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Ideology and Exceptionalism in Intellectual Property: An Empirical Study

Matthew Sag, Tonja Jacobi & Maxim Sytch†

INTRODUCTION

Can Supreme Court justices' views on abortion, racial profiling, and medical malpractice predict how they will vote in intellectual property cases? It may be natural to assume that a justice's views on those topics are irrelevant; they are, after all, unrelated legal fields. It is certainly the dominant view among intellectual property (IP) scholars that copyright, patent, and trademark cases hinge on doctrinal rules and policy issues specific to IP. However, legal realists and political scientists have shown that judges are strongly influenced by political ideology and that judges' ideological positions are consistent across diverse issue areas. The question then becomes: is IP the exception to the attitudinalist rule that ideology affects case outcomes? This Article challenges the widely held belief that IP cases are immune from the influence of judicial ideology, a belief we call "IP exceptionalism."

Judicial attitudes towards IP have become increasingly important. The Supreme Court's 2006–2007 term witnessed a remarkable number of major cases that raised fundamental questions in relation to both the acquisition and the legitimate exercise of IP rights. The increasing attention given to intellectual property issues by the Supreme Court is not surprising, considering

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^{1.} See, e.g., KSR Int'l Co. v. Teleflex Inc., 550 U.S. 398 (2007); MedImmune, Inc. v. Genentech, Inc., 549 U.S. 118 (2007); eBay Inc. v. MercExchange, L.L.C., 547 U.S. 388 (2006).

the paradigm shift created by the rise of the internet economy and the biotechnology industry, each of which has made the impact of IP laws pervasive. Consequently, analyzing the determinants of IP cases has become a pressing imperative for Supreme Court scholarship. It is particularly important to know whether IP cases are shaped by the same ideological rifts that drive divisive social issues, such as affirmative action, executive power, and Supreme Court nominations; if they are, case outcomes can be better predicted by understanding the role of judicial ideology.

This Article explores whether the outcomes of IP cases are influenced by judicial ideology as measured on the traditional liberal-conservative scale. Legal realists have long claimed that judicial decision-making is a function of the political preferences and attitudes held by judges. Developing this claim, political scientists working within the "attitudinal school" have shown empirically that ideology is a significant determinant arguably the dominant determinant—of judicial decisions in general. But this inquiry has not been pursued systematically in relation to IP. Rather, many intellectual property scholars claim that IP law is a function of its own peculiar jurisprudential complexities and is not amenable to conventional ideological analysis.

There are sound reasons for thinking that IP might constitute an exception to this general tendency. IP raises questions that have the potential to divide conservatives and liberals alike, as it pits principles of liberty, property, and free expression against one another. For example, vindicating the property claims of an IP owner arguably interferes with the ability of rivals to compete, of subsequent authors to build upon a prior work, or of the public to freely express a point of view. ⁶

^{2.} OLIVER WENDELL HOLMES, JR., THE COMMON LAW 1 (1881) ("The felt necessities of the time, the prevalent moral and political theories, intuitions of public policy, avowed or unconscious, even the prejudices which judges share with their fellow-men, have had a good deal more to do than the syllogism in determining the rules by which men should be governed.").

^{3.} See, e.g., Jeffrey A. Segal & Harold J. Spaeth, The Supreme Court and the Attitudinal Model (1993) [hereinafter Segal & Spaeth, The Attitudinal Model] (finding the attitudinal model predicts 76% of cases correctly in search and seizure cases); Richard L. Revesz, Environmental Regulation, Ideology, and the D.C. Circuit, 83 Va. L. Rev. 1717 (1997) (finding that ideology significantly influences judicial decision-making and finding further that judges' votes are also greatly affected by the party affiliation of the other judges on the panel in environmental cases). For additional examples, see notes 17-23. The attitudinal model is discussed in more detail infra Part I.A.

^{4.} See, e.g., Jeffrey A. Segal, Separation-of-Powers Games in the Positive Theory of Congress and Courts, 91 Am. Pol. Sci. Rev. 28 (1997) (reviewing the attitudinalist literature and arguing the attitudinal model has strong empirical support, whereas the empirical evidence of strategic models is problematic); Jeffrey A. Segal & Harold J. Spaeth, The Influence of Stare Decisis on the Votes of United States Supreme Court Justices, 40 Am. J. Pol. Sci. 971 (1996) (showing Supreme Court justices decide cases according to their pre-existing revealed preferences in 90.8% of cases, and in only 9.2% of cases did a justice switch to the position established in the landmark precedent; concluding stare decisis does not strongly influence Supreme Court justices).

^{5.} See infra Part I.B.

^{6.} See Bronwyn H. Hall & Rosemarie Ham Ziedonis, The Patent Paradox Revisited: An

To resolve this important question, we conduct a broad empirical study to rigorously test the attitudinal model as applied to IP litigation. This is the first study of this kind.⁷ Indeed, the role of judicial ideology in economic cases in general—cases involving issues such as taxation, securities, and antitrust, as well as IP—has not been clearly established.⁸ Thus an empirical study of the effect of ideology in IP cases informs both IP literature and the broader judicial ideology literature.

In this Article, we examine the effect of judicial ideology on IP case outcomes before the Supreme Court from 1954 to 2006. We find that ideology is a significant determinant of IP cases: the more conservative a justice is, the more likely he or she is to vote in favor of recognizing and enforcing rights to intellectual property. We also find evidence that the relationship is more complex than a purely ideological account would suggest; our results suggest that law matters too. We find that a number of factors that are specific to IP are also consequential. Additionally, we show that although ideology is highly predictive of IP outcomes, the size of this effect is nonetheless significantly lower than it is in cases involving prominent social issues, such as voting rights or the death penalty. We therefore conclude that although ideology is an important element in predicting IP decisions, there may nonetheless be real

Empirical Study of Patenting in the U.S. Semiconductor Industry, 1979-1995, 32 RAND J. ECON. 101, 101-28 (2001); Jean O. Lanjouw & Josh Lerner, The Enforcement of Intellectual Property Rights: A Survey of the Empirical Literature, 49/50 Annales D'Economie Statistique 223, 223-46 (1998); Neil Weinstock Netanel, Copyright and a Democratic Civil Society, 106 Yale L.J. 283 (1996).

- 7. Two prior studies partially address this question. However, they are both narrow in scope and have null results, from which no conclusive inferences can be drawn. Barton Beebe's study of the application of the Polaroid factors in trademark cases calls attention to the possibility that political ideology might affect judicial decision-making in this context but finds no significant effect. See Barton Beebe, An Empirical Study of the Multifactor Tests for Trademark Infringement, 94 CALIF. L. REV. 1581 (2006). Likewise, Kimberly Moore's study of patent claim construction appeals finds no significant difference in how judges appointed by Republicans and judges appointed by Democrats construe patent claims, nor any discernable difference in their tendencies to affirm or reverse district court claim constructions. See Kimberly A. Moore, Are District Court Judges Equipped to Resolve Patent Cases?, 15 HARV. J.L. & TECH. 1 (2001). Polk Wagner and Lee Petherbrige analyze whether Federal Circuit judges follow a methodology that is either "procedural" or "holistic" in their claim construction jurisprudence. Such differences in methodology could be said to be ideological in the most general sense, but they do not equate to the study of political ideology undertaken here. See R. Polk Wagner & Lee Petherbridge, Is The Federal Circuit Succeeding? An Empirical Assessment of Judicial Performance, 152 U. PA. L. Rev. 1105 (2004). Note also that John Allison and Mark Lemley considered this question in their review of patent validity decisions in the Federal Circuit, but did not pursue it because Republican-appointed judges accounted for 92.3% of opinions in their sample. See John R. Allison & Mark A. Lemley, How Federal Circuit Judges Vote in Patent Validity Cases, 27 FLA. St. U. L. Rev. 745 (2000).
- 8. There is no strict categorization of economic cases, but most scholars seem to agree on what is encompassed by the term. Topics other than those listed that would constitute economic cases include bankruptcy, corporate law issues generally, and commercial contracting. *See infra* notes 24-29 and accompanying text.

differences between the effect of ideology in social and economic cases.

Part I of the Article explains the basis for the broad attitudinal claim that case outcomes have ideological derivations. It then presents the theoretical basis for the competing claim that IP is immune to the general impact of ideology on judicial decisions. Part II provides an overview of some of the anecdotal evidence relied upon by exceptionalists and the attitudinalist response. We identify three central interrelated phenomena that scholars point to as evidence of IP's exceptionalism: the unusual prevalence of unanimous opinions, surprising judicial coalitions, and judges voting against ideological type. Part II also considers and counters these claims from an attitudinalist perspective.

We conduct our empirical analysis in Part III. This Part first offers some impressionistic evidence of IP exceptionalism by comparing judicial voting coalitions in IP cases to coalitions in Supreme Court decisions generally. We then apply regression analysis to test four hypotheses: (1) that ideology affects judicial decision-making; (2) that the effect of judicial ideology on outcomes differs between various types of IP claims; (3) that the effect of ideology differs between liberal and conservative justices; and (4) that the effect of ideology on IP cases differs from its effects in other cases. Part IV presents the implications of our analysis for IP in particular and for judicial scholarship in general, and considers potential extensions of our analysis.

I

THE INFLUENCE OF IDEOLOGY IN INTELLECTUAL PROPERTY: ATTITUDINALISM VERSUS EXCEPTIONALISM

A. Intellectual Property and the Attitudinal Model

There is a rich literature demonstrating the significance of ideology in judicial decision-making in both the U.S. Supreme Court and the federal courts of appeal. Ideology typically refers to an overarching framework of beliefs, with sufficient consistency among constituent belief elements that knowledge of an individual's ideology allows for prediction of his or her views on related topics. The attitudinal model of judicial decision-making applies a construct of ideology that reduces to a single continuum: liberal-conservative. Attitudinalists posit that ideology is not only *an* important factor in understanding the behavior of judges, but more controversially that ideology is

^{9.} See Jeffrey A. Segal & Harold J. Spaeth, The Supreme Court and the Attitudinal Model Revisited (2002) [hereinafter Segal & Spaeth, The Attitudinal Model Revisited]; Segal & Spaeth, The Attitudinal Model, supra note 3; see also Lee Epstein et al., The Political (Science) Context of Judging, 47 St. Louis U. L.J. 783 (2003) (providing an overview of various studies); Daniel R. Pinello, Linking Party to Judicial Ideology in American Courts: A Meta-analysis, 20 Just. Sys. J. 219 (1999) (providing an overview of various studies); infra notes 17-29 and accompanying text.

the *most* important factor.¹⁰

The attitudinal model regards judges as rational maximizers of their ideological preferences who attempt to bring the law in line with their personal political commitments. ¹¹ Judges "accomplish this mission, according to some political science accounts, by voting on the basis of their sincerely held ideological (liberal or conservative) attitudes vis-à-vis the facts of cases, and nothing more." ¹²

The attitudinal model rests on two assumptions. The first is that judges have ideological preferences related to the cases that come before them. The second is that, either consciously or unconsciously, these preferences affect their decisions. The first assumption is fairly uncontroversial in relation to contested social issues, but many take issue with the second. Nonetheless, judicial interviews, first-hand judicial accounts, and numerous studies of judicial behavior have shown that judges care strongly about the outcomes of many cases and about which cases they hear. Provided the issues raised are ideologically salient, it follows that judges will decide cases ideologically.

The effect of ideology in Supreme Court decisions has been demonstrated across a number of issue areas including the death penalty, ¹⁷ freedom of speech, ¹⁸ search and seizure, ¹⁹ federalism, ²⁰ and administrative law. ²¹ The

^{10.} Lee Epstein & Jeffrey A. Segal, *Trumping the First Amendment?*, 21 WASH. U. J.L. & PoL'Y 81, 85 (2006) ("[I]n virtually all political science accounts of Court decisions, ideology moves to center stage.").

^{11.} *Id.*; see also Richard A. Posner, What Do Judges and Justices Maximize? (The Same Thing Everybody Else Does), 3 Sup. Ct. Econ. Rev. 1 (1993) (suggesting judges seek to maximize income and leisure in addition to other sources of utility).

^{12.} Epstein & Segal, *supra* note 10, at 85-86 (footnote omitted).

^{13.} See, e.g., Harry T. Edwards, Essay, Collegiality and Decision Making on the D.C. Circuit, 84 Va. L. Rev. 1335 (1998).

^{14.} See H.W. Perry, Jr., Deciding to Decide (1991).

^{15.} See Posner, supra note 11.

^{16.} See, e.g., Lee Epstein & Jack Knight, The Choices Justices Make 22-55 (1998); C. Herman Pritchett, The Roosevelt Court XII-XIII (1948); Segal & Spaeth, The Attitudinal Model, *supra* note 3.

^{17.} See, e.g., Tracey E. George & Lee Epstein, On the Nature of Supreme Court Decision Making, 86 Am. Pol. Sci. Rev. 323 (1992).

^{18.} See, e.g., Epstein & Segal, supra note 10 (finding that although generally the more liberal a justice, the more likely she or he will favor litigants alleging abridgment of First Amendment rights, liberal justices are no more likely than their conservative counterparts to uphold First Amendment claims where other values, such as privacy and equality, are prominently at stake; if anything, conservatives are more likely and liberals are less likely to vote in favor of speech, press, assembly, or association claims).

^{19.} See, e.g., Segal & Spaeth, The Attitudinal Model Revisited, supra note 9, at 316-20.

^{20.} See, e.g., Frank B. Cross & Emerson H. Tiller, The Three Faces of Federalism: An Empirical Assessment of Supreme Court Federalism Jurisprudence, 73 S. Cal. L. Rev. 741 (2000) (finding that ideology dominates questions of institutional federalism); see also David B. Spence & Paula Murray, The Law, Economics, and Politics of Federal Preemption Jurisprudence: A Quantitative Analysis, 87 Calif. L. Rev. 1125 (1999) (finding that federal judges decide preemption cases partly based on ideology, but constrained by the facts and the legal context, and

effect of ideology has also been demonstrated in the federal courts of appeal in areas as diverse as environmental regulation, administrative law, corporate law, campaign finance law, and affirmative action and discrimination law.²² One comprehensive study of almost 15,000 individual judges' votes in twelve different issue areas for the federal courts of appeal found that ideology (as measured by the political party of the appointing president) was a good predictor of how individual judges vote in nine of the twelve issue areas.²³

One gap in the literature establishing the effect of ideology is in what may be labeled "economic cases"—those areas of the law concerned with economic division, such as taxation, securities, antitrust, and IP. Most studies have established the salience of ideology for obviously politicized areas, such as civil rights, civil liberties, criminal law, environmental law, and labor regulation. There is far less evidence that judicial ideology is determinative in economic cases. Staudt, Epstein, and Wiedenbeck commented recently that "[s]tudy after study confirms a strong correlation between judges' political preferences and their behavior in civil rights and liberties cases, but researchers have only rarely identified an association between politics and decisions in economics cases." For example, a study of Supreme Court cases dealing with securities and antitrust law discounted the attitudinal model, noting that there was "an expansive period as to both securities and antitrust during the Warren

not necessarily monolithically based on party affiliation); but see Michael S. Greve & Jonathan Klick, *Preemption in the Rehnquist Court*, 14 Sup. Ct. Econ. Rev. 43, 86 (2006) (finding that preemption cases are multi-dimensional and are unlikely to yield clear confirmation for either an "attitudinal" or a "legal" model of judicial behavior).

