to Abolish the Federal Circuit's Exclusive Jurisdiction in Patent Cases?*, 13 CHI.-KENT J. INTELL. PROP. 1, 9–10 (2013).

¹³² Gugliuzza, *Saving the Federal Circuit*, 13 CHI.-KENT J. INTELL. PROP. 350, 352–61.

¹³³ *Id.* at 377.

¹³⁴ Cecil D. Quillen, Jr., *Rethinking Federal Circuit Jurisdiction – A Short Comment*, 100 GEO. L.J. ONLINE 23, 24 (2012).

C. *Optional Supplement: Modification of the Hruska Commission's National Court of Appeals*

Congress should also enact a modified version of the Hruska Commission's recommendation for a National Court of Appeals if there remains a concern or need for national uniformity on issues of law that Supreme Court would not hear or timely resolve. If the Supreme Court lacks the capacity to hear as many cases as it needs to make the law uniform, then perhaps the question should not be whether to have a magnet circuit court of appeals on certain topics of particular importance. Instead, we should ask how we can expand the capacity of the judicial system to issue national guidance and resolve circuit splits on *all* of the issues of national importance, without eliminating intercircuit competition and percolation.

When faced with similar questions prior to the creation of the Federal Circuit, the Hruska Commission recommended adding a National Court of Appeals.¹³⁵ The Commission rejected the idea of a specialized patent court of appeals, noting that it would not remedy the core issue of the caseload crisis and would suffer several disadvantages of specialization.¹³⁶ Instead, the Hruska Commission recommended that the National Court of Appeals would be a generalist court, hearing cases of all types referred to it by the Supreme Court or transferred from a regional court of appeals.¹³⁷ Under the Hruska Commission's recommendation, the Supreme Court would have the power to direct cases to the National Court of Appeals by making the decision at the certiorari stage of whether to (1) retain the case itself, (2) deny certiorari and terminate the litigation, (3) deny certiorari but refer the case to the National Court of Appeals for a decision on the merits, or (4) deny certiorari and refer the case to the National Court of Appeals to decide whether to decide or terminate the case.¹³⁸ The Hruska Commission also proposed that the court could receive cases that the regional circuit courts chose to transfer to it, prior to a ruling by the regional circuit, if the circuit court determined that the case presented an important federal question in need of prompt national resolution or an issue on which regional circuit courts had reached inconsistent decisions.¹³⁹

The Hruska Commission's proposal remains, to this day, one of the most effective potential solutions to the problem of lack of national uniformity of law. Rather than a single circuit court of appeals for important issues, which would lead to ossification and evade the Supreme Court's ability to resolve circuit splits and be informed by prior precedent, an additional intermediate National Court of Appeals would not

¹³⁵ HRUSKA COMMISSION REPORT, *supra* note 10, at 30.

¹³⁶ Adams, *supra* note 56, at 59 ("The Hruska Commission concluded that the creation of a specialized court for patent appeals had many disadvantages and that its creation would not remedy what it believed was the central problem in the federal court system-inadequate appellate capacity. Instead of a specialized court, the Commission recommended a National Court of Appeals, which it hoped would be capable of eliminating intercircuit conflicts, not only in patent law, but in other areas of federal law.") (citing HRUSKA COMMISSION REPORT, *supra* note 10, at 28-30).

¹³⁷ HRUSKA COMMISSION REPORT, *supra* note 10, at 32.

¹³⁸ *Id.*

¹³⁹ *Id.* at 34-35.

interfere with the Supreme Court's information flow. With a National Court of Appeals unifying patent law and other key areas of national law, the Federal Circuit would no longer need to be solely responsible for performing this function.

However, this Article proposes that the National Court of Appeals not receive cases by transfer jurisdiction; previous scholars have raised significant concerns that the transfer jurisdiction would not substantially ease caseload burdens on the appellate courts because "the transfer decision itself would take time and could prove troubling and divisive."¹⁴⁰ Transfer jurisdiction would also eliminate the benefits of percolation of law through multiple appellate courts. Moreover, transfer jurisdiction might undermine predictability for litigants, who make business decisions based on the expected timing and jurisdiction of review.

Congress could legislatively establish the court and set rules regarding its size and scope.¹⁴¹ Although the Hruska Commission recommended a court of only seven judges,¹⁴² that recommendation was made at a time with different caseload needs. Rather, the court should be staffed with a sufficient number of judges and adequate procedures to provide the court with the capacity to unify the most important issues in all areas of law on a national scale.¹⁴³ Upwards of thirty judges would be beneficial to allow the court to decide the more than a thousand cases per year that might benefit from uniformity on a national level.¹⁴⁴ The Federal Circuit provides an excellent model of how an appellate court that handles law that applies nationwide could operate. Decisions of a panel could be binding precedent on later panels until they are overturned by an *en banc* opinion.¹⁴⁵ Particularly important issues or issues in need of

¹⁴⁰ Charles R. Haworth & Daniel J. Meador, *A Proposed New Federal Intermediate Appellate Court*, 12 U. MICH. J. L. REFORM 201, 208 (1979).

¹⁴¹ See U.S. CONST. art. III, § 1 (vesting judicial power in "one Supreme Court, and in such inferior courts as the Congress may from time to time ordain and establish"); 28 U.S.C. §§ 41–49 (stating rules on the makeup of courts).

¹⁴² HRUSKA COMMISSION REPORT, *supra* note 10, at 30.

¹⁴³ *But see* Richard A. Posner, *Will the Federal Courts of Appeals Survive until 1984?: An Essay on Delegation and Specialization of the Judicial Function*, 56 S. CAL. L. REV. 761, 762–63 (1983) (arguing that a court with more than nine judges or so would "degenerate into a judicial Tower of Babel").

¹⁴⁴ Many appellate courts have now well over a dozen judges; the largest circuit, the Ninth Circuit, has 29 active judgeships. See Ilya Shapiro & Nathan Harvey, *Break up the Ninth Circuit*, 26 GEO. MASON L. REV. 1299, 1301 (2019).

¹⁴⁵ *Newell Cos. v. Kenney Mfg. Co.*, 864 F.2d 757, 765 (Fed. Cir. 1988) ("This court has adopted the rule that prior decisions of a panel of the court are binding precedent on subsequent panels unless and until overturned *in banc*. . . . Where there is direct conflict, the precedential decision is the first."). *But see* Phillip M. Kannan, *The Precedential Force of Panel Law*, 76 MARQ. L. REV. 755, 758 (1993) ("[T]he interpanel rule forecloses the possibility of inconsistent decisions within a circuit. This is contrary to Rule 35, which indicates that panels have the power to reject panel precedent in the circuit.").

resolution of panel inconsistency could be taken *en banc*.¹⁴⁶ Dedicated staff could be employed to help monitor for inconsistency in panel decisions. The Supreme Court would function as a backstop for inconsistent panel decisions or panel dependency if *en banc* rehearings were infrequent. Nonetheless, the chief judge of the National Court of Appeals would need to recognize that, given the court's role in securing national uniformity, panel inconsistency must be promptly resolved and prevented with a culture of frequent *en banc* review and respect for prior panel precedent.

A National Court of Appeals might have less political pressure in the appointment of judges than the Supreme Court, but given its nationwide scope, lawmakers might have concern about the political implications of the establishment of the court.¹⁴⁷ The Hruska Commission recommended that lawmakers act responsibly in the appointment of new judges to ensure diversity of ideology and expertise.¹⁴⁸ Nonetheless, to alleviate concern that a sudden influx of new judgeships would result in centuries of ideological entrenchment and risk political gamesmanship that could make the court's creation impossible,¹⁴⁹ the legislation creating the National Court of Appeals could require that a number of the judges at first be drawn from the judges of the existing regional circuit courts and Federal Circuit and that limits be placed on the balance of judges appointed by each party, so long as doing so would be consistent with constitutional appointment powers. Judges could thereafter be appointed at a rate of three to five judges per year for six to eight years until the court reaches full size, forcing nominations to come from multiple Presidential administrations and parties, again if such limits would be constitutional.¹⁵⁰ Transferring experienced judges from each of the regional circuit courts of appeal and the Federal Circuit and filling remaining vacancies over a timespan of multiple Presidential administrations would help to provide the new court with a mix of generalist and specialist judges of varied levels of technical and legal knowledge and with different viewpoints. The resulting balance of skillsets and ideologies would promote diverse thinking and maximize the legitimacy and longevity of the court.

The proposed National Court of Appeals could exist in concert with changes to the jurisdiction of the Federal Circuit. Specifically, as proposed above, the Federal Circuit would continue to decide appeals from the USPTO, ITC, and Court of Federal Claims. This would restore the Federal Circuit's jurisdiction to something similar to the Court of Customs and Patent Appeals and appellate levels of the Court of Claims that existed prior to its creation, as well as areas like veteran's appeals that Congress might wish

¹⁴⁶ 9 JAMES W. MOORE ET AL., MOORE'S FEDERAL PRACTICE ¶ 235.02 n.3 (2d ed. 1992) ("The function of the in banc hearing is important in resolving conflicting decisions within the circuit . . .").

¹⁴⁷ Gugliuzza, *The Federal Circuit as a Federal Court*, *supra* note 81, at 1798–99.

¹⁴⁸ HRUSKA COMMISSION REPORT, *supra* note 10, at 31.

¹⁴⁹ See Shapiro & Harvey, *supra* note 144, at 1301 (noting that when ten judgeships were added to the Ninth Circuit in 1978 to respond to an expanding caseload during a Democratic administration, especially when many judges choose to retire when the same party is in power as when they were appointed, it resulted in the Ninth Circuit being ideologically homogeneous).

¹⁵⁰ *Cf.* Humphrey's Ex'r v. United States, 295 U.S. 602, 620 (1935) (discussing the constitutionality of appointment and removal provisions).

to keep at the Federal Circuit. This would allow the percolation of patent law through multiple appellate jurisdictions without relying solely upon the Supreme Court to resolve conflicts of law.

The Supreme Court as it exists today, since voluntary jurisdiction, is structured to address important questions, not merely the resolution of differences of law; it addresses very few questions each year¹⁵¹ and its operating rules reflect goals for resolving “important” questions.¹⁵² As Justice Powell commented in response to the Hruska Commission’s proposal, “the availability of a National Court of Appeals could present constructive options to this Court that are not presently available.”¹⁵³ Having an intermediate court to address nonuniformity and leaving the Supreme Court to address important questions, or others as the Chief Justice deems appropriate, would improve the efficiency of the institution. Perhaps the Supreme Court would choose to focus on constitutional questions and questions of civil rights or other issues of major national importance.¹⁵⁴ Given that the Supreme Court lacks the technical expertise to decide complex issues, it could defer those to a court with national jurisdiction but more technically experienced judges and clerks. Indeed, a National Court of Appeals staffed with technically competent judges could mean that complicated but important questions actually reach a nationally uniform decision, rather than languishing as unideal vehicles for certiorari.

Moreover, the number of cases that the Supreme Court decides each year has continued to fall in the last few decades from upwards of 130 opinions per term in the 1980s to far less than half of that today (with only 51 cases decided after oral argument in the 2020 to 2021 term).¹⁵⁵ Meanwhile, the appellate caseload in need of review has continued to rise.¹⁵⁶ In the 1920s and decades following creation of the regional circuit courts of appeal, the Supreme Court reviewed roughly one sixth of all decisions from appellate courts, and by the creation of the Federal Circuit, the Supreme Court was reviewing less than one percent of the nearly 20,000 cases that were then handled by regional circuits.¹⁵⁷ Today, with Supreme Court review occurring half as frequently as it was half a century ago, and a more than doubling of appellate court caseload from 19,188 in 1977 to 46,165 in 2021,¹⁵⁸ Supreme Court review is particularly rare.

¹⁵¹ See *Infra* Part V.C.

¹⁵² See Amanda Frost, *Overvaluing Uniformity*, 94 VA. L. REV. 1567, 1569 (2008) (noting that despite the Supreme Court’s Rule 10 giving priority to “important” questions on which lower courts differ, the Supreme Court regularly addresses “trivial” circuit splits).

¹⁵³ HRUSKA COMMISSION REPORT, *supra* note 10, at 33 (remarks of Justice Powell).

¹⁵⁴ *Id.*

¹⁵⁵ Harold J. Spaeth et al., *The Supreme Court Database*, WASH. UNIV. L. (Version 2020 Release 01), <http://supremecourtdatabase.org/data.php?s=2> (under Analysis, filter results to only include Decision Type: opinion of the court (orally argued)).

¹⁵⁶ Roger J. Miner, *Dealing with the Appellate Caseload Crisis: The Report of the Federal Courts Study Committee Revisited*, 57 N.Y.L. SCH. L. REV. 517, 519 (2012–2013).

¹⁵⁷ Haworth & Meador, *supra* note 140, at 205.

¹⁵⁸ Compare *id.* (citing *Administrative Office of the United States, 1977 Annual Report of the Director 2* (1977)) with *Federal Judicial Caseload Statistics 2021*, U.S. COURTS (2022),

The current rate of Supreme Court review is not sufficient to decide all of the issues of national importance on a national scale in a timely manner. Even in patent law, where the Supreme Court has been active in patent law recently, with over 5% of its docket in the last decade consisting of appeals in patent cases,¹⁵⁹ the Supreme Court has been unable to reach all of the important questions in the law.¹⁶⁰ The Supreme Court lacks the capacity and interest to resolve all disputes of national importance. Indeed, it is remarkable that the judicial system is able to give any certainty to litigants when the vast majority of appellate law goes unaddressed at a national level. A National Court of Appeals could help to resolve this concern, operating as a release valve for the stunning lack of unification currently conducted at the Supreme Court. Moreover, the Federal Circuit lacks the structure to fully perform this function.

IV. OSSIFICATION AT THE FEDERAL CIRCUIT AND A BETTER STRUCTURE FOR COURTS

A. *Patent Law, the Federal Circuit, and Ossification*

1. Importance of Clear and Stable Patent Law

Most patent stakeholders accept that in patent law, clear, understandable boundaries of patents are critical to meet the notice function of patent law and promote trade and investment in patented goods.¹⁶¹ “[P]redictable property rights are needed to avoid incentive destroying risk.”¹⁶² Social science research has demonstrated that when an investment carries significant uncertainty, its value is depleted.¹⁶³ For example, when a product being developed faces unpredictable risk that it will face injunctions and damages for patent infringement, this decreases companies’

<https://www.uscourts.gov/statistics-reports/federal-judicial-caseload-statistics-2021>
[permalink: <https://perma.cc/4MUC-9BXJ>].

¹⁵⁹ Laser, *Certiorari in Patent Cases at the Supreme Court*, *supra* note 8, at 589–90, 590 fig.4 (“In the last decade, patent cases were more than 5% of issued Supreme Court opinions versus only 0.5% in the 1980s.”).

¹⁶⁰ See, e.g., *American Axle v. Neapco Holdings, Inc.*, *cert. denied* (U.S. June 20, 2022) (denying certiorari in key patent eligibility doctrine dispute).

¹⁶¹ BESSEN & MEURER, *supra* note 16, at 219 (noting after examining the value of clear patent boundaries, “Our empirical analysis has shown that poor patent notice has reduced the incentives to invent.”); *id.* at 222 (“Policies that delay the clarification of patent boundaries exact a heavy toll on technology investors by opening them up to the risk of costly inadvertent infringement.”).

