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Patent Amicus Briefs: What the Courts' Friends Can Teach Us About the Patent System

Permalink

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Journal

UC Irvine Law Review, 1(2)

ISSN

2327-4514

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Publication Date

2011-06-01

Patent Amicus Briefs: What the Courts' Friends Can Teach Us About the Patent System

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^{*} Assistant Professor, Santa Clara University School of Law. I thank Mark Lemley, Dan Burk, and the UC Irvine Law Review for inviting me to participate in its inaugural volume; Michael Risch, Eric Goldman, Jeanne Fromer, David Schwartz, Ted Sichelman, Brad Joondeph, John Duffy, Ed Reines, Mark Lemley and participants at the UC Irvine School of Law "Bend or Break" 2010 Symposium and the 2010 Loyola Los Angeles Symposium "The Federal Circuit as an Institution" for their comments; Don Cung, Nikki Qi, Roozbeh Gorgin, and Justin Muller for excellent research assistance; and Dirk Calcoen for his support.

I. INTRODUCTION

Over the last two decades, the courts have become the primary source of patent law and policy. During the half decade or so that Congressional patent reform was pending,¹ the Federal Circuit and Supreme Court reshaped the laws governing innovation in the United States by deciding what can be patented,² the scope of patent rights,³ and the remedies to which patentees are entitled.⁴ Much of this was done in a nuanced way that took into account the different contexts of innovation. As Dan Burk and Mark Lemley have described, in so doing the courts developed industry-specific policy levers in an otherwise uniform body of patent law.⁵ Their insight was key, and the courts do deserve credit. However, they have not accomplished these feats alone.

An important source of the courts' awareness of the contexts of patent law has been amicus briefs. While judges insist that they do not "make policy" but instead decide disputes between parties,⁶ the broader interests at stake in a case are routinely raised by amicus briefs. As the Federal Circuit once said in an unusually public embrace of its policy role: "the administration of this law affects major commercial and societal interests. The number and diversity of the amicus curiae [] briefs reflect the complexity of these concerns.... The public interest here is not in the fate of these litigants and these long-expired patents; the interest is in the way this judge made law affects technologic innovation and competition."⁷⁷

In recent years, amicus brief advocacy has arguably been both more effective and more cost-effective⁸ than lobbying Congress. While the industries most

- 1. These efforts date back to 2005 and include: the Patent Reform Act of 2009, S. 515, 111th Cong. (2009) (Hatch/Leahy Bill); S. 610, 111th Cong. (2009) (Kyl Bill); H.R. 1260, 111th Cong. (2009) (Conyers Bill); Patent Reform Act of 2007, H.R. 1908, 110th Cong. (2007) (Berman Bill); S. 1145, 110th Cong. (2007) (Leahy Bill); Patent Reform Act of 2006, S. 3818, 109th Cong. (2006) (Hatch Bill); Patent Reform Act of 2005, H.R. 2795, 109th Cong. (2005) (Smith Bill), which finally culminated in the passage of the America Invents Act in 2011. Leahy-Smith America Invents Act, Pub. L. No. 112-29 (2011).
- 2. See, e.g., Bilski v. Kappos, 130 S. Ct. 3218 (2010) (addressing what comprises patentable subject matter); KSR Int'l Co. v. Teleflex, Inc., 550 U.S. 398 (2007) (articulating the obviousness standard in patent law).
- 3. See, e.g., Microsoft Corp. v. AT&T Corp., 550 U.S. 437 (2007) (limiting liability for exporting infringing source code).
- 4. See, e.g., eBay v. MercExchange, L.L.C., 547 U.S. 388 (2006) (ruling that courts should use a four-factor test to decide whether to award an injunction to a prevailing patentee).
- 5. See generally Dan L. Burk & Mark A. Lemley, The Patent Crisis and How the Courts Can Solve It (2009).
- 6. Comments of Federal Circuit judges during "Lunch with the Judges," hosted by the Federal Circuit Bar Association and Santa Clara University Law School at Santa Clara University (Nov. 4, 2008)
- 7. Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., 344 F. 3d 1359, 1379 (Fed. Cir. 2003) (footnote omitted).
 - 8. Morriss and Nard argue that this was also the case in the nineteenth century. Andrew P.

interested in patent reform spend millions of dollars per year on political lobbying,⁹ preparing an amicus brief typically costs no more than \$10,000 to \$20,000. Even the most active amici file only a handful of times each year,¹⁰ and the cost of each brief can be split among cosigners. During the years it took to pass Congressional patent reform, the courts issued many decisions addressing the problems motivating legislative action.¹¹ This is not a coincidence, but a reflection of the courts' responsiveness to the issues facing the modern patent system and, in turn, the patent stakeholders that have informed their decision making.

While the study of patent amicus briefs has been limited to date, ¹² amicus interest in patent cases is at an all-time high. *Bilski v. Kappos*, ¹³ a case which addressed the scope of patentable subject matter, attracted sixty-five nonparty briefs sponsored by hundreds of amici, ¹⁴ putting it into the same category as the landmark affirmative action case *Regents of the University of California v. Bakke* (fiftyfour briefs) and the landmark abortion case *Webster v. Reproductive Health Services*

Morriss & Craig Allen Nard, Institutional Choice & Interest Groups in the Development of American Patent Law: 1790-1870, 19 SUP. CT. ECON. REV. (forthcoming 2011), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1262970 ("Although the federal courts have generally been viewed as relatively costly to capture, because of the lack of docket control for individual judges, the general jurisdiction of the courts, and the unpredictability of juries, we argue that the nineteenth century federal bench was less costly to influence than Congress in many instances.").

- 9. For instance, in 2009, the pharmaceutical industry spent \$271 million on lobbying and the computer-internet industry spent \$119 million, likely on a variety of issues including patent reform. This made them the first- and sixth-ranked industries in terms of lobbying, respectively. *Lobbying Spending Database*, CENTER FOR RESPONSIVE POLITICS, http://www.opensecrets.org/lobby/top.php?showYear=2009indexType=i (last visited Feb. 27, 2011).
- 10. Among them, the American Intellectual Property Law Society [hereinafter "AIPLA"] filed six briefs in patent law cases in 2006. *See Judicial Advocacy Archives*, AM. INTELL. PROP. L. ASS'N, http://www.aipla.org/advocacy/judicial/judArchives/Pages/default.aspx (last visited Feb. 27, 2011).
- 11. Patent Reform in the Courts and Congress: Hearing before the Senate Committee on the Judiciary, 111th Cong. 1 (2009) (Testimony of Mark A. Lemley, Professor, Stanford Law School), available at http://judiciary.senate.gov/pdf/09-03-10Lemleytestimony.pdf (describing how "the courts have acted to fix a number of these . . . problems that were the focus of initial Congressional reform," for example, the eBay v. MercExchange and Volkswagen decisions addressing the problems of injunction abuse and forum shopping, respectively).
- 12. One study is DAVID OROZCO & JAMES G. CONLEY, INNOVATION POLICY AND FRIENDS OF THE COURT: INTELLECTUAL PROPERTY ADVOCACY BEFORE THE U.S. SUPREME COURT (2008), available at http://www.law.northwestern.edu/searlecenter/papers/Conley_Orozco_Innovation_Policy.pdf (positing four groups of patent stakeholders and considering Supreme Court patent briefs filed since 1982). There is also an extensive literature on Supreme Court amicus briefs generally. See, e.g., Paul Collins, Lobbyists before the US Supreme Court: Investigating the Influence of Amicus Curiae Briefs, 60 POL. RES. QUART. 1 (2007); John Harrington, Amicus Curiae in the Federal Courts of Appeals: How Friendly Are They?, 55 CASE W. RES. L. REV. 667 (2005); Joseph Kearney & Thomas Merrill, The Influence of Amicus Curiae Briefs on the Supreme Court, 148 U. PENN. L. REV. 743 (2000); Linda Simard, An Empirical Study of Amicus Curiae in Federal Court: A Fine Balance of Access, Efficiency, and Adversarialism, 27 REV. LITIG. 669 (2008).
 - 13. Bilski v. Kappos, 130 S. Ct. 3218 (2010).
- 14. Bilski v. Kappos, SCOTUSBLOG, http://www.scotusblog.com/case-files/cases/bilski-v-kappos/ (last visited Feb. 27, 2011) (see list of Amicus Briefs).

(seventy-eight briefs).¹⁵ At the en banc stage, the Federal Circuit not only welcomed amicus briefs but also invited as many amici as parties to provide oral argument.¹⁶ Chief Judge Michel publicly praised many of the briefs the court received as "high quality, credible, candid, and convincing."¹⁷ The Federal Circuit cited the arguments of amici nearly thirty times, ¹⁸ identifying many briefs specifically by name.¹⁹ The court was not merely being polite, but pragmatic. By addressing the concerns of amici, the court arguably was attempting to anticipate and address arguments that would be later made to the Supreme Court.²⁰

Among appellate courts, the Federal Circuit has been particularly receptive to its friends.²¹ Acting alone in mid-2009, the court extended the period of time available for the submission of amicus briefs at the petition for rehearing and rehearing en banc stage from seven to fourteen days.²² It maintains an amicus "invite" list which it uses to solicit briefs of nonparties when the court wants them that includes bar associations and other organizations.²³ All of these developments portend well for the future of patent amicus briefing in the courts.

Importantly, amici also represent the so-called "fourth pillar" of the patent system—patentees themselves.²⁴ The patent system is generally conceived of in terms of its three principal institutions: Congress, the courts, and the Patent &

- 15. Paul M. Collins Jr., Lobbyists Before the US Supreme Court: Investigating the Influence of Amicus Curiae Briefs, 60 POL. RES. QUART. 55 (2007).
- 16. The amici invited to participate in oral argument were Regulatory Data Corp and Bank of America and its co-amici. *See*, Order, in *In re Bilski*, 545 F.3d 943 (Fed. Cir. 2008)(en banc) (No. 07-1130), *available at* http://www.patentlyo.com/patent/law/bilskiamicusorder.pdf.
- 17. Paul Michel, A Review of Recent Decisions of the United States Court of Appeals for the Federal Circuit, 58 Am. U. L. REV. 699, 705 (2009).
- 18. Eleven times in the opinion, four times in the concurrence, and fourteen times in the dissent, for a total of twenty-nine cites to amici.
- 19. The majority opinion specifically cites briefs from the American Intellectual Property Law Association and Regulatory Datacorp, Consumers Union, William Mitchell College of Law Intellectual Property Institute, Financial Services Industry, End Software Patents, Accenture, and Red Hat, Inc. *In re Bilski*, 545 F.3d at 955–60 (Fed. Cir. 2008).
- 20. *Id.* Many amici that filed briefs in the Federal Circuit (including the AIPLA, Borland, and Accenture) did so as well at the Supreme Court.
- 21. To estimate amicus briefing for purposes of comparing the various circuit courts, I did a keyword search for "amicus" within opinions issued from 1999 to 2009. Based on this methodology, 9% of Federal Circuit decisions used this term, slightly higher than the average across circuits (8%, non-weighted). Among circuits, amici were mentioned most frequently in the D.C. Circuit (15%) and least frequently in the Third Circuit (3%).
- 22. FED. CIR. R. 35(g), 40(g), available at http://www.cafc.uscourts.gov/images/stories/rules-of-practice/rules_2010.pdf; see also Michel, supra note 17, at 705.
- 23. FED. CIR. R. 29(b) ("The clerk will maintain a list of bar associations and other organizations to be invited to file amicus curiae briefs when the court directs. Bar associations and other organizations will be placed on the list if they request. The request must be renewed annually not later than October 1.").
- 24. Colleen Chien, From Arms Race to Marketplace, 62 HASTINGS L.J. 297, 303–10 (2010) (describing the influence of demonstration effects, licensing practices, and other forms of patentee behavior on the patent system).

Trademark Office (PTO). However, patentees, through amicus briefs, lobbying, patenting, and litigation, for example, have also shaped the modern patent system in significant and thus far largely unstudied ways.²⁵ For example, while congressional patent reform was pending, disagreement between the pharmaceutical and high-tech industries has been characterized as making it impossible to enact meaningful congressional patent reform.²⁶ A rules package proposed by the PTO to limit the use of continuation applications was rescinded in large part because it was so unpopular with the patent bar.²⁷ These events arguably demonstrate the influence that patentees have on how the patent system changes—or in these cases, doesn't.

Amicus briefs provide a rich source of empirical data for studying patent groups and their interests in the patent system. Briefs state what amici want on the record, making them easier to track than the high-priced dinners and backroom deals associated with congressional lobbying. There are few barriers to participation—as long as an entity properly submits and formats its brief, it will be accepted by the court—no fee²⁸ or special relationship with a member of Congress required.²⁹ As a result, around 1,000 briefs have been filed in patent cases over the twenty-year period studied.³⁰

Briefs also provide insights into the patent system's alliances. As the work of Burk and Lemley reminds us, patents play different roles in different industries, and the courts have been responsive to these differences.³¹ However, the courts have also engaged in other forms of patent law tailoring: to different patent

^{25.} The historical literature is richer in this area. See, e.g., Morriss & Nard, supra note 8, at 5 (describing the role of interest groups in the development of nineteenth-century patent law); see also Fritz Machlup & Edith Penrose, The Patent Controversy in the Nineteenth Century, 10 J. ECON. HIST. 1 (1950) (describing the positions and advocacy of various interest groups, collectively forming the "antipatent movement" and "patent advocates" in Europe and the US during the nineteenth century).