- 21. Donald W. Crowley, *Judicial Review of Administrative Agencies: Does the Type of Agency Matter?*, 40 W. Pol. Q. 265, 276 (1987) (finding that Justice Rehnquist consistently favored conservative administrative determinations and that Justice Brennan favored liberal outcomes).
- 22. See, e.g., Frank B. Cross & Emerson H. Tiller, Essay, Judicial Partisanship and Obedience to Legal Doctrine: Whistleblowing on the Federal Courts of Appeals, 107 YALE L.J. 2155 (1998) (reviewing administrative regulations under a deferential Supreme Court rule likewise found a significant ideological effect); Pinello, supra note 9, at 236 (a study of circuit court decisions in several areas found significant, but varying, effects of panel ideology on decisions); Revesz, supra note 3 (finding a pronounced difference in the decisions of judges appointed by Democratic presidents and those appointed by Republicans in D.C. Circuit rulings in environmental regulation cases).
- 23. See Cass R. Sunstein et al., Essay, *Ideological Voting on Federal Courts of Appeals: A Preliminary Investigation*, 90 VA. L. REV. 301, 305 (2004). The areas were abortion, affirmative action, campaign finance, capital punishment, Commerce Clause challenges to congressional enactments, the Contracts Clause, criminal appeals, disability discrimination, industry challenges to environmental regulation, piercing the corporate veil, race discrimination, sex discrimination, and claimed takings of private property without just compensation. The three areas where an effect could not be established were criminal appeals, takings claims, and Commerce Clause challenges to congressional enactments. *Id.* at 306; *see infra* notes 147-150 and accompanying text (discussing the limitations of the party of the appointing president as a measure of judicial ideology).
- 24. Nancy Staudt et al., *The Ideological Component of Judging in the Taxation Context*, 84 WASH. U. L. REV. 1797, 1799 (2006).

]

Court, followed by a distinct correction period after Justices Powell and Rehnquist joined the Court in 1972 preceding a third period after Powell's retirement . . . , in which the results are more evenly split" ²⁵ The authors note further that "the cases are few and far between."

Traditional measures of ideology have also fared badly in the context of Supreme Court tax cases. A recent analysis of the Court's tax cases found no support for the role of ideology in general.²⁷ Another study found that decisions on taxpayer standing are ideological, but only when legal doctrine is vague and when little or no judicial monitoring exists.²⁸ Likewise, a study of circuit court tax decisions found that political ideology has some influence on tax case outcomes, but only when combined with other sociological characteristics of a judge—namely, race and how elite the judge's law school was.²⁹

Studies of the effect of ideology of IP cases in particular have been extremely limited. Two prior studies examined the effect of ideology in specific IP contexts, but only as an incident to their primary inquiries. In assessing the application of the *Polaroid* factors in trademark cases, Barton Beebe tested whether political ideology affects decision-making, but found no effect. Similarly, Kimberly Moore tested for the effect of ideology in patent claim construction decisions but found no result. Both of these studies failed to provide support for the attitudinalist model. However, they cannot constitute evidence against it because they found only null results. Even within the attitudinalist field, questions have been raised as to whether IP is clearly ideological in the same way as other areas of the law.

Why would ideology affect some areas of judicial decision-making and not others? One explanation is that these cases are quite simply the "boring

^{25.} E. Thomas Sullivan & Robert B. Thompson, *The Supreme Court and Private Law: The Vanishing Importance of Securities and Antitrust*, 53 Emory L.J. 1571, 1572 (2004).

^{26.} Id

^{27.} See Staudt, supra note 24 (finding no effect for ideology in tax cases in general, but finding that ideology is significant in the sub-set of corporate tax cases).

^{28.} See Nancy C. Staudt, Modeling Standing, 79 N.Y.U. L. Rev. 612, 647 (2004).

^{29.} See Daniel M. Schneider, Using the Social Background Model to Explain Who Wins Federal Appellate Tax Decisions: Do Less Traditional Judges Favor the Taxpayer?, 25 VA. TAX REV. 201, 230-34 (2005).

^{30.} See Beebe, supra note 7.

^{31.} See Moore, supra note 7.

^{32.} A null result in a statistical study means that an effect cannot be established. However, the failure of regression analysis to reject a null hypothesis should not be taken to indicate that the null hypothesis is true. *See* ROBERT M. LIEBERT & LYNN LANGENBACH LIEBERT, SCIENCE AND BEHAVIOR 92 (4th ed. 1995). Thus Beebe and Moore's studies do not establish IP's exceptionalism, rather they simply fail to establish the effect of judicial ideology in each of their subfields.

^{33.} See Paul H. Edelman et al., Measuring Deviations from Expected Voting Patterns on Collegial Courts (2d Ann. Conf. on Empirical Legal Stud., Working Paper 2007), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=998297 (suggesting, among other possibilities, that copyright cases often involve very technical legal questions and are less clearly ideological).

cases'—cases requiring technical legal analysis such as statutory interpretation and doctrinal analysis, without much impact on constitutional rights or other 'interesting' areas of law."³⁴ Tax cases in particular are often singled out as "boring" in this sense.³⁵ Staudt et al. reject this view, arguing that it is "extremely unlikely that judges and Justices simply set aside their political preferences in cases involving business and finance questions, or that the preferences are so weak they cannot show up in empirical studies."³⁶

A second explanation is that there is nothing wrong with the attitudinal model; it is simply that the traditional method of coding data is inapposite in economic cases. For example, Staudt et al. have suggested that the traditional case coding rules misclassify outcomes in tax cases.³⁷ The traditional coding refers again to the Spaeth dataset, which codes tax decisions in favor of the taxpayer as conservative and decisions in favor of the government as liberal.³⁸ Staudt et al. conclude that "these coding rules work well in the civil rights context but produce unexpected errors in business and finance litigation."³⁹ More generally, they speculate that "the null findings in the extant literature may be a by-product of the ways in which scholars have operationalized the term 'ideology' in business and finance cases."⁴⁰ Indeed, by adopting a more selective classification system, Staudt et al. have shown that politics does indeed play a role in Supreme Court decision-making in business and finance litigation.⁴¹

In summary, there is a wealth of evidence that ideology is a significant factor in judicial decision-making. But this scholarship is far less developed in demonstrating that the same effect can be found in economic cases. This raises the question of whether the salience of ideology is stronger in non-economic issue areas. In the next Section we consider theories of why IP in particular may not fit the attitudinal model.

B. Theories of Intellectual Property Exceptionalism

In spite of the significant body of evidence that political ideology plays a role in higher court decision-making generally, there is a widely held view among those practicing and studying IP that the traditional ideological divide

^{34.} Neil M. Richards, *The Supreme Court Justice & "Boring" Cases*, 4 Green Bag 2D 401, 403 (2001).

^{35.} Id. at 403-08.

^{36.} Staudt et al., *supra* note 24, at 1811.

^{37.} Id

^{38.} *Id.* The United States Supreme Court Judicial Database is a widely used database of Supreme Court opinions developed by Harold J. Spaeth. *See* Harold J. Spaeth, *The Original U.S. Supreme Court Judicial Database*, http://www.cas.sc.edu/poli/juri/sctdata.htm (last visited Sept. 19, 2008). We discuss this coding in more detail *infra* Part III.A.

^{39.} Staudt et al., *supra* note 24, at 1802.

^{40.} Id. at 1812.

^{41.} See id. at 1815-20.

between "liberals" and "conservatives" has little or no relevance in their specialized field. ⁴² Those in the IP trenches appear to regard judges as either impartial or indifferent to questions of IP. ⁴³ Those who do consider the issue of ideology usually conclude that the political labels of "liberal" and "conservative" are inapplicable in the context of IP. ⁴⁴

The belief that ideology does not affect judicial behavior in the IP context raises some interesting questions. If the prevailing wisdom of the IP community is correct, IP poses a significant challenge to the attitudinal model and suggests that its proponents may have failed to account for differences in specific fields of law. Alternatively, if the attitudinalist school is correct and judicial ideology shapes all areas of the law, this suggests that IP scholars and practitioners may have fundamentally failed to understand a critical aspect of their own discipline.

The relevance of ideology to IP is ultimately an empirical question and should be answered accordingly. We expect that the exceptionalist view is overstated, but to explore this issue, we want to consider the strongest case for exceptionalism. However, because the marginalization of questions of ideology

See, e.g., Craig Allen Nard & R. Polk Wagner, Patent Law 33 (2008) ("As of 2006, eight of the twelve active judges [on the Federal Circuit] were appointed by Republican Presidents, and four by Democrats—though given that patent law issues rarely separate neatly along political party lines, this statistic is of only limited relevance."); James E. Rogan, Foreword, Intellectual Property and the Challenge of Protecting It, 9 J. Tech. L. & Pol'y xv, xvi (2004) (relating Rogan's personal experience that intellectual property issues are rarely partisan: "[B]attle lines typically did not break down along Republican or Democrat lines: when IP warfare erupted, it tended to be a battle between those who understood the importance of intellectual property, and those who did not"); William Patry, Does Ideology Matter in Copyright?, THE PATRY COPYRIGHT BLog, http://williampatry.blogspot.com (Dec. 14, 2005, 7:17 EST) (questioning whether there is an ideology of copyright in a functional sense and whether ideologies of copyright have ever had any demonstrable impact). The strength of this belief is aptly demonstrated by Ann Bartow, who declares in a recent article that "[i]dentification as a Democrat or Republican does not provide too much guidance or create too many expectations about a person's views of intellectual property issues." Ann Bartow, When Bias is Bipartisan: Teaching About the Democratic Process in an Intellectual Property Law Republic, 52 St. Louis U. L.J. 715, 715 (2008). Curiously, Bartow's statement is followed immediately by a footnote to an earlier version of this Article. Id. at 715 n.2. Bartow dismisses our findings—which contradict her assertion—by arguing that we do not have sufficient evidence that the view we label IP exceptionalism actually exists. Id. We are indebted to Bartow for providing us with such a compelling illustration of the exceptionalist view.

^{43.} See Melvin Simensky, Does the Supreme Court Have a "Liberal" or "Conservative" Intellectual Property Jurisprudence?: An Evening with Kenneth Starr & Martin Garbus, 11 MEDIA L. & POL'Y 116, 116 (2003) (quoting Kenneth Starr as rejecting the notion that the Supreme Court is ideological and arguing that the number of unanimous decisions on the Supreme Court "bespeaks the underlying and, in many respects, overriding professionalism of this very lawyerly court").

^{44.} See, e.g., Sara K. Stadler, Forging a Truly Utilitarian Copyright, 91 Iowa L. Rev. 609, 616 n.34 (2006) (acknowledging that the political labels of "liberal" and "conservative" have crept into the discourse of copyright, but also noting confusion as to their meaning); Robert S. Boynton, The Tyranny of Copyright?, N.Y. Times Mag., Jan. 25, 2004, at 40, 42 (stating that the lawyers, scholars and activists forming Lawrence Lessig's "free culture movement" are neither "wild-eyed radicals opposed to the use of copyright" "[n]or do they share a coherent political ideology").

is so substantial in the IP literature, very few articles even raise the question. We undertook a comprehensive study of contemporary newspaper coverage and law review articles relating to every Supreme Court IP case in our dataset for any mention of the ideological nature of the cases. With the exception of *Florida Prepaid*, we found little or no mention of ideological terms. If contrast, when we performed the same search for 105 randomly selected Supreme Court cases we found references to ideological terms in approximately one third. The primary manifestation of the dominance of the exceptionalist view is the invisibility of any discussion of the role of ideology. Accordingly, to fill this gap in the literature, in this Section we attempt to set forth as robust an account as possible of the arguments in favor of exceptionalism.

There are two primary explanations for the perceived lack of ideological influence on IP decisions. The first is that IP cases are largely technical and legalistic and judges simply do not have policy preferences with respect to the outcomes of such cases. For the reasons discussed below, we find this implausible. The second (and more plausible) explanation for IP exceptionalism is that judicial policy preferences with respect to IP do not fit within the stereotypical view of the liberal-conservative ideological continuum.

The claim that judges simply do not have policy preferences because of the technical nature of IP cases is similar to the "boring cases" view of tax—that like tax cases, IP cases also require "technical legal analysis . . . without much impact on constitutional rights or other 'interesting' areas of law."⁴⁷ This seems implausible. Given the significance of IP rights in the modern economy, it is unlikely that judges would not have opinions and policy preferences on the fundamental questions raised by IP disputes. At a policy level, IP cases raise questions regarding property rights, government regulation, freedom of competition, and freedom of speech. The effects of IP laws are also widely felt at a practical level. Copyright and patent law define the relationship between creators (authors and inventors) and the public. Perhaps more importantly,

^{45.} The studies by Beebe and Moore, discussed *supra* notes 30-32 and in the accompanying text, are notable exceptions.

^{46.} Using a FOCUS search on LexisNexis, we searched for citing references to Supreme Court patent cases, using the search phrase: ["democrat" or "democratic" or "republican" or "conservative" or "liberal" or "biased" or "left-wing" or "right-wing"]. Most hits related to a secondary issue, for example, whether states can be subjected to private lawsuits. See, e.g., Fla. Prepaid Postsecondary Educ. Expense Bd. v. Coll. Sav. Bank, 527 U.S. 627 (1999). The IP aspects of decisions, however, were not discussed in political terms regardless of whether they were a "victory for consumers" by allowing gray market products, see, for example, Quality King Distributors, Inc. v. L'Anza Research International, Inc., 523 U.S. 135 (1998), or a "victory for makers of leading brand-name products." See, e.g., Qualitex Co. v. Jacobson Prods. Co., 514 U.S. 159 (1995). A search through the journals, in all cases, failed to turn up any discussion of political motivations behind Supreme Court decisions which is often found in other areas of the law.

^{47.} Richards, *supra* note 34, at 403. It should be noted that the description of "boring" here is somewhat circular as it essentially boils down to not interesting.

these laws also mediate the relationships between creators who build upon one another's works. Similarly, trademark law and trade secret law each police the means of competition between rival businesses: trademark law regulates the ways in which a business may represent its products to consumers, and trade secret law regulates the means by which a business acquires valuable information held by another business.

The more plausible explanation for IP exceptionalism is that judicial policy preferences regarding IP do not fit within the stereotypical view of the liberal-conservative ideological continuum. The labels "liberal" and "conservative" extrapolate easily in certain contexts: liberals (in the modern sense) tend to look favorably upon social programs even if they require government intervention in the economy, but unfavorably upon government regulation of individual expression or "morality." Conservatives, in contrast, generally resist government regulation of the economy in favor of market solutions and privatization, but often endorse laws reinforcing "traditional values."

Of particular relevance to our inquiry are the expected views of liberals and conservatives on property rights. According to the traditional formulation, conservatives are more likely to see private property as an end unto itself, and liberals are more tolerant of incursions of private property rights for the greater societal good. This division is reflected in the infamous *Lochner* decision, in which the Supreme Court invalidated a New York law limiting the working hours of bakers as an "unreasonable, unnecessary and arbitrary interference with the right and liberty of the individual . . . to enter into . . . contracts." This division also forms the basis for the definition of what constitutes a liberal outcome in the dominant database of Supreme Court cases. ⁵¹

If the conventional measures of ideology apply to IP, then one would expect conservatives to view IP as end unto itself. To the extent that IP is viewed in the same way as traditional property, pro-property conservatives should also be pro-IP. Equally, one would expect liberals to be more receptive to placing limitations on IP rights in the pursuit of other social values, such as free speech or distributive justice.⁵²

^{48.} See generally Mark A. Lemley, *The Economics of Improvement in Intellectual Property Law*, 75 Tex. L. Rev. 989 (1997) (discussing sequential innovation in copyright and patent law).