¹⁶² BESSEN & MEURER, *supra* note 16, at 223; see also *id.* at 225 (“When patents offer poor notice, few firms will have an incentive to analyze patents and oppose weak patents as a strategy for clearing a path to the market”), 219 (“[I]ncentives [to invent] depend not only on the value realized through patents, but also on the costs of disputes and litigation—it is the *net* reward that matters, not the reward from patents alone. Undoubtedly, some reforms that improve notice might reduce patent value more than others.”).

¹⁶³ See Dirk Czarnitzki & Andrew A. Toole, *Patent Protection, Market Uncertainty, and R&D Investment*, 93 REV. ECON. & STAT. 147 (2011), <https://pubag.nal.usda.gov/download/53785/PDF> (noting the relationship between uncertainty and value).

willingness to commercialize.¹⁶⁴ In patent law, the quality of law is not defined necessarily by how pro-patentee or anti-patentee the law is, but rather by how predictable it is to those in the innovation market.¹⁶⁵

But if it is important to innovation for patent stakeholders to have notice of the scope and boundaries of patent claims, it is similarly important for litigants and patent stakeholders to have reasonable stability and predictability of when the law will change. The law, however, need not be certain to be predictable.

2. The Relationship Between the Federal Circuit and Supreme Court Destabilizes Patent Law

The structure of the relationship between the Federal Circuit and the Supreme Court has led to instability in patent law, despite the Supreme Court performing a purported unifying function. The Federal Circuit might no longer be providing the certainty and stability of law that it once did, in part because a more active Supreme Court destabilizes the Federal Circuit's role as the source of nationwide clarity in patent law.¹⁶⁶ Patentees can never be sure of when the Supreme Court will intervene and change what they once expected would be the law; the Supreme Court has at times rendered entire industries unpatentable, such as through its decisions regarding patent ineligibility of medical diagnostic and biotechnology inventions, dramatically shifting the incentives for innovation.¹⁶⁷

The Federal Circuit might have been needed in 1982 when the Supreme Court wasn't hearing many patent disputes, creating unpredictability in the scope of patent rights across regional circuits.¹⁶⁸ Indeed, predictability in patent law likely went up for a time with the creation of the Federal Circuit in part because the law became more uniform, and the Supreme Court stayed out of it. Since then, tech has become mainstream, the Court became more ideologically divided such that patent cases seemed a ready escape, and patent cases became a notable percentage of the Supreme Court's docket.¹⁶⁹ The Supreme Court is far more active in patent appeals now than it was when the Federal Circuit was created.¹⁷⁰

Moreover, patent stakeholders don't have enough information to know when the Supreme Court will change the law or what it might change to. Typically, the Supreme

¹⁶⁴ See *id.* at 157 (stating that "higher levels of uncertainty reduce current R&D investment, with a non-patenting firm in the German manufacturing sector reducing R&D investment by 23% in response to a 10% increase in uncertainty from the median.").

¹⁶⁵ *Id.* at 157.

¹⁶⁶ Kevin Madigan & Adam Mossoff, *Turning Gold into Lead: How Patent Eligibility Doctrine Is Undermining U.S. Leadership in Innovation*, 24 GEO. MASON L. REV. 939, 955 (2017).

¹⁶⁷ *Id.* at 946–47.

¹⁶⁸ See Laser, *Certiorari in Patent Cases at the Supreme Court*, *supra* note 8, at 595.

¹⁶⁹ See *supra* Part II.C.

¹⁷⁰ See Laser, *Certiorari in Patent Cases at the Supreme Court*, *supra* note 8, at 590–91, 597.

Court uses circuit splits as a means to determine when to accept a case for review, but there are no equally clear signals of the need for review in patent law.¹⁷¹

Regional circuit courts hearing district court patent cases could help to break this cycle of unpredictable and erratic review. Although additional courts of appeals can decrease uniformity at the appellate level, this lack of uniformity would only apply to issues on which the Supreme Court (and National Court of Appeals) declines review. Moreover, the value of patented technologies might become easier to assess in a world with multiple courts of appeal deciding an issue because patent stakeholders would be able to use circuit splits to better assess which standards are most likely to be subject to Supreme Court review and reversal than today, where the Federal Circuit's exclusive jurisdiction results in few circuit splits and Supreme Court reversals can be unexpected and destabilizing.¹⁷² The Supreme Court might also take a more tempered approach to granting certiorari in patent cases than it has in the last decade if there were multiple courts of appeal in agreement on certain legal issues; it might instead wait for a circuit conflict to develop before accepting review.

3. Ossification with Exclusive Jurisdiction

One of the natural outcomes of exclusive appellate jurisdiction then is the tendency of law to ossify when similar issues are repeatedly decided by the same court.¹⁷³ Common law is already path dependent, building upon prior precedent, and a single court repeating its own rules will be more so.¹⁷⁴ What pushes the Federal Circuit towards ossified law is likely the combination of the power of nationwide precedent, the lack of competition for ideas from other appellate courts, and repetition of a large portion of its docket.¹⁷⁵ When law lacks the opportunity to percolate before a decision to set it in stone, it might “be more likely to produce a suboptimal body of legal doctrine that sticks—that is unlikely to be abandoned or seriously questioned, even after its negative consequences have become clear.”¹⁷⁶

Without the injection of competing ideas (such as from other circuit courts) or regular upheaval of the old (such as when the Supreme Court reverses the Federal Circuit's precedent), the model of sequentially generated precedent can reduce the quality of law.¹⁷⁷ Law may continue in “blind imitation of the past,” even when it is

¹⁷¹ *See id.* at 607 (finding that the Supreme Court did not use other signals as alternatives to circuit splits in patent law).

¹⁷² Madigan & Mossoff, *supra* note 166, at 952–55.

¹⁷³ Vermeule, *supra* note 9, at 14.

¹⁷⁴ *Id.* (citing Oona Hathaway, *Path Dependence in the Law: The Course and Pattern of Legal Change in a Common Law System*, 86 IOWA L. REV. 601–65 (2001)).

¹⁷⁵ *See* Sunstein, *Deliberative Trouble? Why Groups Go to Extremes*, *supra* note 9, at 74–75.

¹⁷⁶ John M. Golden, *The Supreme Court as "Prime Percolator": A Prescription for Appellate Review of Questions in Patent Law*, 56 UCLA L. REV. 657, 673 (2009).

¹⁷⁷ Vermeule, *supra* note 9, at 32 (“[A] body of precedent generated sequentially may embody reduced epistemic value.”).

clearly wrong and the “grounds upon which it was laid down have vanished.”¹⁷⁸ As Learned Hand noted, “after [courts] have proceeded a while they get their own set of precedents, and precedents save ‘the intolerable labor of thought,’ and they fall into grooves, just as judges do,” adding, “[w]hen they get into grooves, then God save you to get them out of the grooves.”¹⁷⁹

And it is not merely the power of layered precedent that pushes the Federal Circuit to entrenched views; social science research also suggests that a group of likeminded individuals repeatedly deliberating on similar issues over time will have tendencies to become more entrenched in the views held when they began.¹⁸⁰ “Specialization leads people to take a narrow perspective that limits and biases their understanding of the matters they address.”¹⁸¹

Previous scholars have raised concern that the Federal Circuit’s exclusive jurisdiction over patent law leads to the stagnation of patent law for all of the above reasons; “centralized review [of patent law] by the Federal Circuit means that the real danger is ossification”¹⁸² In particular, many argue that “the Federal Circuit’s exclusive jurisdiction leads to poor percolation of legal ideas, less experimentation with legal principles, and, ultimately, a patent law that, although uniform, is insular and severed from economic reality.”¹⁸³ Professors Bessen and Meurer argue that the Federal Circuit has actually decreased the predictability of law by expanding its own power, particularly in the context of claim interpretation by reviewing claim interpretations *de novo* and with high rates of reversal of district court opinions.¹⁸⁴ Others have also criticized Federal Circuit precedent for being difficult to administer and for expanding the power of the court, the patent bar, and patent holders.¹⁸⁵ Still others have urged that the Federal Circuit’s caselaw suggests capture by the patent

¹⁷⁸ Oliver Wendell Holmes, Jr., *The Path of the Law*, 10 HARV. L. REV. 457, 469 (1897).

¹⁷⁹ LEARNED HAND, *THE SPIRIT OF LIBERTY: PAPERS AND ADDRESSES OF LEARNED HAND* 241–42 (Irving Dillard ed., 1952).

¹⁸⁰ See Sunstein, *Deliberative Trouble? Why Groups Go to Extremes*, *supra* note 9, at 74–76.

¹⁸¹ LAWRENCE BAUM, *SPECIALIZING THE COURTS 2* (Univ. of Chi. Press ed., 2011).

¹⁸² Golden, *The Supreme Court as “Prime Percolator”: A Prescription for Appellate Review of Questions in Patent Law*, *supra* note 176, at 701.

¹⁸³ Gugliuzza, *Rethinking Federal Circuit Jurisdiction*, *supra* note 5, at 1442; BESSEN & MEURER, *supra* note 16, at 229–30; Nard & Duffy, *supra* note 23, at 1619–22.

¹⁸⁴ BESSEN & MEURER, *supra* note 16, at 228–29 (“[G]reater discretion by the appeals court implies the lower predictability of patent boundaries, leading to poor notice and a greater risk of litigation.”) (citing *Phillips v. AWH Corp.*, 415 F.3d 1303, 1330 (Fed. Cir. 2005) (en banc) (Mayer, J., dissenting) (“What we have wrought, instead, is the substitution of a black box, as it so pejoratively has been said of the jury, with the black hole of this court.”)).

¹⁸⁵ Craig Allen Nard, *Process Consideration in the Age of Markman and Mantras*, U. ILL. L. REV. 355, 359–61 (2001) (discussing the court’s claim construction precedents, which gave appellate courts more power by interpreting patents as a question of law); Gugliuzza, *Rethinking Federal Circuit Jurisdiction*, *supra* note 5, at 1460–63.

bar, with patents becoming more difficult to invalidate after creation of the Federal Circuit.¹⁸⁶

Some have criticized the Federal Circuit for being overly rigid and formalist.¹⁸⁷ They urge that the Federal Circuit is promoting certainty and formalism at the expense of fairness and flexibility in particular cases.¹⁸⁸ One commonly-cited example is the Federal Circuit's caselaw regarding invalidity of a patent based on obviousness prior to *KSR v. Teleflex*, where the Supreme Court rebuked the Federal Circuit's test for obviousness as overly rigid.¹⁸⁹

Another example of how the Federal Circuit's path dependence has led to the perpetuation of incorrect or oversimplified law is the Federal Circuit's indefiniteness caselaw. For over a decade, until it was corrected by the Supreme Court in *Nautilus, Inc. v. Biosig Instruments, Inc.*,¹⁹⁰ the Federal Circuit held that a patent claim could not be found indefinite—or too imprecise to be valid—unless the claim was “insolubly ambiguous.”¹⁹¹ The Federal Circuit's rule resulted in part from the Federal Circuit's oversimplification of the statutory text, ultimately combining the statute's language that merely required “particularly pointing out and distinctly claiming” the invention¹⁹² with the statutory presumption of validity that applies in district court proceedings.¹⁹³ The Federal Circuit rulified and simplified the statutory standard

¹⁸⁶ Rai, *supra* note 102, 1110–11.

¹⁸⁷ Rai, *supra* note 102, 1103–04; Golden, *The Supreme Court as "Prime Percolator": A Prescription for Appellate Review of Questions in Patent Law*, *supra* note 176, at 686.

¹⁸⁸ Timothy R. Holbrook, *The Supreme Court's Complicity in Federal Circuit Formalism*, 20 SANTA CLARA COMPUTER & HIGH TECH. L.J. 1, 1 (2004); Donald S. Chisum, *The Scope of Protection for Patents After the Supreme Court's Warner-Jenkinson Decision: The Fair Protection-Certainty Conundrum*, 14 SANTA CLARA COMPUTER & HIGH TECH. L.J. 1, 30 (1998); John R. Thomas, *Formalism at the Federal Circuit*, 52 AM. U. L. REV. 771, 773 (2003).

¹⁸⁹ *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 419 (2007) (“Helpful insights, however, need not become rigid and mandatory formulas . . .”); accord Golden, *The Supreme Court as "Prime Percolator": A Prescription for Appellate Review of Questions in Patent Law*, *supra* note 176, at 686 (observing that “[t]he most robust criticisms of the [Federal] Circuit, including charges that the Circuit's pre-KSR jurisprudence interpreted nonobviousness too weakly or that the Circuit's jurisprudence had become too reflexively formal, seem primarily to reflect a contention that the Circuit has substantively erred and, worse, persisted in error . . .”).

¹⁹⁰ *Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 909–913 (2014).

¹⁹¹ *Hearing Components, Inc. v. Shure Inc.*, 600 F.3d 1357, 1366–67 (Fed. Cir. 2010) (“Claims are considered indefinite when they are not amenable to construction or are insolubly ambiguous. Thus, the definiteness of claim terms depends on whether those terms can be given any reasonable meaning.”); *Datamize, LLC v. Plumtree Software, Inc.*, 417 F.3d 1342, 1347 (Fed. Cir. 2005) (“Only claims ‘not amenable to construction’ or ‘insolubly ambiguous’ are indefinite.”); *Exxon Research & Eng'g Co. v. United States*, 265 F.3d 1371, 1375 (Fed. Cir. 2001) (“If a claim is insolubly ambiguous, and no narrowing construction can properly be adopted, we have held the claim indefinite.”).

¹⁹² 35 U.S.C. § 112 (2022).

¹⁹³ Christa Laser, *A Definite Claim on Claim Indefiniteness: An Empirical Study of Definiteness Cases of the Past Decade with a Focus on the Federal Circuit and the Insolubly*

through repetition from case to case, failing to consider how the rule might not be applicable in different contexts, such as in proceedings before the USPTO. Indeed, for a time the USPTO adopted the Federal Circuit's rule, even though the presumption of validity does not apply during examinations of patent applications.¹⁹⁴ District courts became four times less likely to find a claim indefinite, in some cases doubly applying the presumption of validity along with the Federal Circuit's rule that already incorporated it.¹⁹⁵ The Federal Circuit's historical caselaw on indefiniteness is a prime example of the entrenchment of incorrect rules as issues are repeated from case to case in a court of exclusive jurisdiction. If another circuit court had been given the opportunity to address indefiniteness, it might have articulated the rule differently or pointed out this error, leading to reconsideration by the Federal Circuit or flagging the issue for earlier resolution by the Supreme Court.