^{26.} See, e.g., Robert E. Thomas, Vanquishing Copyright Pirates and Patent Trolls: The Divergent Evolution of Copyright and Patent Law, 43 AM. BUS. L.J. 689, 733–34 (Winter 2006) (describing biotech/pharma industries as having "stymied" the hi-tech industry's momentum in passing patent reform); Manus Cooney, The America Invents Act—How it All Went Down, IPWATCHDOG (Sept. 30, 2011, 3:30 PM), http://ipwatchdog.com/2011/09/20/the-america-invents-act-how-it-all-went-down/id=19294/ (describing the ongoing behind-the-scenes clashes between the IT and innovator industries up to the passage of the bill).

^{27.} USPTO Rescinds Controversial Patent Regulations Package Proposed by Previous Administration, UNITED STATES PATENT AND TRADEMARK OFFICE (Oct. 8, 2009), http://www.uspto.gov/news/09_21.jsp. The most controversial of the proposed rules, a limit on the number of continuations, was also held by the Federal Circuit to be inconsistent with §120 of the Patent Act. Tafas v. Doll, 559 F.3d 1345 (Fed. Cir. 2009), rev'd en banc, 328 Fed. Appx. 658 (Fed. Cir. 2009).

^{28.} FED. R. APP. P. 29 (listing the requirements for submitting an amicus brief).

^{29.} This is not to say that changes to the patent system through the courts and Congress are mutually exclusive. According to Morriss and Nard's account of the development of patent law in the nineteenth century, patent interest groups sought changes in interpretation of the law from the courts, and then sought codification of these changes by changing the text of the law itself through Congressional reform. Morriss & Nard, *supra* note 8, at 54–66.

^{30.} Described infra Part III.

^{31.} See generally BURK & LEMLEY, supra note 5.

business models for instance.³² The diversity of interests in the patent system can be better understood by looking at how patent stakeholders cluster on amicus briefs.

This paper uses amicus briefs filed in Supreme Court and Federal Circuit patent cases from 1989 to 2009 to better understand the patent system, focusing specifically on who is interested in the patent system, the positions they have advocated, and the effectiveness of their advocacy. Based on its analysis of twenty years of briefs, it finds that, among a diverse set of patent system constituents, high-tech and biotech/pharmaceutical companies and patent lawyers filed the most amicus briefs. What seemed to determine how amici advocated was their business model. Nonpracticing entities (NPEs), for example, nearly always weighed in for the patentee while public companies often filed briefs against the patentee.

The data collected also support that certain kinds of briefs have influenced the court, namely certiorari and en banc briefs, as well as briefs filed by the United States. The courts were much more likely to grant certiorari or a petition for en banc rehearing if an amicus brief was filed with the petition, or for or against the petition. The Supreme Court was also more likely to grant certiorari when a negative brief was filed than if no brief was filed.

Among individual amici, the briefs of the United States were exceptionally prescient. Over the twenty years studied, every single amicus brief authored by the United States in a Supreme Court patent case except one predicted the case outcome. That is to say, in almost all cases, the Court took the side the Government brief told it to, and in one case, dismissed certiorari as improvidently granted when the Government recommended doing so. It was harder to detect the influence of amicus on the courts' jurisprudence. I failed to find evidence that the courts were more likely to rule for the side supported by the greatest number of amici. Section II discusses why and how amici file briefs; Section III describes the data and methods we used to analyze amicus participation in patent cases; Section IV describes my findings, and Section V concludes.

II. THEORIES AND MECHANICS OF AMICUS PARTICIPATION

Each amicus brief contains two parts: the cover page and the rest of the brief. The cover page describes who has filed the brief and their position in the case.³³ Often this is the only portion of the brief that will make it into the decision,

^{32.} See, e.g., eBay v. MercExchange, L.L.C., 547 U.S. 388 (2006) (articulating a four-factor standard that makes it harder for some types of pure licensing entities to get injunctions); Fla. Prepaid Postsecondary Educ. Expense Bd. v. College Sav. Bank, 527 U.S. 627 (1999) (ruling on the defense of sovereign immunity to charges of patent infringement by state universities).

^{33.} Compare SUP. CT. R. 33.1(g) (requiring Supreme Court brief covers to show which party it favors by color), with FED. R. APP. P. 32(a)(2) (requiring Federal Circuit brief covers to always be

if any,³⁴ and the only part of the brief that the court will consider as the judges are selective about the briefs they read.³⁵ As Justice Scalia has said, the front page is where a collective body makes its strongest point, by providing support for one side or the other.³⁶ The remainder of the brief contains legal arguments or factual information that, ideally, supplements rather than merely repeats what the parties have presented. The ideas and information presented by amici can in this way enhance the court's decision making. Broadly speaking, the "affected groups" and "information" theories of amicus participation describe the functions of a brief that are served by its cover page and its content, respectively.

A. Affected Groups/Stakeholder Theory

According to the "affected groups" theory, amicus briefs serve as a barometer of public opinion.³⁷ Since the vast majority of appellate cases have no amicus briefing,³⁸ the submission of even one nonparty brief in a case signifies that it is important. When there are multiple amici, the briefs serve as a kind of "poll" of the community—each brief representing a "vote" by an outside stakeholder. The affected groups theory underscores that while the judiciary may be perceived as impartial and insulated from special interests,³⁹ judges are often

green), and FED. R. APP. P. 29(c) (requiring Federal Circuit brief covers to identify the party or parties supported, if any (amici need not support either party) and whether the briefs support affirmance or denial).

- 34. Only about half of the decisions studied contained any reference to amici, often in the abstract or only with reference to a select few. See infra Table 2; see also Aerojet-General Corp. v. Machine Tool Works, Oerlikon-Buehrle Ltd., 895 F.2d 736, 738 n.3 (Fed. Cir. 1990) (The court's only mention of amici was the following: "Amicus curiae briefs were filed by the Federal Circuit Bar Association, the American Intellectual Property Law Association, the District of Columbia Bar, and the Bar Association of the District of Columbia.").
- 35. See, e.g., Simard, supra note 12, at 23 (describing a telephone interview with Justice Ginsburg: "[The Justice's] clerks often divide the amicus briefs into three piles: those that should be skipped entirely; those that should be skimmed; those that should be read in full."). Accord ANTONIN SCALIA & BRYAN A. GARNER, MAKING YOUR CASE: THE ART OF PERSUADING JUDGES 102–06 (2008) ("In general, unless a prominent attorney or authority files the brief, the law clerks will very likely screen it and it will never reach the judge's desk.").
 - 36. SCALIA & GARNER, *supra* note 35.
 - 37. Joseph Kearney & Thomas Merrill, supra note 12, at 785.
- 38. In 2010, about 10% of cases appeared to have briefing, based on an analysis in the CTA database in Westlaw using the search string "amic! /4 curi!" within the decision or attorney portion of the decision. Amicus briefing in district court cases is even rarer.
- 39. Simard, *supra*, note 12, at 681–82 (citations omitted) ("[T]raditional jurisprudence would suggest that the judicial branch is to be insulated from majoritarian pressures, not subject to them. Yet, the judiciary's institutional legitimacy is ultimately dependent upon the influence of its decisions upon society. To the extent that the strength of the judicial system depends upon having its decisions followed and not overridden, altered or ignored, judges have an incentive to fit within the parameters of broadly shared public opinion. Moreover, lacking the purse and the sword, the judicial branch is not equipped to enforce its decisions without the assistance of the other branches of government and the goodwill of the citizenry. Thus, while the judicial branch is theoretically shielded from majoritarian forces, the practical reality suggests that some consideration of public opinion may be prudent.").

aware of and inevitably influenced by the real-world contexts of their decision making. 40

Exemplary of this theory, the Federal Circuit cited "the number and diversity of the amicus curiae briefs reflect[ing] the complexity of [] concerns and the variety of viewpoints among technology-based enterprises" in its en banc *Festo* decision.⁴¹ In the *Bilski* case which involved a business method claim, briefs filed by biotech, medical device, consumer, and other groups⁴² demonstrated the case's broader impact. The less obvious the "affected group," the greater the impact the brief can have. For instance, in the case of *In re Volkswagen*⁴³, a products liability case in the Fifth Circuit, patent amici presented briefs that demonstrated the wideranging impact of a proposed venue rule on patent law, a completely different area of law.⁴⁴

While democratic in theory, the "affected groups" function of amicus briefs suffers several shortcomings in practice. First, not every affected group files an amicus brief. Though patent laws have downstream impacts on the prices of goods, for example, consumer groups are relatively underrepresented among amici.⁴⁵ Preparing and submitting an amicus brief requires organizational resources and an understanding of the issues in a case not always within the reach of all of the patent system's constituents. Second, allowing the submission of a brief by any "affected party" may compromise judicial efficiency. "Me-too" briefs that simply repeat the arguments of the parties can increase the costs of litigation and add to already heavy judicial caseloads.⁴⁶ While the Federal Circuit has declined to limit the submission of such briefs as have other courts,⁴⁷ it has noted

^{40.} See, e.g., Paul R. Michel, A Review of Recent Decisions of the United States Court of Appeals for the Federal Circuit: Introduction: The Challenge Ahead: Increasing Predictability in Federal Circuit Jurisprudence for the New Century, 43 Am. U. L. REV. 1231, 1253 (1994) (extolling the virtue of "realism" in judicial decision making).

^{41.} Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., 344 F. 3d 1359, 1379 (Fed. Cir. 2003).

^{42.} E.g., Brief of Amicus Curiae Medistem Inc., in Support of the Petition for a Writ of Certiorari, Bilski v. Doll, 129 S. Ct. 2735 (2009) (No. 08-964), 2009 U.S. S. Ct. Briefs LEXIS 387; Brief of Amicus Curiae Medtronic, Inc., in Support of Neither Party, *Bilski*, 129 S. Ct. 2735 (No. 08-964), 2009 U.S. S. Ct. Briefs LEXIS 728; Brief of Eleven Law Professors and AARP as Amici Curiae in Support of Respondent, Warsaw v. Kappos, 129 S. Ct. 2735 (2009) (No. 08-964), 2009 U.S. S. Ct. Briefs LEXIS 993.

^{43.} In re Volkswagen of Am., Inc., 545 F.3d 304 (5th Cir. 2008).

^{44.} Briefs in this case were submitted by the Union Pacific Railroad Company, Liability Advisory Council, American Intellectual Property Law Association, Ad Hoc Committee of Intellectual Property Trial Lawyers in the Eastern District of Texas, and a group of law professors. *See* Edward R. Reines, Weil, Gosthal & Manges LLP, Address at the 10th Annual Silicon Valley Patent Law Institute (Dec. 11, 2009).

^{45.} They represent less than 20% of patent amici. See infra Figure 2.

^{46.} Voices for Choices v. Illinois Bell Telephone Co., 339 F.3d 542, 544 (7th Cir. 2003) (citing these among other reasons for potentially excluding amicus participation.).

^{47.} *Id.* ("The judges of this court will therefore not grant rote permission to file such a brief, and in particular they will deny permission to file an amicus brief that essentially duplicates a party's

where amicus briefs "make essentially the same point" as the parties. 48

B. Information Theory

Under the "information" theory, briefs are useful for bringing to the courts' attention legal arguments or factual information not already on the record.⁴⁹ Some of the most successful briefs, for example, have detailed the implications of a ruling for a particular constituency. In *Grutter v. Bollinger*,⁵⁰ the landmark Supreme Court affirmative action case, one of the "most valuable" briefs was submitted by former administrators of military academies⁵¹ who described the potential harms that would result from of a lack of diversity among military officers.⁵² Similarly, in its decision in *Brown v. Board of Education*,⁵³ the Supreme Court specifically referenced authorities cited by amici demonstrating that segregation generates feelings of inferiority among minorities.⁵⁴ Whether or not such information actually has persuasive value, it can provide support for the positions adopted by the judges.⁵⁵

Former Supreme Court clerks have stated that "amicus briefs were most helpful in cases involving highly technical and specialized areas of law."⁵⁶ Patent law would seem to fit this description,⁵⁷ although the patent bar is well-funded and the parties tend to be sophisticated. Some litigants have expressed concern about judges seeking out technical and other information from unregulated third-party sources like the Internet.⁵⁸ Definitions taken from Internet dictionaries, for

brief. The reasons for the policy are several: judges have heavy caseloads and therefore need to minimize extraneous reading; amicus briefs, often solicited by parties, may be used to make an end run around court-imposed limitations on the length of parties' briefs; the time and other resources required for the preparation and study of, and response to, amicus briefs drive up the cost of litigation; and the filing of an amicus brief is often an attempt to inject interest group politics into the federal appeals process.").