^{49.} *See*, for example, the reaction to *Lawrence v. Texas*, 539 U.S. 558 (2003), and discussion as to its effects on "morals" legislation, and the division this provoked in liberals versus conservatives. Nelson Lund & John O. McGinnis, Lawrence v. Texas *and Judicial Hubris*, 102 MICH. L. REV. 1555, 1595 (2004).

^{50.} Lochner v. New York, 198 U.S. 45, 56 (1905).

^{51.} Spaeth, *supra* note 38; *see infra* note 134 (giving a detailed description of the coding categories of liberal and conservative case outcomes employed in the Spaeth database).

^{52.} See, e.g., Jack M. Balkin, Commentary, Digital Speech and Democratic Culture: A Theory of Freedom of Expression for the Information Society, 79 N.Y.U. L. Rev. 1, 6 (2004); Margaret Chon, Intellectual Property "from Below": Copyright and Capability for Education, 40 U.C. DAVIS L. Rev. 803 (2007); Molly Shaffer Van Houweling, Distributive Values in Copyright,

But do the conventional measures apply? While it seems naive to think that the justices do not have preferences relating to IP, it seems more plausible that the nature of IP itself is ideologically ambiguous. This ambiguity manifests in four closely related questions. First, do IP rights originate from a natural rights framework or a utilitarian one? Second, are IP rights property, or are they an instrument of government regulation (or something entirely different)? Third, do IP rights ultimately detract from or enhance individual liberty? Fourth, do the differences between the various subfields of IP differently affect the extent to which IP is ideological?

1. Natural Rights versus Utilitarian Accounts of Intellectual Property

In the United States, the institution of private property is predominantly justified in terms of natural rights,⁵³ though the primary justifications for IP tend to be instrumentalist and utilitarian.⁵⁴ This contrast between real property and IP is discernable in the text of the U.S. Constitution itself. For example, the Due Process and Takings Clauses of the Fifth Amendment provide that: "No person shall be . . . deprived of life, liberty, or property, without due process of law; nor shall private property be taken for public use, without just compensation." Similarly, the Fourteenth Amendment states: "No State shall . . . deprive any person of life, liberty, or property, without due process of law." In contrast, all that the Constitution says about IP is that: "The Congress shall have Power . . . To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries." Although the Constitution gives Congress the authority to grant patents and copyrights, it does so only for the limited purpose of promoting "the Progress of Science and useful Arts." The Constitution protects private property rights as a fundamental aspect of

⁸³ Tex. L. Rev. 1535, 1540 (2005).

^{53.} See, e.g., Wendy Gordon, A Property Right in Self-Expression: Equality and Individualism in the Natural Law of Intellectual Property, 102 YALE L.J. 1533, 1540 (1993); Justin Hughes, The Philosophy of Intellectual Property, 77 Geo. L.J. 287, 288 (1988).

^{54.} See ROBERT P. MERGES & JANE C. GINSBURG, FOUNDATIONS OF INTELLECTUAL PROPERTY 21 (2004) (stating that the "'utilitarian' view of intellectual property is widely held to be the intellectual foundation for U.S. intellectual property law").

^{55.} U.S. Const. amend. V.

^{56.} U.S. Const. amend. XIV, § 1; see also Protocol to the Convention for the Protection of Human Rights and Fundamental Freedoms, Mar. 20, 1952, 213 U.N.T.S. 262; Universal Declaration of Human Rights, art. 17, G.A. Res. 217A (III), at 71, U.N. GAOR, 3d Sess., 1st. plen. mtg., U.N. Doc. A/810 (Dec. 12, 1948); French Declaration of the Rights of Man and of the Citizen, art. XVII (Fr. 1789).

^{57.} U.S. CONST. art. I, § 8, cl. 8.

^{58.} *Id.*; *see* Sony Corp. of Am. v. Universal City Studios, Inc., 464 U.S. 417, 429 (1984) ("The monopoly privileges that Congress may authorize are neither unlimited nor primarily designed to provide a special private benefit. Rather, the limited grant is a means by which an important public purpose may be achieved."); Twentieth Century Music Corp. v. Aiken, 422 U.S. 151 (1975).

individual liberty; in contrast, the constitutional provision for patents and copyrights appears to be merely instrumental.⁵⁹

The text of the Constitution may not be dispositive on this question. However, it raises a strong presumptive case for viewing conventional property rights through the lens of natural rights while regarding IP rights instrumentally. ⁶⁰ Furthermore, even if one accepts that the underlying rationale for creating, recognizing, and enforcing IP rights has roots in both utilitarian and natural rights based theories, ⁶¹ this too becomes a cause for ideological uncertainty, because utilitarian and rights-based approaches to IP frequently conflict. ⁶² To the extent that IP rights are not attributable to a natural rights framework, one might expect that they would have less intrinsic appeal to political conservatives. ⁶³

2. Property, Regulation, or Tertium Quid?⁶⁴

The concept of property in physical objects is well understood, and is one of the oldest institutions of human civilization. The concept of IP—or more specifically, the discrete concepts of patents, copyrights, trademarks, and trade secrets—has far more recent origins. This is significant because conservatives generally idealize forms of social order that evolve over time, but they

^{59.} Justin Hughes, *The Philosophy of Intellectual Property*, 77 GEO. L.J. 287, 303-04 (1998) (noting that the Constitution's copyright and patent clause is cast in instrumental terms). The Constitution makes no specific provision for trademark or trade secret rights. *See* Trade-Mark Cases, 100 U.S. 82 (1879). Congressional power with respect to trademarks is based on the Commerce Clause. U.S. Const. art. I, § 8, cl. 3.

^{60.} See Dotan Oliar, Making Sense of the Intellectual Property Clause: Promotion of Progress as a Limitation on Congress's Intellectual Property Power, 94 GEO. L.J. 1771 (2006) (arguing that the Framers intended the preamble in the IP Clause, "to promote the Progress of Science and useful Arts," to serve as a limitation on congressional power). But see Adam Mossoff, Who Cares What Thomas Jefferson Thought About Patents? Reevaluating the Patent "Privilege" in Historical Context, 92 Cornell L. Rev. 953 (2007) (arguing that historically patent rights were defined and enforced in part as natural rights); Thomas B. Nachbar, Intellectual Property and Constitutional Norms, 104 Colum. L. Rev. 272 (2004) (questioning historically derived understandings of the limits of the Intellectual Property Clause); Thomas B. Nachbar, Constructing Copyright's Mythology, 6 Green Bag 2d 37, 46 (2002).

^{61.} See Justin Hughes, Copyright and Incomplete Historiographies: Of Piracy, Propertization, and Thomas Jefferson, 79 S. Cal. L. Rev. 993 (2006); see also Mossoff, supra note 60; Alfred C. Yen, Restoring the Natural Law: Copyright as Labor and Possession, 51 Ohio St. L.J. 517 (1990).

^{62.} See Christopher Sprigman, Reform(aliz)ing Copyright, 57 STAN. L. Rev. 485, 544 (2004).

^{63.} This is not to suggest that there are not purely utilitarian conservatives.

^{64.} *Tertium quid* is something that cannot be classified into either of two groups considered exhaustive: an intermediate thing or factor—a term artfully employed by Justice Scalia in *Wal-Mart Stores, Inc. v. Samara Bros.*, 529 U.S. 205, 215 (2000).

 $^{65.\;\;}$ Robert P. Merges et al., Intellectual Property in the New Technological Age 2 (4th ed. 2006).

^{66.} See Mark A. Lemley, Property, Intellectual Property, and Free Riding, 83 Tex. L. Rev. 1031 (2005). How recently is a matter of some debate. See Hughes, supra note 61.

condemn institutions imposed by planners, engineers, politicians, and other societal decision-makers.⁶⁷ From this perspective, the common law of property is both evolved and longstanding, whereas the various forms of IP are more recent and conspicuously engineered.⁶⁸

Indeed, IP can be analogized to many other legal forms:⁶⁹ property,⁷⁰ tort,⁷¹ government subsidy,⁷² and government regulation.⁷³ Each of these analogies tilts in a different ideological direction. One might predict that conservative judges who favor private property rights would be inclined to favor IP claims, but instead those judges could see IP laws as government intervention in the free market. Equally, one might predict that liberal judges would be more predisposed to see the virtue of government intervention in the marketplace to promote creativity, but would also be more likely to see the costs of granting property rights over information.⁷⁴

The politics of the Copyright Term Extension Act of 1998 ("CTEA") illustrates the Supreme Court's internal disagreement as to the appropriateness of the property analogy. The CTEA extended copyright terms in the United States by twenty years, both prospectively and retrospectively.⁷⁵ Proponents of

^{67.} See Robert Cooter & Thomas Ulen, Law and Economics 118 (4th ed. 2004).

^{68.} See, e.g., Dan L. Burk & Mark A. Lemley, *Policy Levers in Patent Law*, 89 Va. L. Rev. 1575 (2003); Joseph P. Liu, *Regulatory Copyright*, 83 N.C. L. Rev. 87 (2004). But note that bankruptcy and corporate law are just as recent and conspicuously engineered as IP, yet their appeal to conservatives is largely unquestioned.

^{69.} See generally Lemley, supra note 66.

^{70.} See, e.g., Kenneth W. Dam, Some Economic Considerations in the Intellectual Property Protection of Software, 24 J. Legal Stud. 321 (1995); Frank H. Easterbrook, Intellectual Property is Still Property, 13 Harv. J.L. & Pub. Pol'y 108, 112 (1990); Edmund W. Kitch, Elementary and Persistent Errors in the Economic Analysis of Intellectual Property, 53 Vand. L. Rev. 1727 (2000). For assessments of this claim, see Richard A. Epstein, Liberty Versus Property? Cracks in the Foundation of Copyright Law, 42 San Diego L. Rev. 1 (2005); Wendy J. Gordon, An Inquiry Into the Merits of Copyright: The Challenges of Consistency, Consent, and Encouragement Theory, 41 Stan. L. Rev. 1343 (1989) (discussing similarities between copyright law and common law property); Lemley, supra note 66 (reviewing the literature); Henry E. Smith, Intellectual Property as Property: Delineating Entitlements in Information, 116 Yale L.J. 1742, 1744 (2007) (noting grave doubts about whether intellectual property is property).

^{71.} See, e.g., Wendy J. Gordon, Copyright as Tort Law's Mirror Image: "Harms," "Benefits," and the Uses and Limits of Analogy, 34 McGeorge L. Rev. 533 (2003).

^{72.} See, e.g., Tom W. Bell, Authors Welfare: Copyright as a Statutory Mechanism for Redistributing Rights, 69 Brook. L. Rev. 229 (2003).

^{73.} See, e.g., Lawrence Lessig, Free Culture 104, 194 (2004); Shubha Ghosh, Patents and the Regulatory State: Rethinking the Patent Bargain Metaphor After Eldred, 19 Berkeley Tech. L.J. 1315 (2004); Herbert Hovenkamp, Antitrust and the Regulatory Enterprise, 2004 Colum. Bus. L. Rev. 335, 336-37.

^{74.} See, e.g., Lessig, supra note 73, at 249 ("When you focus the issue on lost creativity, people can see the copyright system makes no sense. As a good Republican might say, here government regulation is simply getting in the way of innovation and creativity. And as a good Democrat might say, here the government is blocking access and the spread of knowledge for no good reason.").

^{75.} Sonny Bono Copyright Term Extension Act of 1998, Pub. L. No. 105-298, §§ 102(b), (d), 112 Stat. 2827 (1998) (codified as amended at 17 U.S.C. §§ 302, 304 (2006)).

this extension argued that extending the basic term of protection from the life of the author plus fifty years, to the life of the author plus seventy years, would harmonize U.S. law with that of the European Union and would instill better incentives to create and maintain copyrighted works. ⁷⁶ Critics of the legislation have observed that retrospectively extending the copyright term cannot logically be reconciled with an incentive-based system (dead people are notoriously unresponsive to incentives) and that the retrospective term extension effectively freezes the advancement of the public domain. ⁷⁸

The CTEA and the subsequent *Eldred*⁷⁹ litigation place liberal and conservative intuitions in tension.⁸⁰ Although liberal justices might embrace an unrestricted view of congressional power to regulate the economy, they would not be expected to embrace the extension of private property and redistribution of wealth in favor of large corporate interests.⁸¹ On the other hand, although conservatives are predisposed to favor private property rights, a narrow reading of Congressional authority under the Copyright Clause would have added support to cases such as $Lopez^{82}$ and Morrison,⁸³ which adopted a narrow reading of the Commerce Clause.⁸⁴ We return to the Supreme Court's decision in *Eldred* in Part IV to discuss which of these arguments might have been expected to succeed before the Supreme Court, given the implications of our results.

3. Intellectual Property Rights and Individual Liberty

Intellectual property laws have the potential to promote individual autonomy by giving authors and inventors control over the product of their labors. However, these same laws also constrain the autonomy of non-owners by restricting the re-use and re-interpretation of protected works. All property raises tension between property and liberty, but the non-rivalrous nature of

^{76.} Eldred v. Ashcroft, 537 U.S. 186, 196 (2003).

^{77.} *Id.* at 258 (Breyer, J., dissenting) (arguing that the CTEA would "neither encourage creation nor benefit the long-dead author in any other important way"); Robert P. Merges, *One Hundred Years of Solicitude: Intellectual Property Law, 1900-2000*, 88 CALIF. L. REV. 2187, 2236 (2000) (describing the CTEA extension as 'virtually worthless' from an incentive perspective and "a classic instance of almost pure rent-seeking legislation").

^{78.} *Eldred*, 537 U.S. at 251-52 (Breyer, J., dissenting).

^{79.} Id

^{80.} See generally Paul M. Schwartz & William Michael Treanor, Eldred and Lochner: Copyright Term Extension and Intellectual Property as Constitutional Property, 112 YALE L.J. 2331 (2003).

^{81.} Indeed, Justices Stevens and Breyer, generally considered to be liberal justices, *see infra* Part III.B, were the dissenting justices in *Eldred*. Eldred v. Ashcroft, 537 U.S. 186, 222 (2003) (Stevens, J., dissenting); *id.* at 242 (Breyer, J., dissenting).

^{82.} United States v. Lopez, 514 U.S. 549 (1995).

^{83.} United States v. Morrison, 529 U.S. 598 (2000).

^{84.} See generally Erwin Chemerinsky, The Rehnquist Revolution, 2 PIERCE L. REV. 1 (2004) (discussing the Rehnquist Court's limitations on the power of Congress under the Commerce Clause).

information means that this tension could lead to internal divisions within both liberal and conservative camps. Whereas exclusion from ordinary property is required to protect the holders' possessory interest, exclusion from intellectual property may enable profit but is not necessary to maintain the possession of the intangible good.⁸⁵

This difference between tangible property and intellectual property suggests why IP might foster ideological ambiguity and why elements of both the left⁸⁶ and the right express concern over the expansion of IP.⁸⁷ Because we live in a world saturated with proprietary images and text, copyright and trademark law have the potential to impede individual autonomy in a unique way.⁸⁸ Documentarians filming outside a tightly controlled studio,⁸⁹ children playing at being superheroes,⁹⁰ and fans expressing pride in their association with sporting teams⁹¹ all run the risk of infringing the copyrights or trademarks of numerous rights holders.⁹²

As Judge Alex Kozinski observed, although the courts defend free expression when it affronts public morality⁹³ or even when it compromises national security,⁹⁴ they have drawn the line on free expression differently with respect to copyright law:

Congress has given courts the power to order books burned. In a legal

^{85.} Matthew J. Sag, Beyond Abstraction: The Law and Economics of Copyright Scope and Doctrinal Efficiency, 81 Tul. L. Rev. 187, 192 (2006) (reviewing the economics of IP in the context of copyright).