It is no wonder, however, that some urge that the Federal Circuit has taken its mandate too far, taking an "approach to decisionmaking [that] has been decidedly formalist."¹⁹⁶ Indeed, Federal Circuit opinions so frequently expand upon the facts of the case to state "rules" for particular situations in patent law that some scholars have referred to the Federal Circuit as a quasi-administrative agency in its behaviors.¹⁹⁷ Particularly soon after the Federal Circuit's creation, scholars asserted, "some members of the court developed the unfortunate habit of writing broadly, expounding on matters far beyond the facts of the case" and creating "unnecessary dicta."¹⁹⁸ The

Ambiguous Standard, 10 CHI.-KENT J. INTELL. PROP. 25, 38–39 (2010) [hereinafter Laser, *A Definite Claim on Claim Indefiniteness*] ("The likely reason that the *Exxon* court joined the two standards is that it is easier, faster, and more concise for a court to apply the 'insolubly ambiguous' standard than it would be for the court to explicitly apply both § 112's requirement for clarity and § 282's presumption of validity. However, . . . problems arise when courts do not clearly delineate the legal standard from the presumption of validity.") (citing *Exxon Research*, 265 F.3d at 1375 ("By finding claims indefinite only if reasonable efforts at claim construction prove futile, we accord respect to the statutory presumption of patent validity.")).

¹⁹⁴ DEPT. OF COMMERCE, MANUAL OF PATENT EXAMINING PROCEDURE § 2173.02(I), p. 294 (9th ed. 2014) (PTO manual describing Federal Circuit's test as upholding a claim's validity "if some meaning can be gleaned from the language").

¹⁹⁵ Laser, *A Definite Claim on Claim Indefiniteness*, *supra* note 193, at 33, 39.

¹⁹⁶ Rai, *supra* note 102, 1103–04.

¹⁹⁷ Sapna Kumar, *The Accidental Agency?*, 65 FLA. L. REV. 229, 231 (2013) ("The Federal Circuit engages in two agency-like functions: promulgating substantive rules and adjudicating disputes. The court has historically engaged in a form of rulemaking by issuing mandatory bright-line rules."); Ryan Vacca, *Acting Like an Administrative Agency: The Federal Circuit En Banc*, 76 MO. L. REV. 733, 733 (2011) ("When Congress created the Federal Circuit in 1982, it intended to create a court of appeals. Little did it know that it also was creating a quasi-administrative agency that would engage in substantive rulemaking and set policy in a manner substantially similar to administrative agencies."). Of course, the Federal Circuit's opinions do not follow agency rulemaking procedures, such as hearing the views of the public and allowing them to receive notice and comment on them. Indeed, courts are ill-equipped at setting patent policy and broad rules beyond those necessary to decide the facts of a disputes before them.

¹⁹⁸ William C. Rooklidge & Matthew F. Weil, *En Banc Review, Horror Pleni, and the Resolution of Patent Law Conflicts*, 40 SANTA CLARA L. REV. 787, 791, 802 (2000); John R.

Federal Circuit's formalist tendencies may have been driven by the court's perceived mandate to provide clarity and uniformity in patent law.¹⁹⁹ The Federal Circuit's formalist tendencies are also amplified by its jurisdictional structure.²⁰⁰ Other scholars urge that formalism might go hand-in-hand with a court of specialized expertise.²⁰¹ The Federal Circuit's decision to incorporate the precedent of the Court of Customs and Patent Appeals (CCPA) as its own might also have influenced the Federal Circuit's tendency for formalism.²⁰²

Clearer, more formal statements of law from appellate courts might make it easier for district courts to apply the law consistently nationwide in different factual circumstances. However, some scholars argue that the Federal Circuit's formalism results in rules so strict that lower courts are unable to tailor and reasonably apply the legal rules to different cases.²⁰³ They urge that such a formalist approach is inappropriate in patent law, where the text of the Patent Act is generally worded, leaving space for an approach with more flexibility.²⁰⁴ Judge Roger Andewelt of the Court of Federal Claims cautioned the Federal Circuit early on regarding "the thirst for principles and certainty and bright lines".²⁰⁵

When Federal Circuit judges take a look at lower court decisions, they have the briefs of each of the parties before them. This gives the court a very, very narrow focus on the policy issues impacted. It's true as a court and as an individual sitting on the court, you develop some expertise over a period of time. But how confident can you really be that you understand what's going on out there in the economic community?

Thomas, *Formalism at the Federal Circuit*, 52 AM. U. L. REV. 771, 794 (2003). *But see* Tun-jen Chiang, *Formalism, Realism, and Patent Scope*, IP THEORY 88, 89 (2010).

¹⁹⁹ Bock, *supra* note 62, at 212–13; Holbrook, *supra* note 62, at 1.

²⁰⁰ Arti Rai, *supra* note 102, 1111; Bock, *supra* note 62, at 202–03 (“[T]he Federal Circuit does not experience the type of corrective case law ‘percolation’ that occurs among the regional circuits.”).

²⁰¹ Gugliuzza, *Rethinking Federal Circuit Jurisdiction*, *supra* note 5, at 1440–41 (citing PAUL D. CARRINGTON ET AL., JUSTICE ON APPEAL 168 (1976)); David Charny, *The New Formalism in Contract*, 66 U. CHI. L. REV. 842, 848 (1999) (“[I]t may be that formalism and expertise go hand-in-hand . . .”).

²⁰² Jeffrey Lefstin, *The Constitution of Patent Law: The Court of Customs and Patent Appeals and the Shape of the Federal Circuit's Jurisprudence*, 43 LOY. L.A. L. REV. 843, 847 (2010).

²⁰³ Gugliuzza, *Rethinking Federal Circuit Jurisdiction*, *supra* note 5, at 1440.

²⁰⁴ Gugliuzza, *Rethinking Federal Circuit Jurisdiction*, *supra* note 5, at 1440 (citing Peter S. Menell, *The Mixed Heritage of Federal Intellectual Property Law and Ramifications for Statutory Interpretation*, in INTELLECTUAL PROPERTY AND THE COMMON LAW 73 (Shyam Baganesh ed., 2013); Craig Allen Nard, *Legal Forms and the Common Law of Patents*, 90 B.U. L. REV. 51, 53 (2010).

²⁰⁵ Roger Andewelt et al., *Remarks at the Tenth Annual Federal Circuit Judicial Conference*, in 146 F.R.D. 205, 381 (1992).

Do you really understand the ramifications of the bright lines that you create, what's left inside and what's left outside of those lines?²⁰⁶

The Federal Circuit's structure as a lone court of appeals in patent law might contribute to the ossification of law.

B. A Framework for Success of Appellate Courts: Balancing Percolation, Uniformity, and Quality of Law

Some uncertainty is inherent in the process of judging.²⁰⁷ Uniformity of law is not equivalent to quality.²⁰⁸ Moreover, law can be unclear but nonetheless predictable, provided that there is enough information to manage risk of possible outcomes and changing law. Yet ultimately, the percolation of law combined with reasonable predictability of what the law will be can lead to high quality law that is clear enough for society to function.²⁰⁹ As Karl Llewellyn noted, "the ideal is not 'certainty' at all, in any of the senses in which that term is commonly applied to matters legal. The true ideal is *reasonable regularity* of decision."²¹⁰ "Although uncertainty is not desirable, all else being equal, the legal system can tolerate a certain amount of it, especially if the institutions exist to resolve the uncertainty."²¹¹

As detailed further below, the highest quality judging requires a combination of three elements in the judging process: (1) diversity of viewpoints; (2) simultaneous but separate experimentation; and (3) ultimate cohesion of law nationally. The structure of the forums where law is formed can impact what it becomes. With percolation through a multi-tier structure, law could be higher quality because of the additional diversity of thought that went into its creation. Many minds involved in appellate decision-making in patent law would support a broad and independent

²⁰⁶ *Id.*

²⁰⁷ Mullally, *supra* note 106, at 1109; *id.* at 1120 ("[M]any of the demands for uncertainty in patent law have been vague, conclusory, and fatalistic.").

²⁰⁸ Nard & Duffy, *supra* note 23, at 1620 ("Yet uniformity is not a proxy for quality. That a policy is uniformly applied says very little about its soundness or desirability."); Diane P. Wood, *Keynote Address: Is It Time to Abolish the Federal Circuit's Exclusive Jurisdiction in Patent Cases?*, 13 CHI.-KENT J. INTELL. PROP. 1, 3 (2013) ("[U]niformity says nothing about *quality or accuracy*.").

²⁰⁹ See Vermeule, *supra* note 9, at 15 ("[T]here is a burgeoning literature on 'legal origins' suggesting that nations whose legal system descend from the common law outperform nations with other types of legal systems, on various measures of economic and political well-being, perhaps due to the security of economic expectations that a common law system provides.") (citing La Porta, Lopez de Silanes, & Shleifer 2008).

²¹⁰ KARL N. LLEWELLYN, *THE COMMON LAW TRADITION: DECIDING APPEALS* 216 (1960).

²¹¹ BESSEN & MEURER, *supra* note 16, at 231 ("Making patent boundaries clearer is of paramount importance. When parties know they have moved onto a (possibly valid) patent right and that they will need to negotiate, they often will reach an agreement that can successfully manage uncertainty about the validity of the patent.").

percolation of law through diverse courts and a cohesion decision at the Supreme Court.²¹² More percolation of law can lead to higher quality law.

1. Diversity of Viewpoints

Diversity of experience and thought are necessary to the quality of group deliberation. All human beings are limited in the capacity of their individual knowledge. But “one of the ways in which civilization helps us to overcome that limitation on the extent of individual knowledge is . . . by the utilization of knowledge which is and which remains widely dispersed among individuals.”²¹³ Aristotle likewise urged that when many voices come together, the group may surpass the quality of the best among them.²¹⁴ Research in the social sciences supports that cognitive diversity—psychological differences in “how each individual sees the world, interprets its problems, and makes predictions in it”—can positively impact the quality of problem-solving and decision-making.²¹⁵ Indeed, on problem solving tasks, cognitive diversity of a group might be as or more important than the average ability of each individual in the group for determining the competence of the group,²¹⁶ and as or more important than other forms of diversity such as gender and ethnic diversity,²¹⁷ although these forms of diversity have also been shown to significantly improve group performance.²¹⁸

²¹² See discussion *infra* Section II.C (stating that another alternative to the Supreme Court alone providing this cohesion is to create a National Court of Appeals between the Supreme Court and the regional circuits and Federal circuit).

²¹³ 1 FRIEDRICH HAYEK, *LAW, LEGISLATION, AND LIBERTY* 15 (Routledge & Kegan Paul Ltd. 1973); JOHN RAWLS, *A THEORY OF JUSTICE* 358 (1971) (“In everyday life the exchange of opinion with others checks our partiality and widens our perspective.”).

²¹⁴ ARISTOTLE, *THE POLITICS* 108 (Ernest Barker trans., Oxford Univ. Press 1995) (350 B.C.E).

²¹⁵ Hélène Landemore, *Deliberation, Cognitive Diversity, and Democratic Inclusiveness: An Epistemic Argument for the Random Selection of Representatives*, 190 *SYNTHESE* 1209, 1212 (2013).

²¹⁶ See *id.* (citing generally SCOTT PAGE, *THE DIFFERENCE: HOW THE POWER OF DIVERSITY CREATES BETTER GROUPS, FIRMS, SCHOOLS, AND SOCIETIES* (2007); Lu Hong & Scott Page, *Problem Solving by Heterogenous Agents*, 97:1 *J. OF ECON. THEORY* 1 (2000)).

²¹⁷ Cf. Alison Reynolds & David Lewis, *Teams Solve Problems Faster When They're More Cognitively Diverse*, *HARV. BUS. REV.* (Mar. 30, 2017), <https://hbr.org/2017/03/teams-solve-problems-faster-when-theyre-more-cognitively-diverse> (finding that differences in cognitive styles and perspectives improved the speed of consultants completing a strategy task and noting the risk of functional bias in insular teams with low cognitive diversity).

²¹⁸ Sundiatu Dixon-Fyle, et al., *Diversity Wins: How Inclusion Matters*, MCKINSEY & COMPANY (May 19, 2020), <https://www.mckinsey.com/featured-insights/diversity-and-inclusion/diversity-wins-how-inclusion-matters>.

Diversity of thought is, likewise, critical to the process of quality judging. When “many minds”—a term coined by Cass Sunstein²¹⁹—come together effectively, they can improve the quality of human decision-making, whether in business or in courts.²²⁰ When applied to judging, there are several ways in which diverse perspectives of individual judges can combine to create a more effective decision, such as by judges reviewing the wisdom of prior precedent, by judges considering the outcomes in competing courts, by multiple simultaneous statements by different courts that are reviewed to reach a cohesive result at a higher level such as at the Supreme Court, or by a process of deliberation between judges with different views at a particular court.²²¹ Nonetheless, it is only through deliberation with and consideration of *competing* views and approaches that the quality of decision-making can improve through deliberation; social science research suggests that deliberation with only like-minded individuals or deliberation without access to competitive viewpoints can further entrench a group and worsen the quality of decisions.²²² Professor Adrian Vermeule further elaborated on the concepts of “many minds” from Cass Sunstein and political philosophy to note that “many minds” are not always effective at improving quality; a legal system must be designed around the natural human bottlenecks and biases that inhibit the effective use of information.²²³ Nonetheless, as patent law becomes more central to business decisions and public awareness, the contributions of many generalist and specialist judges becomes more critical.²²⁴

Diversity should be incorporated into our institutional structures. The judges on different courts have very different anchors, beliefs, and experiences to draw from. The quality of judging might be improved when judges with different backgrounds, experiences, and contexts are able to decide similar issues. As Aristotle once noted, “[f]or each individual among the many has a share of excellence and practical wisdom, and when they meet together, . . . are better judges . . . for some understand one part, and some another, and among them they understand the whole.”²²⁵

²¹⁹ Cass R. Sunstein, HARV. LAW SCH. (Aug. 5, 2022, 11:03 AM), <https://hls.harvard.edu/faculty/directory/10871/Sunstein>.

²²⁰ SUNSTEIN, *INFOTOPIA*, *supra* note 9, at viii (“Access to many minds contains risks, because many people can and do blunder. But for society’s most important institutions, dispersed information, if elicited, is far more likely to lead to better understanding—and ultimately to more sensible decisions in both markets and politics.”); John Ferejohn, *The Lure of Large Numbers*, 123 HARV. L. REV. 1969, 1969–70 (2010).

²²¹ *See* Vermeule, *supra* note 9, at 19.

²²² Sunstein, *Deliberative Trouble*, *supra* note 9, at 74–76.

²²³ Vermeule, *supra* note 9, at 39.

²²⁴ *See* Gugliuzza, *Saving the Federal Circuit*, *supra* note 132, at 377.

²²⁵ ARISTOTLE, *THE POLITICS* 66 (Stephen Everson, ed., Cambridge Univ. Press 1988) (350 B.C.E.); Jeremy Waldron, *Legislation by Assembly*, 46 LOY. L. REV. 507, 514–15 (2000) (referring to this as Aristotle’s “wisdom of the multitude”).