- 48. Egyptian Goddess, Inc. v. Swisa, Inc., 543 F.3d 665, 672 (Fed. Cir. 2008).
- 49. Voices for Choices, 339 F.3d at 545 (describing how a brief may "assist the judges [in a case] by presenting ideas, arguments, theories, insights, facts, or data that are not to be found in the parties' briefs.").
 - 50. Grutter v. Bollinger, 539 U.S. 306 (2003).
 - 51. Simard, supra note 12, at 33.
- 52. Consolidated Brief of Lt. Gen. Julius W. Becton et. al. as Amici Curiae in Support of Respondents, *Grutter*, 539 U.S. 306 (Nos. 02-241, 02-516), 2003 US S. Ct. Briefs Lexis 532.
 - 53. Brown v. Board of Education, 347 U.S. 483 (1954).
 - 54. Id. at 494.
 - 55. I am thankful to Brad Joondeph for making this point to me.
- 56. Kelly Lynch, Best Friends? Supreme Court Law Clerks on Effective Amicus Curiae Briefs, 20 J.L. & POL. 33, 41 (2004).
- 57. See Voda v. Cordis Corp. 476 F.3d 887, 902 (Fed. Cir. 2007) ("Patents and the laws that govern them are often described as complex. Indeed, one of the reasons cited for why Congress established our court was because it 'felt that most judges didn't understand the patent system and how it worked." (quoting Pauline Newman, Origins of the Federal Circuit: The Role of Industry, 11 FED. CIR. B.J. 541, 542 (2002))).
- 58. Remarks of Joseph R. Re, Knobbe Martens Olsen Bear LLP, Loyola Symposium: The Federal Circuit as an Institution (Oct. 30, 2009).

example, have been cited by courts doing claim construction.⁵⁹ However, the proper way for such information to enter the record is through briefs, as "the prevailing rules of judicial notice prevent[] the court itself from properly searching out and using [Internet information]."⁶⁰

Patent amici can also provide novel arguments or facts that the parties may not have thought of or are not in a position to make.⁶¹ While the parties must focus on winning the case presently before the court, amici are less tied to the particular facts of a case and can recommend, for example, that the court rule in a way that will advance patent law in general.⁶² Among particular amici, patent academics may present relevant research from law review or social science literature.⁶³ The courts appear to particularly value timely empirical work and have cited to relevant studies by academics.⁶⁴ Other amici, including specialized attorney groups like the Advanced International Patent and Law Office (AIPLA) or Intellectual Property Owners Association (IPO), can credibly discuss how a proposed standard may operate in practice by drawing upon the experience of their membership base. The Federal Circuit puts a high premium on such insights into the contexts of patent law. Judge Michel, for example, has stated that organizational briefs can improve "the quality and realism of panel decisions." ⁶⁵ Judge Newman has similarly commented, "[E]xperience, and the exhortations of

^{59.} See Eolas Technologies, Inc. v. Microsoft Corp., 399 F.3d 1325, 1337 (Fed. Cir. 2005) (citing for the definition of "application.").

^{60.} Michel, supra note 40, at 1256.

^{61.} Compare Brief for Amicus Curiae Eli Lilly and Company in Support of G.D. Searle & Co., Inc. et al. for Affirmance at 13, Univ. of Rochester v. G.D. Searle & Co., Inc., 358 F.3d 916 (Fed. Cir. 2003), 2003 WL 24305359 (presenting historical accounts of the evolution of the written description requirement, the brief of the former tracing back to the Supreme Court's decision in Evans v. Eaton, 20 U.S. 356 (1822)); nith Brief of Plaintiff-Appellant Univ. of Rochester at 26, Univ. of Rochester v. G.D. Searle & Co., Inc., 358 F.3d 916 (Fed. Cir. 2003) (No. 03-1304), 2003 WL 24305355 (only brief address of history); and Univ. of Rochester, 358 F.3d at 924 (providing a more in-depth treatment of references cited by amici briefs to describe a separate written description requirement, citing to Evans, 20 U.S. 356; In re Barker, 559 F.2d 588 (1977); In re Moore, 439 F.2d 1232 (C.C.P.A. 1971); Jepson v. Coleman, 314 F.2d 533 (C.C.P.A. 1963); In re Sus, 306 F.3d 494 (C.C.P.A. 1962)).

^{62.} I am thankful to Jeanne Fromer for making this point to me.

^{63.} See Brief of Business and Law Professors as Amici Curiae in Support of the Respondents at 21, KSR Intern. Co. v. Teleflex, Inc., 550 U.S. 398 (2006) (No. 04-1350), 2006 WL 293165 (citing Gregory Mandel's experimental study of nonobviousness decision making before the Supreme Court). Courts may alternatively cite to law professor articles rather than amicus briefs, perhaps to lend a greater sense of objectivity to their own decisions and those of the professors. For an in-depth discussion of judicial citations in appellate decision, see David Schwartz and Lee Petherbridge, The Use of Legal Scholarship by the Federal Courts of Appeals: An Empirical Study 96 CORNELL L. REV. (forthcoming 2011).

^{64.} See, e.g., Ariad Pharmaceuticals, Inc. v. Eli Lily & Co., 598 F.3d 1336, 1372 (Fed. Cir. 2010) (citing to Dennis Crouch's empirical study of rejections by the PTO on the basis of the written description requirement); Dennis Crouch, An Empirical Study of the Role of the Written Description Requirement in Patent Examination, 104 Nw. U. L. REV. 1665 (2010).

^{65.} Michel, supra note 40, at 1256.

the amici curiae, have persuaded me . . . [to adopt the position of the majority]."⁶⁶ Amicus briefs written by the PTO can convey information about the details of patent prosecution to which the parties may not have access.⁶⁷

Still, briefs that add "new information" can be a hindrance to the courts. In attempting to influence the courts, amici, who are generally presumed to be more neutral than the parties themselves as to the specific outcome of a case, may nonetheless present information in a biased way or exaggerate the impact of a potential ruling. A brief filed by several universities in one case asserted that the court's decision threatened the "continuing viability of technology transfer programs at universities and . . . the equitable allocation of intellectual property rights between universities and the private sector," to which the Federal Circuit responded, "That argument is unsound." A "boy who cries wolf" brief presents an enlarged sense of the negative consequences or parade of horribles accompanying a decision that may not comport with reality. Yet it is a natural tendency of amici, which the courts recognize.

Amici often make arguments in service of legal theories not raised by the parties. If the parties have expressly waived an issue, the court will generally be reluctant to rule on it.⁷⁰ The Supreme Court has been described as considering novel legal arguments made by amici only on "rare occasion,"⁷¹ a description which has empirical support.⁷² Appellate courts have followed this lead, citing for example the "rule of avoidance" as a justification for ignoring amici arguments.⁷³ In its decision in *Lucent v. Gateway*, the Federal Circuit dismissed an amici argument by saying, "[W]hile the amicus brief is informative, we need not address its assertion regarding jury instructions . . . for the simple reason that neither party

- 66. In re Seagate Technology, L.L.C., 497 F.3d 1360, 1385 (Fed. Cir. 2007).
- 67. The use of such briefs is described in more detail in Section IV(E), infra.
- 68. Univ. of Rochester v. G.D. Searle & Co., 358 F.3d 916, 929 (Fed. Cir. 2004).
- 69. See, e.g., Motors Corp. v. Auto Body Panels of Ohio, Inc., 908 F.2d 951, 953 (Fed. Cir. 1990) ("[W]hile the issues underlying this case are perhaps broad and far reaching, or so amici would have us believe, the issue before this court is the narrow question of whether the district court abused its discretion in holding that Chrysler is not entitled to a preliminary injunction.").
- 70. In re Alappat, 33 F.3d 1526, 1536 (Fed. Cir. 1994) (citing Broadrick v. Okla., 413 U.S. 601, 610 (1973) ("constitutional rights are personal and may not be asserted vicariously") and United Parcel Service, Inc. v. Mitchell, 451 U.S. 56, 60 n. 2, (1981) (amicus may not rely on new arguments not presented below)).
 - 71. ROBERT STERN ET AL., SUPREME COURT PRACTICE 564 (7th ed. 1993).
- 72. James F. Spriggs II & Paul J. Wahlbeck, Amicus Curiae and the Role of Information at the Supreme Court, 50 POL. RES. Q. 365, 382 (1997) (stating, about an empirical analysis of Supreme Court briefs filed in 1982, "[O]ur principal finding is that an amicus brief's role most likely does not pertain to their contributing novel arguments but more likely rests with reiterating party arguments."); accord Lee Epstein, Jeffrey A. Segal & Timothy Johnson, The Claim of Issue Creation on the U.S. Supreme Court, 90 AM. POL. SCI. REV. 4, 845 (1995) (finding that "briefs filed by third parties (such as amicus curiae) are generally not a source of important issues considered by the Court").
- 73. Eldred v. Ashcroft, 255 F.3d 849, 851 (D.C. Cir. 2001) (citing the "rule of avoidance" in its refusal to consider the constitutional question of whether the preamble of the Copyright Clause serves as a substantive limitation upon the power of Congress raised by amici in the case).

at trial challenged [them]."⁷⁴ However, the Federal Circuit has also invoked suggestions made by amici to point out their weaknesses⁷⁵ or, alternatively, to support the court's reasoning on an issue raised sua sponte.⁷⁶

C. The Rules of Participation

Federal Rule of Appellate Procedure Rule 29 and its counterpart rules at the Federal Circuit and Supreme Court⁷⁷ govern amicus participation. While technically an amicus needs party consent or court approval to file a brief,⁷⁸ in practice, most courts, including the Federal Circuit, grant leave liberally.⁷⁹ Indeed, over its twenty-seven-year history, the Federal Circuit has rarely denied a request to file a patent amicus brief on nonprocedural grounds.⁸⁰ The court's "invite" list of prospective amici is another sign of its receptiveness.⁸¹

- 74. Lucent Technologies, Inc. v. Gateway, Inc, 580 F.3d 1301, 1339 (Fed. Cir. 2009); see also U.S. Philips Corp. v. International Trade Com'n, 424 F.3d 1179, 1195 (Fed. Cir. 2005) (stating, in hearing an appeal from the International Trade Commission, "[B]ecause neither the Commission nor the administrative law judge addressed [the issue raised by the amicus], and none of the parties addressed that issue on appeal in their briefs, we do not address the issue here."); Knorr-Bremse Systeme Fuer Nutzfahrzeuge GmbH v. Dana Corp., 383 F.3d 1337, 1347 (Fed. Cir. 2004) (en banc) (dismissing an argument raised by amicus that "that aspect is not raised by the case, was not before and has not been briefed on appeal").
- 75. See, e.g., Markman v. Westview Instruments, Inc., 52 F.3d 967, 1021 (Fed. Cir. 1995) ("Although some amici curiae encouraged the federal circuit to find technological facts for ourselves, none explained the procedure by which we are to do so. Are we to read the entire record of the trial, re-create the demonstrations, decipher the literature of the science and art; are we to seek our own expert advice; must the parties be told the technical training of our law clerks and staff attorneys? No amicus explained how improved technological correctness—that is, truth—would be more likely to be achieved during the appellate process of page-limited briefs and fifteen minutes per side of argument.").
- 76. See, e.g., MedImmune, Inc. v. Genentech, Inc., 549 U.S. 118, 141 (Thomas, J., dissenting) ("Neither does MedImmune's opening brief allege a contractual dispute. Even at oral argument, it was not MedImmune, but an amicus, that alleged there was a contract dispute at issue in this case.. In short, MedImmune did not 'rais[e] and preserv[e] a contract claim.' In reaching a contrary conclusion, the Court states that its identification of a contract claim 'probably makes no difference to the ultimate' outcome of this case. This may very well be true, if only because of the broad scope of the Court's holding.").
- 77. FED. CIR. R. 29, available at http://www.cafc.uscourts.gov/images/stories/rules-of-practice/rules_2010.pdf; SUP. CT. R. 37, available at http://supct.law.cornell.edu/rules/supct/37.html.
- 78. Unless the amicus is the government. FED. R. APP. P. 29(a) ("When Permitted. The United States or its officer or agency, or a State, Territory, Commonwealth, or the District of Columbia may file an amicus-curiae brief without the consent of the parties or leave of court. Any other amicus curiae may file a brief only by leave of court or if the brief states that all parties have consented to its filing.").
- 79. REAGAN SIMPSON & MARY VASALY, THE AMICUS BRIEF: HOW TO BE A GOOD FRIEND OF THE COURT 37 (2d ed. 2004); *accord* Harrington, *supra* note 12, at 670.
- 80. A search of "deny! /5 motion /s amicus" in Westlaw's CTAF database yields only 3 cases. *In re* Seagate, 214 Fed. Appx. 997 (Fed. Cir. 2007) (The briefs were deemed "moot."); Co-Steel v. United States, 215 F.3d 1348 (Fed. Cir. 1999) (improper collateral attack in a related dispute); *In re* Opprecht, 868 F.2d 1264 (Fed. Cir. 1989) (reexamination appeal).
 - 81. See FED. CIR. R. 29(b) ("List of Amicus Curiae. The clerk will maintain a list of bar

Among other appellate courts, the Seventh Circuit takes a more restrictive approach. In *Voices for Choices*, the court declined requests by two amici to write briefs. 82 Writing for the court, Judge Posner stated that only briefs that articulated a new perspective or added information to the record, which he found "rare," would be welcome in the circuit. 83 The Third Circuit, on the other hand, has a reputation for being amicus-friendly. It has directly criticized the Seventh Circuit's more restrictive approach for potential to create a perception of viewpoint discrimination. 84

Each amicus must state its interest in the case.⁸⁵ Such statements vary in length, and provide insights into the divergent interests of patent amici. While the Biotechnology Industry Organization (BIO) has emphasized the importance of "predictable and effective patent protection" to spur the development of new technology,⁸⁶ inventor groups have stated their interest, for example, in the "fair administration" of patent law.⁸⁷ In contrast, lawyer groups have expressed concern, for example, that "narrowing the scope of patent eligibility may have a detrimental effect on innovation and the American economy."⁸⁸

Government briefs tend to emphasize interests beyond the patent system. Briefs on behalf of the United States routinely state the government's interest in both "competition and innovation in the marketplace," which can sometimes be in opposition and which implicate the concerns not only of the PTO but agencies like the Department of Justice and Federal Trade Commission. Unlike private parties, the United States also has broader concerns as a state relating, for example, to international comity and the international agreements to which the

associations and other organizations to be invited to file amicus curiae briefs when the court directs. Bar associations and other organizations will be placed on the list if they request. The request must be renewed annually not later than October 1.").