^{86.} See, e.g., Yochai Benkler, The Wealth of Networks (2006); James Boyle, Shamans, Software, and Spleens (1996).

^{87.} See, e.g., N. Stephan Kinsella, Against Intellectual Property, 15 J. LIBERTARIAN STUD., Spring 2001, at 1, available at http://www.mises.org/journals/jls/15_2/15_2_1.pdf; Roderick T. Long, The Libertarian Case Against Intellectual Property Rights, 3 Formulations (1995), available at http://libertariannation.org/a/f3111.html.

^{88.} See, e.g., Patricia Aufderheide & Peter Jaszi, Ctr. for Soc. Media, Untold Stories: Creative Consequences of the Rights Clearance Culture for Documentary Filmmakers (2004), available at http://www.centerforsocialmedia.org/files/pdf/UNTOLDSTORIES_Report.pdf; Marjorie Heins & Tricia Beckles, Brennan Ctr. for Justice, Will Fair Use Survive? (2005), available at http://www.fepproject.org/policyreports/WillFairUseSurvive.pdf; Rochelle Dreyfuss, Expressive Genericity: Trademarks as Language in the Pepsi Generation, 65 Notre Dame L. Rev. 397 (1990); Alex Kozinski, Essay, Trademarks Unplugged, 68 N.Y.U. L. Rev. 960, 972 (1993).

^{89.} Lessig, supra note 73, at 95.

^{90.} See Jessica Litman, Breakfast with Batman: The Public Interest in the Advertising Age, 108 Yale L.J. 1717 (1999).

^{91.} See Stacey L. Dogan & Mark A. Lemley, The Merchandising Right: Fragile Theory or Fait Accompli?, 54 EMORY L.J. 461 (2005).

^{92.} See James Gibson, Risk Aversion and Rights Accretion in Intellectual Property Law, 116 YALE L.J. 882 (2007) (discussing a number of examples).

^{93.} E.g., Cohen v. California, 403 U.S. 15 (1971) (finding that "Fuck the Draft" printed on the appellant's jacket was not repugnant to constitutional speech protections).

^{94.} E.g., N.Y. Times Co. v. United States, 403 U.S. 713 (1971) (holding that the government did not meet its burden of showing justification for the imposition of a prior restraint of expression in relation to the publication of the Pentagon Papers).

regime as jealously protective of freedoms of speech and press as ours, this ought to give us some pause. What's that, you say? Classified documents about our Vietnam war effort have been stolen from the Pentagon and given to the newspapers? You want an injunction to avoid risking the death of soldiers, the destruction of alliances, the prolongation of war? No way, Jose; this is the land of the brave and the home of the free. But wait a minute—did you say someone drew a picture of OJ Simpson wearing a goofy stovepipe hat? Light the bonfires . . . ! 95

As a result, for both liberal and conservative judges, the balance struck between incentives to foster creativity and public access will not automatically mirror the balance they would strike between governmental regulation and free speech generally.

4. Intellectual Property Heterogeneity

In addition to the ideological ambiguity of IP in general, the attitudinal model must also contend with the differences between the various subfields of IP. These subfields—copyright, patent, trademark, and trade secret law—are distinct legal categories with potentially different ideological implications. When aggregated, the tensions between the ideological implications of the various subfields may cause the IP category as a whole to transect the traditional ideological bounds between liberalism and conservatism.

^{95.} Alex Kozinski & Christopher Newman, What's So Fair About Fair Use?, 46 J. COPYRIGHT Soc'Y 513, 516-17 (1999).

Patent law balances the need for incentives for innovation against the competing claims of competitors and second-generation inventors. Copyright raises similar policy issues in many respects, but also requires recognition of the public interest in freedom of expression—a salient issue for liberals in particular. Trademark law, with its focus on preventing consumer confusion instead of providing incentives, is different again. Even if there is a coherent liberal or conservative view with respect to one field of IP, such as patent law, one would not necessarily expect that view to apply to other fields of IP, such as copyright, trademark, and trade secret. Therefore, it may be difficult to see an effect of ideology on IP in an empirical inquiry because each area might pull the Court in a different direction. Of course, if our empirical inquiry does show a consistent effect for ideology on IP, that result is all the more persuasive given the potential heterogeneity within IP.

In summary, IP may be ideologically ambiguous at a theoretical level because: (1) IP rights are not unequivocally linked to a natural rights framework; (2) the property analogy is in tension with the government regulation analogy; and (3) the exercise of IP rights can detract from individual liberty and freedom of expression in a different way than other restrictions of speech. However, these philosophical complexities are only relevant for our purposes to the extent that they affect judicial behavior. This is an empirical question. The next Part explores the existing empirical evidence of exceptionalism and shows it to be quite precarious.

II

Assessing Existing Evidence of Intellectual Property Exceptionalism

Attitudinalists have amassed a formidable body of evidence that judges make decisions based on their ideological predilections. The previous Section explored some of the theoretical reasons underpinning the widely held view that conventional measures of ideology nevertheless have little or no relevance to IP. This Section assesses the extent to which evidence in individual cases lends support to the claim of IP exceptionalism and the attitudinalist response to those claims.

A. Evidence of Exceptionalism

We consider three empirically driven arguments supporting IP exceptionalism in this Section. First, the Supreme Court decides an unusually large number of IP cases unanimously. Second, there are a number of IP cases in which justices vote against type; that is, cases in which conservative justices vote against an IP claim or liberal justices vote in favor of an IP claim. Third, there are also many IP cases which produce strange coalitions of liberals and conservatives that would appear to defy the predictions of an attitudinal model. We present each of these observations in detail before turning to the attitudinal response in Part II.B.

Even Supreme Court justices agree sometimes. In general, the Court averages about one unanimous opinion for every two divided opinions.⁹⁷ The Court's level of unanimity in IP cases is higher than average: about 45% of IP cases between 1954 and 2006 were unanimous decisions.⁹⁸ Indeed, between 1997 and 2007 the Supreme Court decided sixteen IP cases on a unanimous basis⁹⁹ and only eight otherwise.¹⁰⁰

It has been suggested that unanimous decisions demonstrate the justices' impartiality and the ascendance of precedent over political preference. ¹⁰¹ Critics of the attitudinal model often argue that unanimity and near-unanimity are "hard to square" with the attitudinal model. For example, Michael Gerhardt argues that "many unanimous and nearly unanimous opinions involve salient issues on which the justices transcend their ideological differences to reach agreement about the law."

The second empirical observation that causes many to doubt that IP cases are ideologically determined is that there are a number of cases where the

^{97.} See Nine Justices, Ten Years: A Statistical Retrospective, 118 HARV. L. REV. 510, 520 tbl.IV (2004). On average, 35.5% of Supreme Court decisions in the 1994 to 2003 terms were unanimous. The proportion of unanimous cases was as low as 29.6% in 1998 and as high as 43% in 1997. *Id.*

^{98.} This calculation is derived from our database of Supreme Court IP cases described in detail *infra* Part III.A.

^{99.} See, e.g., KSR Int'l Co. v. Teleflex Inc., 127 S. Ct. 1727 (2007); eBay Inc. v. MercExchange, L.L.C., 547 U.S. 388 (2006); Ill. Tool Works Inc. v. Indep. Ink, Inc., 547 U.S. 28 (2006); Metro-Goldwyn-Mayer Studios Inc. v. Grokster, Ltd., 545 U.S. 913 (2005); Merck KGaA v. Integra Lifesciences I, Ltd., 545 U.S. 193 (2005); KP Permanent Make-Up, Inc. v. Lasting Impression I, Inc., 543 U.S. 111 (2004); Dastar Corp. v. Twentieth Century Fox Film Corp., 539 U.S. 23 (2003); Moseley v. V Secret Catalogue, Inc., 537 U.S. 418 (2003); Holmes Group, Inc. v. Vornado Air Circulation Sys., Inc., 535 U.S. 826 (2002); Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., 535 U.S. 722 (2002); Traffix Devices, Inc. v. Mktg. Displays, Inc., 532 U.S. 23 (2001); Wal-Mart Stores, Inc. v. Samara Bros., 529 U.S. 205 (2000); Quality King Distribs., Inc. v. L'Anza Research Int'l, Inc., 523 U.S. 135 (1998); Feltner v. Columbia Pictures Television, Inc., 523 U.S. 340 (1998); Pfaff v. Wells Elecs., Inc., 525 U.S. 55 (1998); Warner-Jenkinson Co., Inc. v. Hilton Davis Chem. Co., 520 U.S. 17 (1997).

^{100.} See, e.g., Microsoft Corp. v. AT&T Corp., 127 S. Ct. 1746 (2007); MedImmune, Inc. v. Genentech, Inc., 549 U.S. 118 (2007); Unitherm Food Sys., Inc. v. Swift-Eckrich, Inc., 546 U.S. 394 (2006); Eldred v. Ashcroft, 537 U.S. 186 (2003); J.E.M. Ag Supply, Inc. v. Pioneer Hi-Bred Int'l, Inc., 534 U.S. 124 (2001); N.Y. Times Co. v. Tasini, 533 U.S. 483 (2001); Fla. Prepaid Postsecondary Educ. Expense Bd. v. Coll. Sav. Bank, 527 U.S. 627 (1999); Dickinson v. Zurko, 527 U.S. 150 (1999).

^{101.} Simensky, *supra* note 43, at 116 (citing Kenneth Starr's approbation of the professionalism of the Court).

^{102.} Michael J. Gerhardt, *Attitudes About Attitudes*, 101 MICH. L. REV. 1733, 1743 (2003) (footnote omitted) (reviewing *The Supreme Court and the Attitudinal Model Revisited* by Jeffrey A. Segal & Harold J. Spaeth).

justices vote against type. Applied to the realm of IP litigation, the attitudinal model predicts that conservative judges will be predisposed to side with those asserting IP rights and that liberal judges will be correspondingly predisposed against them. Thus, when a conservative (liberal) judge votes for (against) the IP owner, we say that the judge is voting according to type.

IP practitioners and scholars frequently point to the decisions of Justice Ginsburg as refutation of the attitudinal model in the context of IP. Justice Ginsburg is generally considered to be one of the more liberal judges on the Court. However, she is also widely perceived as a reliable vote in favor of the IP owner. ¹⁰³ Ginsburg is not the only justice who votes against type from time to time. There are, for example, a number of split decisions in which Chief Justice Rehnquist, a conservative, voted against the IP owner, ¹⁰⁴ and in which Justice Stevens, a liberal, voted in favor of the IP owner.

Not only do IP cases produce numerous examples of voting against type, they also give rise to strange coalitions of liberals and conservatives that would appear to defy the predictions of the attitudinal model. Figure 1 illustrates the mean ideological positions of the members of the Rehnquist Court from 1994 to 2004 based on the ideology scores developed by political scientists Andrew Martin and Kevin Quinn. ¹⁰⁶

^{103.} Justice Ginsburg has only twice voted against the IP owner in a non-unanimous Supreme Court decision. *See* MedImmune, Inc. v. Genentech, Inc., 549 U.S. 118 (2007); Unitherm Food Sys., Inc. v. Swift-Eckrich, Inc., 546 U.S. 394 (2006); *see also* Lawrence Lessig, *How I Lost the Big One*, Legal Aff., Mar.-Apr. 2004, *available at* http://www.legalaffairs.org/printerfriendly.msp?id=544.

^{104.} See, e.g., Fla. Prepaid, 527 U.S. 627; Eli Lilly & Co. v. Medtronic, Inc., 496 U.S. 661 (1990); Stewart v. Abend, 495 U.S. 207 (1990); Dow Chem. Co. v. United States, 476 U.S. 227 (1986); Dowling v. United States, 473 U.S. 207 (1985); Mills Music, Inc. v. Snyder, 469 U.S. 153 (1985); Ruckelshaus v. Monsanto Co., 467 U.S. 986 (1984); Twentieth Century Music Corp. v. Aiken, 422 U.S. 151 (1975); Teleprompter Corp. v. Columbia Broad. Sys., Inc., 415 U.S. 394 (1974).

^{105.} See, e.g., Unitherm Food Sys., Inc. v. Swift-Eckrich, Inc. 546 U.S. 394 (2006); Fla. Prepaid, 527 U.S. 627; S.F. Arts & Athletics, Inc. v. U.S. Olympic Comm., 483 U.S. 522 (1987); Harper & Row, Publishers, Inc. v. Nation Enters., 471 U.S. 539 (1985).

^{106.} Andrew D. Martin & Kevin M. Quinn, *Dynamic Ideal Point Estimation via Markov Chain Monte Carlo for the U.S. Supreme Court, 1953-1999*, 10 Pol. Analysis 134-53 (2002). Updated data is available at http://mqscores.wustl.edu/measures.php. The figure shows the average Martin-Quinn score for each justice during the period 1994–2004. We discuss the Martin-Quinn scores in detail below. *See infra* notes 151-159 and accompanying text.

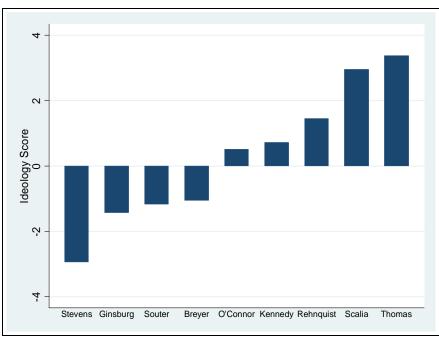


Figure 1Rehnquist Court Judicial Ideology Scores (Martin-Quinn), 1994–2004¹⁰⁷

As Figure 1 illustrates, the justices are positioned from most liberal to most conservative as follows: Stevens, Ginsburg, Souter, Breyer, O'Connor, Kennedy, Rehnquist, Scalia, and Thomas. Accordingly, we might expect to see coalitions of justices who are ideologically proximate; we would not predict ideologically discontinuous coalitions, such as a majority comprised of Justices Stevens, Souter, O'Connor, Rehnquist, and Thomas, or Justices Ginsburg, Breyer, Kennedy, Rehnquist, and Scalia. 109

As noted, Justice Ginsburg appears to present something of a paradox if the attitudinal model of IP is to be believed. In Part III of this Article we undertake a detailed analysis of the correlations of voting patterns between the justices in IP cases and compare those to the correlations between the justices across all Supreme Court cases. The comparison shows that the votes of Justices Rehnquist and Ginsburg have a correlation of 0.42 across all cases, but

^{107.} Data: Martin & Quinn, supra note 106.

^{108.} The average Martin-Quinn scores for each justice between 1994 and 2004 were: Stevens (-2.94); Ginsburg (-1.43); Souter (-1.17); Breyer (-1.05); O'Connor (0.51); Kennedy (0.72); Rehnquist (1.45); Scalia (2.95); and Thomas (3.38).

^{109.} Edelman, Klein, and Lindquist refer to this as "disordered voting." *See* Edelman et al., *supra* note 33.

that in IP cases the correlation is 0.91.¹¹⁰ Justice Ginsburg's tendency to vote more often with Justice Rehnquist in IP cases than she does with her more liberal colleagues is evidence of both the strange coalition phenomena and of voting against type.¹¹¹ We examine these correlations in more detail in Part III.C.