2. Independent Experimentation in Different Jurisdictions

It is not only the benefit of different minds and perspectives that helps develop legal ideas—it is also the benefit of multiple minds over time and in different contexts, such that the law has a chance to play out experimentally in different jurisdictions.²²⁶ In the context of appellate judging, the Supreme Court benefits when it can see how different regional appellate court decisions affected later district court decisions applying the law in different ways or different factual scenarios. After these experiments play out, the Supreme Court can aggregate and use the different decisions from separate jurisdictions to reach an informed result.²²⁷

Moreover, the benefit of many minds is at its peak when at least some of these minds are not inhibited by being bound to precedent, but instead are deciding issues anew. When the winner of different legal approaches is decided early through a binding nationwide precedent, it limits other lines of experimentation.²²⁸ For example, the appellate judges on the Federal Circuit are more restrained than they would be if they served on separate circuit courts of appeal because the patent law precedent of the Federal Circuit binds each panel of judges, restraining experiments in different legal rules from playing out over time.²²⁹

Likewise, district judges are bound to follow the precedent of the Federal Circuit where it exists, so although district judges have some experimental freedom to have differences between each other, some lines of experimentation evaporate when a single court has exclusive nationwide appellate jurisdiction. This elimination of other lines of experimentation occurs quickly with only one court of appeals, because the only chance for experimentation on an issue is the time period between the issue first arising and it first reaching the Federal Circuit when it is appealed from that case (or another if that case or issue does not reach appeal). This time period could be a few years, but a new issue is unlikely to be unresolved for decades. Moreover, litigants might also be less willing to raise novel arguments or ideas when they are contradicted by clear prior precedent that applies nationwide at the appellate level. In contrast, if there were multiple circuit courts of appeal deciding patent law issues, the lines of experimentation would not close until an issue percolates through multiple circuit courts and to the Supreme Court.

²²⁶ See Vermeule, *supra* note 9, at 18 (“[T]he current generation benefits by being able to see how the plans, projects, and experiments of past generations actually turned out.”).

²²⁷ *Id.* at 19 (“[T]he pooling of perspectives can be accomplished just by having each member of the group simultaneously state her partial perspective and using some aggregation rule to combine them into a whole picture.”).

²²⁸ BESSEN & MEURER, *supra* note 16, at 25 (“[A] single appellate court might not be well suited for developing new law. Because power is concentrated in the Federal Circuit, patent law misses the benefit of the intercircuit competition that exists in most other areas of federal law.”); Vermeule, *supra* note 9, at 31 (“Sequential decision-making in which decisions are revealed as they are made permits various forms of free-riding, informational and reputational cascades, strategic abstention, and bandwagon effects that may undermine the epistemic competence of many minds.”).

²²⁹ BESSEN & MEURER, *supra* note 16, at 25.

Judges, like all people, have unique beliefs and experiences that shape their judgement.²³⁰ When any multi-member deliberative body like an appellate court begins with similar starting points and experiences, and particularly if the group deliberates together, it risks becoming entrenched in mistaken beliefs.²³¹ In judging, this reality would caution against having a single insular court with the power of unified nationwide precedent deliberate on one area of law repeatedly throughout each year for forty years with little exposure to diversifying forces, as at the Federal Circuit.²³² Instead, independent sourcing of ideas for consideration can improve the quality of law at the Supreme Court by expanding the diversity of its inputs.²³³ Having multiple appellate courts with diverse precedent and experiences consider the proper interpretation of the law should be beneficial to the quality of appellate law.

Other fields also teach us that independent, even redundant deliberation on the inputs to higher level decision-making can reduce the risks of mistakes.²³⁴ For example, the Central Intelligence Agency (“CIA”) often uses “red teams,” “devil’s advocates,” and similar alternative or competitive analysis of intelligence information to avoid the mistakes of groupthink, but according to Senate reports the CIA failed to effectively employ these procedures when investigating whether Iraq was in possession of weapons of mass destruction, leading to a misguided beginning to the Iraq War.²³⁵ Senators recommended that the CIA “[i]nstitute and formalize procedures for alternative analysis,” noting, “[e]ven the best analysts need to have their work checked and challenged by others.”²³⁶ The lessons from the Iraq War also reinforce the importance of fresh analysis. Namely, the Senate report identified that another structural problem in the intelligence leading to the Iraq War is that the analysis “suffer[ed] from a ‘layering’ effect whereby assessments were built based on previous

²³⁰ See SUNSTEIN, INFOTOPIA, *supra* note 9, at 34 (“It is well-known that people are susceptible to *anchors*, in the form of starting points that can greatly bias their judgments.”).

²³¹ SUNSTEIN, INFOTOPIA, *supra* note 9, at 35 (“Even judges have been found to be subject to irrelevant anchors, and there is every reason to believe that multi-member courts would be at least as vulnerable to them as individual judges are.”); *id.* at 70 (“It turns out that like-minded judges end up with more extreme opinions after they speak with one another.”); JEAN-ANTOINE-NICOLAS DE CARITAT MARQUIS DE CONDORCET, CONDORCET: SELECTED WRITINGS 49 (Keith M. Baker ed., 1976). (“[T]he more numerous the assembly the more it will be exposed to the risk of making false decisions.”).

²³² See SUNSTEIN, INFOTOPIA, *supra* note 9, at 34–35.

²³³ *Id.* at 34–35, 49.

²³⁴ See generally MICAH ZENKO, RED TEAM xxiii (2015) (discussing the value of alternative analysis at reducing the cognitive bias of entrenched organizations, noting, “[t]he objective of alternative analysis is to hedge against these natural human and organizational constraints by . . . employing a wholly different team not already immersed in an issue to challenge assumptions or present alternative hypotheses and outcomes.”).

²³⁵ S. REP. NO. 108–301, at 21 (2004); SUNSTEIN, INFOTOPIA, *supra* note 9 at 12–13 (describing this example and NASA’s similar failure to structurally incorporate devil’s advocates on safety concerns leading to the explosion of the space shuttle Columbia).

²³⁶ S. REP. NO. 108–301, at 510 (Additional Views of Senator Barbara A. Mikulski).

judgments without carrying forward the uncertainties of the underlying judgments.”²³⁷ This can be analogized to the problems that arise in courts of exclusive jurisdiction: a single organization repeatedly deciding the same types of issues by building on prior decisions can amplify misguided determinations of law, but one potential remedy is competition.

3. The Cohesion Decision

There is little benefit to many minds in judging if, as a result, the laws do not later reach some state of coherence between competing ideas.²³⁸ The quality of a cohesion decision in law begins from the diversity of viewpoints and the playing out of experimentation that informs the decision. Yet a critical component of the many minds approach to judging requires a resolution and settlement upon answers, or at least predictability what those answers might be when they are decided. This resolution or cohesion can occur when the Supreme Court (or National Court of Appeals) or a consensus of circuits choose from among methods that have played out experimentally at the lower courts within each jurisdiction. It can also occur when private actors have enough predictability of the likely outcome of a cohesion decision that the decision itself need not occur or perhaps when agencies with expertise and authority can guide the market.

a. *The Supreme Court Looks to Appellate Courts for Ideas and Signals*

The interaction between lower courts and the Supreme Court is not only that lower courts look to the Supreme Court for declaration of law; the Supreme Court also requires lower courts and courts of appeals for the percolation of ideas and options for interpreting the law.²³⁹ As Professor H.W. Perry once noted, “[j]ustices like the smell of well-percolated cases.”²⁴⁰ In interviews that H.W. Perry conducted with justices and clerks on the Supreme Court, one justice explained that the right amount of percolation is “driven by time” and that if a conflict arises, the court “will let it percolate to see if the conflict will work itself out,” “[b]ut we are better informed if the issue has been considered by several courts of appeals”²⁴¹ A clerk noted, “[j]ustices] do not want to look at a claim in the abstract,” but want to “review how

²³⁷ *Id.* at 22.

²³⁸ Vermeule, *supra* note 9, at 20 (“[D]eliberation may produce simple incoherence—a mishmash of views or a misshapen policy or an interminable debate that never decides anything.”).

²³⁹ Patricia M. Wald, *The Changing Course: The Use of Precedent in the District of Columbia Circuit*, 34 CLEV. ST. L. REV. 477, 505 (1986) (“The work of the Supreme Court, especially when it is deciding novel issues or changing course in an important area of the law draws heavily on the work of perceptive, and even visionary, lower court judges to frame vital issues, document the need for their resolution or clarification, and develop rationales to justify one solution or reform over another.”).

²⁴⁰ PERRY, *supra* note 8, at 230.

²⁴¹ *Id.* at 233.

other courts have looked at the issue.”²⁴² Lower court and appellate level conflicting opinions and percolation are part of a systemic “learning process” that informs the Court until it resolves the dispute.²⁴³ Perry concluded, “[the Court’s] interpretation is final, so justices want to make sure that when they do speak, they can do so intelligently as possible—or more precisely . . . so that the Court can benefit from analysis of others.”²⁴⁴

In most non-patent cases, the primary driver of the Supreme Court’s decision to grant certiorari and hear a case is a circuit split, a conflict that needs to be resolved between the law of multiple circuits.²⁴⁵ In recent history, the Supreme Court has resolved approximately one third of all newly arising circuit splits, usually within three years of the first conflict, with certiorari being more likely if multiple circuits have growing disagreement at around the same time.²⁴⁶ In non-patent cases, a circuit split often signals the need for Supreme Court review and with it provides fully-articulated competing interpretations of law to aid the Court. Supporting this view, empirical research shows that the Court often waits to intervene until after multiple appellate courts have opined on a problem.²⁴⁷ With intercircuit competition, the Supreme Court can also see the effects that each interpretation of law has had in later district court opinions within those circuits, helping the Court to see the potential implications, extensions, and future paths of development of the law under either interpretation.²⁴⁸ The Justices of the Supreme Court thus view their role not as providing mere error correction but as providing uniformity of the law that has percolated through intermediate courts and ruling on other critical interpretive questions.²⁴⁹

Currently, when the Supreme Court decides an issue of patent law on appeal from the Federal Circuit, there is typically no circuit split—and thus no competing appellate decisions—on the issue. As a result, when the Supreme Court is deciding what law to

²⁴² *Id.* at 231.

²⁴³ Tom Clark & Jonathan Kastellec, *The Supreme Court and Percolation in the Lower Courts: An Optimal Stopping Model*, 75 J. POL. 150, 151 (2013).

²⁴⁴ PERRY, *supra* note 8, at 230–31.

²⁴⁵ Laser, *Certiorari in Patent Cases at the Supreme Court*, *supra* note 8, at 578–79.

²⁴⁶ Deborah Beim & Kelly Rader, *Legal Uniformity in American Courts*, 16:3 J. EMPIRICAL LEGAL STUD. 448, 448 (2019).

²⁴⁷ Clark & Kastellec, *supra* note 243, at 151 (“[T]he extent to which conflict among the lower courts induces the Court to intervene and resolve the conflict depends on how many previous courts have ruled on the question.”).

²⁴⁸ See VANESSA A. BAIRD, ANSWERING THE CALL OF THE COURT: HOW JUSTICES AND LITIGANTS SET THE SUPREME COURT AGENDA 70–72 (UNIV. VA. PRESS ed., 2007) (“[I]ntermediate appeals courts . . . have a symbiotic relationship with Supreme Court Justices.”).

²⁴⁹ Clark & Kastellec, *supra* note 243, at 151–52; Address of Chief Justice Vinson before the American Bar Association (Sep. 7, 1949) (“The Supreme Court is not, and never has been, primarily concerned with the correction of errors in lower court decisions.”), reprinted in PERRY, *supra* note 8, at 36 (“Time and again my informants—justices and clerks—stated that the Supreme Court was not there to ensure justice.”).

apply if it overturns the Federal Circuit, it has limited information: the content of any dissents or concurrences, the arguments from the opposing party, and decisions entered by lower courts before the Federal Circuit's precedential ruling. Particularly in patent law, where appellate jurisdiction is placed exclusively before a single Federal Circuit, the opportunities to gather information on policy making and consider the impact of alternative decisions is limited.²⁵⁰ Ossified law at a single circuit can also mean less stability because the Supreme Court will need to issue major corrections in order to alter the path of this precedent. This kind of upheaval is not as necessary to correct regional circuit courts.

Professors Bessen and Meurer assert that the emergence of new technologies such as biotechnology and software create novel questions of law that are best resolved with the help from competition of lower courts and courts of appeals on innovative legal resolutions, then percolated to and evaluated by the Supreme Court.²⁵¹ A number of patent scholars criticize the Supreme Court for making unworkable rules and detrimental policy decisions in patent law. In part, this could be the result of a lack of percolation. Under the proposal suggested by this Article, instead of overturning a Federal Circuit decision and making its own rule, the Supreme Court would be choosing from among different variations of patent law that had percolated in different regional circuit court jurisdictions and the district courts beneath them. In this situation, the Supreme Court might be less likely to adopt unworkable or detrimental rules because it will have been able to see how one rule has proven more workable than another in practice.

If the National Court of Appeals is adopted, it could hear and develop expertise in more and perhaps different cases than the Supreme Court currently handles. For example, the National Court of Appeals would likely resolve more circuit splits in commercial law questions or doctrinal disputes on technical topics that the Supreme Court might view as less important than constitutional law or civil rights disputes. The cohesion decision then could come from the National Court of Appeals, deciding the case from a broad scope of institutional knowledge, expertise, and information resulting from the percolation of cases through lower regional courts of appeals.

b. Regional Circuits Benefit from Intercircuit Idea Exchange

Regional circuits are not bound to follow the law set forth in other regional circuits.²⁵² This gives each circuit court the freedom to observe the law in another circuit, including how the law has percolated down to district court decisions in that circuit, and make a conscious choice of whether to create a circuit split or adopt the same approach. Intercircuit idea exchange can increase the quality of law because each circuit court that later decides an issue has more information to draw from than the original circuit court. Unlike subsequent decisions in the Federal Circuit in which a

²⁵⁰ See Nard & Duffy, *supra* note 23, at 1631–32 (arguing that a lone Federal Circuit limits generation of ideas for legal decision-making around patent law).

²⁵¹ BESSEN & MEUERER, *supra* note 16, at 229 (“Patent law needs to adapt to these new technologies, yet, as several legal scholars have emphasized, a single centralized appeals court might be a poor institutional arrangement to develop new law.”) (citing Duffy & Nard, *supra* note 23; Arti Rai, *supra* note 102, at 1124–25 (2003)).

²⁵² Arthur D. Hellman, *By Precedent Unbound: The Nature and Extent of Unresolved Intercircuit Conflicts*, *UNIV. PITT. L. REV.*, 693, 700 (1995).

panel would be bound to follow precedent, the regional circuit court is free to use information from opinions on the same issue in other circuit courts to adopt a different view or decide to adopt the same.

Judge Markey noted that the exclusivity of the Federal Circuit poses a “challenge” because “[t]he Court is on its own. . . . There is no other court to which we might look for other views as the years go by.”²⁵³ As Seventh Circuit Judge Diane Wood explained, “[i]n the circuits, we pay attention to opinions of other circuits and if we create conflict, we do it with our eyes open. We get a real exchange of ideas in a way the Federal Circuit doesn’t.”²⁵⁴ As Professors Nard and Duffy point out, the Federal Circuit’s exclusive jurisdiction “discourages parties from challenging the settled precedents of the court with different perspectives” and “also limits the set of available authorities and experience from which the court might seek guidance.”²⁵⁵ Without other circuit courts to develop and test alternative approaches to the law, the Federal Circuit lacks the same amount of information that other circuits have to gauge the potential impact of different legal choices.

c. Extrajudicial Cohesion Through Private Risk Assessment

Circuit splits themselves can help provide the predictability, signaling that review is likely if a split occurs or signaling that the law is unlikely to change if multiple circuits have decided an issue in the same way. Circuit splits can also help to inform the different possible ways that law might be interpreted, allowing patent stakeholders who are making investment decisions to more accurately discount against risks under different legal approaches. A decision by the Supreme Court is not necessary for stakeholders to predict the likely outcome of law.