- 82. Voices for Choice v. Illinois Bell Telephone Co., 339 F.3d 542, 544–45 (7th. Cir. 2003).
- 83. Id. at 545 (7th. Cir. 2003).
- 84. Neonatology Assocs. v. Commissioner, 293 F.3d 128, 132–33 (3d Cir. 2002), cited in Harrington, *supra* note 12, at 672.
 - 85. SUP. Ct. R. 37.5; Fed. R. App. P. 29(c).
- 86. Corrected Brief of Amicus Curiae Biotechnology Industry Organization in Support of Neither Party, Prometheus Laboratories, Inc. v. Mayo Collaborative Services, 581 F.3d 1336 (Fed. Cir. 2009) (No. 2008-1403), 2009 WL 462603.
- 87. Brief of the United Inventors Association as Amicus Curiae in Support of Plaintiff-Appellee, Abbott Laboratories v. Sandoz, Inc., 544 F.3d 1341 (Fed. Cir. 2008) (No. 2007-1300), 2007 WL 2888547.
- 88. Brief of Amicus Curiae Boston Patent Law Association in Support of Appellants, *In re* Bilski, 545 F.3d 943 (Fed. Cir. 2008) (No. 2007-1130), 2008 WL 1842278.
- 89. See, e.g., Brief for the United States as Amicus Curiae Supporting Petitioners, Quanta Computer, Inc. v. LG Electronics, Inc., 553 U.S. 617 (2008) (No. 06-937), 2007 WL 3353102; Brief for the United States as Amicus Curiae Supporting Petitioner, KSR Intern. Co. v. Teleflex, Inc., 550 U.S. 398 (2007) (No. 04-1350), 2006 WL 2453601.
 - 90. See briefs cited supra note 89.
- 91. See, e.g., Brief for the United States as Amicus Curiae in Support of the Appellant at 7, Voda v. Cordis Corp., 476 F.3d 887, (Fed. Cir. 2007) (No. 05-1238), 2005 WL 1868615

United States is a party.⁹² State Attorneys Generals have also cited antitrust and related consumer concerns.⁹³ The Director of the PTO has stated a variety of interests, including defending the PTO's practices⁹⁴ and the decisions of the Board of Patent Appeals and Interferences,⁹⁵ and ensuring that interferences are carried out according to the statute.⁹⁶

Each brief must identify the party or parties supported, if any. ⁹⁷ Of the briefs studied, about 35% of amici favored the position of the patentee, 49% of the briefs the position of nonpatentee, and 16% of the briefs supported neither side to the exclusion of the other (for instance in the context of an interference, ownership dispute, or because the amici simply did not favor either side or favored both sides). In the Federal Circuit, amici must keep their arguments relatively short—briefs cannot exceed half the page limit of a party's principal brief ⁹⁸—and, under current rules must submit their briefs within seven days, ⁹⁹ or in a case being reheard or heard en banc, fourteen days after the filing of the supported party brief. ¹⁰⁰

III. DATA AND METHODS

The concerns and characteristics of patent amici can best be understood by looking at the briefs they submit. A team of research assistants and I collected data on amicus briefs in Supreme Court and Federal Circuit patent cases decided from 1989 through 2009. We analyzed briefs on the merits of a case (N = 844) as

- 92. See, e.g., Brief for the United States as Amicus Curiae Supporting Respondent, eBay, Inc. v. MercExchange, L.L.C., 547 U.S. 388 (2006) (No. 05-130), 2006 WL 622120 (stating the United States' interests in patent infringement enforcement agreements).
- 93. Amici Curiae Brief Submitted by the States of Alabama, Alaska, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, Florida, Hawaii, Idaho, Iowa, Kansas, Kentucky, Maine, Maryland, Massachusetts, Minnesota, Mississippi, Missouri, Montana, Nevada, New Hampshire, New Mexico, New York, North Carolina, North Dakota, Oklahoma, Oregon, Pennsylvania, South Carolina, Tennessee, Utah, Vermont, Washington, West Virginia, Wisconsin, and Wyoming Supporting Plaintiffs-Appellants and Reversal, *In re* Ciprofloxacin Hydrochloride Antitrust Litigation, 544 F.3d 1323 (Fed. Cir. 2008) (No. 2008-1097), 2008 WL 576744.
- 94. Brief for Amicus Curiae Director of the United States Patent and Trademark Office Supporting Reversal-in-Part, Aristocrat Technologies Australia PTY Ltd. v. Intern. Game Tech., 543 F.3d 657 (Fed. Cir. 2008) (No. 2008-1016), 2007 WL 5161326.
 - 95. Id.
- 96. Brief of Amicus Curiae, the Director of the United States Patent and Trademark Office, in Support of Appellee, Berman v. Housey, 291 F.3d 1345 (Fed. Cir. 2002) (No. 01-1311), 2001 WL 34629604.
 - 97. FED. R. APP. P. 29(c); SUP. CT. R. 37.
- 98. FED. R. APP. P. 29(d); see also FED. CIR. R. 35(g), 40(g) (limiting an amicus brief to ten pages in cases being heard en banc or reheard).
 - 99. FED. R. APP. P. 29(e).
 - 100. FED. CIR. R. 35(g), 40(g).

^{(&}quot;[C]onsiderations of public and private convenience and international comity should ordinarily lead a district court to exercise its discretion not to entertain foreign patent infringement claims, even if the court has jurisdiction over such claims.").

well as those submitted in support of petitions to the Supreme Court to grant certiorari (N = 54) and to the Federal Circuit to rehear a case en banc (N = 80). For Supreme Court amicus briefs, we used the SCT-BRIEF-ALL database in Westlaw. For Federal Circuit cases (precedential and nonprecedential, including Rule 36 affirmances¹⁰¹), we used a variety of methods. It is estimated that sometime after 2000, the Federal Circuit began systematically reporting amicus briefs at the beginning of its decisions. 102 We collected this information from the electronic record in Westlaw. For briefs filed during the entire twenty-year period, we drew from Westlaw's electronic database of amicus briefs, many of which were not reported by the Federal Circuit. To locate these briefs, we used Westlaw's indexing system and searched each opinion for the word stem "amic!" and manually analyzed each result for evidence of amicus briefing. For cases in which we suspected there was briefing, based on mentions within the decision or in the header of the case, but could not find an electronic copy of the briefing, we reviewed available microfiche and paper records maintained at the Federal Circuit. We also supplemented these databases with amicus briefs posted to the PTO and Solicitor General websites. 103 Despite these efforts, our analysis necessarily excludes briefs that are not part of the existing electronic or microfiche record. These "missing" briefs are likely to be primarily from the 1990s, skewing our results towards more recent amicus activity.

We tracked several pieces of information about each brief. We collected the names of the amici that signed onto each brief as well as whether the brief supported the appellant, appellee, or neither party. 104 We compared this data with information about the case to determine whether the brief supported the patentee or nonpatentee, and whether or not it advocated for the outcome ultimately adopted by the court. We also collected and reviewed mentions of amicus briefs within the courts' decisions. We categorized each amicus into one of several

^{101.} Federal Circuit Rule 36 permits the Federal Circuit to summarily affirm a decision of a lower court without any written opinion when "an opinion would have no precedential value" and one of the following is present:

⁽a) the judgment, decision, or order of the trial court appealed from is based on findings that are not clearly erroneous;

⁽b) the evidence supporting the jury's verdict is sufficient;

⁽c) the record supports summary judgment, directed verdict, or judgment on the pleadings;

⁽d) the decision of an administrative agency warrants affirmance under the standard of review in the statute authorizing the petition for review; or

⁽e) a judgment or decision has been entered without an error of law. FED. CIR. R. 36.

^{102.} Phone call with Federal Circuit Clerk's office, Nov. 2009.

^{103.} Archive of Amicus Briefs in Which the USPTO Participated in Formulating the Government's Position, UNITED STATES PATENT AND TRADEMARK OFFICE, http://des.uspto.gov/Foia/ABReadingRoom.jsp (last visited Feb. 27, 2010); Archive of Briefs Filed by Solicitor General, U. S. DEPT. OF JUSTICE, http://www.justice.gov/osg/briefs/brieftype.htm (last visited Feb. 27, 2010).

^{104.} We did not track the names of the attorneys writing the briefs. Although this can certainly influence how the Supreme Court evaluates an amicus, patent law cases have likely attracted fewer high-profile Supreme Court attorneys than cases about constitutional and public policy matters.

detailed categories which were then further grouped into larger categories. 105

We report our results here in terms of total amici¹⁰⁶ rather than total briefs because this provides a more detailed and granular way to track participation, and because we believe that, in accordance with the affected groups/stakeholder theory, the entities that sign a brief are important to the court. The average number of amici per brief was generally comparable across amicus categories (between one and two), except in the case of government and university briefs which each had, on average, more than three cosigners to a brief.¹⁰⁷ As a result, the university and government shares in Figures 1 and 2 look larger than they would had the data been presented on a per-brief basis.

IV. ANALYSIS OF PATENT AMICUS BRIEFS

This Section makes several observations about the patent system based on an analysis of amicus filings at the Supreme Court and Federal Circuit. Some of the data reinforce, while other data appear to question, widely held beliefs about the patent system. Subpart A describes which interest groups filed briefs; Subpart B explores patterns of briefing at the Federal Circuit and Supreme Court. Subpart C examines how various amici advocated, generally in support of or against the patentee. Subpart D presents data consistent with the proposition that briefs at the en banc and certiorari petition stage on the courts are influential. Finally, Subpart E considers the question of whether briefs on the merits of a case matter, and discusses the exceptional success of US government amicus briefs.

A. Patent "Insiders" Dominate Amicus Filings

1. General Findings

To many, the patent system appears to be dominated by corporate interests. Congressional patent reform, for example, has been described as "a fierce fight involving the high-tech and drug industries." The present analysis confirms that companies in these and other industries are indeed keenly interested in the patent system, representing about half of the amici filing briefs (Figure 1). Such industry briefs were filed by companies, individually or with cosigners, as well as collectively as part of industry groups (Figure 1). But the data also

^{105.} See Figures 1 and 2, infra.

^{106.} Except in the case of individual persons who signed a brief; thus, a brief signed by ten law professors was only counted as having one amicus, while a brief by Apple, Inc. and the University of Miami, for example, was counted as having two amici. Because professor briefs often have multiple individual signatories, this approach reduces the share associated with them in this article.

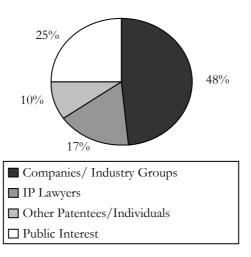
^{107.} Average number of signors per merits brief across all categories = 1.6; for government briefs = 3.2, for university briefs = 3.4.

^{108.} Robert C. Pozen, *Inventing a Better Patent System*, N.Y. TIMES, Nov. 16, 2009, at A33, *available at* http://www.nytimes.com/2009/11/17/opinion/17pozen.html.

^{109.} Further detail of the distribution of groups and companies is provided in Figure 2, infra.

provide a reminder of the importance of another industry within the patent system—the patent "industry"—comprised of intellectual property lawyers who draft, sue upon, defend, and defend against patents. Intellectual property lawyers, most often represented by membership groups, accounted for about 17% of the amici (Figure 1). Universities and individuals, in most cases patent attorneys and individual inventors, represented 10% of amici. All told, patentees and their lawyers, or patent "insiders," filed about 75% of the briefs studied (Figure 1).

Figure 1: Who's Interested in the Patent System: Patent Amicus Filers¹¹⁰



"Consumers" of patented goods and advocates of the "public interest" accounted for the remaining quarter of amici. These advocates included citizen and consumer groups, governments, and members of academia.¹¹¹ While comprising only a quarter of amici, such patent "outsiders" have significant stakes in the patent system concerning, for example, the development and availability of new products and the prices of patented goods. These interests are relatively underrepresented in the patent system, based on the number of amicus filings.

The skew towards patent insiders is not surprising, however. The impact to consumers and the public associated with a particular patent or patent doctrine can be hard to determine. In addition, few consumer groups concentrate solely on patent issues, 112 especially as compared to the large number of professional

^{110.} Representing 1,359 amici on 844 Federal Circuit and Supreme Court merits briefs.

^{111.} E.g., Consumers Union, Patients Not Patents, and various states.

^{112.} A notable one is the Public Patent Foundation, or PUBPAT, whose website claims that patents and patent policy have the potential to harm the public "by making things more expensive]]; by preventing scientists from advancing technology; by unfairly prejudicing small businesses; and by

organizations focused on furthering the interests of patent owners and lawyers. In public choice parlance, consumer interests are more diffuse, and patent interests more concentrated, within the patent system.¹¹³

Still, the data support the charge that the patent system is primarily concerned with corporate interests. It would be worthwhile to consider how to increase public participation and engagement in the patent system from outside of the patent industry. When outsiders turn their attention to the patent system, they bring different perspectives on patent policy, with the potential to challenge, and potentially upset, entrenched interests.¹¹⁴

2. Group and Entity Breakdowns

The importance of an individual amicus brief depends on whom it represents. A judge is likely to regard a brief submitted by the AIPLA, which has 16,000 members¹¹⁵, differently from one submitted by a single individual. To minimize distortions caused by lumping such heterogeneous amici together, I further considered the breakdown of amici within individual entity and group divisions. Of the amici studied, 49% (672) were individual companies, universities, or people while 51% (687) of amici filed in a group, such as, for example, the AIPLA (a lawyer group), BIO (an industry group), or a professor group.

restraining civil liberties and individual freedoms." PUBLIC PATENT FOUND., http://www.pubpat.org/ (last visited Mar. 1, 2011).