B. The Attitudinal Response

To review, proponents of IP exceptionalism usually support the theory by citing evidence of: (1) unanimous cases; (2) judges voting against type; and (3) strange coalitions of liberals and conservatives. We now present the attitudinalist response to each of these elements of the exceptionalist claim.

The argument that unanimous decisions demonstrate judicial impartiality or the ascendance of precedent over preference assumes that the facts of the cases under review are moderate relative to the ideological positions of the justices. That is, the argument assumes that the status quo under review lies somewhere between the preferences of the liberal and conservative extremes of the Court. However, even an appellate court with heterogeneous ideological preferences could reach a unanimous decision if the lower court's ruling fell to the extreme right or left of the preferences of the judges on the higher court. To take an extreme illustration, a unanimous Supreme Court decision to overturn the imposition of the death penalty on a juvenile shoplifter would hardly constitute evidence that Supreme Court justices have homogeneous views on the death penalty, nor would it establish that death penalty cases are non-ideological.

The Supreme Court's recent unanimous decisions in the context of IP may be similarly misleading. For example, in the recent *Grokster* case, it was fairly clear that all of the justices considered that allowing the providers of file sharing services to blatantly encourage unlawful copying would be an extreme result. Thus, despite the justices' differences on the broader issue of the correct application of the *Sony* doctrine, the Court held unanimously that the

^{110.} For detailed correlations, see *infra* Table 2 in Part III.B. *Florida Prepaid* is the only case in which Ginsburg cast her vote in a different direction to that of Rehnquist. *See* Fla. Prepaid Postsecondary Educ. Expense Bd. v. Coll. Sav. Bank, 527 U.S. 627 (1999).

^{111.} In the IP database, the correlation between Ginsburg and Stevens is 0.51, the correlation between Ginsburg and Breyer is 0.58.

^{112.} See Tonja Jacobi, Competing Models of Judicial Coalition Formation and Case Outcome Determination, 2 J. Legal Analysis (forthcoming 2009), available at http://ssrn.com/abstract=947592.

^{113.} See id.

^{114.} Metro-Goldwyn-Mayer Studios Inc. v. Grokster, Ltd., 545 U.S. 913, 923-25 (2005).

^{115.} The concurring opinion of Justice Ginsburg (joined by Justices Rehnquist and Kennedy) would have substantially narrowed the application of the *Sony* doctrine by adopting a ratio test in relation to substantial non-infringing use. *Id.* at 942 (Ginsburg, J., concurring). In contrast, the concurring opinion of Breyer (joined by Stevens and O'Connor) expressly rejected the application of a ratio test in relation to substantial non-infringing use. *Id.* at 949 (Breyer, J.,

defendants were liable for inducing infringement. 116

Also, unanimity in a ruling can mask disagreement in the Court as to the details of the ruling. For example, in *eBay*, the Court was of one mind in holding that a plaintiff seeking a permanent injunction against patent infringement must satisfy the traditional four-factor test focused on "well-established principles of equity." However, the Court was divided as to the implications of this ruling. Chief Justice Roberts (joined by Justices Scalia and Ginsburg) stressed that history suggests that most patent owners would be entitled to injunctive relief. In contrast, Justice Kennedy (joined by Justices Stevens, Souter, and Breyer) argued that the lessons of history may not apply because "in many instances the nature of the patent being enforced and the economic function of the patent holder present considerations quite unlike earlier cases."

As the *Grokster* and *eBay* cases illustrate, citing to unanimous decisions as evidence against the attitudinal model is unreliable without some understanding of the underlying status quo that the Court's opinion addresses. Indeed, once we scratch the surface of the Court's so-called unanimous decisions, we often see deep underlying differences that do in fact tend to correlate with the justices' ideological profiles. Ultimately, unanimity is not an effective measure of the impact of ideology.

There are a number of examples in the IP cases of liberals and conservatives teaming up to form unusual coalitions and of individual justices voting against type. However, the existence of such instances does not fundamentally challenge the attitudinal model.

First, no model is capable of perfectly predicting every case. There may well be idiosyncratic factors that account for discrepancies between the model and that which is modeled. A model is useful if it highlights variables that explain a significant amount of the behavior in question. The attitudinal model is exceptionally successful in this regard, in that it correctly predicts case outcomes in many issue areas. 121

concurring).

^{116.} *Id.* at 923 (holding that one who distributes a device with the object of promoting its use to infringe copyright, as shown by clear expression or other affirmative steps taken to foster infringement, is liable for the resulting acts of infringement by third parties).

^{117.} eBay Inc. v. MercExchange, L.L.C., 547 U.S. 388, 391 (2006) (holding that the usual equitable principles apply with equal force to disputes arising under the Patent Act).

^{118.} *Id.* at 395 (Roberts, C.J., concurring).

^{119.} *Id.* at 396 (Kennedy, J., concurring). The Court's decision in *Grokster* illustrates a similar division beneath the edifice of unanimity. In that case, Ginsburg's concurring opinion (joined by Rehnquist and Kennedy) takes a high-protectionist view; whereas Breyer's concurring opinion (joined by Stevens and O'Connor) adopts a low protectionist stance. Metro-Goldwyn-Mayer Studios Inc. v. Grokster, Ltd., 545 U.S. 913, 942 (2005) (Ginsberg, J., concurring); *id.* at 949 (Breyer, J., concurring).

^{120.} SEGAL & SPAETH, THE ATTITUDINAL MODEL, *supra* note 3, at 32.

^{121.} SEGAL & SPAETH, THE ATTITUDINAL MODEL REVISITED, supra note 9, at 319

Second, the persuasiveness of any particular case where individual justices vote against type must be assessed in light of all the other cases where justices vote in accordance with type. Impressions taken from individual cases manifest two significant cognitive biases: the fundamental attribution error and the availability heuristic. The fundamental attribution error describes the human tendency to overemphasize personality-based explanations for observed behavior while underemphasizing the role and power of situational influences on the same behavior. The availability heuristic describes the tendency of people to overemphasize the significance of vivid, salient or unusual events. In this context, it is not surprising that IP exceptionalists would point to examples of voting against type and the strange coalitions they produce.

It is easy to find individual IP cases that show the opposite: justices voting according to type. Two such cases are the Court's landmark patent decisions in *Diamond v. Chakrabarty*¹²⁴ and *Diamond v. Diehr*. Indeed, *Diamond v. Diehr* exactly reflects the ideological composition of the Court at the time. Figure 2 represents the ideological composition of the Supreme Court in the 1980 term based on the Martin-Quinn scores of judicial ideology for that year. The majority in *Diamond v. Diehr*—Chief Justice Burger and Justices Stewart, White, Powell, and Rehnquist—continued the expansive reading of the Patent Act adopted in *Chakrabarty*, holding that patentable processes could include mathematical formulas programmed into a digital computer. 127

(finding that ideology correctly predicts 77% of justices' votes in search and seizure cases from 1962 to 1998, this constitutes a 30% improvement on the null hypothesis that ideology does not explain case outcomes); Jeffrey A. Segal & Albert D. Cover, *Ideological Values and the Votes of U.S. Supreme Court Justices*, 83 Am. Pol. Sci. Rev. 557, 561 (1989) (finding that ideology explains 80% of justices' votes in civil liberties cases between 1953 and 1988).

^{122.} See Lee Ross, The Intuitive Psychologist and His Shortcomings: Distortions in the Attribution Process, in 10 Advances in Experimental Social Psychology 173 (Leonard Berkowitz ed., 1977).

^{123.} See Amos Tversky & Daniel Kahneman, Availability: A Heuristic for Judging Frequency and Probability, 5 Cognitive Psychol. 207 (1973).

^{124. 447} U.S. 303 (1980).

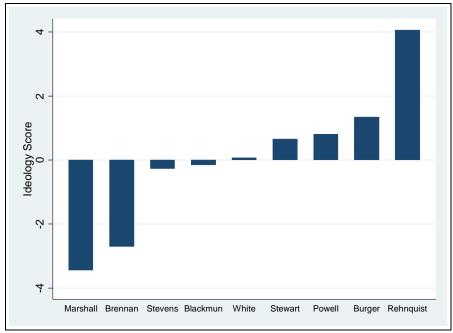
^{125. 450} U.S. 175 (1981).

^{126.} We discuss the Martin-Quinn scores in more detail infra Part III.A.

^{127.} *Diehr*, 450 U.S. 175. *Chakrabarty* held that a live, human-made micro-organism is patentable subject matter under section 101 of the Patent Act. *See Chakrabarty*, 447 U.S. 303. Note that in both these cases the conservative justices chose to expand property rights through an expansive non-textualist reading of the Patent Act. We are grateful to Adam Mossoff for this insight.

Figure 2

Judicial Ideology (Martin-Quinn) in the *Diamond v. Diehr* Court¹²⁸



Diamond v. Diehr is a perfect example of justices voting according to ideological type. But we do not raise this example merely to rebut one anecdotal observation with another. Rather, our aim is to show that focusing on individual IP cases where justices form strange coalitions or vote against type may be misleading; there may be more cases where justices vote as the attitudinal model predicts, but which do not garner the attention given to cases with incongruous voting coalitions. More rigorous analysis is required to determine whether cases producing unusual voting blocs are merely vivid anecdotes that stand out against a sea of less remarkable voting that is consistent with the attitudinal model.

C. The Need for an Empirical Approach

As the foregoing discussion makes clear, the relevance of ideology to decision-making in IP cases is ultimately an empirical question. It requires a comprehensive empirical analysis, rather than an ad hoc impressionistic review of salient cases. However, until now, there has not been a systematic attempt to analyze the role of ideology in IP cases in a rigorous empirical fashion.

III EMPIRICAL ANALYSIS

In this section, we test the relationship between ideology and judicial decision-making. The theoretical and anecdotal accounts described in the previous sections suggest two competing views of the relationship between IP and ideology. The attitudinalist model suggests that support for, and opposition to, IP claims will be significantly shaped by political ideology. Conversely, the exceptionalist model claims that the ideological divide typically observed in Supreme Court cases will not predict the outcomes of IP cases.

In Part III.A we describe the data, dependant variables, control variables, and independent variables used in our empirical analysis. In Part III.B we conduct a preliminary analysis of IP exceptionalism by comparing the justice coalitions usually observed in Supreme Court cases with those found in IP cases specifically. In Part III.C we then set out our formal testable hypotheses. In Part III.D we discuss our detailed logistical regression testing of these hypotheses and the results of our analysis.

A. The Data

To test our hypotheses, we constructed the Supreme Court Intellectual Property Database. This database contains a comprehensive set of Supreme Court opinions dealing with IP from 1954 through 2006. Much of our IP database is adapted from a widely used database of Supreme Court opinions developed by Harold Spaeth: The United States Supreme Court Judicial Database. For simplicity we refer to these databases as the IP database and the general database, respectively.

We compiled our set of cases by cross-referencing the subject matter coding in the general database¹³¹ with a list of IP cases generated through a

^{129.} The Appendix lists the cases contained in our final dataset. See supra app.

^{130.} The general database is available at the Judicial Research Initiative website, http://www.cas.sc.edu/poli/juri/sctdata.htm. For an assessment of the use of this database, see Lee Epstein & Gary King, *The Rules of Inference*, 69 U. Chi. L. Rev. 1, 23 (2002). For other studies using this database, see Ruth Colker & Kevin M. Scott, Essay, *Dissing States?: Invalidation of State Action During the Rehnquist Era*, 88 VA. L. Rev. 1301, 1305 (2002); Frank B. Cross & Blake J. Nelson, *Strategic Institutional Effects on Supreme Court Decisionmaking*, 95 Nw. U. L. Rev. 1437, 1483 (2001); Lee Epstein et al., *The Supreme Court During Crisis: How War Affects Only Non-War Cases*, 80 N.Y.U. L. Rev. 1 (2005); Epstein & Segal *supra* note 10; Youngsik Lim, *An Empirical Analysis of Supreme Court Justices' Decision-making*, 29 J. LEGAL STUD. 721 (2000).

^{131.} Although the general database contains subject matter codes relating to some areas of IP—patent (661), copyright (662), trademark (663), and patentability of computer processes (664)—we found the subject matter coding in the general database to be under-inclusive. For example, *Markman v. Westview Instruments, Inc.*, 517 U.S. 370 (1996) is coded as "jury trial" rather than patent and thus falls under the general issue heading of criminal procedure rather than economic activity. *See* Carolyn Shapiro, *Coding Complexity: Bringing Law to the Empirical Analysis of the Supreme Court*, 60 HASTINGS L.J. 477 (2009).

LexisNexis search for the core terms: patent, copyright, trademark, trade secret, and fair use. ¹³² In this fashion we avoid solely relying on the classifications in the general database. The IP database consists of 102 IP cases decided by the U.S. Supreme Court. Within those 102 decisions there are 844 separate votes by the individual justices. The 102 cases in the IP database consist of 52 patent cases, 26 copyright cases, 20 trademark cases, and 4 trade secret cases. Twelve of these cases also deal with issues of antitrust law, such as whether IP owners should be presumed to have market power under the Sherman Act. ¹³³ The general database constitutes our comparison data. It contains over 8,900 cases with more than 105,000 separate votes by individual justices.

1. Dependant Variables

The general database records a multitude of attributes for each decision relating to the origins of the case, the legal subject at issue, key dates such as the date of oral argument and final decision, the identities of the parties, and the votes of the individual justices. The database codes the outcome of each decision either "liberal" or "conservative" according to whether it favored or disfavored classic liberal underdogs such as the accused in a criminal case, a person claiming the protection of civil rights, children, indigents, or American Indians. We call this variable "Underdog." The general database provides for these distinctions, and we rely on this widely used external coding for verification purposes to compare against our primary dependant variable.

In spite of its impressive scope and complexity, the general database is not adequately detailed in relation to IP. The primary dependant variable in the general database, Underdog, focuses primarily on the status of the winning party and is divorced from any ruling as to doctrinal entitlement. Thus, a vote

^{132.} We searched LexisNexis for U.S. Supreme Court Cases as follows: core-terms (copyright) or core-terms (patent) or core-terms (trademark) or core-terms (trade secret) or core-terms (fair use) and date (geq (01/01/1953) and leq (05/30/2006)). We excluded non-IP cases, grants of certiorari, and cases dealing solely with the recovery of attorney fees. Note that our core-terms did not include the right of publicity and thus our database does not include *Zacchini v. Scripps-Howard Broadcasting Co.*, 433 U.S. 562 (1977) (holding that the First Amendment did not immunize a TV broadcasting company against publicity rights claims by a performer). The Appendix lists the cases contained in our final dataset.

^{133.} See, e.g., Ill. Tool Works Inc. v. Indep. Ink, Inc., 547 U.S. 28, 31 (2006) (holding that the mere fact that a tying product is patented does not support a presumption of market power). There are eight patent/antirust cases, two copyright/antitrust cases, and two trademark/antitrust cases.

^{134.} In addition, outcomes favoring affirmative action and reproductive freedom are also coded as liberal. Pro-union decisions are coded as liberal except in the context of antitrust cases, where a pro-union decision is regarded as conservative. In cases pertaining to economic activity, liberal outcomes include pro-competition, anti-business, pro-indigent, pro-small business vis-à-vis large business, pro-debtor, pro-bankrupt, pro-Indian, pro-environmental protection, pro-consumer, and pro-economic underdog. *See generally* Spaeth, *supra* note 38.