One might assume that if the Supreme Court is not active in patent law, as it was not shortly before the creation of the Federal Circuit, it would not be as valuable to patent law to have a laboratory of ideas at the appellate circuit court level. Indeed, it is possible that the Supreme Court is, even now, not sufficiently active to provide coherence and not sufficiently inactive to allow a Federal Circuit with exclusive jurisdiction to be a source of sufficient coherence. Nonetheless, there are alternatives to the type of coherence of law that is provided by an official, final determination of law, namely by the Supreme Court or by a Federal Circuit with nationally binding precedent.

Members of the public could come to an understanding based upon their own assessments of the risks of laws shifting in particular jurisdictions or applying in particular circumstances based on signals in past lower court decisions, reaching a state where even though the law has not been official decided, it is coherent and predictable enough to those in the business community to support sound investments and competitive decision-making. Some might argue that there are enough signals of where the law will go and where it is unclear to allow businesses to function and

²⁵³ Howard T. Markey, *Excerpts from Remarks by Hon. Howard T. Markey*, 1983 A.B.A. SEC. PAT. TRADEMARK AND COPYRIGHT L. PROC. 99, 101.

²⁵⁴ Lisa Shuchman, *Judge Wood Proposes Changing Jurisdiction for Patent Cases*, CORPORATE COUNSEL (Oct. 2, 2013) <http://www.corpcounsel.com/id=1202621813096/Judge-Wood-Proposes-Changing-Jurisdiction-for-Patent-Cases?sreturn=20140231134450>.

²⁵⁵ See Nard & Duffy, *supra* note 23, at 1623.

manage risk of change even in the current environment of exclusive Federal Circuit jurisdiction and high rates of Supreme Court review. This is particularly true where parties are sophisticated businesses with lawyers available to assist with interpretation of complex and unsettled law. Nonetheless, having multiple courts of appeal could help to provide additional extra-judicial coherence because it provides additional signals of when the law is likely to change, such as if there are circuit splits, and when it is likely to remain the same, such as if all circuit courts of appeal agree on a particular interpretation.

Private risk assessment markets are often correct.²⁵⁶ In practice, clients of law firms routinely solicit predictions from the law firms of the likely outcome of uncertain law and legal risk of various business choices.²⁵⁷ These predictions help to guide corporate marketplace decisions, even in the absence of Supreme Court law resolving every potential issue.²⁵⁸ Indeed, this kind of prediction of uncertain events is so entrenched in the practice of law that law school exams focus not merely on the letter of the law, but on the analysis of the law as applied to novel situations. Certainty of law is not required for lawyers to make predictions to clients as to the risk of potential outcomes.

d. Extrajudicial Cohesion by Agencies

Currently, the USPTO follows Federal Circuit law as binding precedent on issues which the Supreme Court has not yet decided. For example, the Manual of Patent Examination and Procedure (MPEP), a guide that examiners use to apply the patent laws when deciding issues of entitlement to a patent, cites hundreds of Federal Circuit opinions.²⁵⁹ One might wonder, then, if the Federal Circuit loses exclusive jurisdiction over patent appeals, what law would the USPTO apply when examining patents? The USPTO would continue to apply Federal Circuit and Supreme Court precedent, but these precedents would become more tempered with added percolation at the appellate level.

Professor Gugliuzza notes that because less than two percent of patent cases are litigated, the law applied at the USPTO would have an outsized impact even with multiple circuit courts.²⁶⁰ Agencies like the USPTO can help to further the cohesion of law in the mind of the public because agencies often issue guidance that signals to

²⁵⁶ SUNSTEIN, *INFOTOPIA*, *supra* note 9, at 104.

²⁵⁷ *Cf.* Kris Steckman, *Market-Based Prediction Models as an Aid to Litigation Strategy and Settlement Negotiations*, 2 J. BUS. ENTREPRENEURSHIP & L. 244, 247 (2008) (discussing litigation markets as legal assessment tool to reduce risk for clients).

²⁵⁸ Rhys Dipshan, *With Analytics Tools, Law Firms Are Adding Predictive Power to Their Advice*, THE AMERICAN LAWYER (Jun. 3, 2022, 11:06 AM), <https://www.law.com/americanlawyer/2022/06/03/with-analytics-tools-law-firms-are-adding-predictive-power-to-their-advice/>.

²⁵⁹ *E.g.*, U.S. PAT. TRADEMARK OFF., MANUAL OF PATENT EXAMINING PROCEDURE (MPEP) §2163 (2020) (citing Federal Circuit caselaw regarding compliance with the written description requirement).

²⁶⁰ *See* Gugliuzza, *Saving the Federal Circuit*, *supra* note 132, at 361 (citing Mark A. Lemley, *Rational Ignorance at the Patent Office*, 95 NW. UNIV. L. REV. 1495, 1501 (2001)).

the public the likely outcome of law or otherwise lends predictability to private decision-making until the Supreme Court decides an issue because of their trusted specialized expertise. However, although the decisions from the PTO would help to shape the law and public perceptions of the law, it would not bind regional circuit courts or restrain the other laboratories of ideas taking place in these separate jurisdictions. Even if the number of patent cases heard by other circuit courts would be small, the information generated by having law percolate in multiple different laboratories or jurisdiction would be valuable.

Litigants would likely engage in some forum shopping when deciding whether to file an IPR proceeding, deciding in part whether Federal Circuit law and thus PTAB law is more favorable for them than the regional circuit law where a district court case is proceeding. However, because IPR proceedings are discretionary and the PTAB also has a burdened caseload,²⁶¹ the PTAB will not accept all proceedings and many will proceed as filed in the district court and to the regional circuit court. This type of forum shopping—the decision of whether to file an IPR—is unlikely to be as problematic as the forum shopping concerns of the 1980s when the Federal Circuit was created.

Moreover, on issues only decided by a regional circuit court, it is not insurmountable for a federal agency to need to rely upon mixed law from multiple circuit courts of appeal to decide issues of entitlement to government granted rights. Just as private business interests are able to ascertain the law in many areas by considering the risk of particular judgments being affirmed by the Supreme Court, agencies have the capacity to apply indeterminate law. Agencies, just like private actors, rely on predictions of the law rather than complete uniformity to govern their actions and issue this informal guidance when the Supreme Court has not yet acted. For example, the United States Copyright Office makes decisions during the registration of creative works in part based on judicial interpretations of law, even though copyright cases are appealed to multiple regional circuit courts of appeal rather than a court of exclusive jurisdiction.²⁶² Likewise, the USPTO would be able to apply patent law effectively without a uniform appellate law. Indeed, prior to the creation of the Federal Circuit, the MPEP referenced both Supreme Court law and the law of the Court of Customs and Patent Appeals (CCPA), a predecessor court to the Federal Circuit.²⁶³ The USPTO has also issued guidance where Supreme Court precedent can be difficult to apply, such as patent eligible subject matter under Section 101 of the patent act.²⁶⁴ Even if the Federal Circuit retained jurisdiction over appeals from the

²⁶¹ Cf. Robert E. Colletti, et al., *The Recent Rise of Discretionary Denials at the Patent Trial and Appeal Board*, HAUG PARTNERS (Nov. 18, 2020), <https://haugpartners.com/article/the-recent-rise-of-discretionary-denials-at-the-patent-trial-and-appeal-board/> (noting that multiple IPR petitions place unnecessary burden on PTAB).

²⁶² See, e.g., *Works Made for Hire*, CIRCULAR 9 (United States Copyright Office, Wash. D.C.), 2012 (citing Supreme Court caselaw).

²⁶³ U.S. PAT. TRADEMARK OFF., *MANUAL OF PATENT EXAMINING PROCEDURE (MPEP)* § 2110 at 538.1 (Oct. 1981).

²⁶⁴ See generally U.S. PAT. TRADEMARK OFF., *MANUAL OF PATENT EXAMINING PROCEDURE (MPEP)* §2103-2106.7(c) (2020) (citing Federal Circuit caselaw regarding compliance with the written description requirement).

USPTO, the USPTO could continue to apply Federal Circuit and Supreme Court precedent during examinations.

V. CONSIDERATIONS AND CRITICISMS OF THE PROPOSAL

A. *Does the Proposal Enhance Diversity of Thought and Quality of Law?*

1. Diversity of Thought and Controlled Experimentation

The proposal suggested by this Article—eliminating the Federal Circuit’s exclusive jurisdiction over patent appeals from district courts, returning those to regional circuit courts, and otherwise retaining the Federal Circuit’s current jurisdiction, such as over agency appeals—uniquely implements many minds theories, promotes percolation of law, and reduces the current unpredictability of Supreme Court reversals in patent cases.

Diversity of thought in patent law would be expanded if it is decided in separate regional circuits, separate microcosms, with different ranges of expertise and experiences. For example, patent law could benefit by having some patent cases resolved in regional circuits that also hear competitor commercial suits, antitrust law, and copyright law, among other topics; this diverse range of commercial competition cases could be helpful for providing perspective and making certain legal laboratory tools top of mind when analogous questions arise in patent disputes.²⁶⁵ And yet retaining some key aspects of jurisdiction at the Federal Circuit, such as appeals from the USPTO, ITC, and Court of Federal Claims, will ensure that patent law still benefits from the specialized expertise and experience of the Federal Circuit judges. In turn, review of these decisions provides some diversity versus the circuit court decisions.

Some have criticized previous plans for dividing Federal Circuit jurisdiction as undermining uniformity without providing adequate percolation.²⁶⁶ But this proposal promotes controlled experimentation, which is helpful to inform the decisions that the Supreme Court makes in patent law cases.²⁶⁷ The current proposal provides for more percolation than the previous proposals because it would result in district courts in specific regions applying different circuit law, thereby testing the impact of the circuit court precedent in micro-laboratories. Under a more diverse system of inter-circuit competition, that percolation will be far more informed by potentially innovative legal approaches provided by other regional circuit courts, resulting in better law and more predictability in knowing what cases will result in Supreme Court review.²⁶⁸ The

²⁶⁵ See Gugliuzza, *Rethinking Federal Circuit Jurisdiction*, *supra* note 5, at 1443 (noting that “commercial- or competition-related issues . . . would inform a patent jurisprudence sensitive to innovation needs”).

²⁶⁶ See Golden, *supra* note 176, at 661 (stating that Nard and Duffy’s “solution threatens to sacrifice substantial benefits of unified review under the Federal Circuit while providing little assurance of adequate percolation”).

²⁶⁷ BESSEN & MEURER, *supra* note 16, at 230 (“[L]acking distinct, well-developed doctrines evolved by competing courts, the Supreme Court cannot easily intervene.”).

²⁶⁸ BESSEN & MEURER, *supra* note 16, at 231 (“It is certainly true that appeals courts had different interpretations of patent law before the Federal Circuit was created, but the uncertainty must be weighed against the benefit of a better-quality patent law that would likely result from inter-circuit competition. A reasonable hope is that patent law would ultimately become more

proposal therefore promotes informed cohesion of law at the Supreme Court. Without an adequate structure for percolation of law, the Supreme Court lacks information needed to make the best decisions on quality of law; more information would be helpful to the court of last resort. Although some might have a concern of the potential for forum shopping, forum shopping itself might have some positive role in a system designed for experimentation, functioning as a signal of the business impacts of different legal rules.²⁶⁹ Moreover, predictability of law might be increased, not decreased, by the proposal to eliminate the Federal Circuit's exclusive jurisdiction. As discussed above, circuit splits can help to inform litigants of the risk that law will be overturned.

In addition, a system with multiple regional circuits might make the Federal Circuit more accepting of error correction from the Supreme Court and reduce path dependency. As discussed above, the Federal Circuit sometimes, potentially due to an expertise-related anti-correction bias, will resist changes to patent law made by the Supreme Court.²⁷⁰ When the Federal Circuit is no longer the only appeals court in patent law, this anti-correction bias might be lessened. In effect, the Federal Circuit might no longer view itself as the superior expert on patent law versus the Supreme Court when the Supreme Court will be regularly resolving circuit splits with other learned courts.

Moreover, under this proposal, patent law will continue to benefit from many of the positive and unique contributions of the Federal Circuit. For example, because the Federal Circuit would be maintained under this model, patent law will continue to benefit from having at least one circuit court with judges with technical expertise and specialized knowledge. Indeed, under this model, because appeals from the Patent Office would remain with the Federal Circuit, some uniformity could be maintained at least on issues of patent validity under the standards of appeal from the PTAB. This method would provide both a unified review in PTAB appeals and ITC disputes, but also provide more informed percolation of patent law on issues of both patent validity and infringement. At bottom, it is possible to go back to a more diverse model of inter-circuit competition while still retaining these benefits at the Federal Circuit.

In the current era of Supreme Court activism in patent law, the Federal Circuit can no longer provide all of the predictability and stability of law or the quality of law that was part of its original mandate. Stakeholders will still be able to structure their investments in patented technologies because, as they do in other areas of law, predictions can account for law that is uncertain, especially if the vectors of uncertainty are apparent. For example, if patentees know that in certain jurisdictions the law is one way and in others it is different, patentees might choose their locations

predictable. Moreover, there is an important difference between notice and certainty of the law.”).

²⁶⁹ Nard & Duffy, *supra* note 23, at 1668 (noting that forum shopping “can be a positive force” because it promotes court competition) (citing Robert M. Cover, *The Uses of Jurisdictional Redundancy: Interest, Ideology, and Innovation*, 22 WM. & MARY L. REV. 639, 678 (1981) (“Forum shoppers and those who oppose them . . . become the carriers that pollinate one system of courts with the information about another system’s experience.”); Todd J. Zywicki, *The Rise and Fall of Efficiency in the Common Law: A Supply-Side Analysis*, 97 Nw. U. L. Rev. 1551, 1620–21 (2003) (noting forum shopping’s role in enhancing competition).

²⁷⁰ Bock, *supra* note 62, at 214–17.

of business in ways that optimize for the preferred law or calculate expected remedies using an odds ratio that considers the risk of different law applying.

2. Would Giving the Federal Circuit More Non-Patent Cases Provide Sufficient Diversity of Thought to Render the Proposal Unnecessary?

a. *Adding General Jurisdiction*

The Federal Circuit is currently not only responsible for patent appeals. Indeed, a large portion of its docket consists of non-patent cases such as veteran's benefits, takings, government contracts, government employment law, and trademark office appeals.²⁷¹ Some scholars propose expanding the jurisdiction of the Federal Circuit to hear other civil cases, urging that a wider docket would make the Federal Circuit less formalist, among other perceived benefits.²⁷² Specifically, Professor Paul Gugliuzza proposed restructuring the Federal Circuit's jurisdiction to cover a range of commercial cases more similar to the jurisdiction of other regional circuits: the Federal Circuit could absorb general appeals from district courts in Maryland and Virginia, and hear fewer of the government cases over which it currently has exclusive jurisdiction, while maintaining its exclusive jurisdiction over patent law.²⁷³ Professor Gugliuzza alternatively encourages the President to nominate and the Senate to confirm more judges to the Federal Circuit who have both patent and generalist expertise.²⁷⁴ For example, he urges, Federal Circuit Judge Kathleen O'Malley came to the Federal Circuit with sixteen years of expertise as a district court judge, hearing all case types, and as a result brought more intellectual diversity to the Federal Circuit.²⁷⁵ Either approach would be helpful in providing the Federal Circuit with more innovation and understanding of diverse issues of law, providing a modest alternative in the absence of elimination of the Federal Circuit's exclusive jurisdiction in patent cases.