^{113.} See, e.g., DANIEL A. FARBER & PHILIP P. FRICKEY, LAW AND PUBLIC CHOICE: A CRITICAL INTRODUCTION 72 (1991) ("Public choice suggests that diffuse groups will generally find it difficult to obtain legislation that benefits them at the expense of more compact groups, even where the legislation creates much greater benefits than costs."). I am thankful to Jeanne Fromer to making this point to me.

^{114.} See, e.g., Christopher M. Holman, Gene Patents Under Fire: Weighing the Costs and Benefits, in BIOTECHNOLOGY AND SOFTWARE PATENT LAW: A COMPARATIVE REVIEW OF NEW DEVELOPMENTS (Nov. 30, 2011), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1710150 (describing the "stunning decision" of a New York District Court to side with the American Civil Liberties Union in its case challenging the validity of patents related to the BRCA gene, and the potentially substantial impact of the decision, if allowed to stand, on universities, basic research institutions, and biotechnology firms).

^{115.} See Testimony of Albert Tramposch, Deputy Executive Director, American Intellectual Property Law Association, before the U.S.-China Economic and Security Review Commission (Apr. 8, 2010), available at http://www.uscc.gov/hearings/2010hearings/transcripts/10_04_08_trans/tramposch_testimony.pdf.

·	Groups $(N = 687)$	Entities (N = 672)	
0%	Bar/IP Association	Financial Co.	
	Industry Group 32%	48% Hi-Tech/	
	Public Interest/ Policy Group 18%	Bio/Pharma & Related Co.	
	17%	23%	
+	Professors 16% Government	13% University 11% Other Company	
0%	7% Trade Ass'n	6% Individual	

Figure 2: Who's Interested in the Patent System: Distribution of Group and Entity Amicus Filers¹¹⁶

Among entities, bio/pharmaceutical and hi-tech companies predominated (Figure 2). Companies from these two industries represented over 70% of all amici in this division, with only 11% of the total coming from other industries. Of the remainder of amici filing individually, 13% were universities and 6% were individuals. While most entities had general interests in the development of patent law, likely relevant to their status in the patent system, a handful had even more direct interests in the outcome of the litigation. For example, licensees, 117 requesters of the re-examination of the litigated patents, 118 and defendants in related lawsuits 119 have all filed amicus briefs.

^{116.} Companies were classified on the basis of the industry that they primarily belonged to, discerned from reading about each company from their websites or from a self-description of the company provided in an amicus brief filing.

^{117.} E.g., Non-Confidential Brief of Amicus Curiae Watson Laboratories, Inc., in Support of Dismissing This Appeal for Lack of Jurisdiction, Bayer Schering Pharma AG v. Barr Laboratories, Inc., 575 F.3d 1341 (Fed. Cir. 2008) (No. 2008-1282), 2008 WL 4972953; Brief for Amicus Curiae Boston Scientific Scimed, Inc. in Support of Plaintiff-Cross Appellant Seeking Reversal of Denial of Permanent Injunction, Voda v. Cordis Corp., 536 F. 3d 1311 (Fed. Cir. 2007) (No. 2007-1343), 2007 WL 3218894.

^{118.} E.g., Brief of Amicus Curiae Novell, Inc. in Support of Brief and Addendum of Director of the United States Patent and Trademark Office, *In re* Am. Academy of Science Tech. Ctr., 367 F.3d 1359 (Fed. Cir. 2003) (No. 03-1531), 2003 WL 24305475.

^{119.} E.g., Brief for Amici Curiae Atheros Communications, Inc. et al. in Support of Defendants-Appellants and Vacatur of Permanent Injunction, Commonwealth Scientific and Indus. Research Organisation v. Buffalo Tech. (USA), Inc., 542 F.3d 1363 (Fed. Cir. 2007) (No. 07-1449), 2007 WL 4618639; Brief of Amicus Curiae Sandoz, Inc. Requesting Affirmance in Support of Defendant-Appellees, Aventis Pharma S.A. v. Amphastar Pharmaceuticals, Inc., 525 F.3d 1334 (Fed. Cir. 2007) (No. 2007-1280), 2007 WL 3308222; Brief for Amicus Curiae Sun Life Assurance

Among groups, the greatest share of amici were patent lawyers, represented by bar and IP associations. A third of all group filings were by entities like the AIPLA, Intellectual Property Owner's Association (IPO), and Federal Circuit Bar Association (FCBA). Each of these three groups was among the top five patent amici, and patent lawyer groups represented five of the top ten patent amici (Table 1). While perhaps surprising to some, the influence of the patent bar on the development of patent laws is nothing new. 120 According to one account, during the nineteenth century "patent law developed in the courts, and instrumental to this development [was] a relatively small patent bar"121 In Europe, patent lawyers also advocated for a strong patent system during this period. 122

Table 1: Top 10 Patent Amici¹²³

- 1. AIPLA
- 2. FCBA
- 3. Bar Association of the District of Columbia
- 4. BIO
- 5. IPO
- 6. The United States
- 7. Intel
- 8. Houston IP Law Association
- 9. ABA
- 10. Eli Lilly
- 10. PTO

Private industry groups and public interest/policy groups were also important, representing 18% and 17% of the amici, respectively. Professors and the government also each represented a significant share of the total (Figure 2). The differences in the rates of filing among amici were statistically significant.¹²⁴

The top 10% of amici, each filing briefs in three or more cases, produced close to 40% of the briefs. Representation within the remaining 90% of amici was less concentrated. Of this remaining share, 70% filed briefs in a single case, and

Company of Canada (U.S.) In Support of: the Defendant-Appellants and Supporting: Affirming the Portion of the District Court's Judgments holding the 792 Patent Invalid, Bancorp Services, L.L.C. v. Hartford Life Ins. Co., 359 F.3d 1367 (Fed. Cir. 2003) (No. 03-1181), 2003 WL 24018558.

^{120.} Morriss & Nard, *supra* note 8, at 2 ("We find that the story of patent law from 1790 to 1870 is the story of the creation and dominance of the patent bar as an interest group.").

^{121.} Id

^{122.} Machlup & Penrose, *supra* note 25, at 4 (describing "patent lawyers . . . [and] others who felt they stood to profit from the patent laws . . . [as] advocates of the system.").

^{123.} Based on number of briefs filed.

^{124.} I used a single-factor ANOVA to test whether or not the rate of amicus filing was uniform among groups and entities. The resulting P-values were 4.64E-05 (groups) and 0.000128 (entities), indicating that the null hypothesis could be rejected.

90% filed briefs in two or fewer cases. 125

B. Fewer Amici File at the Federal Circuit than at the Supreme Court, Likely Because the Importance of a Federal Circuit Case is Unknown Ex Ante

This study considers amicus filings at the Federal Circuit and Supreme Court. Of the two venues, the Supreme Court was much more popular among amici. Over the twenty years studied, the Supreme Court was more likely to receive briefing, from more amici, than the Federal Circuit. Federal Circuit cases heard en banc enjoyed amicus participation on a level between panel and Supreme Court decisions (Table 2).

Author's analysis.

^{126.} Over the twenty-year period studied, the Supreme Court had more amici (645 amici) in just sixteen cases than the Federal Circuit had in about 150 times this number of cases (511 amici over 2,366 cases). This disparity has not gone by unnoticed. See, e.g., Paul R. Michel, A Review of Recent Decisions of the United States Court of Appeals for the Federal Circuit: Introduction: The Challenge Ahead: Increasing Predictability in Federal Circuit Jurisprudence for the New Century, 43 AM. U. L. REV. 1231, 1243 (1994) (The Chief Judge commenting that the Federal Circuit lacked the resource of amicus briefs, which the Supreme Court usually relies on.).

Table 2: Amicus Filings in Patent Cases
at the Supreme Court and Federal Circuit ¹²⁷
1989–2009

Judicial Venue	Federal Circuit Three-Judge Panel ¹²⁸	Federal Circuit En Banc ¹²⁹	Supreme Court
Total # of Amici	511	338	645
Total # of Cases	2,366	30	16 ¹³⁰
- With Amicus Participation ¹³¹	5% (117 cases)	70% ¹³² (21 cases)	100% (16 cases)
- Amicus Mentioned in Decision ¹³³	50%	52%	60%
- Average # of Amici per Case	4	18	41

There are at least two explanations for these disparities. The first is the perception that power within the patent judiciary is concentrated at the top, the

^{127.} In cases and on the merits, not on petitions for certiorari or rehearing en banc; cases identified using the methods described *supra* in Part II.

^{128.} Includes cases heard en banc in part.

^{129.} Count includes cases heard en banc in part and therefore overlaps with the adjacent column. List generated based on Jason Ratanen, *Federal Circuit En Banc Patent Decisions*, PATENTLY-O (Mar. 8, 2011), http://www.patentlyo.com/patent/2011/03/federal-circuit-en-banc-patent-decisions.html (last visited Mar. 15, 2011).

^{130.} This analysis excludes several cases that implicate patent law: Florida Prepaid v. College Savings Bank, 527 U.S. 627 (1999), Dickinson v. Zurko, 527 U.S. 150 (1999), and Asgrow Seed Co. v. Winterboer, 513 U.S. 179 (1995).

^{131.} On the merits; for analysis of amici in petitions for rehearing en banc see *infra* Section IV(D).

^{132.} The en banc cases in which we found no amicus briefs filed using the methods described *supra* in Part II include: DSU Med. Corp. v. JMS Co., 471 F.3d 1293 (Fed. Cir. 2006) (en banc in part); Honeywell Int'l, Inc. v. Hamilton Sundstrand Corp., 370 F.3d 1131 (Fed. Cir. 2004) (en banc); Midwest Indus., Inc. v. Karavan Trailers, Inc., 175 F.3d 1356 (Fed. Cir. 1999) (en banc); Nobelpharma AB v. Implant Innovations, 141 F.3d 1059 (Fed. Cir. 1998) (en banc in part); Cybor Corp. v. FAS Techs, Inc., 138 F.3d 1448 (Fed. Cir. 1998) (en banc); *In re* Trovato, 60 F.3d 807 (Fed. Cir. 1995) (en banc); Beatrice Foods Co. v. New England Printing & Lithographing Co., 899 F.2d 1171 (Fed. Cir. 1990) (en banc); Racing Stroller, Inc. v. TRI Indus., Inc., 878 F.2d 1418 (Fed. Cir. 1989) (en banc).

^{133.} As a percentage of cases in which amicus briefs were filed. Includes any mention of amicus briefing, not limited to briefs submitted in the particular case. *See, e.g.*, Honeywell Intern., Inc. v. Hamilton Sundstrand Corp., 370 F.3d 1131, 1141–42 (Fed. Cir. 2004) (citing the United States amicus curiae brief in Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., 535 U.S. 722 (2002) and quoting the Supreme Court's citation of same.

Supreme Court, hence amici concentrate their efforts there. The Supreme Court's rulings are the law of the land and bind the lower courts.¹³⁴ If an amicus can sway the Supreme Court even a bit, it will produce a lasting impact, at least until the Court or Congress later overrules it.

Another explanation is more basic: that notice and procedural considerations prevent amici from weighing in on important Federal Circuit cases. Amici do not know ahead of time whether or not a case headed for a hearing by a three-judge panel, as the majority of Federal Circuit cases are, is even going to result in a written opinion, ¹³⁵ let alone be considered precedential or important. ¹³⁶ It is hard to justify the expense of filing a brief when ex ante it is unclear, even if the court rules in favor of the party supported by the amici, whether the decision will matter to future jurisprudence. There is also less lead time for amici to get their briefs into the Federal Circuit, compared to the Supreme Court. In the *Bilski* case, for instance, amici had about four months between the taking of certiorari and the deadline to get their briefs into the Supreme Court, ¹³⁷ but there was less than half that amount of time between the Federal Circuit's en banc order and the due date of amicus briefs to the appellate court. ¹³⁸

Though both "power" and procedural disparities likely affect the decision to file, the history of business method patents demonstrates the importance of procedural constraints. Three cases have been particularly seminal—*State Street v. Signature Financial Group*,¹³⁹ decided by a three-judge panel; *In re Bilski*,¹⁴⁰ decided en banc by the Federal Circuit; and the same case as heard by the Supreme Court,

^{134.} At least in theory. See, e.g., Transcript of Supreme Court Oral Argument at 18, Carlsbad Technology, Inc. v. HIF Bio, Inc., 129 S. Ct. 1862 (2009) (No. 07-1437 2009), 2009 WL 453826. ("CHIEF JUSTICE ROBERTS: Well, they don't have a choice, right? They can't say, I don't like the Supreme Court rule so I'm not going to apply it, other than the Federal Circuit."), available at http://www.supremecourt.gov/oral_arguments/argument_transcripts/07-1437.pdf. Neither do all of the Supreme Court's decisions bind the International Trade Commission. See, e.g., Spansion v. ITC, 629 F.3d 1331 (Fed. Cir. 2010) ("this court holds that [the Supreme Court's decision in] eBay does not apply to Commission remedy determinations under Section 337.").

^{135.} See FED. CIR. R. 36 (allowing the court to issue a summary affirmance without an opinion).

^{136.} See FED. CIR. R. 32.1 (outlining the three possible ways that the court can dispose of an appeal: with a precedential opinion, with a nonprecedential opinion, or without an opinion), See FED. CIR. R. 36 (authorizing the use of a Rule 36 summary affirmance when the court feels that its ruling "would have no precedential value.")

^{137.} In Bilski v. Doll, *certiorari* was granted on June 1, 2009 with briefs due seven days after the government brief deadline of September 27, or October 4, four months after June 1, 2009. Bilski v. Doll, 129 S. Ct. 2735 (2009).