^{135.} Spaeth uses the term "liberal." *See id.* However, to avoid confusion resulting from multiple uses of "liberal"—applied to cases and justices—we use the term "Underdog."

in an IP case is coded as Underdog if the party favored by the case outcome is characterized by probable relative disempowerment without considering the legal claim the party makes. Typical examples include small businesses prevailing over large businesses or individuals prevailing against the state.

However, determining the effect of ideology on predicting IP outcomes requires a measure of case outcomes that is relevant to the claim being made. Specifically, the variable must stipulate the determination in terms of IP. To correct for this incompatibility, we created a new dependant variable, "PRO-IP," that records case outcomes in relation to IP. A case is coded as PRO-IP when it is decided in favor of the party who is asserting the IP right in the case. ¹³⁶

For a study such as this, the PRO-IP variable has clear advantages over the traditional Underdog measure. In a scenario where one large corporate patent holder sues another similar entity, the Underdog variable provides no strong intuitive expectation as to how an ideologically driven court should rule. On the other hand, the PRO-IP variable, which specifies party status in relation to a legal doctrine, distinguishes between whether the entity is defending or claiming a property interest. PRO-IP outcomes should therefore correlate with an expansion or contraction of IP rights. More generally, to the extent that attitudinalists claim that judges care about case outcomes, they should expect judges to care about the precedential value of a doctrinal determination, not just the fate of the specific parties before them in the case at hand. Ordinarily the attitudinal approach gets at the doctrinal aspect of outcome by subdividing issue areas-distinguishing between free speech cases in general and free speech in the context of protests outside abortion clinics, for example. 137 Since the general database variable does not provide for this nuance in relation to IP, it is necessary to create the PRO-IP variable. To ensure the robustness of our results, we carry out tests on both the Underdog and PRO-IP dependant variables.

We did not attempt to code decisions along subjective criteria such as whether the Court "followed precedent" or created a rule favorable to IP

^{136.} Although IP cases often involve parties who are both owners of distinct IP rights, only two of the cases in the IP dataset required the Court to choose between directly conflicting claims of IP protection. See N.Y. Times Co. v. Tasini, 533 U.S. 483 (2001); Cmty. for Creative Non-Violence v. Reid, 490 U.S. 730 (1989). In all other cases, the issue before the Court clearly determined which party was the IP owner in the relevant sense of asserting a claimed IP right. The Tasini case centered around a conflict between the copyright claims of freelance journalists under section 106(1) of the Copyright Act and the scope of the reproduction and distribution privilege accorded to collective work copyright owners, such as the New York Times, by section 201(c). In Tasini we coded the freelance journalists as the IP owners because they were the original authors of the works in question. The issue in the CCNV case was whether the sculptor or the party that commissioned him to make the work of art was the copyright owner under the work made for hire doctrine. In CCNV we coded the artist as the IP owner because he was the original author of the work in question.

^{137.} See Spaeth, supra note 38.

owners generally.¹³⁸ To make that determination requires a subjective analysis that would raise questions as to the reliability of the data.¹³⁹ Accordingly, the PRO-IP variable does not capture the differences between the justices in their many split concurrences.¹⁴⁰ Because the PRO-IP variable does not capture this kind of nuance, it may understate the extent of the differences between the justices. This only makes our task of rejecting the null hypotheses that ideology does not affect outcomes in IP cases more difficult.¹⁴¹

2. Control Variables

We supplemented the coding in the general database with additional variables relevant to IP. We created new control variables relating to case subject matter (Antitrust, Copyright, Patent, Trademark, and Trade Secret). ¹⁴² Table 1 summarizes a breakdown of the composition of the cases in the IP databases. The low number of trade secret cases means that we are unlikely to be able to discern significant results in relation to that area.

In addition to the type of IP variables, we coded IP data according to a number of other criteria that could potentially determine IP cases. First, to address the possibility that the justices might be more sympathetic to creators of IP—differentiating, for instance, between individual inventors on the one hand and large companies that simply purchase patent portfolios on the other—we created the variable "Author/Inventor."

^{138.} For a qualitative study of Supreme Court IP cases between 1975 and 2005, see Pamela Samuelson, *The Generativity of* Sony v. Universal: *The Intellectual Property Legacy of Justice Stevens*, 74 FORDHAM L. REV. 1831 (2006) (reviewing trends in IP law during Justice Stevens' tenure on the Supreme Court).

^{139.} See Epstein & King, supra note 130, at 82-97 (discussing the importance of reliability and validity in data collection and measurement).

^{140.} See supra Part II.B.1.

^{141.} To the extent that the errors are unbiased, this conservative assessment of the differences between the justices allows us to be more confident of the significance of any alternative result we find.

^{142.} A control variable is a variable that is held constant in order to analyze the relationship between other variables without interference.

| | , | J J1 |
|---------------|------------------|--------------|
| Type of Claim | Against IP Owner | For IP Owner |
| Patent | 35 | 16 |
| Copyright | 14 | 11 |
| Trademark | 14 | 5 |
| Trade secret | 3 | 1 |

Table 1Case Outcomes in the IP Database, by IP Type

Second, there is common doctrinal overlap between IP and antitrust cases. To address the possibility that IP cases that also involve antitrust issues might split the justices in an ideological pattern that differs from ordinary IP cases, we created the variable "Antitrust." The possibility that IP-Antitrust cases differ systematically from other IP cases arises because those cases are more likely to hinge on the legitimacy of the exercise of IP rights, rather than questions of infringement or validity. 143

Third, to address the possibility that the creation of the Court of Appeals for the Federal Circuit had a significant effect on how IP cases are determined, we created the variable "Post-1982." Congress established the Federal Circuit in 1982, giving it exclusive jurisdiction over patent appeals in order to make patent law more consistent, reduce forum shopping and (implicitly) to increase the value of patent rights. The creation of the Federal Circuit changed substantive patent law and also affected the types of patent cases the Supreme Court is likely to review. The creation of the Federal Circuit changed court is likely to review.

Finally, we use the "Lower Court" variable in the general database to capture the ideological direction of the lower court decision. The Supreme Court has a strong tendency to take cases in which it ultimately reverses the lower court decision. ¹⁴⁶ Including this control variable mitigates the potential selection bias that would otherwise arise from this tendency to reverse.

^{143.} See Louis Kaplow, The Patent-Antitrust Intersection: A Reappraisal, 97 HARV. L. REV. 1813, 1817 (1984).

^{144.} See generally Rochelle Cooper Dreyfuss, The Federal Circuit: A Case Study in Specialized Courts, 64 N.Y.U. L. Rev. 1 (1989).

^{145.} See generally Glynn S. Lunney, Jr., Patent Law, the Federal Circuit, and the Supreme Court: A Quiet Revolution, 11 Sup. Ct. Econ. Rev. 1 (2004).

^{146.} Chris Guthrie & Tracey E. George, *The Futility of Appeal: Disciplinary Insights into the "Affirmance Effect" on the United States Courts of Appeals*, 32 FLA. ST. U. L. REV. 357, 358 (noting that "over the last decade, the Supreme Court *reversed* 64% of the cases it heard").

3. Independent Variables: Measures of Ideology

Our statistical analysis, which follows in Part III.D, uses two different measures of judicial ideology: one simple, one complex. The simple measure is the party of the appointing president. Commentators often assume that a judge's ideological leanings can be determined by identifying the party of the president who appointed that judge to the bench. The assumption here is that Republican presidents are inclined to appoint conservative justices and Democratic presidents are inclined to appoint liberal ones.

There are, however, reasons to question the validity of using the party of the appointing president as a measure of judicial ideology. First, presidential ideology is more nuanced than a simple binary choice between liberal and conservative. Second, other factors such as the composition of the Senate and its prevailing norms may either constrain or enhance the power of the president with respect to judicial appointments. High Third, using the party of the appointing president as a proxy for judicial ideology ignores the possibility that ideology changes over time. For example, Justice Stevens was appointed by President Ford, but is now the most liberal member of the Supreme Court.

The more complex measure we employ is one developed by Andrew Martin and Kevin Quinn. Unlike other measures of judicial ideology, the "Martin-Quinn" scores are derived by actually looking at the votes of the justices over time. Martin and Quinn estimated scores for every justice serving from the 1937 term to the 2005 term using a dynamic item response theory model. The model takes into account not just case outcomes, but also voting patterns in each term. Is

Martin and Quinn designate ideal points, or an estimate of latent preferences, of each Supreme Court justice by modeling every imaginable combination of the justices' preferences that could explain the pattern of cases over their study period of time. Martin and Quinn also leverage voting coalitions to make inferences about the relative placement of justices. For

^{147.} See, e.g., Cross & Tiller, supra note 20; Revesz, supra note 3.

^{148.} *See* Epstein & King, *supra* note 130, at 88-89 (noting that on Segal's measure of presidential economic liberalism, for example, Jimmy Carter is ideologically closer to Richard Nixon than to Lyndon Johnson).

^{149.} See Tonja Jacobi, The Senatorial Courtesy Game: Explaining the Norm of Informal Vetoes in Advice and Consent Nominations, 30 LEGIS. STUD. Q. 193 (2005).

^{150.} See supra fig.1.

^{151.} Martin & Quinn, supra note 106.

^{152.} For a discussion of other measures, see Epstein & King, *supra* note 130, at 95; *see also* Barry Friedman & Anna L. Harvey, *Electing the Supreme Court*, 78 IND. L.J. 123, 134-37 (2003).

^{153.} *See* Martin & Quinn, *supra* note 106. Item response theory models are mathematical functions used to estimate the probability of underlying characteristics or latent traits of the subject of interest, given a set of observed outcomes.

^{154.} A justice's ideal point is his or her most preferred policy position, such that any change in outcome away from that position reduces that individual's utility.

example, a justice who is often a lone dissenter in conservative cases will be ranked as more liberal than a colleague in the minority of a 7-2 conservative decision.

This measure allows for standardized comparisons over time, using the manifold crossovers between justices' tenures to compare justices who were never on the Court together. Thus the rank order measure simultaneously accounts for change over time and across justices for all years, and therefore renders the ideal points of the justices a standardized comparison of justices with one another over time. The dynamic nature of the Martin-Quinn scores, which allow individual justices' scores to change over time, makes this measure of ideology more realistic than other measures that hold justices' ideology constant. It is essential that the measure of the justices' ideal points rests on a standardized scale for our purposes because our analysis follows IP cases over half a century. Although the method used to derive the Martin-Quinn scores is quite complex, the scores themselves align closely with press and popular perceptions of the ideological positions of the justices—in other words, the scores "look right."

Using the Martin-Quinn scores derived from Supreme Court cases as a measure of ideology with respect to those same cases might raise questions of circularity in some contexts. However, Martin and Quinn have shown that there is minimal concern with circularity in using scores developed from cases to predict voting behavior, since rerunning the analysis with any given issue area excluded has a minimal effect on the resulting scores. Nevertheless, to be certain to avoid any circularity problems, we conducted our analysis using a version of the Martin-Quinn scores that excludes IP cases from the ideology score derivation procedure. 158

Using specialized Martin-Quinn scores that exclude IP cases has an added advantage for our analysis. Although Martin-Quinn scores are typically used as measures of judicial ideology, the measure simply assumes that a single dimension is operative in Supreme Court decision-making; it makes no assumption that the dimension is necessarily ideological. Generally, the

^{155.} See Lee Epstein et al., Ideological Drift among Supreme Court Justices: Who, When, and How Important?, 101 Nw. U. L. Rev. 1483 (2007).

^{156.} In 2004 Justice O'Connor held the median position with a Martin-Quinn score of 0.08; with her retirement and the death of Chief Justice Rehnquist, Justice Kennedy occupies the median position with a Martin-Quinn score of 0.49. Media portraits of Justice Kennedy as the new "swing vote" on the Court fit very well with Martin and Quinn's analysis. See, e.g., Robert Barnes, In Second Term, Roberts Court Defines Itself, WASH. POST, June 25, 2007, at A3; Robert Barnes, Justice Kennedy: The Highly Influential Man in the Middle, WASH. POST, May 13, 2007, at A1.

^{157.} Andrew D. Martin & Kevin M. Quinn, Can Ideal Point Estimate be Used as Explanatory Variables? (Martin-Quinn Scores, Working Paper 2005), available at http://mqscores.wustl.edu/media/resnote.pdf.

^{158.} We are indebted to Andrew Martin for creating this unique data for us.

^{159.} Farnsworth has recently commented on what he perceives to be a limitation of the

Martin-Quinn scores are treated as scores of ideology because it has been shown that judicial decision-making in many areas of law can be predicted by how the judges vote in other areas. This gets to the heart of the definition of ideology: an overarching framework that consistently predicts people's views in one area, based on their views in other areas. If we can show that the outcomes in IP cases are predictable, given how judges vote in other areas of law, then we will have established that judicial ideology is a determinant in IP cases. Even if the reader rejects this definition of ideology, establishing this effect will nonetheless show the hollowness of the exceptionalist claim that IP cases are not explicable and predictable by the same factors that determine case outcomes in other areas of the law.

B. Impressionistic Results

We begin with the descriptive analysis of the correlations between the justices in the general Spaeth database and our specialized IP database. This analysis is by no means definitive, but it does provide a preliminary test of whether IP looks significantly different from other areas of the law, and directly addresses some of the arguments raised in favor of IP exceptionalism. This comparison confirms the anecdotal observations discussed in Part II that there are unusually high correlations among the justices in IP cases when compared to Supreme Court cases generally.

Table 2 provides correlations among the justices on the Rehnquist Court, for both the general database and the IP database. Each cell contains two numbers: the number on the left is the correlation between the applicable justices in the general database; the number on the right is the correlation between the same two justices in the IP database. We test for both whether we can be confident (at least at the 0.05 level of significance) of the accuracy of each set of correlations, and whether there is a significant difference between each pair of correlations in the general and the IP database. For example, Ginsburg and Rehnquist have a correlation of 0.42 in the general database, which is significant, and a correlation of 0.91 in the IP database, which is also significant; furthermore, the difference between these two numbers is also significant.

Martin-Quinn scores: the notion that judicial policy preferences can be arrayed along a single ideological spectrum. Farnsworth argues that the Martin-Quinn Scores assume rather than prove the attitudinal model. See Ward Farnsworth, The Use and Limits of Martin-Quinn Scores to Assess Supreme Court Justices, with Special Attention to the Problem of Ideological Drift, 101 Nw. U. L. REV. Colloguy 143 (2007),available at http://www.law.northwestern.edu/ lawreview/colloquy/2007/11/. In fact, although Martin and Quinn assume that a single dimension is operative in Supreme Court decision-making, as discussed they make no assumption that the dimension is necessarily ideological. The chances are vanishingly small that the model used by Martin and Quinn could be made to work if their assumption of a single dimension was seriously flawed.

| Justice | Stevens | Ginsburg | Breyer | Souter | O'Connor | Kennedy | Rehnquist | Scalia |
|-----------|------------|-------------|------------|-------------|-------------|-------------|--------------|------------|
| Ginsburg | .66 .50 | | | | | | | |
| Breyer | .62 .83* | .75 .65 | | | | | | |
| Souter | .62 .65 | .80 .92** | .73 .74 | | | | | |
| O'Connor | .46 .51 | .54 .83** | .58 .70 | .61 .93** | | | | |
| Kennedy | .41 .48 | .51 .84** | .45 .47 | .57 .79* | .66 .80 | | | |
| Rehnquist | .38 .53 | .42 .91** | .40 .49 | .50 .84** | .69 .75 | .74 .80 | | |
| Scalia | .30 .62* | .37 .85** | .27 .66* | .44 .93** | .57 .88** | .69 .71 | .70 .94*** | |
| Thomas | .22 .59* | .32 .85** | .23 | .38 .93** | .53 1.00# | .60 .87** | .68 .92** | .80 1.00 |

 ${\bf Table~2}$ Correlations between Justices in the General Database and the IP Database 160

As expected, given the large number of cases, all correlations in the general database are significant at the 0.01 level. Even though there are far fewer cases, all correlations in the IP database are significant at the 0.01 level except for the following: Rehnquist-Breyer, Kennedy-Breyer and Stevens-Kennedy, which are significant at the 0.05 level, and Thomas-O'Connor and Thomas-Scalia, which has no computable p-value because their votes are identical.