Professor Gugliuzza also suggests potentially merging the Federal Circuit with the D.C. Circuit, which hears appeals in many administrative law cases.²⁷⁶ Under the proposal in this Article, in which patent law would be exposed to other areas of law by percolating through regional circuits, there might be no need to further combine the Federal Circuit's jurisdiction with other courts because there can be benefits to the quality of law if each laboratory of ideas is diverse. Namely, perhaps there is a benefit of having one specialized court and other more generalist regional circuit courts deciding the same issues of law to be percolated to the Supreme Court. The judges on these courts would have very different anchors, beliefs, and experiences to draw from, allowing different perspectives to be considered and experimented with in different

²⁷¹ Gugliuzza, *Rethinking Federal Circuit Jurisdiction*, *supra* note 5, at 1460–63.

²⁷² *Id.* at 1445 (also noting that this expansion could improve decision-making in other areas of the court's docket such as veteran's appeals); *Id.* at 1442–43.

²⁷³ *Id.* at 1498–1500.

²⁷⁴ Gugliuzza, *Saving the Federal Circuit*, *supra* note 132, at 375–76.

²⁷⁵ *Id.*

²⁷⁶ Gugliuzza, *Rethinking Federal Circuit Jurisdiction*, *supra* note 5, at 1501.

jurisdictions, and potentially enhancing the quality of decisions. But the success of this model would require a Supreme Court that is active enough in patent law to sometimes decide the potentially highly diverse conflicts between these different courts. In the alternative, merging the courts would bring a unique expertise in administrative law to patent cases²⁷⁷ and potentially more cognitive diversity to the D.C. Circuit.²⁷⁸ If the Supreme Court is expected to be less active in patent law in the coming years, then the benefit of more intracircuit diversity from a merger could exceed the benefit of the intercircuit diversity of a combination of generalist regional courts and a specialized Federal Circuit. This merger could be done in concert with the rest of the proposals in this Article.

b. Expanded General Jurisdiction Still Lacks Experimentation

Yet a proposal to merely expand the jurisdiction of the Federal Circuit, without also eliminating its exclusive jurisdiction over patent appeals, fails to provide the level of percolation and predictability of patent law required in an era of increased Supreme Court review. Although intracircuit diversity can expand the scope of ideas considered at each court, inter-circuit competition at the appellate level can provide more informative percolation of law because law that differs between regional circuit jurisdictions can be pushed, expanded, and tested at the trial level in different ways in each jurisdiction, contributing to the range of ideas that percolate to the Supreme Court. If the Supreme Court is hearing appeals from only one court in patent disputes with regularity, the Court will continue to routinely upset the balance of what stakeholders believe to be stable law and replace it with formulations of rules that have not been tested in other circuit courts under the weight of binding precedent. In contrast, if the exclusive jurisdiction of the Federal Circuit is eliminated and some patent cases are spread to regional circuits, it might be beneficial to promote a more diverse laboratory of ideas in patent appeals by having the Federal Circuit retain its more narrow scope of case types and have other regional circuits provide the perspective of courts with general dockets.

3. Does Patent Law Already Have Sufficient Diversity of Thought?

a. Internal Heterogeneity at the Federal Circuit is Not Enough to Give the Best Diversity of Thought and Experimentation in Patent Law Because it Lacks Diversity of Input

Senior Circuit Judge Jay Plager and Lynne Pettigrew argued that the Federal Circuit does not have problems with ossification of law or a failure of the laboratory of ideas, stating that there is sufficient intracircuit competition between panel opinions.²⁷⁹ Indeed, some scholars urge that, rather than path dependence or ossification of law, the Federal Circuit has been divided to the point where it is

²⁷⁷ *Id.*

²⁷⁸ *Cf.* Reynolds & Lewis, *supra* note 217, at 3.

²⁷⁹ S. Jay Plager & Lynne E. Pettigrew, *Rethinking Patent Law's Uniformity Principle: A Response to Nard and Duffy*, 101 NW. U. L. REV. 1735, 1739 (2007); Lee Petherbridge, *Patent Law Uniformity?*, 22 HARV. J. L. & TECH. 421, 426–27 (2009).

internally inconsistent, with panels of different judges issuing opposing rulings.²⁸⁰ Professor Christopher Cotropia published empirical data that he relies upon to state that “Federal Circuit is no more lacking in jurisprudential diversity than other circuits and, considering dissents, is significantly more internally diverse in viewpoints regarding the outcomes of individual cases.”²⁸¹

But the primary concern of the failure to have a laboratory of ideas is not equivalent to an argument that Federal Circuit caselaw is internally overly homogeneous. Rather, there is an insufficient choice available to the Supreme Court of quality ideas, and this lack of choice of quality law is perpetuated by the power of precedent in the Federal Circuit’s internal rules. This leads to formalism and crystallization of poor-quality patent law. The concern is not necessarily that there is intracircuit entrenchment, but that the structure of the Federal Circuit as a court of exclusive jurisdiction causes nationwide stagnation of patent law at the appellate level because, unlike the other perhaps equally entrenched circuits, in patent law there is no competition for ideas from other circuits.

Moreover, the *en banc* review that would serve as the percolator of intracircuit conflict is often not as effective of a percolation tool as having multiple circuit courts of appeal and an active Supreme Court, in part because *en banc* review creates friction between the members of the same court.²⁸² Moreover, *en banc* review is typically reserved for issues of exceptional importance and where there is intracircuit conflict.²⁸³ As a result, *en banc* review on contentious issues—where it might be most needed—is often avoided or delayed or can result in unhelpful fractured decisions.²⁸⁴

Furthermore, there can never be true heterogeneity in the Federal Circuit’s precedent as there can be between circuits: the Federal Circuit resolves disputes between competing panel opinions by providing that only the earlier panel opinion is binding law in the event of conflict unless and until it is overturned by the court *en*

²⁸⁰ Jason Rantanen & Lee Petherbridge, *Disuniformity*, 66 FLA. L. REV. 2007, 2021 (2015).

²⁸¹ Christopher A. Cotropia, *Determining Uniformity within the Federal Circuit by Measuring Dissent and En Banc Review*, 43 LOY. L.A. L. REV. 801, 804 (2010).

²⁸² Rooklidge & Weil, *supra* note 103, at 795; BESSEN & MEURER, *supra* note 16, at 230.

²⁸³ Rooklidge & Weil, *supra* note 103, at 812; U.S. Ct. of Appeals for the Fed. Cir., *Internal Operating Procedures*, (Aug. 23, 2022), <https://cafc.uscourts.gov/wp-content/uploads/RulesProceduresAndForms/InternalOperatingProcedures/InternalOperatingProcedures.pdf>.

²⁸⁴ Bock, *supra* note 62, at 208–09; See generally Michael Ashley Stein, *Uniformity in Federal Courts: A Proposal for Increasing the Use of En Banc Appellate Review*, 54 U. PITT. L. REV. 805, 810–11 (1993) (describing the history of *en banc* review in circuit courts of appeal).

banc.²⁸⁵ As a result, any nonuniform later opinion is not binding on that issue.²⁸⁶ Without having the power of precedent, and without regional variation to see how that nonuniformity changes the behavior of litigants, it cannot form the basis for informed percolation or a functioning laboratory of ideas. Path dependence is crystallization of precedent and stagnation of precedent—conflicting non-binding views in later panel opinions provide little help towards effective percolation of patent law. For example, without a laboratory of precedential ideas at the appellate level, it is harder to know what different arguments and different presentations of evidence will arise under that different law when two cases presenting similar facts percolate through that competing precedent.

b. *Diversity Among District Courts is Insufficient Because it Lacks Percolation*

Some might argue that patent law obtains enough diversity of thought by having multiple district courts and the PTAB deciding issues of patent law at the trial level. However, the same concerns arise as discussed in the section above: if the appellate law remains steady it constrains the experimentation that could otherwise occur at the district court level in an environment having regional variation in appellate law. District courts are free to freshly decide new issues, but the law is solidified at the appellate level as soon as it is decided, and patent experimenters become unable to observe how nonuniformity changes the behavior of litigants at the trial level. This model cannot provide as unhindered of a laboratory of ideas as having appellate court variation.

B. *Should Patent Law be Different than Other Areas of National Law Without Exclusive Appellate Jurisdiction?*

Under either major proposal in this Article, patent law would have the opportunity to develop just as law develops in other areas of law that do not have exclusive jurisdiction vested in a single appellate court. Some judges and scholars have urged that there is little reason to treat patent law differently than every other area of law

²⁸⁵ Howard T. Markey, *Excerpts from Remarks by Hon. Howard T. Markey*, 1983 A.B.A. SEC. PAT. TRADEMARK & COPYRIGHT L. PROC. 99, 102 (1983) (“[T]he Court has adopted a procedure under which an earlier decision of any of its panels or one of its predecessors can be overruled only by the action of the Court *en banc*. Although nothing conducted by humans can always be perfect, this defense-in-depth should forestall what would be a most unfortunate event, namely, an unnoticed conflict in the Court’s own jurisprudence.”); *Mother’s Rest., Inc. v. Mama’s Pizza, Inc.*, 723 F.2d 1566, 1573 (Fed. Cir. 1983) (“[T]he court may overrule a prior holding having precedential status only by an *in banc* decision.”); *see also Newell Co. v. Kenney Mfg. Co.*, 864 F.2d 757, 765 (Fed. Cir. 1988), cert. denied, 493 U.S. 814 (1989); *Rooklidge & Weil*, *supra* note 103, at 797–98; *but see* Dennis Crouch, *Priority of Precedent: When Same-Day Federal Circuit Opinions are in Tension*, PATENTLY-O (May 11, 2018), at <https://patentlyo.com/patent/2018/05/priority-precedent-opinions.html> (“Although law-of-the-circuit rules prohibit a later panel from upsetting prior precedent, the reality is that principle is treated as an internal rule rather than one opening the later decision to collateral attacks by the parties. . . . Except when squarely on point, later panels have power to substantially shift precedent by adding nuances or ‘explaining’ the prior decision in terms that better fit to a new narrative.”).

²⁸⁶ *See id.*

where complex issues arise on a national scale.²⁸⁷ “[T]he problem of inadequate appellate capacity is not limited to one or two areas of the law.”²⁸⁸ Early in the discussions of the creation of the Federal Circuit, some lawmakers urged that the Federal Circuit’s exclusive jurisdiction should cover not only patent appeals but also appeals in tax, communications, labor, and immigration law.²⁸⁹ And it was likely by political accident—the right alignment of policy interests, available solutions, and political will—that the Court of Appeals for the Federal Circuit focused on patent law and its other few areas of jurisdiction, but dropped these other areas in need of national uniformity.²⁹⁰

Other complex areas of law, such as federal tax, communications, labor, immigration, copyright, trademark, environmental law, and antitrust law, would benefit from nationally binding appellate law and by decisions from more expert tribunals but are appealed to multiple circuit courts instead of subject to exclusive appellate jurisdiction.²⁹¹ For example, copyright law arises from federal statutes, applies nationwide like a patent right, and involves a right that can be asserted in multiple cases and jurisdictions, and yet unresolved “circuit splits . . . are common” in copyright law, such as on the issue of availability of the laches defense, as well as in other non-patent areas of intellectual property.²⁹² Likewise, trademark and other areas of intellectual property law face similar concerns.²⁹³ Scholars who recommended adding tax and environmental law to the Federal Circuit’s jurisdiction also pointed out significant inequities that resulted from lack of nationally uniform precedent in these complex areas of law, such as the same type of business being subjected to different federal tax treatment in different regions.²⁹⁴ Similar business inequities can arise in antitrust law.²⁹⁵ And in criminal law, longstanding nonuniformity in approaches to use of sentencing guidelines prompted the Supreme Court to hear *United States v.*

²⁸⁷ Wood, *supra* note 24, at 6–7.

²⁸⁸ HRUSKA COMMISSION REPORT, *supra* note 10, at 68.

²⁸⁹ See Daniel J. Meador, *A Challenge to Judicial Architecture: Modifying the Regional Design U.S. Courts of Appeals*, 56 CHI. U. L. REV. 603, 621–24 (1989) (urging consolidation of appeals for tax, communications, labor, and immigration law).

²⁹⁰ BAUM, *supra* note 41, at 5 (noting that much of “[t]he movement towards greater judicial specialization has been a product of inadvertence rather than design”).

²⁹¹ See Wood, *supra* note 24, at 7.

²⁹² Samantha M. Basso, *When National Law Means Regional Law: A Look at the Non-Uniformity of Copyright Law and How the Federal Circuit Can Help*, 21 FED. CIR. B.J. 355, 356–57 (2012).

²⁹³ But see J. Thomas McCarthy & Dina Roumiantseva, *Divert All Trademark Appeals to the Federal Circuit? We Think Not*, 105 TRADEMARK REP. 1275, 1275 (2015).

²⁹⁴ Haworth & Meador, *supra* note 140, at 201, 210, 212.

²⁹⁵ Mackenzie Holland, *Lack of Competition is Driving Federal Budget Antitrust Hike*, TECHTARGET (Aug. 7, 2022), <https://www.techtargget.com/searchcio/news/252515349/Lack-of-competition-is-driving-federal-budget-antitrust-hike>.

Booker.²⁹⁶ As Judge Wood of the Seventh Circuit noted when comparing the complexity of patent law to other areas of law, “[e]ven though these cases are complex, there is great value in obtaining the views of a number of judges, and there is great value in using generalist judges.”²⁹⁷

One might argue that in other areas of law like copyright, the lack of nationally uniform appellate law is causing what this author terms “Schrödinger’s rights” (rights that are valid in some regions and invalid in others)²⁹⁸ as well as circuit court forum shopping.²⁹⁹ Therefore, some scholars urge that a single federal appellate court should be established for others areas as well.³⁰⁰ Adopting a single appellate court for all of these complex national areas of law has the drawbacks discussed above such as lack of percolation and experimentation with legal ideas, insufficient information to support the Supreme Court’s certiorari decision, and risk of capture or specialists’ bias. The suggested structure of the Hruska Commission’s National Court of Appeals, discussed above, would provide both uniformity and percolation in all of these and other complex areas of law. Regardless, scholars seem to agree that there is no reason to treat patent law differently than other complex and important areas of national law.³⁰¹

One might argue that patent law differs from these in part because patents are rights granted by a government agency based on the law set forth by federal courts.³⁰² Therefore, if federal courts are not uniform in their interpretation of patent law, it could be unclear what law the USPTO should apply. This might in turn lead to over-issuance of patents that would be invalid under another circuit’s law, under-issuance of patents that could be valid if the USPTO had applied different law, or at a minimum uncertainty over what the USPTO should do when a patent’s eligibility depends on the interpretation of law on which the regional circuits are divided. Moreover, companies will make investment decisions based on assessments of whether certain patents are valid or whether it will be infringement to sell certain products, all of which benefit from nationally uniform law. Yet in these other areas of law, too, corporations, individuals, and government agencies need to make decisions with respect to rights and risks that apply nationwide, and the need for uniformity might be as high or higher. There is no reason that patent law should be treated differently than other areas of law.