^{138.} Order Granting a Hearing En Banc, 545 F.3d 943 (Fed. Cir. 2008) (requiring amici to submit their briefs thirty days after party briefs, which are due twenty days after the en banc order), available at http://www.eff.org/files/filenode/in_re_bilski/bilksi-en-banc-order.pdf.

^{139.} State St. Bank & Trust Co. v. Signature Financial Grp., Inc., 49 F.3d 1368 (Fed. Cir. 1998), abrogated by In re Bilski, 545 F.3d 943 (2008).

^{140.} In re Bilski, 545 F.3d 943 (Fed. Cir. 2008).

*Bilski v. Kappos.*¹⁴¹ The three-judge *State Street* panel received no amicus briefs, while the other cases received ample briefing. ¹⁴² Had companies realized the importance of the *State Street* decision ex ante, many would certainly have filed amicus briefs.

In addition, when the Federal Circuit signals to the community the importance of a case by deciding to hear it en banc, it is much more likely to receive briefs—70% of en banc cases received briefing while only 5% of cases heard by a three-judge merits panel did. This lends further support to the "procedural" considerations explanation—when people know ahead of time that a Federal Circuit case is going to be important, they file amicus briefs. Yet the court at times takes cases sua sponte en banc, potentially resulting in an abbreviated opportunity for amicus briefing. In her dissent in Abbott Laboratories v. Sandoz, Inc., 143 for example, Judge Newman criticized the court for taking the case en banc, "without notice and without argument and without an opportunity for participation." As a result, she opined, "[T]he court has deprived itself of input concerning the experience of precedent, of advice as to how this change of law may affect future innovation, and of guidance as to the effect on existing property rights."144 To get greater input and participation in its important en banc decisions, the court should limit the number of cases it takes sua sponte en banc without notice, and instead conserve its resources for cases where members of the public have the opportunity to voice their opinions.

C. Whether an Amicus Advocates in Favor of or Against the Patentee Is More Closely Correlated with Its Business Model Than Its Industry

Each amici has its own distinct interest in the patent system.¹⁴⁵ For example, innovator pharmaceutical companies rely heavily on the patent system as a way to ensure return on their investments.¹⁴⁶ Patent lawyers have incentives to make sure patent law develops in a way that is supportive of their profession and their ability to serve their clients. Patent law professors are rewarded for their novel ideas about how the status quo should be changed, and have cited as one of their interests the free flow of ideas and information.¹⁴⁷ In order for judges to

^{141.} Bilski v. Kappos, 130 S. Ct. 3218 (2010).

^{142.} See cases cited supra notes 139-41.

^{143.} Abbott Laboratories v. Sandoz, Inc., 566 F.3d 1282 (Fed. Cir. 2009).

^{144.} Id. at 1302.

^{145.} See Section II(C) ("The Rules of Participation") supra for the stated interests of various groups.

^{146.} *E.g.*, BURK & LEMLEY, *supra* note 5, at 142–55.

^{147.} Brief of Amici Curaie in Support of Petition for Panel Rehearing and Rehearing En Banc of Defendant-Appellant Baystate Technologies, Inc., Bowers v. Baystate Technologies, Inc., 320 F.3d 1316 (Fed. Cir. 2003) (Nos. 01-1108, 01-1109), 2002 WL 32345615 (amicus brief of thirty-three

properly evaluate the merits of an amicus brief, it is important to understand each amicus's perspective or bias, and how it impacts their advocacy.

In this Section, I set forth a simple analysis of amici based on how often they favored the patentee in their amicus filings. Due to limitations on the number of cases that could be profiled, the results presented here, while suggestive of certain relationships, are by no means conclusive. The statistical significance of various differences is reported throughout the analysis.

Based on the perception that patents are helpful in pharmaceutical and chemical industries and less so in high-tech and related areas, one might expect briefs filed by pharmaceutical and biotechnology companies to be pro-patentee and those filed by high-tech companies to be anti-patentee. Yet the results provided only weak support for these expectations: bio/pharma amici supported patentees 56% of the time and high-tech and financial companies supported patentees, when they took a stand in favor of one party in a dispute, ¹⁴⁸ only 36% of the time, but in neither case were the differences from an equal chance of supporting a patentee as opposed to a nonpatentee statistically significant (Figure 3).

More predictive of whether an entity advocated for or against the patentee than an amicus's industry was its business model. NPEs and public companies were on opposite sides of the spectrum, the former supporting the patentee virtually every time (98%) and public companies, regardless of industry, supporting the patentee less than one-third (32%) as often. Likewise, universities, which patent across technologies, supported the patentee three-quarters of the time (Figure 3), while groups representing patent consumers and the public interest filed briefs that favored the patentee only one-quarter of the time.

professors and others) ("Common among all amici is a commitment to encouraging authorship and innovation by maintaining the free flow of ideas and information.").

^{148.} Amici may also file briefs in support of both or none of the parties.

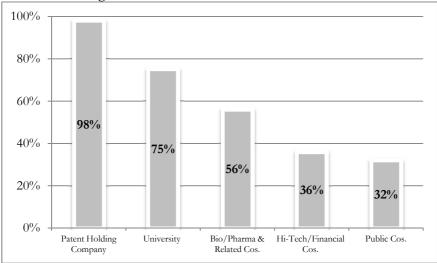


Figure 3: How Often Amici Favored Patentees¹⁴⁹

Patent holding companies and universities have limited exposure as patent defendants and significant opportunities as patent licensors or plaintiffs. Their consistent support for strong patent rights is therefore not surprising. Neither, necessarily, is the finding that public company amici more often than not oppose patentees. Most of the public companies that filed briefs were in the high-tech and financial industries, where the cumulative nature of innovation has created liabilities for companies introducing new products. These findings extend our understanding of how companies view the patent system. This data suggests that a company's business model is generally more predictive of how it will "vote" than its industry.

Business model differences have created different stakes in the patent system. For example, BIO, a "frequent-filer" (see Table 1), has stated that the vast majority of its members are "small companies that have not yet brought a product to market or attained profitability," and care about patents because they "serve as the asset on which investors (such as venture capitalists) base decisions to invest in early-stage companies and fund research and development activities that will eventually bring new products to market." In contrast, pharmaceutical

^{149.} All values from a baseline of a 50% support rate for patentees were statistically significant (based on a P-value, calculated using Pearson's chi-square test, of less than .05), except for bio/pharma and related companies. Subsequent P-values in this report were also calculated using this method.

^{150.} See, e.g., Colleen Chien, Of Trolls, Davids, Goliaths, and Kings: Narratives and Evidence in the Litigation of High-Tech Patents, 87 N.C. L. REV. 1571, 1590 (2009).

^{151.} Corrected Brief of Amicus Curiae Biotechnology Industry Organization in Support of Neither Party, Promethues Laboratories, Inc. v. Mayo Collaborative Services, 581 F.3d 1336 (Fed. Cir. 2009) (No. 2008-1403), 2009 WL 462603 ("Statement of Interest"); accord Brief of Amicus Curiae

companies and large biotechnology companies have stated that they need strong patents to *protect* investments rather than to attract them.¹⁵²

High-tech amici also exhibit a diversity of interests as shown by their selection into amicus groups. One of the amici in *Lucent v. Gateway* was a group that called itself "13 Diverse Innovators . . . represent[ing] 18 different industry sectors," and included not only the high-tech companies Tessera, General Electric, Qualcomm, and Dolby Laboratories, but also 3M Company, Eli Lilly and Company, and BIO. Hi-tech companies also group themselves by industry. For example, another brief in the *Lucent* case was submitted by "10 Technology-Based Companies," including Bank of America Corporation, Coverity, Inc., Intel Corporation, Micron Technology, Inc., Palm, Inc., SAP America, Inc., Symantec Corporation, Regulatory DataCorp, Inc., Trimble Navigation Ltd., and Yahoo! Inc. In addition to all belonging to the technology or financial sector, these companies are also mostly public, practicing companies. Similarly, members of an amicus group that included Intellectual Ventures and others identified as the common characteristic among them that they were all "small companies." ¹⁵⁴

At the group amici level, the numbers were too small for any differences to be statistically significant. However, generally speaking, the results seem to confirm perceptions of various patent interest groups: high-tech and financial groups, public interest/policy groups, and the government tended to vote against the patentee, while groups representing the bio/pharma/chem industry supported patentees 59% of time. Bar/IP associations, generally perceived to be

Biotechnology Industry Organization in Support of Neither Party, Knorr-Bermse Systeme Fuer Nutzfahrzeuge GmbH v. Dana Corp., 383 F.3d 1337 (Fed. Cir. 2004) (Nos. 01-1357, 01-1367, 02-1221, 02-1256), 2003 WL 23200555 (BIO "Statement of Interest" stating same).

152. See, e.g., Brief of Amici Curiae GlaxoSmithKline, Johnson & Johnson, and Amylin Pharaceuticals in Support of Appellants and Reversal, In re Kubin, 561 F.3d 1351 (Fed. Cir. 2009) (No. 08-1184), 2008 WL 2967584 ("GSK is an international company, with substantial operations in the United States performing research and development of pharmaceutical and consumer healthcare products. . . . Patents are critical to GSK because they are often the only method available to protect the results of the billions of dollars that GSK invests each year in research and development."); accord Brief for Amicus Curiae Eli Lilly and Company in Support of Neither Party, Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., 234 F.3d 558 (Fed. Cir. 2000) (No. 95-1066), 2002 WL 32144418 (Statement of Eli Lilly emphasizing the use of patents to "protect" its discoveries).

153. Brief of 13 Diverse Innovators as Amici Curaie in Support of Lucent Technologies, Inc., Lucent Technologies, Inc. v. Gateway, Inc., 580 F.3d 1301 (Fed. Cir. 2009) (Nos. 2008-1385, 2008-1486, 2008-1487, 2008-1495), 2009 WL 870147 ("Statement of Interest").

154. Brief of Fallbrook Technologies, Inc.; Intellectual Ventures; Ellsworth Int'l, Inc.; GE02 Technologies, Inc.; Mobile Productivity, Inc.; Composite Tech. Int'l, Inc.; Skyler Technology, Inc.; Private Mgmt, Inc.; Technology, Patents & Licensing, Inc.; and Intermune, Inc. as Amici Curiae in Support of Respondents at 1, KSR International Co. v. Teleflex, Inc., 550 U.S. 398 (2007) (No. 04-1350), 2006 WL 3004030 ("Amici are small companies that rely on the patent system to protect their innovations.").

155. Supporting patentees, as opposed to nonpatentees, 5%, 20%, and 28% of the time, respectively.

pro-patentee, usually¹⁵⁶ but by no means always sided for the patentee rather than the nonpatentee, and professors, often accused of being anti-patent,¹⁵⁷ in fact filed briefs that supported patentees nearly 40% of the time.¹⁵⁸

The data remind us that courts should read briefs in a way that is mindful of who has filed them. In many cases, *amici* are *not* neutral parties, but rather, are motivated by private interests and stakes in the development of the patent system. The data also suggest that the patent system is working differently, not only for different types of industries, but for different types of companies. As such it validates the ongoing study of the functioning of the patent system with respect to different types of patentees, from universities, to entrepreneurs, to large practicing companies.¹⁵⁹

D. The Courts Agree with, and Perhaps Listen to, Amici When Deciding What Cases to Take

We used the data to test how the courts are using amicus briefs. According to the affected groups theory, for example, briefs signal to the court which cases matter to amici. If the court is indeed using and acting on this information as predicted by theory, it should be more likely to grant certiorari or rehear cases en banc when amicus briefs are filed. To test this proposition, we considered the success rates of amicus briefs at the request for rehearing en banc and certiorari petition stages.

Patent amicus advocacy was positively correlated with the grant of certiorari and en banc petitions. Over the ten- to twenty-year period studied, the Supreme Court was seven times more likely to grant certiorari, and the Federal Circuit was eight times more likely to grant a petition for rehearing en banc if a third party filed a brief urging the court to do so. As discussed below, the Supreme

^{156.} 55% of the time, N = 133.

^{157.} See, e.g., Matthew Dowd, Conversation with Two Chief Judges, MED. INNOVATIONS & BUS., Summer 2010, at 61 (quoting Chief Judge Michel as saying, "I think there are many, in particular, in the academic world, who seem to assume that nearly all useful innovation would occur anyway, in the absence of the patent system.").

^{158.} 39%, N = 56 professor groups.

^{159.} See, e.g., Stuart J. H. Graham et al., High Technology Entrepreneurs and the Patent System: Results of the 2008 Berkeley Patent Survey (June 30, 2009). 24 BERKELEY TECH. L. J. 255 (survey of entrepreneurs' attitudes towards patenting); Arti Rai & Rebecca S. Eisenberg, Bayh-Dole Reform and the Progress of Biomedicine, 66 LAW & CONTEMP. PROBS. 289 (2003) (studying federally funded research at universities); Chien, supra note 150 (contrasting the litigation behavior of independent inventors, large firms, nonpracticing entities and other litigants).

^{160.} See, e.g., Kevin H. Smith, Certiorari and the Supreme Court Agenda: An Empirical Analysis, 54 OKLA. L. REV. 727, 761 (finding, based on empirical analysis, a positive relationship between the granting of certiorari and filing of a brief in support of doing so).

^{161.} Based on an analysis of Supreme Court certiorari petitions from 2000 to 2009 (the electronic records maintained by Lexis-Nexis and Westlaw from earlier years is reputed to be unreliable), and Federal Circuit petitions for rehearing en banc in patent cases from 1990 to 2009.