Twenty-two of the thirty-six pairs of the correlations in the general database are significantly different from their counterpart correlations in the IP database. Strikingly, all of the statistically significant differences between the IP data and the general data indicate a higher correlation between pairs of justices in the IP data.

The lowest correlation in the IP data is Kennedy-Stevens at 0.48, compared to the lowest correlation in the general data, Thomas-Stevens at 0.22. Ten justice pairs have significant correlations over 0.90 in the IP data; eighteen pairs have correlations over 0.80. There are no correlations above 0.80 in the general data. These correlation patterns are further reflected in the high level of unanimous decisions in IP cases, as discussed above, and may suggest a broader level of consensus generally in IP cases. ¹⁶¹

The only correlations that were lower in the IP data than the general data

^{160.} Data: Harold J. Spaeth, United States Supreme Court Judicial Database, http://www.cas.sc.edu/poli/juri/sctdata.htm.

All correlations in the general database are significant at the 0.01 level. All correlations in the IP database are significant at the 0.01 level, except: Rehnquist-Breyer, Kennedy-Breyer and Stevens-Kennedy, each significant at the 0.05 level; and Thomas-O'Connor and Thomas-Scalia, for which there is perfect collinearity.

^{*} Difference between correlations is significant at the 0.05 level.

^{**} Difference between correlations is significant at the 0.01 level. At the 0.05 level we can have 95% confidence that the results are not the product of a random effect. At the 0.01 significance level, the confidence is 99%.

[#] Approximated p-values, where the correlation in IP database is assumed 0.999 and not 1.000. The correlation comparison formula is based on the conversion of correlations into Fisher z-scores, which are undefined for p=1.000.

^{161.} See supra Part II.A.1.

were Ginsburg-Stevens (0.50 as opposed to 0.66) and Ginsburg-Breyer (0.65 as opposed to 0.75). Neither of these differences is statistically significant. Stevens and Breyer are unusual in being the only two justices whose correlations with the majority of other justices are *not* significantly higher in the IP database.

Together, these effects show that there are unusually high correlations among the justices' votes in IP cases when compared to the general database, but that the increased agreement among the justices is lower for some of the liberal justices. Both of these effects provide some support, albeit impressionistic, to the claim that the usual coalitions that we see on the Supreme Court in the general data are not replicated in IP cases. This evidence provides some support for the claim that IP may in fact be exceptional; whether this means that the outcomes of IP are not amenable to prediction on the basis of traditional definitions of judicial ideology remains to be seen. The evidence also lends credence to the claim that the extent of the effect of ideology may be significantly different for liberal and conservative justices. ¹⁶²

The following section lays out our hypotheses. These hypotheses will allow us to test whether the impressionistic evidence is in fact supported by more rigorous analysis.

C. Hypotheses

The attitudinalist theory would predict that judges' ideology will be significantly related to their voting behavior in IP cases. 163 Establishing this result would suggest that the noteworthy cases that seemed to defy ideological explanations are outliers, given undue attention because of their salience. The exceptionalist theory, in contrast, would predict that we will not see a significant relationship between ideology and judicial votes in IP cases. Using judicial vote as the unit of analysis, our first formal hypothesis is that judicial ideology predicts judicial decision-making in IP cases.

The theory explored in Part I also suggested that we might fail to find an effect for ideology in relation to IP because of differences between the various subfields of IP. In other words, differences between copyright, patent, trademark, and trade secret could raise competing concerns that cut across the usual liberal and conservative ideological camps. To test this proposition, we ascertain whether, to the extent there is an effect of ideology on IP case outcomes, it is undermined when we examine areas of IP separately. Consequently, our second hypothesis is that the effect of judicial ideology is affected by the type of IP right at issue.

^{162.} See supra Part I.B.

^{163.} See supra Part I.A.

^{164.} See supra Part I.B.

^{165.} See supra Part I.B.4.

The same body of theory also suggests that the ideological ambiguity of IP may be more pronounced in either the liberal or the conservative camp. For example, it is possible that ideology does not answer IP questions for conservatives, as they may be divided on the threshold question of whether IP is property or on the correct balance between property rights and free competition. Alternately, liberal justices who value free speech might divide on how to balance freedom of expression with protecting consumers from confusion (trademark) or providing incentives to authors (copyright). Although these effects are driven by similar causes, they may be independent. For example, conservatives may oscillate between supporting property rights and supporting free-market liberalism, but liberals may consistently favor free speech, or vice versa. In the previous section, we found preliminary evidence suggesting that liberals may be more divided on IP issues than conservatives. To assess this claim, the third hypothesis we test is that the extent of the effect of ideology on judicial voting behavior differs between liberals and conservatives.

If there is a significant positive relationship between judicial voting behavior in IP cases and ideology, the next natural question would be whether the effect is as strong as it is for all other cases before the Supreme Court. To ascertain this, the fourth hypothesis we test is whether the extent of the effect of ideology on IP case outcomes is less pronounced than the effect of ideology on the entire population of Supreme Court cases.

In summary, our four hypotheses are:

Hypothesis 1. Judicial ideology predicts judicial decision-making in IP cases.

Hypothesis 2. The effect of judicial ideology is affected by the type of IP right at issue.

Hypothesis 3. The effect of judicial ideology differs between liberals and conservatives.

Hypothesis 4. The effect of judicial ideology in IP cases is less pronounced than in other Supreme Court cases.

D. Statistical Testing of Intellectual Property Exceptionalism

1. Methodology

Given that our data consists of the "for or against" votes of individual justices, we must use a method of regression that can calculate probabilistic effects on dichotomous outcomes. That is, we need a method that can estimate incremental probabilities from data that is essentially comprised of "reverse" or "affirm" votes. The two primary methods for doing this are logit and probit. He report logit results, but we have also verified our results using probit, and the results are substantively the same. Logit coefficients do not have an intuitive meaning unless they are converted into either odds ratios or probabilities. We provide both odds and probability translations to demonstrate the substantive meaning of our results.

It is important to note that the general statistical assumption that each observation is independent is not appropriate when the observations are the votes of the justices. Even though justices often disagree, they are each observing the same facts and the same arguments in any given case, and thus their votes are likely to be correlated. Therefore, we relax the independence assumption. ¹⁶⁸

^{166.} Logit and probit are both designed for estimation of binary outcomes; they vary with respect to the assumptions made about the distribution of the error term. Whereas logit assumes a logistic distribution, probit assumes a normal distribution.

^{167.} The reason for this is that a logit coefficient represents a movement along a non-linear scale; consequently the effect of a one-unit change in the independent variable will depend on the point at which the change occurs. Lee Epstein et al., *On the Effective Communication of the Results of Empirical Studies, Part I*, 59 VAND. L. REV. 1811, 1813 (2006).

^{168.} We do so by adjusting the standard errors given the heteroskedastic and clustered structure of the data. That is, these are mechanisms of accounting for the possible lack of independence between cases and over time. We undertake three variations of estimation, with Huber-White standard errors, with standard errors clustered by judges and clustered by cases. See Peter J. Huber, The Behavior of Maximum Likelihood Estimates Under Nonstandard Conditions, in 1 Proceedings of the Fifth Berkeley Symposium on Mathematical Statistics and PROBABILITY 221 (1967), available at http://projecteuclid.org/DPubS/Repository/1.0/Disseminate? view=body&id=pdf 1&handle=euclid.bsmsp/1200512988; William. Rogers, sg17: Regression Standard Errors in Clustered Samples, 13 STATA TECHNICAL BULL. 19 (1983); Halbert White, A Heteroskedasticity-Consistent Covariance Matrix Estimator and a Direct Test for Heteroskedasticity, 48 Econometrica 817 (1980). William Roger's robust estimator of the covariance matrix of the estimates may be considered an extension of Peter Huber's earlier formula. Clustering helps mitigate the underestimation of standard errors—a typical hazard in panel data—and reduces the risk of rejecting a true null. For similar approaches, see, for example, Julie Agnew et al., Portfolio Choice and Trading in a Large 401(k) Plan, 93 Am. Econ. Rev. 193 (2003); John Core & Wayne Guay, Stock-Option Plans for Non-Executive Employees, 61 J. Fin. Econ. 253 (2001). The most effective way to factor our judge- and case-level heterogeneity entirely would be to use fixed-effects estimation. In our data, however, using fixed-effects is not possible as it may lead to systematic selection, since all observations related to cases with unanimous decisions and to judges who voted strictly in one direction would be dropped. More important, given the dramatic reduction in the number of observations and small group sizes, fixed-effects would pose an incidental parameter problem, or the hazard of inconsistent estimates

2. The Significance of Ideology in Intellectual Property Cases

Our first hypothesis predicted that a justice's votes in IP cases will be significantly affected by his or her ideology. Our initial regression analysis shows that there is a positive and statistically significant relationship between a justice's ideology and the extent to which he or she votes in favor of the IP owner. The more conservative the justice (and thus the higher the Martin-Quinn score) the more likely he or she is to favor the IP owner. Using the Martin-Quinn scores as our measure of judicial ideology, we derived a logit coefficient of 0.14 in the direction predicted (with a standard error of 0.04). Using our alternative measure of ideology, the party of the appointing president, we derived a logit coefficient of 0.47 in the direction predicted (with a standard error of 0.17). These results establish that a conservative justice is significantly more likely than a liberal justice to vote to uphold an IP claim.

The conclusion that ideology shapes IP case outcomes holds regardless of whether ideology is measured in terms of Martin-Quinn scores or simply the party of the appointing president. We can also confirm the consistency of Martin-Quinn scores with party of the appointing president by investigating the effect of these measures on the more traditional measure of case outcomes, Underdog. Here again the results are consistent. The Underdog coefficient using Martin-Quinn scores is 0.22 in the direction predicted (with a standard error of 0.04). The Underdog coefficient using the party of the appointing president is 0.39 in the direction predicted (with a standard error of 0.17). We use the terminology "in the direction predicted" to avoid confusion over positive and negative values. In each case, the more liberal the justice, the more likely he or she is to vote in favor of the Underdog.

When using both measures of judicial ideology *together*, the Martin-Quinn coefficient remains significant in the direction predicted throughout and completely absorbs the explanatory power of the party of the appointing president measure. Additionally, we ran the same tests using a measure of each justice's prior voting history, determined by using either the count or the fraction of judicial votes against the IP owner for each justice over the five years prior to the focal year or over all preceding years. Although prior voting history is also a significant predictor of future voting when run independently, when combined with the Martin-Quinn scores, the history measure became insignificant while leaving the effect of Martin-Quinn scores intact. These additional analyses show that establishing the effect of ideology is not contingent upon use of one particular score of ideology.

resulting from a small number of cases used to estimate a large number of parameters. See, e.g., J. Neyman & Elizabeth L. Scott, Consistent Estimates Based on Partially Consistent Observations, 16 Econometrica 1 (1948); Tony Lancaster, The Incidental Parameters Problem Since 1948, 95 J. Econometrics 391 (2000). Most results are substantively similar using all three variations of estimation, so we report Huber-White standard errors except where otherwise specified.

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Moreover, these additional analyses using a variety of measures of ideology indicate that, although the Martin-Quinn scores are congruent with the same broad effect of ideological preferences and consistency, they are empirically more refined and reflect a more precise estimate of ideology than the alternative proxies. This is an important result for the study of judicial ideology more broadly, suggesting that Martin-Quinn scores should generally be preferred as a measure of judicial ideology on the U.S. Supreme Court. Consequently, the remainder of our analysis uses only the Martin-Quinn scores as a measure of ideology.

We have shown that there is a significant relationship between IP outcomes and ideology, but how substantive is this effect? We can answer this question by converting our logit coefficients into expected changes in the odds that a justice will vote in favor of an IP claim. Martin-Quinn scores of ideology are theoretically unbounded, but their actual historical range is from -6.33 at the extreme liberal end to 4.31 at the extreme conservative end. The difference between a justice at the liberal extreme and a justice at the conservative extreme translates to a 79% increase in the odds of voting for the IP owner. Thus the difference between strong liberals and strong conservatives translates to a massive difference in the likelihood of supporting an IP claim. This effect is not limited to the extremes. A move from one standard deviation below the historical mean ideology score (-2.33) to one standard deviation above the mean (2.19) increases the odds of voting for the IP owner by 48%. To put this in context, the same movement decreases the odds of voting Underdog by 63%.

Specifically for the Rehnquist Court, moving the ideological distance from Justice Stevens at the liberal end of the Court to Justice Thomas on the conservative end translates to a 51% increase in the odds of voting for the IP owner. The increase in ideological conservatism from Justice Stevens to Justice O'Connor at the median of the Court translates to a 30% increase in the odds of voting for the IP owner. Similarly, the increase in conservatism from Justice O'Connor to Justice Thomas at the conservative end of the Court translates to a 29% increase in the odds of voting for the IP owner. ¹⁷¹

We can also perform the same analysis in terms of our other measure of ideology, the party of the appointing president. The odds of a justice voting for the IP owner increase 37.5% if the justice was appointed by a Republican, as opposed to a Democratic president. These results show that ideology has both a highly statistically significant and large substantive effect on the propensity of justices to vote for an IP claim.

 $^{169.\,\,}$ These are the Martin-Quinn scores for Justice Douglas in the 1974 term and Justice Rehnquist in the 1975 term.

^{170.} It is important to remember that these figures describe changes in conditional probabilities, not absolute probabilities. For example, a 79% reduction in the odds of voting PRO-IP would move an outcome from 80% to 17% (= 80 - 79% of 80), not from 80% to 1%.

^{171.} Based on the tenure average Martin-Quinn scores for each justice.

3. The Effect of Ideology on Different Types of Intellectual Property

Thus far, we have drawn no distinctions between the various types of IP: patents, copyrights, trademarks and trade secrets. These areas are different in a number of respects, and so it is worth exploring whether the effect of ideology is contingent upon a particular subset of IP cases. For example, conservative judges might be expected to be less amenable to patent and trademark claims, given that both plaintiffs and defendants in patent and trademark cases are often businesses. In contrast, liberal judges might be expected to be less amenable to copyright claims that pit the commercial interests of large companies against a diverse range of less powerful individuals with an interest in free expression.

To explore the potential distinctions between different types of IP, we estimated two different models of the effect of ideology on IP cases using Martin-Quinn scores. Model 1 includes variables relating to the type of IP at issue in each case. We tested the effect of ideology, accounting for the individual effects of copyrights, trademarks, and trade secrets, using patents as our default category, since approximately half of the cases in the IP database involve patents. In Model 2, we added interaction terms between our measure of ideology and each type of IP to test the conditionality of our earlier results on type of IP.

Both models show that IP case outcomes are significantly related to ideology. In fact, the coefficient on ideology remains substantively identical to our earlier result, ¹⁷² confirming that the effect of ideology is not a result of other factors, such as type of IP.