²⁹⁶ U.S. v. *Booker*, 543 U.S. 220, 230–37, 253–54 (2005).

²⁹⁷ Wood, *supra* note 24, at 7.

²⁹⁸ Basso, *supra* note 292, at 357; Barbara Yngvesson & Susan Coutin, *Schrodinger's Cat and the Ethnography of Law*, 31 POLAR 61, 61 (2008).

²⁹⁹ See Basso, *supra* note 292, at 356–57.

³⁰⁰ *Id.*

³⁰¹ *Id.* at 368.

³⁰² Paul R. Gugliuzza, *Rising Confusion About "Arising Under" Jurisdiction in Patent Cases*, 69 EMORY L. J. 459, 459 (2019); see also Naira Rezende Simmons, *Putting Yourself in the Shoes of a Patent Examiner: Overview of the United States Patent and Trademark Office (USPTO) Patent Examiner Production (Count) System*, 17 J. MARSHALL REV. INTELL. PROP. L. [1] 32, 33 (2017).

C. *Can the Supreme Court Perform the Cohesion Function in Patent Law and Provide Enough Certainty by its Review of Patent Cases?*

Professor Golden instead urges the Supreme Court to more frequently grant review in patent cases and for the Federal Circuit to hear more case *en banc*.³⁰³ Professor Golden argues that the unifying function of patent law is of the utmost importance, necessitating the Federal Circuit retaining its current jurisdiction, but Professor Golden urged the Supreme Court to take on the role of “prime percolator” in patent law, performing a key function in maintaining the stability and uniformity of patent law while correcting ossification that had occurred at the appellate level.³⁰⁴

Since Professor Golden urged this change, the Supreme Court has dramatically increased its involvement in patent law, making patent disputes 5% of its docket in the last decade—a similar percentage of patent cases as it heard in the second industrial revolution when patent appeals to the Supreme Court were mandatory and more patent cases than at any other time since passage of the Patent Act in 1952.³⁰⁵ Unfortunately, the Supreme Court is not taking (and likely will not take) Professor Golden’s advice to tailor its areas of review to those in which the Court’s aid is most needed to stabilize patent law.³⁰⁶ Certainty or stability of patent law is simply not an element in the Supreme Court’s consideration of whether to grant certiorari in a patent dispute.³⁰⁷ After all, the Supreme Court’s rules for granting certiorari were created before the Federal Circuit and do not specify how to decide certiorari in an area of federal law that lacks multiple regional circuit court precedents.³⁰⁸

Moreover, the Supreme Court does not have the bandwidth to further increase its caseload of patent cases: even in 1975, Chief Justice Burger stated, “as the Supreme Court’s workload exceeds its capacity, it may be unable to give binding national resolution to all cases that deserve it. . . . [T]he capacity of nine human beings has finite scope.”³⁰⁹ The caseload of the federal courts has more than doubled since that

³⁰³ John M. Golden, *The Supreme Court as “Prime Percolator”: A Prescription for Appellate Review of Questions in Patent Law*, 56 *UCLA L. REV.* 657, 662–63 (2009).

³⁰⁴ *Id.* at 662 (“[T]he Court’s primary role in [patent law] should be to combat undesirable ossification of legal doctrine. Consequently, the Court should generally confine its review of substantive patent law to situations where there is a substantial risk that Federal Circuit precedent has frozen legal doctrine either too quickly or for too long. Further, the Court’s decisions in this area should typically be modest, seeking to spur, rather than foreclose, subsequent legal development.”).

³⁰⁵ Laser, *Certiorari in Patent Cases at the Supreme Court*, *supra* note 8, at 592.

³⁰⁶ *See* Golden, *supra* note 303, at 672.

³⁰⁷ Laser, *Certiorari in Patent Cases at the Supreme Court*, *supra* note 8, at 584.

³⁰⁸ *See* SUP. CT. R. 10 (listing factors for certiorari in patent cases at the Supreme Court including resolution of certain splits).

³⁰⁹ *See* HRUSKA COMMISSION REPORT, *supra* note 10, at A-222–24 (comments of the Chief Justice, May 29, 1975).

time.³¹⁰ Yet there is little that is politically and constitutionally feasible to allow the Supreme Court to review more cases; as the then-Chief Justice noted in his comments in the Hruska Commission report, enlarging the Supreme Court to sit in divisions or panels “would appear to alter the basic concept of ‘one Supreme Court’ under Article III.”³¹¹ There is also no reason for patent cases to take up more than the 5% of the Supreme Court’s docket that it has taken in the last decade³¹² when so many other areas of law are also in need of nationally uniform decisions.³¹³

Furthermore, increasing Supreme Court review without also adding patent jurisdiction to other regional circuits would only exacerbate the problem of unpredictability in patent law. The Supreme Court’s review of patent law in the past decade has often been haphazard and destabilizing.³¹⁴ The Supreme Court routinely flips what stakeholders believed to be settled law, undermining predictability and investment in patented products and patent-dependent business.³¹⁵ When the appeals court believed by stakeholders to be the effective “court of last resort” in most patent cases decides an issue, businesses and other patent stakeholders might depend on that articulation of law to structure their businesses and investments more than if multiple appeals courts held different views. When the Supreme Court steps in to reverse this law, the outcome can seem sudden, and the value of these investments may change as the boundaries of the rights and remedies on patented technologies shift with the law. It can be unclear without the benefit of competing regional circuit law what new standard the Supreme Court might adopt. Instead, what is needed is both less ossification at a single court of appeals and more predictability of when the Supreme Court will review an issue. The law is best developed at the Supreme Court when fresh ideas are circulated in distinct circuit courts and regions, providing fully formed articulations of potentially competing approaches by the time the issue reaches the Supreme Court for review.³¹⁶

The National Court of Appeals offers an ideal balance. If the Federal Circuit’s jurisdiction is modified as recommended in this paper, returning district court appeals to the regional circuit courts, then a court that has the capacity to unify regional circuit court precedents at a faster rate than the Supreme Court is ideal. The Supreme Court cannot expand its capacity in patent law without harming other areas of law. A National Court of Appeals could perform a unifying function in important areas of

³¹⁰ Compare H.R. Report No. 96–1307, pt. 1 at 14 (1980), and U.S. ATT’Y OFF. STATISTICAL REP. FISCAL YEAR 1975, U.S. DEP’T. OF JUST., at 1, 4 (1975).

³¹¹ HRUSKA COMMISSION REPORT, *supra* note 10, at A-223 (comments of the Chief Justice, May 29, 1975).

³¹² Laser, *Certiorari in Patent Cases at the Supreme Court*, *supra* note 8, at 589.

³¹³ See *infra* Part V. B.

³¹⁴ Laser, *Certiorari in Patent Cases at the Supreme Court*, *supra* note 8, at 616; Madigan & Mossoff, *supra* note 166, at 946–47.

³¹⁵ Laser, *Certiorari in Patent Cases at the Supreme Court*, *supra* note 8, at 616; Madigan & Mossoff, *supra* note 166, at 946–47.

³¹⁶ BESSEN & MEURER, *supra* note 16, at 230 (“[L]acking distinct, well-developed doctrines evolved by competing courts, the Supreme Court cannot easily intervene . . .”).

national law like patent law and more. The National Court of Appeals would ease the burden of the Supreme Court.³¹⁷

In the current era of Supreme Court activity in patent law, what is more needed than uniformity and certainty from the Federal Circuit is informational signals to allow companies to manage risk of change—when will the Supreme Court reverse or change a patent law doctrine that affects the validity of its patents or its freedom to operate in a field? A prime informational signal would be the circuit splits and lack thereof that would develop with inter-circuit competition in patent law.

D. Technical and Subject Matter Expertise

1. Is Subject Matter Expertise in Patent Law Helpful?

Professor Bock argues that the organizational structure of the Federal Circuit, particularly the long tenure and expertise of its judges, contributes to stagnation at the Federal Circuit.³¹⁸ For example, he urges, experts might incorrectly believe that non-experts will have the same ease with the material, which could cause expert judges to issue judgments that will not be correctly understood or applied by non-experts.³¹⁹ Federal Circuit judges may articulate rules that smooth over nuances needed for district courts to understand and accurately apply the precedent. Moreover, experts are more likely to be resistant to correction in their area of expertise, which could account for the perception that the Federal Circuit fails to follow the precedent of the Supreme Court on patent law because this “likely creates a situation where the Federal Circuit is potentially operating without any meaningful moderating influence.”³²⁰

Moreover, in a court of exclusive jurisdiction, judges who repeatedly see certain issues of patent law but do not have much exposure to other areas of law are less likely to draw from the lessons available from other subject areas, in part because individuals tend to rely on information to which they are exposed more often.³²¹ Courts with more

³¹⁷ *But see* Frost, *supra* note 152, at 1572–73 (“Even if uniformity is a worthwhile goal, federal courts should not be the governmental institution responsible for providing it.”).

³¹⁸ Bock, *supra* note 62, at 203–04.

³¹⁹ *Id.* at 214–15 (“[A]ccording to experiments conducted by Pamela Hinds, experts may be prone to underestimating the difficulties encountered by non-experts who attempt to perform tasks within the expert’s field. . . . [T]he expertise of the Federal Circuit judges could potentially interfere with their ability to recognize when an error in the judgment below may be primarily attributable to vague, conflicting, or unworkable case law”) (citing Pamela J. Hinds, *The Curse of Expertise: The Effects of Expertise and Debiasing Methods on Predictions of Novice Performance*, 5 J. EXPERIMENTAL PSYCHOL.: APPLIED 205 (1999) (“[E]xperts may have a cognitive handicap that leads to underestimating the difficulty novices face.”)); Simon Rifkind, *A Special Court for Patent Litigation? The Danger of a Specialized Judiciary*, 37 A.B.A. J. 425, 425 (1951) (noting a specialized court will “develop[] a jargon of its own, thought-patterns that are unique, internal policies which it subserves and which are different from and sometimes at odds with the policies pursued by the general law.”).

³²⁰ Bock, *supra* note 62, at 217.

³²¹ *Id.* at 218 (noting that the tendency to rely on readily accessible information might inhibit the ability of Federal Circuit judges to accurately judge the issues presented in district courts).

expertise might be more prone to formalism.³²² Expertise can also lead to industry capture.³²³ In these ways, expertise in law can sometimes be a curse for an appellate court. Although expertise and the bias of not seeing difficulties non-experts will face might contribute to unwieldy or difficult-to-apply rules, other structural factors like the lack of competing circuit courts could have a stronger effect on stagnation of the law. Nonetheless, the value of expertise in patent law is likely overrated particularly given these drawbacks.³²⁴

Expertise in patent law is also no longer as needed now as it once was, in part because the Federal Circuit has already served a purpose of setting out opinions educating on the core issues of patent law.³²⁵ Moreover, access to information about cases in specialized subject areas and search functionality for finding information within a case file is easier, making judging patent cases an easier task than it was 40 years ago. Today, the Supreme Court largely ignores that expertise anyway, giving little deference to the Federal Circuit.³²⁶ Indeed, clashes in viewpoints are inevitable between an appellate court of specialized expertise and a Supreme Court without it. Law will be more stable if the makeup and directive of at least some appellate courts more closely matches that of the Supreme Court.

Furthermore, there is little evidence that legal expertise actually aids decision-making in law. Expertise in patent law is higher now in certain district courts than it was at the time the Federal Circuit was created, particularly after the Patent Pilot Program began, yet this has not resulted in observable improvements in judging patent disputes.³²⁷ Indeed, rather than specialization, patent law would likely benefit more

³²² PAUL D. CARRINGTON, *JUSTICE ON APPEAL* 168 (West Pub. Co. 1975); *see also* Charny, *supra* note 201, at 848.

³²³ Sapna Kumar, *Judging Patents*, 62 WM. & MARY L. REV. 871, 923 (2021); *Id.* at 882 (discussing the Eastern District of Texas) (“[T]he popularity of specialized courts with litigants may, moreover, be due to their bias rather than their quality”); *Id.* at 882 (discussing the Eastern District of Texas) (“[T]he popularity of specialized courts with litigants may, moreover, be due to their bias rather than their quality”).

³²⁴ *But see* Rochelle Cooper Dreyfuss, *What the Federal Circuit Can Learn from the Supreme Court and Vice Versa*, 59 AM. U. L. REV. 787, 792 (2010); Timothy B. Dyk, *Does the Supreme Court Still Matter?*, 57 AM. U. L. REV. 763, 772 (2008) (“The Supreme Court has repeatedly confirmed that the Federal Circuit has useful expertise in patent law, and that the Supreme Court benefits from having its views.”).

³²⁵ Molly Mosley-Goren, *Jurisdictional Gerrymandering? Responding to Holmes Group v. Vornado Air Circulation Systems*, 36 JOHN MARSHALL L. REV. 1, 15 (2002).

³²⁶ Paul R. Gugliuzza, *How Much Has the Supreme Court Changed Patent Law*, 16 CHI.-KENT J. INTELL. PROP. 330, 331 (2016).

³²⁷ The five-year report prepared by the Federal Judicial Center found that the pilot program had no impact on the rates of affirmance and reversal of trial court patent decisions at the Federal Circuit; rates of affirmance were roughly the same in both pilot and nonpilot cases. MARGARET S. WILLIAMS, REBECCA EYRE & JOE CECIL, *PATENT PILOT PROGRAM: FIVE-YEAR REPORT*, FED. JUD. CTR., at 36 (2016); *see also* David L. Schwartz, *Practice Makes Perfect? An Empirical Study of Claim Construction Reversal Rates in Patent Cases*, 107 MICH. L. REV. 223, 258–59 (2008) (reporting results from empirical study suggesting that “[t]here is no compelling evidence that trial court judges are improving with experience on claim construction”).

from exposure to expertise in other areas of law such as antitrust, commercial disputes, and other areas of law related to innovation at least in some appellate tribunals. Without evidence that specialized courts improve the law, we should err on the side of courts hearing all subject areas to avoid the known dangers of insularity.³²⁸

2. Does Patent Law Need Technically Trained Judges and is the Federal Circuit the Only Way to Get Them?

The types of scientific issues that arise in patent law are often complex.³²⁹ The scientific complexity of many patent cases can sometimes far exceed that of even complex environmental or criminal cases.³³⁰ Technical training can matter in making accurate rulings in patent cases, particularly complex scientific nuances such as the meaning of patent claims in high technology and medicine. Indeed, the Federal Circuit's high rate of reversing district court decisions construing, or determining the meaning of, patent claims, could in part be a function of differences in the scientific knowledge of the Federal Circuit judges versus generalist district court judges.