Court was also more likely to take a case if a negative brief was filed. These differences were statistically significant.¹⁶² They are also consistent with previous work on amicus briefs in general that found that Supreme Court amicus briefs "substantially increase[d]" the likelihood of a certiorari grant,¹⁶³ even controlling for a number of potential influences on the court's decision to hear a case.¹⁶⁴

Supreme Court amicus briefs at the certiorari stage may be more influential in patent cases than in nonpatent cases. The Federal Circuit is the only appellate court empowered to hear patent cases, eliminating one of the main indicators that the Supreme Court has that it ought to take certiorari, circuit splits. The Justices may therefore rely on other signals, including amicus briefs, to make their decision. 166

The data show that the courts generally agreed with, and even perhaps listened to, their friends regarding which cases were important. Whether or not briefs caused, rather than coincided with, petition grants, is not possible to tell from the data. However, by recently doubling the amount of time available for amici to submit briefs in en banc petitions, ¹⁶⁷ the Federal Circuit has signaled that it welcomes input on petition decisions.

If briefs indeed are persuasive, the implication for would-be amici seems to be: file amicus briefs early and often, rather than waiting until the merits stage. This is probably sound advice for amicus groups that are underrepresented at the petitions stage—to the extent their adversaries are filing and persuading the court to hear cases likely to be resolved in their favor, underrepresented groups are "losing" at the case-selection stage. Based on a comparison of briefs filed at the petitions stage versus the merits stage, public interest/policy groups best fit this profile, representing a proportionally smaller share of amici at the petitions stage as at the merits stage, ¹⁶⁸ perhaps due to a lack of resources. ¹⁶⁹

^{162.} I use a chi-square test to assess whether the differences in grant rates were the result of chance with the following results: P-value associated with the grant of a petition for rehearing en banc when there was a positive amicus filing vs. negative or no filing at the Federal Circuit = 1.59467E-05; P-value associated with the grant of certiorari when there was any amicus filing vs. no amicus filing at the Supreme Court = 2.93768E-06; P-value of grant of certiorari associated with a negative only filing vs. no amicus filing at the Supreme Court = 9.2366E-13. The differences were significant even when we controlled for the impact of the Solicitor General, who filed eight certiorari-stage amicus briefs and who, as described *infra* Section IV(E), has a strong influence on the Supreme Court.

^{163.} Gregory Caldeira & John Wright, Amici Curiae before the Supreme Court: Who Participates, When, and How Much? 52 J. POL. 782, 788 (1990).

^{164.} Including circuit splits and the opinion of the Solicitor General. Id. at 788.

^{165.} But see John Duffy, The Federal Circuit in the Shadow of the Solicitor General, 78 GEO. WASH. L. REV. 518, 536 (suggesting that fractious en banc decisions in Federal Circuit cases send signals similar to circuit splits that Supreme Court resolution is needed).

^{166.} *Id.* (describing the views of the Solicitor General and dissension in en banc Federal Circuit decisions as providing input to the Court).

^{167.} See Michel, supra note 17, at 705 (describing the extension of the period during which briefs can be submitted from seven to fourteen days).

^{168.} Representing 17% of merits-level amici, but filing only a few of the certiorari-level

However, the filing of patent amicus briefs in many more petitions could, ironically, undermine their effectiveness. Currently, the relatively few numbers of briefs makes the petitions that do receive briefing stand out. Among the Federal Circuit petitions studied, amicus briefs were filed in 6% of en banc petitions, 170 12% of which were granted, versus a success rate of less than 2% of petitions without briefing. 171 In the Supreme Court, 31% of petitions had amicus briefing, 172 with certiorari granted on 45% of petitions with briefing, as compared to a 2% grant rate without. 173 As others have noted, both "the expense of filing an amicus brief, coupled with the relative *infrequency* with which interested parties file amicus briefs" contribute to their influence on the court. 174 Thus, while amicus groups may in general be advised to file more petition stage briefs, the net effect of doing so may be to dilute the impact of each individual brief. In addition, given the low grant rates on petitions, it is important to bear in mind that while amicus briefs may increase the chances of success, they by no means guarantee it.

What should amici do if they oppose, rather than support, the grant of certiorari? According to conventional wisdom, it may be best to lay low, as negative briefs are likely to be ineffective at best and counterproductive at worst—signaling the importance of a case and potentially increasing the chances of review.¹⁷⁵ Patent amicus practice seems to reflect this understanding; only a handful of briefs filed at the Federal Circuit and Supreme Court urged the courts to decline to hear the cases. In the two cases where amici advocated against taking certiorari,¹⁷⁶ the Court took certiorari anyway, in each case siding with the many more positive briefs urging it to do so and effectively ignoring the negative briefs. The impact of negative briefs at the Federal Circuit was harder to discern. The Federal Circuit declined to grant rehearing en banc in the eight cases in the sample

amicus briefs studied.

- 170. Thirty-three of 523.
- 171. Four of 33 and 8 of 450, respectively.
- 172. Twenty-two of seventy-one.
- 173. Ten of twenty-two and one of forty-nine, respectively.
- 174. Caldeira & Wright, *supra* note 163, at 753 (emphasis added).
- 175. See, e.g., id. at 801 (finding a positive correlation between negative briefs and the taking of certiorari).

176. Brief of Amici Curiae Qualcomm Incorporated, Tessera, Inc. and Biogen Idec Inc. in Support of Respondent, eBay Inc. v. MercExchange, L.L.C., 547 U.S. 388 (2006) (No. 05-130), 2005 WL 2381068; Brief of International Business Machines Corporation, Eastman Kodak Company and Ford Motor Company as Amici Curiae in Support of Respondents, Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., 535 U.S. 722 (2002) (No. 00-1543), 2001 WL 34092006; Brief of Amicus Curiae Applera Corporation (Applied Biosystems and Celera Genomics) in Support of Respondents, Festo, 535 U.S. 722 (No. 00-1543), 2001 WL 34092011 (count excludes briefs filed by the Solicitor General by request of the Court).

^{169.} Accord, Adam Chandler, The Early Brief Gets the Worm, SLATE (Dec. 5, 2008), http://bbs.slate.com/id/2206039/ (describing the ACLU's organizational decision not to file certiorari-level briefs as an "allocation-of-resources" decision).

where negative briefs were filed.¹⁷⁷ However, because the Federal Circuit grants so few en banc requests, any difference in outcomes was not statistically significant. Thus, while this sample was too small to draw any definitive conclusions, it leaves largely intact the conventional wisdom that negative briefs should be filed, if at all, with caution.

E. Amicus Briefs on the Merits, Unless Filed by the Government, Did Not Seem to Influence Outcomes¹⁷⁸

While the affected groups theory emphasizes the signals that amicus briefs send to the courts, information theory predicts that amicus briefs can make substantive contributions to the development of the law. To test the extent to which courts are using briefs for their substance, we focused on one particular measure: whether or not briefs at the merits stage persuaded the court to rule for one party or another. We found that when the balance of amici favored one side of a case, as it usually did,¹⁷⁹ the court still ruled for or against patentees at around the same rate that it did in the absence of a winner among amici.¹⁸⁰ This was true even when amici exclusively filed in favor of one side (X-0 or 0-X).¹⁸¹ Although the courts more often than not agreed with the balance of amici,¹⁸² any difference in how they ruled with and without amici was statistically undetectable.¹⁸³ The data studied, therefore, failed to find evidence that courts are more likely to rule for a party just because it had greater support among amici, as some amici may hope.

This is not to rule out other ways that briefs may have substantively influenced the courts' decision making. Indeed, individual briefs have been important to courts. The arguments of amici like the United States have been cited in detail in court decisions, for example, as described in Section IV(E), *infra*. Anecdotally, amici and clerks interviewed for this study also suspected that the

^{177.} Cases were Bayer Schering Pharma AG v. Barr Laboratories, 575 F.3d 1341 (2009), Aventis Pharma S.A. v. Amphastar Pharmaceuticals, Inc., 525 F.3d 1334 (2008), BMC Res. v. Paymentech, 498 F.3d 1373 (2007), Gen-Probe Inc. v. Vysis, 359 F.3d 1376 (2004), Eli Lilly & Co. v. Board of Regents of The Univ. of Wash., 334 F.3d 1264 (2003), Allergan v. Alcon Laboratories, 324 F.3d 1322 (2003), Symbol Technologies v. Lemelson Med., 277 F.3d 1361(2002), Eli Lilly & Co. v. Barr Laboratories, Inc., 251 F.3d 955 (2001).

^{178.} Baseline win rate for patentees calculated based on a statistically valid sample of cases from the period studied without amicus filing (95% confidence rate).

^{179.} 76/106 = 72% of Federal Circuit cases with any briefs favoring a party, 16/16 = 100% of Supreme Court cases with any briefs favoring a party.

^{180. 45%} win rate for patentees; calculated based on a statistically valid sample of cases from the period studied without amicus filing (95% confidence rate).

^{181.} In 41 out of 76 Federal Circuit cases, or 54%, the balance of amicus briefs favored one side.

^{182.} Federal Circuit: 37/68 = 54%, Supreme Court: 7/13 = 53% (denominators exclude cases in which the outcome of the case was mixed, the amicus did not favor either side, or the brief was unavailable). Any difference in the success rate of parties in the presence of one-sided amicus briefs for them was also statistically insignificant.

^{183.} With respect to its likelihood of ruling for the patentee.

courts have borrowed liberally from amicus briefs without citing to them.¹⁸⁴ For example, the supervising attorney of one amicus brief in the *Festo* case, the IEEE brief, believes that the brief provided the court with the concept of a foreseeability limit on the doctrine of equivalents.¹⁸⁵ While the brief was mentioned during the oral arguments,¹⁸⁶ it was not mentioned in the final decision.¹⁸⁷

In an attempt to evaluate how widespread "borrowing" from amicus briefs by court decisions was, we performed a statistical analysis based on the content of briefs in a handful of cases. Using open source plagiarism software and techniques used by other scholars, ¹⁸⁸ we analyzed the overlap between briefs (amici and party) and the Supreme Court's decisions in *Bilski*, *Festo*, *Ebay*, and *KSR* to gauge the extent to which the Court agreed with a specific brief filer. Many of the matches were to case law, making the extent of match at best an imperfect proxy of agreement, as citing to the same authority does not preclude disagreement if the authority is applied to a different set of facts or to reach a different outcome, or merely represents citing in order to disagree with the authority. Still, based on the analysis, United States amicus briefs had the greatest amount of overlap with the decisions, averaging an 8% match rate with the decisions in these four cases versus an average of 2.5% for briefs from some twenty other amici in each case (selected at random). ¹⁸⁹

Although we did not find that, overall, the courts sided for the more popular party among amici, the courts did tend to agree with certain amici and disagree with others. Government amici did well, for example, predicting the winner three-quarters of the time.¹⁹⁰ University amici, in contrast, did poorly, filing in favor of the winning side only 6% of the time.¹⁹¹ The difference between the success rates of these particular groups deviated significantly from the average.¹⁹²

^{184.} Exchanges in 2009 and 2010.

^{185.} See Professional website of Professor Lee A. Hollar, UNIV. OF UTAH, http://www.cs.utah.edu/~hollaar/ (last visited Feb. 27, 2010) (claiming that the concept of foreseeability was provided to the Supreme Court by the IEEE brief, and containing a link to same).

^{186.} Transcript of Oral Argument at 7, Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., 535 U.S. 722 (2002) (No. 00–1543), 2002 WL 22010, available at http://www.supremecourt.gov/oral_arguments/argument_transcripts/00-1543.pdf.

^{187.} See Festo, 535 U.S. 722.

^{188.} We used the approach described in Pamela Corley, *The Supreme Court and Opinion Content: The Influence of Parties' Briefs*, 61 POL. RES. QUART. 468 (2008), and used the open source plagiarism detection software WCopyFind v.2.7 available at http://plagiarism.phys.virginia.edu/Wsoftware.html to look for matches within briefs and published decisions based on a shortest matching phrase of six words and 100 characters with a maximum of two imperfections.

^{189.} Among amici that filed multiple briefs, we found the following levels of overlap: Business Software Alliance (3.7%, based on analysis of three cases), Federal Circuit Bar Association (3.3%, based on analysis of three cases), IBM (3.8%, based on analysis of four cases), and American Bar Association (1.8%, based on analysis of four cases).

^{190.} Seventy-five percent success rate; N = 56 amici, P-value = 0.004.

^{191.} N = 65 amici, P-value = 2.39E-06.

^{192.} Six percent success rate, see p-values in supra notes 190, 191.

Bar/IP associations, including, for example, the Federal Circuit Bar Association, were more successful than average, and professors, less so, ¹⁹³ but neither these nor other differences were statistically significant.

Federal government amicus briefs, filed by the United States and by the PTO, were exceptionally prescient. Amicus briefs authored by the United States predicted the winner 90% of the time at the Supreme Court¹⁹⁴ and 80% of the time at the Federal Circuit,¹⁹⁵ based on an analysis of briefs on petitions and the merits. In every single Supreme Court patent case from 1990 to 2009 in which the United States filed an amicus brief except for one, the Court sided with the government.¹⁹⁶ That is to say, in almost all cases, the Court affirmed or rejected¹⁹⁷ the lower court holding when the Government told it to, and in one case, dismissed certiorari as improvidently granted when the Government recommended doing so. While the Court's reasoning tracked that of the Government closely in some cases and less so in others,¹⁹⁸ in every instance but one, the Court took the side in the case that was advocated by the United States.¹⁹⁹ This impressive level of agreement reveals a high-level accord between

^{193.} Bar/IP associations (N = 138) had a success rate of 53%, and professors (N = 56) a success rate of 30%, as opposed to a 45% average.

^{194.} Based on an analysis of thirty available certiorari and merit amicus briefs filed in patent cases from 1999 to 2009, twenty-seven of which were resolved as advocated by the US government brief.

^{195.} Twenty-three out of twenty five times at the Supreme Court (thirteen out of fourteen *certiorari* petition briefs and ten out of eleven merit briefs) and four out of five times at the Federal Circuit (four out of four merit briefs and zero out of one en banc brief).

^{196.} Based on an analysis of the twelve Supreme Court patent cases during this period in which the US Government filed an amicus brief, and finding *accord* where the court took action as advocated by the US Government brief, to affirm or reject the lower court ruling, or to dismiss the case as improvidently granted certiorari. In the lone case in which there was not, *accord* eBay Inc. v. MercExchange, L.L.C., 547 U.S. 388 (2006), the Court adopted the discretionary four-factor standard for granting injunctive relief advocated by the government but vacated the decision below in its application, whereas the government recommended affirming it. Brief for the United States as Amicus Curiae Supporting Respondent, *eBay*, 547 U.S. 388 (No. 05-130), 2006 WL 622120.

^{197.} By vacating, reversing, and/or remanding it. In two of the cases, *Quanta* and *Illinois Tool Works*, the government recommended vacating and remanding and the Court reversed, or vice versa. However, in both cases, the Court endorsed the legal standard advocated the government, and overall, rejected the lower court's reasoning as recommended by the government. *Cf.* Quanta Computer, Inc. v. LG Electronics, Inc., 553 U.S. 617 (2008); Brief for the United States as Amicus Curiae Supporting Petitioners, *Quanta*, 553 U.S. 617 (No. 06-937), 2007 WL 3353102; Illinois Tool Works v. Independent Ink, 547 U.S. 28 (2006); Brief for the United States as Amicus Curiae Supporting Petitioners, *Illinois Tool Works*, 547 U.S. 28 (No. 04-1329), 2005 WL 1864093.

^{198.} Compare Brief for the United States as Amicus Curiae Supporting Petitioner, Microsoft Corp. v. AT&T Corp., 550 U.S. 437 (2006) (No. 05-1056), 2006 WL 3693464 and Microsoft, 550 U.S. 437 (relying on a textual analysis of the patent statute to reach [the U.S. Government and the Courts'] conclusion[s]), with Brief for the United States as Amicus Curiae Supporting Petitioner, MedImmune, Inc. v. Genentech, Inc., 549 U.S. 118 (2006) (No. 05-608) 2006 WL 1327303 (citing extensive policy considerations) and MedImmune, 549 U.S. 118 (Scalia deciding not to address policy considerations).

^{199.} Accord Duffy, supra note 165, at 538 ("Since 2000, the Solicitor General has enjoyed not only an expanded ability to help in selecting patent cases for Supreme Court review but also an

the judiciary and executive branches in high-level patent matters.

Several factors likely contributed to the singular success of United States briefs. First, the briefs were generally first authored by the Office of the Solicitor General,²⁰⁰ whose success at the Supreme Court is widely recognized.²⁰¹ In fact, the majority of United States briefs were provided in response to the Court's request, oftentimes for advice about whether it should grant certiorari.²⁰² As John Duffy has noted, calls for the views of the Solicitor General (CVSG) in patent cases have "surged" since 2000 as the SG has taken on an expanded role,²⁰³ suggesting that the Court has come to view the Solicitor General as a "superclerk" in this particular area of law. Also, while the Department of Justice authored every brief through the Office of the Solicitor General, other agencies including the Department of Health and Human Services, 204 Federal Trade Commission, 205 Treasury Department, and naturally, the PTO, were signatories.²⁰⁶ As such, each brief represented the consensus view, however narrow or broad, of a range of executive agencies. Whatever the specific reasons, whenever the United States filed an amicus brief in a patent case, nine out of ten times, the court adopted the outcome advocated by it.

In addition to signing onto successful United States briefs, the PTO has filed its own amicus briefs. The Director of the Patent and Trademark Office has filed briefs in a handful of Federal Circuit cases, sometimes at the behest of the Federal

incredible winning streak in getting the Supreme Court to adopt its legal positions in patent cases In only one case—eBay, Inc. v. MercExchange, L.L.C.—did the party supported by the Solicitor General lose.").

200. See Briefs: Help/Glossary, U.S. DEPT. OF JUSTICE, http://www.justice.gov/osg/briefs/help.html#brieftypes, (last visited Feb. 28, 2011) (describing the types of briefs the Solicitor General files)

201. See, e.g., Michael A Bailey, Brian Kamoie & Forrest Maltzman, Signals from the Tenth Justice: The Political Role of the Solicitor General in Supreme Court Decision Making, 49 AM. J. POL. SCI. 72, 72 (2005) (characterizing the Solicitor General's successful track record as "well-established" in the political science literature); Kevin McGuire, Explaining Executive Success in the U.S. Supreme Court, 51 POL. RES. Q. 505, 505 (1998) (concluding, based on an empirical analysis, that the solicitor general's success can be explained by his or her litigation experience before the Court); see also Bradley W. Joondeph & Sri Srinivasan, Business, the Roberts Court, and the Solicitor Genera: Why the Supreme Court's Recent Business Decisions May Not Reveal Very Much, 49 SANTA CLARA L. REV. 1103 (2009) (documenting the loyalty of the Robert's Court to the Solicitor General's amicus positions, even over positions advanced by the Chamber of Commerce).

202. Seventeen out of the thirty US briefs analyzed were solicited, fourteen of them regarding certiorari petitions.

203. Duffy, supra note 165, at 529-31.

204. See Brief for the United States as Amicus Curiae Supporting Petitioner, Merck KGaA v. Integra Lifesciences, Ltd., 545 U.S. 193 (2005) (No. 03-1237), 2005 WL 429972.

205. See Brief for the United States as Amicus Curiae, Philips v. AWH Corp., 376 F.3d 1382 (Fed. Cir. 2004) (Nos. 03-1269, 03-1286), available at http://des.uspto.gov/Foia/ReterivePdf?system=AB&flNm=03-1269_1c.

206. See Brief of Amicus Curiae, the United States, in Support of Defendants-appellees and Affirmance of the Judgment, Advanced Software Design Corp. v. Federal Reserve Bank of St. Louis, 583 F.3d 1371 (Fed. Cir. 2009) (No. 2008-1152), 2008 WL 2444725.

Circuit.²⁰⁷ Four out of the five times, the PTO brief predicted the case outcome.²⁰⁸ The Federal Circuit has also drawn upon PTO briefs to justify its own reasoning. For example, the court has cited information that the PTO, through its brief, was uniquely positioned to provide information regarding the status of assignments at the PTO,²⁰⁹ the PTO's interpretation of its own regulations,²¹⁰ and the reasons a PTO examiner may ask for a change in claim language.²¹¹

207. See, e.g., Brief for Director of the United States Patent and Trademark Office as Amicus Curiae at 1, Dethmers Mfg. Co. v. Automatic Equipment Mfg., Co., 293 F.3d 1364 (Fed. Cir. 2002) (Nos. 00-1114, 00-1130), 2001 WL 34401343 (referencing June 1, 2001 order in Dethmers Mfg. Co. requesting PTO briefing); En Banc Order, Therasense, Inc. v. Becton, Dickinson, & Co., 593 F.3d 1289 (Fed. Cir. 2010), available at http://www.patentlyo.com/order_20re_20petition_20for_20rehearing_20en_20banc.pdf.

208. Brief for Director of the United States Patent and Trademark Office as Amicus Curiae, Dethmers Mfg. Co., 293 F.3d 1364 (Nos. 00-1114, 00-1130), 2001 WL 34401343; Brief for Amicus Curiae Director of the United States Patent and Trademark Office Supporting Reversal-in-Part, Aristocrat Technologies Australia PTY Ltd. v. Intern. Game Tech., 543 F.3d 657 (Fed. Cir. 2008) (No. 2008-1016), 2007 WL 4692988, available at http://des.uspto.gov/Foia/ReterivePdf?system=AB&flNm=08-1016_1; Brief and Addendum of Amicus Curiae Director of the United States Patent and Trademark Office, McKechnie Vehicle Components USA, Inc. v. Lacks Industries, Inc., 122 Fed. Appx. 482 (Fed. Cir. 2005) (No. 04-1278), 2004 WL 3763631; Brief of Amicus Curiae, the Director of the United States Patent and Trademark Office, in Support of Appellee, Berman v. Housey, 291 F.3d 1345 (Fed. Cir. 2002) (No. 01-1311), 2001 WL 34629604; Brief of Amicus Curiae, the Director of the United States Patent and Trademark Office, Supporting Appellee and Opposing Rehearing, Eli Lilly Co. v. Board of Regents of the Univ. of Wash., 334 F.3d 1264 (Fed. Cir. 2006) (No. 02-1610), available at http://des.uspto.gov/Foia/ReterivePdf?system=AB&flNm=02-1610_2.

- 209. Abrutyn v. Giovanniello, 15 F.3d 1048, 1051 (Fed. Cir. 1994) ("Moreover, the PTO records show that by the time of the default judgment STG's assignment from Dow, and Dow's assignment from Wickhen, had been properly recorded in the PTO. See Brief for Amicus Curiae Commissioner of Patents and Trademarks at 3–4.").
- 210. Kubota v. Shibuya, 999 F.2d 517, 520 (Fed. Cir. 1993) ("The Supreme Court has made clear that an agency's interpretation of its own regulations is due 'considerable respect.' Ford Motor Credit Co. v. Milhollin, 444 U.S. 555, 566, 100 S.Ct. 790, 797, 63 L.Ed.2d 22 (1980). The Commissioner of Patents and Trademarks filed a brief in this case as amicus curiae, stating his interest to be that of ensuring proper interpretation and application of the interference rules pursuant to his statutory authority under 35 U.S.C. § 6 (1988). As to the respective burdens of proof, the commissioner urges us to affirm the board's interpretation of the new rules. The Commissioner asserts that a party filing a preliminary motion bears the burden of proof with respect to the requested relief.").
- 211. Warner-Jenkinson v. Hilton Davis Chemical, 520 U.S. 17, 31–32 (1997) ("It is telling that in each case this Court probed the reasoning behind the patent office's insistence upon a change in the claims. In each instance, a change was demanded because the claim as otherwise written was viewed as not describing a patentable invention at all—typically because what it described was encompassed within the prior art. But, as the United States informs us, there are a variety of other reasons why the PTO may request a change in claim language. Brief for United States as Amicus Curiae 22–23 (Counsel for the PTO also appearing on the brief). And if the PTO has been requesting changes in claim language without the intent to limit equivalents or, indeed, with the expectation that language it required would in many cases allow for a range of equivalents, we should be extremely reluctant to upset the basic assumptions of the PTO without substantial reason for doing so.").

V. CONCLUSION

This study considers twenty years of patent law amicus advocacy. During this time, more than 1500 amici, representing thousands of organizations, companies, and individuals, have signed onto briefs in over a hundred cases, many of them landmark decisions in patent law. The diversity of interests and entities represented by these briefs highlights the importance of the patent system to a wide variety of constituents. Patent "insiders"—including companies, lawyers, and industry groups—have dominated amicus filings, filing three-quarters of the briefs studied. Public interest and consumer groups filed relatively fewer amicus briefs, but when they did so, they often articulated interests beyond the patent system. Although fewer in numbers, the briefs of these patent "outsiders" have highlighted for the courts the impact of patent law jurisprudence on consumer welfare, competition, and related interests.

It appears that the courts are listening closely to these outside perspectives. One important finding of this study is that, of various amici, the U.S. Government is among the most successful. In almost all of the cases during the twenty-year period studied, the Supreme Court adopted the outcome the government advocated. Assuming this trend continues, this means, from a practical perspective, that in most cases, the side that the Court will rule for can be predicted by looking at the U.S. Government brief. From a political perspective, the agreement between the court and U.S. Government is also notable. It reveals an accord between the executive branch, represented by the PTO, Department of Justice, and Federal Trade Commission (FTC), and the judiciary on high-level patent law matters. It also suggests that the courts, though credited with being the primary source of law and policy in the patent system, may in fact be taking their cues from the other branches of government.

How amici advocate also has implications for the functioning of the patent system. Across sectors, whether an amicus advocates in favor of or against the patentee appears to be closely tied to the business model of the amicus. Depending on the business profile of a company, patents may represent the main source of revenue, a cost center, or a net liability for company operations. The patent system must be responsive to not only the needs of different industries, but also the varied settings in which innovative activities take place.

The data contain several suggestions for amicus filers. The impact of an amicus brief appears to depend largely on what kind of brief it is. For example, the courts are more likely to grant certiorari in a case or rehear it en banc when urged to do so. Amicus filers should therefore consider filing briefs on petitions when the opportunity to promote a favorable case arises. How much briefs matter to the substance of a court's ruling is less clear. The present analysis failed to find that briefs made a measurable difference with respect to the court's propensity to rule for or against the patentee, but did not test other ways that briefs on the merits might be influential. However, the literature on amicus briefs in general suggests

that briefs are more likely to be influential if they add new information or perspectives, rather than merely rehash the parties' briefs or address legal theories not raised or expressly waived by the parties.

Finally, the study of amicus briefs provides an insight into our "patent democracy." The diversity of amicus participation and large percentage of briefs filed by limited-repeat filers provide some indication of the system's health. Currently, amicus participation is concentrated at the Supreme Court, although many more cases are decided by the Federal Circuit, at least in part due to procedural obstacles. To this end, the appellate court's efforts to increase amicus participation are a welcome development. This participation can help the patent system evolve dynamically in response to the changing needs of innovation.