One drawback of the proposal is that not all patent appeals would get the benefit of the Federal Circuit judges' technical expertise. However, perhaps this will incentivize the President to nominate and the Senate to confirm more technically trained judges to all federal courts. Given that in the past decade, nearly five percent of the Supreme Court's docket was patent appeals,³³¹ it would be expected that at least having one clerk on the Court with a scientific background and knowledge of patent law would have been useful to the Court. Indeed, there are many other areas of law, such as environmental and criminal law, where knowledge of scientific issues would be valuable beyond patent law. The Supreme Court should have more clerks and ideally Justices with scientific and technical knowledge. If patent cases are spread to additional appellate circuits, it would be important that those courts have ideally some judges or clerks with technical fluency.³³² Particularly, if Congress adopts the National Court of Appeals, this new court should be staffed with at least some technically trained judges. If patent law is divided among regional circuits, and even if it is not, the President should try to nominate more qualified judges with scientific educations

³²⁸ David B. Rottman, *Does Effective Therapeutic Jurisprudence Require Specialized Courts (and Do Specialized Courts Imply Specialist Judges)?*, 37 CT. REV. 22, 24–25 (2000) (urging that specialized courts are the exception, not the norm, and should not be supported without evidence of their benefits); Kumar, *Judging Patents*, *supra* note 323, at 883 (“Because of these potential drawbacks, it is important to move cautiously with any plan to increase judicial specialization, and to ensure that the benefits outweigh the risks.”).

³²⁹ See, e.g., *Wisconsin Alumni Research Found. v. Apple Inc.*, 905 F.3d 1341, 1345 (Fed. Cir. 2018), *cert. denied*, 140 S. Ct. 44 (2019).

³³⁰ *Are Patent Cases Too Complex?*, GOODWIN LAW (Aug. 6, 2022), https://www.goodwinlaw.com/publications/2006/10/20061023/23_02.

³³¹ Laser, *Certiorari in Patent Cases at the Supreme Court*, *supra* note 8, at 571.

³³² See Paul R. Michel, *The Court of Appeals for the Federal Circuit Must Evolve to Meet the Challenges Ahead*, 48 AM. U. L. REV. 1177, 1184–85 (1999) (urging that as scientific advancement radically shapes commercial arrangements, society and business “will be less tolerant of . . . possibly unsound adjudications by general adjudicators handling highly complicated matters of great economic importance . . .”).

to regional circuits for the benefit of all cases requiring technical expertise. This will help not only in patent cases but also in cases such as criminal law, environmental law, and other scientifically complex cases that are currently appealed to other courts. To help offset the concern that regional circuits lack technical education to judge patent cases and that it will take decades to confirm additional judges with technical knowledge, Federal Circuit judges could occasionally sit by designation on regional courts in patent cases. This might be particularly valuable in the early years before the President has nominated and the Senate confirmed any judges with a scientific background to the regional appellate court or courts hearing patent appeals.

Nonetheless, technical knowledge, while helpful, is not required to fairly decide patent cases; district courts are regularly tasked with deciding these complex issues and typically rely on the testimony of experts rather than their own independent scientific knowledge to understand the issues in the case, and the Supreme Court decides patent cases having little to no scientific understanding among the judges or their clerks.³³³ There might also be a benefit to the diversity of thought obtained by having both generalists and specialists deciding issues of patent law in different jurisdictions, furthering the laboratory of ideas.

E. Timing and Stays of Appeal and Schrödinger's Patents

One risk is that in a system split by case type, a district court case on one patent might result in a different outcome on appeal than a PTAB appeal on the same patent. However, this outcome already regularly occurs when the Federal Circuit is the exclusive court of appeals, in part because of different burdens in district courts and the PTAB.³³⁴ District courts often try to avoid this outcome by issuing a stay of proceedings until the PTAB case is resolved, which district courts could continue to do under this new model. It is likely that regional circuits will, like many district courts, stay cases pending appeal of issues to the Federal Circuit where the same patent was at issue in a pending appeal from the PTAB.

Others might have concerns that in a system with regional variation in appellate law, patents will be invalid in one region and not invalid in another, a sort of Schrödinger's patent.³³⁵ However, after *Blonder-Tongue*,³³⁶ where the Supreme Court held that a patentee is estopped from relitigating the validity of a patent held invalid in any prior suit, this creates fewer problems. A patent is now only either alive or dead—either it has been found invalid or it remains valid nationwide. Moreover, after a change to the federal appellate structure, it is likely that if one circuit court of appeals affirmed a finding that a patent was invalid, the other circuit court would likely stay their appeal until such time as the validity of the patent in the prior suit was finally determined. The proposal for the National Court of Appeals would likely provide shorter durations of final resolution of these issues than the current model of relying solely on the Supreme Court because it would likely have more capacity.

³³³ Kumar, *Judging Patents*, *supra* note 323, at 888–89.

³³⁴ Paul R. Gugliuzza, *(In)Valid Patents*, 92 NOTRE DAME L. REV. 271, 273, 290–91 (2016).

³³⁵ JOHN GRIBBIN, IN SEARCH OF SCHRÖDINGER'S CAT: QUANTUM PHYSICS AND REALITY 2 (1984).

³³⁶ *Blonder-Tongue Labs., Inc. v. Univ. of Ill. Found.*, 402 U.S. 313 (1971).

F. *Handling Federal Circuit Precedent at Regional Circuits*

Regional circuits are likely to respect principles of comity³³⁷ when dealing with the same companies, products, or intellectual property rights, but not necessarily when dealing with the same legal issues in different factual contexts.³³⁸ In a recent trademark case, *Georgia-Pacific Consumer Products LP v. von Drehle Corp.*, the Fourth Circuit declined to issue a nationwide injunction barring infringement after finding that von Drehle infringed Georgia-Pacific's trademark on paper towels because other regional circuits had declined to issue injunctions for similar products in their jurisdictions.³³⁹ The Fourth Circuit decided to limit the scope of the injunction to acts within the circuit in order to respect the judgments of other courts.³⁴⁰

If the precedent from the Federal Circuit were to apply as though it was heard by that circuit, with *en banc* opinions carrying precedential weight and panel opinions carrying the weight of a panel of that court, this would help to reduce the pain of the period of early uncertainty created by separating the courts and retain the benefit of forty years of precedent. Even if regional courts are free to make their own determination of how to handle the precedent of the Federal Circuit, it would be wise to announce that they will take advantage of this precedent to reduce the risk of a surge of appeals on the same issues shortly after the court obtains jurisdiction in patent appeals. Professor Dreyfuss asserts that other circuit courts might defer to Federal Circuit precedent regardless of merits even if it is not deemed binding precedent,³⁴¹ but this assertion underestimates the seriousness with which judges approach such determinations.³⁴²

Some might have fears that adopting the Federal Circuit's precedent would perpetuate the ossification and formalism embodied in that precedent. This does pose a significant risk. However, this must be balanced against the risk of destabilization and unpredictability that would arise otherwise if this precedent were suddenly discarded for cases newly arising under the jurisdiction of regional circuit courts. If the regional circuits choose to follow *en banc* Federal Circuit decisions as precedent,

³³⁷ *Federal Comity Doctrine*, BLACK'S LAW DICTIONARY (11th ed. 2019) (defining under comity, courts at the same level may refrain from interfering with each other's rulings.).

³³⁸ See *Georgia-Pac. Consumer Prods. LP v. Von Drehle Corp.*, 781 F.3d 710, 717 (4th Cir. 2015).

³³⁹ *Id.* ("[F]or the sake of comity, we require, under the unique circumstances of this case, that the injunction be limited geographically to the States in this circuit.").

³⁴⁰ *Id.*

³⁴¹ Dreyfuss, *In Search of Institutional Identity: The Federal Circuit Comes of Age*, *supra* note 70, at 811 ("Nard and Duffy's solution may produce fewer splits and less dialogue than they expect" because other circuits might "sav[e] resources by simply adopting the Federal Circuit's law based on its presumed expertise, rather than because they are persuaded the Federal Circuit's views are accurate.").

³⁴² If Federal Circuit precedent is not binding, it might be considered and cited by the parties in cases regional circuits, but it would not blind the regional circuits to alternative interpretations of law that they believe to be correct. See *Foster v. Hallco Mfg. Co.* 947 F.2d 469, 475–76 (Fed. Cir. 1991).

the regional circuit courts would be free to develop new law on the numerous issues not previously decided by the *en banc* Federal Circuit. Doing this would allow a more gradual transition back to regional jurisdiction and the benefit of decades of consideration and expertise that the Federal Circuit's precedent offers.

G. *What Other Judicial Experiments Can be Run to Determine Whether Further Change is Needed in the Federal Circuit's Jurisdiction?*

If deep structural changes to the Federal Circuit are politically impossible, there are other options for limited experimentation to see if changes to the scope of the Federal Circuit's jurisdiction improves the quality of law in those areas. Perhaps some issues in patent law cases can be returned to the regional circuits, such as damages, remedies and equitable defenses, and venue and jurisdiction, which do not have the same national uniformity needs as issues in patent law that require claim interpretation, such as infringement and invalidity.³⁴³ One might raise concern that this change would cause confusion over which circuit's law applies to which issues in lower courts. However, just as currently issues of procedural law are decided according to the law of the regional circuit courts, issues of remedies, venue, and jurisdiction can also be decided according to regional circuit law even if the appeal as a whole ultimately goes to the Federal Circuit. At a minimum, Congress should eliminate Federal Circuit jurisdiction over patent appeals that do not require technical expertise, such as design patents.³⁴⁴

H. *How Can We Decide the Purpose of the Court and Determine Whether the Federal Circuit is Working?*

The Federal Circuit was not born from a single Congressional intent, but from a consensus among different interests and their intents.³⁴⁵ Nonetheless, some of the goals included creating nationally uniform patent law, improving the certainty of patent rights, and reducing forum shopping.³⁴⁶ How can we know whether the Federal Circuit has served these purposes and whether these roles are still needed in the modern legal context, or even if they ever were needed?

The United States now has more nationally binding rulings on issues of patent law than could ever have occurred prior to the creation of the Federal Circuit and judges that brought scientific background, intellect, and subject matter expertise to patent law

³⁴³ The author considers inequitable conduct to be a species of invalidity, rather than an equitable defense, Christa J. Laser, *Equitable Defenses in Patent Law*, 75 U. MIAMI L. REV. 1, 32, 51 (2020) (“[D]eception in obtaining a patent beyond the scope of one’s invention might more accurately be described as a species of invalidity than an equitable defense.”), so inequitable conduct should be retained within the jurisdiction of the Federal Circuit under this model.

³⁴⁴ Peter Menell & Ryan Vacca, *Improving Intellectual Property Percolation*, work-in-progress presented at the 2021 Works-in-Progress IP Conference, Feb. 11, 2021; see also Peter Menell & Ella Corren, *Design Patent Law’s Identity Crisis*, 36 Berkeley Tech. L. J. 1 (2021) (forthcoming).

³⁴⁵ Richard H. Seamon, *The Provenance of the Federal Courts Improvement Act of 1982*, 71 GEO. WASH. L. REV. 543, 564, 566 (2003).

³⁴⁶ S. Rep. No. 97-275, at 4–5, 21 (1981).

decisions.³⁴⁷ The last forty years of the Federal Circuit's work has left a permanent mark on patent law.³⁴⁸ Even if the Federal Circuit's exclusive jurisdiction is modified, the precedent formed during nearly four decades of operation will live on and influence patent law (persuasively or as binding precedent, depending upon how its precedent is treated) for generations to come. Moreover, the practices that have been implemented in other tribunals as a result of the Federal Circuit's rulings, such as early *Markman* hearings in district courts to decide issues of claim construction, will continue nationwide even if patent appellate jurisdiction is restored to the regional circuits. The lasting impact that will remain even if the Federal Circuit's exclusive jurisdiction is now changed might offset concerns of implementing change.

Some of the roles of the Federal Circuit might have been needed at the time of its creation but no longer needed today. Even if the Federal Circuit's jurisdiction worked for a time for some intended purposes, many of those purposes have been fulfilled. The legal environment changed since the Federal Circuit's creation: the Supreme Court became more active, appeals from the PTAB came to dominate the Federal Circuit's docket after America Invents Act, laws around venue have changed forum shopping practices, and Federal Circuit has already addressed many of the pressing questions of patent law that were not resolved at a national level at the time of the Federal Circuit's creation. The current jurisdictional structure of the Federal Circuit might no longer be needed, and the evidence that it worked in the past is not evidence that it will necessarily work in the future.

Nonetheless, some roles that the Federal Circuit serves might need to be continued. For example, if a regular and large stream of nationally uniform patent law decisions is still necessary for the maintenance of patent law, in the absence of exclusive jurisdiction, then a new secondary appellate court such as that recommended by the Hruska Commission would be needed to provide uniformity and informed decision-making when the Supreme Court is unable to do so. Otherwise, patent stakeholders would need to come to terms with the level of uncertainty in patent law matching that seen in many other areas of the law where the Supreme Court is the primary means for uniformity. The Federal Circuit currently hears hundreds of patent cases per year, with novel issues of law arising regularly among those.³⁴⁹ The Supreme Court, even the current Supreme Court that is more active in patent law than it has been for half a century or more, cannot keep pace with that rate of review and resolution of pressing issues of patent law at the Federal Circuit today. If exclusive jurisdiction in patent law is eliminated, this Article recommends that a new structure such as the National Court of Appeals should be adopted to fill its place in order to reduce the risk of uncertainty and nationwide disuniformity of law.

Society must determine which purposes for the Federal Circuit (such as uniformity and certainty) are more valuable in today's legal context relative to their tradeoffs (such as ossification and poor percolation of law). Stakeholders also must determine whether the Federal Circuit is still needed for the purposes it once served. A change to the structure of the Court of Appeals for the Federal Circuit that results in appeals

³⁴⁷ Christa Laser, *Certiorari in Patent Cases at the Supreme Court*, *supra* note 8.

³⁴⁸ 28 U.S.C. §1295(a)(1) (2012).

³⁴⁹ Dan Bagatell, *Fed. Cir. Patent Decisions In 2021: An Empirical Review*, LAW360, (Jan. 6, 2022, 1:32 PM), <https://www.law360.com/articles/1452355>.

from district court being decided instead by the regional circuit courts should be considered. This changing structure could enhance percolation of law before it reaches the Supreme Court and have a key impact in improving the quality of patent law.

VI. CONCLUSION

After 40 years, we have no evidence that the experiment of placing exclusive jurisdiction for patent appeals in the Court of Appeals for the Federal Circuit is still needed for the future. Indeed, with changing times, it might be that diversity of legal thought in patent law is now a more important consideration than the certainty needs that drove creation of the Federal Circuit in 1982. A judicial structure must balance needs such as uniformity, certainty, and technical expertise along with risks of ossification and poor-quality law. A change to the structure of the Court of Appeals for the Federal Circuit that results in appeals from district courts being decided instead by the regional circuit courts should be considered. Additionally, in concert with this change, Congress could create a National Court of Appeals similar to that recommended by the Hruska Commission, which would provide national uniformity in all subject areas after those cases have percolated through regional circuit courts of appeal. These new judicial structures together could enhance percolation of law before it reaches the Supreme Court, expand the diversity of legal thinking that reaches the Court, address the Supreme Court's current failure to resolve national conflicts of law on many important issues, and improve the quality of law.