Model 1 tested the effect of different types of IP. Our regression analysis showed that the justices were significantly more likely to vote for the IP owner in copyright cases compared to the default category of patent cases (p < 0.01). We did not find any statistically significant differences at the 0.05 level between trademark and patent, or trade secret and patent.

Figure 3, below, provides a visualization of the differences between types of IP. This figure depicts the logit-derived predicted probability of a justice voting for the IP owner mapped against the Martin-Quinn ideology scores. The Figure graphs the Martin-Quinn ideological scores for the historical range of that variable's scale on the x-axis and the probability of voting for the IP owner on the y-axis.

Figure 3 illustrates the effect of ideology on the probability of voting for the IP owner, by IP type, when the lower court voted in a conservative direction.¹⁷⁴ It shows that justices are significantly more likely to vote for an IP

^{172.} See supra Part III.D.2 (reporting a coefficient of 0.14). In Model 1 the logit coefficient was 0.13 with a standard error of 0.04; in Model 2 the logit coefficient was 0.12 with a standard error of 0.06.

^{173.} Again, this result holds across all model specifications.

^{174.} Here we are simply using the Underdog variable to control for the direction of the

owner in copyright cases when compared to other types of IP. For instance, at the zero point on the Martin-Quinn ideology score, the probability of a justice voting for the IP owner in patent, trademark, and trade secret cases is 24.4%. In contrast, the equivalent probability for the copyright cases is 40.3%. This divergence increases slightly as justices become more conservative.

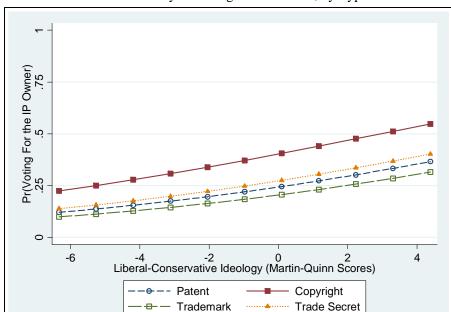


Figure 3
Predicted Probability of Voting For IP Owner, by Type of IP

The difference between the effect of ideology in copyright cases and patent cases is open to a number of possible explanations. Both copyright and patent law establish private rights of exclusion in order to give authors and inventors an incentive to create. However, copyright and patent differ in several important respects. First, although copyright defendants incur liability for infringement only if they have copied a copyrighted work, many patent defendants have independently invented their products. Second, Supreme Court justices are masters of the written word and so might be more sympathetic to the romantic myth of the author underlying copyright than they would be to the equivalent myth of the inventor in patent law. Both of these factors suggest that the justices may simply be more sympathetic to the claims of an author against a copier than they are to the claims of one inventor against a second inventor or rival producer. If true, these explanations imply that the justices respond more

favorably to the incentive theory underlying copyright protection than that underlying patent protection. An alternative possibility is that the justices perceive no difference in the incentive logic of patents versus copyrights, but are less concerned with over-breadth in copyright law because of its many exceptions and limitations. ¹⁷⁵

The apparent difference between copyright and patent cases begs the question whether the effect of ideology on IP is contingent on type of IP. That is, are the types of IP different, but all driven by ideology, or are they different because only some are driven by ideology? To investigate this question further, we added interaction terms between our measure of ideology and each type of IP in Model 2. None of the interaction terms were significant, which indicates that the impact of ideology on voting in favor of the IP owner is not driven by one particular type of IP case alone. Ideology significantly affects all types of IP.

The difference between copyright and patent cases should not be misinterpreted. The slope of the curves in Figure 3 demonstrates that the effect of ideology on copyright cases is very similar to all other cases. The only difference is that for any given ideology score, the predicted probability that a justice will vote in favor of the IP claimant is greater in a copyright case. This is apparent from the fact that the intercept of the copyright curve is higher than the other curves in Figure 3.

Taken together, these results show that the effect of ideology exists in every type of IP case to a significant degree, but the level of the propensity to vote in favor of the IP owner depends on the type of IP dispute. In other words, although the effect of ideology is uniformly significant for all types of IP cases, and is not amplified or attenuated by type of IP, the predicted probability of voting for the IP owner for any level of ideological score varies, at least between copyright and patent cases. This suggests that although ideology is highly consequential, legal and factual elements may also be highly determinative. ¹⁷⁶

4. Other Differences: Antitrust, Author-Inventor, and the Creation of the Federal Circuit

In addition to type of IP, we added control variables for other potentially significant legal and factual elements of IP cases. In particular we tested the

^{175.} Compare, for example, the broad scope of the fair use doctrine in copyright law with the narrow scope of the experimental use defense in patent law. *See* Eldred v. Ashcroft, 537 U.S. 186, 219-20 (2003).

^{176.} This is consistent with some attitudinal literature. For example, Segal & Spaeth's analysis of Supreme Court search and seizure decisions from 1962 to 1998 shows that although overall the Court voted in a liberal direction in 36% of cases, factors such as the location of the search, the timing of the search and the presence or absence of a warrant affected that result considerably. *See* Segal & Spaeth, *supra* note 9, at 316-20.

effect of controlling for Author/Inventor, Antitrust, and Post-1982.¹⁷⁷ We discuss our findings in relation to these variables below.

First, we found no statistically significant effect for the Author/Inventor variable. This indicates the effect of ideology on IP cases is not affected by whether a case is brought by an author or an inventor, as opposed to a non-creative owner.

Second, we found only weak results for the effect of our Post-1982 variable, which was intended to capture the possible influence of the creation of the Federal Circuit. The Post-1982 variable is significant at the 0.05 level when not controlling for lower court direction, but the variable is not significant with this control. One interpretation of this result is that it reflects a paradigm shift in the attitude of the Court to IP in the 1980s that coincides with the creation of the Federal Circuit. On this view, the creation of the Federal Circuit and the Supreme Court's increased receptivity to IP claimants are both manifestations of a broader trend: recognition of the increased importance of the information economy and IP to American competitiveness. However, because this result is not sustained once we control for the direction of the lower court decision, the findings are more consistent with the view that Supreme Court review of Federal Circuit cases is motivated by the perceived need to rein in the Federal Circuit's excessive formalism, rather than to change the rights of IP owners *per se.* ¹⁷⁸

Finally, we also found only weak results with respect to our Antitrust variable. Antitrust is significant just outside of the traditional 0.05 standard using robust standard errors, but not when clustering by case or by judge. This result suggests that there may be some ideologically relevant difference between IP cases, which typically focus on issues of validity and infringement, and IP-Antitrust cases, which focus instead on the legitimacy of the exercise of IP rights. However, our confidence in the reliability of this difference is marginal; because these results disappear when clustering, some other factor common to antitrust cases may account for the apparent difference of those cases.

^{177.} For a description of these control variables, see *supra* Part III.A.2.

^{178.} See, e.g., KSR Int'l Co. v. Teleflex Inc., 127 S. Ct. 1727 (2007); eBay, Inc. v. MercExchange, L.L.C., 547 U.S. 388 (2006); Festo Corp. v. Shoketsu Kinzoku Kogyo Kabuskihilo Co., 535 U.S. 722 (2002).

Overall, these results raise interesting doctrinal implications for IP. Some elements common to IP cases that one might consider determinative in case outcomes are at best marginally significant. The creation of the Federal Circuit, the interaction between IP and antitrust, and the status of the owner of the IP rights all fall to an insignificant level when ideology and the direction of the lower court's decision have been accounted for. This suggests that ideology is not only a significant predictor of outcomes in IP cases, but that it appears to overshadow many important legal elements.

The only legal distinction of consistent and strong significance is that between copyright and patent. Justices across the entire ideological spectrum are significantly more likely to rule in favor of the IP owner in a given copyright case than in a given patent case. We have proposed a number of possibilities as to why this difference arises: differences in judicial attitudes to patent and copyright's restrictive incentive systems, differences in the nature of authorship and invention, or differences in the balance between IP protection and its limitations. The most striking result is that the effect of ideology remains highly significant when many other potential predictors of justices' voting are accounted for.

Next we test the possibility raised in the theoretical discussion of IP exceptionalism, and also suggested by the impressionistic results: that the effect of ideology may be different for conservative as opposed to liberal justices.

5. Differentiating the Effect of Ideology for Liberals and Conservatives

Our analysis so far shows that ideology—measured along the traditional liberal-conservative spectrum—is significantly related to the likelihood of voting in favor of an IP claim. However, the theoretical ideological ambiguity of IP addressed earlier raises the question of whether we should expect this effect to be uniform across the ideological spectrum.

To see whether the effect of ideology in IP cases is different for liberal and conservative justices, we use a statistical technique called spline regression, which allows us to examine the effect of ideology on different groups of justices separately. Spline decomposition is a powerful analytical tool because it allows us to compare the effects of liberal and conservative ideology while retaining the statistical power of the entire sample of cases. 180

^{179.} For a thorough discussion of complex regression models, see JACK JOHNSTON & JOHN DINARDO, ECONOMETRIC METHODS (4th ed. 1997). For an application of a spline regression, see Ranjay Gulati & Maxim Sytch, Dependence Asymmetry and Joint Dependence in Interorganizational Relationships: Effects of Embeddedness on a Manufacturer's Performance in Procurement Relationships, 52 Admin. Sci. Q. 32 (2007).

^{180.} A spline allows the regression to have two separate slopes—one liberal, one conservative—without confining any given justice to the category of liberal or conservative. This maintains the maximum amount of data. We use simultaneous estimation on the logit equations for each spline and a joint variance-covariance matrix to account for possible correlation among structural errors.

We divided our data into two groups, liberal and conservative, based on their Martin-Quinn scores. We chose a Martin-Quinn of zero as the dividing line between liberal and conservative justices. The zero point on the Martin-Quinn ideology scale provides the most intuitive cut point at which to distinguish liberals from conservatives for two reasons. First, zero is the assumed prior for each justice's ideal point under the method Martin and Quinn used to create their scores in the first place. Second, zero turns out to be very close to the actual historical mean of the Martin-Quinn ideology scores used in our analysis (the historical mean is -0.01).

Our spline regression analysis shows that there is indeed a difference between how ideology affects conservative and liberal justices in IP cases. When viewed in isolation, the effect of ideology on IP case outcomes is only significant for conservative justices. ¹⁸³ The same analysis shows no apparent effect of ideology on IP case outcomes for liberals alone. Should we conclude that the conservative justices of the Supreme Court are ideologically driven but that the liberal justices are not? When we ran the same spline analysis with respect to the effect of ideology on voting for the Underdog, we found that both the liberal and conservative splines were significant. Thus it would be unsound to suggest that liberal justices are generally non-ideological; our analysis using the traditional Underdog measure of case outcomes indicates the contrary.

These results confirm the preliminary conclusion we reached based on our impressionistic evidence: there is a difference in the extent to which ideology affects conservative and liberal justices in IP cases. In this spline regression analysis the role of ideology in voting in favor of the IP owner is significant only for conservatives; the effect for liberals is not differentiable from zero. We discuss these findings in greater detail in the implications section.

6. The Relative Impact of Ideology on Intellectual Property

Having established that ideology has a significant effect on the probability of voting in favor of the IP owner—albeit an effect that itself is differentiated by ideology—the final element of our inquiry is to determine whether ideology shapes IP to the same extent that it shapes other cases. We examine this question in two ways. First, we analyze the interaction of ideology and IP in the general database. Second, we analyze the effect of ideology on voting for the Underdog in IP cases and in non-IP cases from the general database.

^{181.} More technically, the conservative spline was recoded to equal the Martin-Quinn score if the justice's score was greater than or equal to zero, and was set to zero if otherwise. Likewise, the liberal spline was set equal to the Martin-Quinn score only if the justice's score was below zero, and constrained to zero otherwise.

^{182.} See Martin & Quinn, supra note 106.

^{183.} The coefficient was 0.19 in the direction predicted. The effect is significant at the 0.05 level using robust standard errors and robust standard errors clustered by case. However, the effect is only marginally significant when clustering by judge, where p = 0.07.

Our first test was to run a regression with Underdog as the dependent variable and with: (1) ideology; (2) a dichotomous (or dummy) IP variable; ¹⁸⁴ and (3) an interaction term between the IP and ideology variables, in the general database. This test compares IP cases to all other cases, and determines whether ideology as applied to IP is significantly different from ideology generally. Thus, if the interaction term is significant, then there is a significant difference between the role of ideology in IP cases and other cases.

The results show that ideology remains significant, but the interaction term is also highly significant (the coefficient was 0.10 with a standard error of 0.04). The interaction term is negative, while the ideology term is positive: this shows that the effect of ideology is weaker in IP cases compared to other cases, because the negative interaction term weakens the positive effect of ideology on the probability of voting PRO-IP. This difference gives some support to the claim that IP differs from other areas of the law. However, the continued significance of ideology belies the stronger exceptionalist claim that IP cases are not explicable by reference to judicial ideology.

Interestingly, the IP variable is also positive and significant. Since Martin-Quinn scores give liberal justices negative scores and conservative justices positive scores, the positive IP result suggests that justices are more likely to vote for the Underdog in IP cases than they are in other types of cases the Court hears. This lends further support to the claim that IP cases are different from other cases. However, as in all of our tests, ideology remains significant in this test, confirming the predictive power of ideology in IP cases. Again, this shows that IP is not immune to the effects of ideology, even though IP does seem to be somewhat less influenced by ideology than are other areas of the law. This combination of results also arises in our second test of the extent of the effect of ideology.

The second question, the difference in the effect of ideology in voting for the Underdog in IP and non-IP cases, cannot be addressed with a direct comparison; that would be like comparing "whether a particular line is longer than a particular rock is heavy." One cannot compare different dependant variables in different databases. We also cannot compare PRO-IP in both databases, because there is no vote in relation to IP in non-IP cases. What we can do, however, is estimate the relative effect of ideology on voting Underdog in the IP database compared to the effect of voting Underdog in non-IP cases from the general database.

We find a similar disparity as in the tests of the first question. The effect of ideology on voting Underdog in IP cases is lower than the effect of ideology

^{184.} A dummy variable is a simple 1/0 coding of whether a given data point fits in a given category. Here, any case concerning IP is coded IP=1, all other cases are coded IP=0.

^{185.} Bendix Autolite Corp. v. Midwesco Enters., Inc., 486 U.S. 888, 897 (1988) (Scalia, J., concurring in judgment).

on voting Underdog in non-IP cases. The difference is statistically significant at the 0.05 level. The difference between the effect of ideology for IP cases (0.24) and all other cases (0.33) is highly statistically significant (p=0.02). Moving from one end of the historical ideological spectrum to the other (-6.33 to 4.31) decreases the odds of voting Underdog in the general database by nearly 97%. In the IP database, that move reduces the odds of voting Underdog by 92%.

In sum, both tests provide strong evidence that ideology is statistically significant in its effect on IP cases, but at significantly lower levels than in non-IP Supreme Court cases. The interaction of ideology and IP in the general database is highly significant, which indicates that the effect of ideology is weaker in IP cases compared to other cases. We also found that difference when comparing the probability of voting for the Underdog in IP cases versus non-IP cases. The effect of ideology on voting for the Underdog in IP cases is significantly lower than the effect of ideology on voting for the Underdog in non-IP cases. 186 Both of these tests confirm that judicial ideology has a statistically significant effect on the outcomes of IP cases, but at significantly lower levels than in non-IP Supreme Court cases. Thus in answer to our question of whether ideology shapes IP, or conversely whether IP is exceptional, we have seen that ideology has both a statistically and substantively significant effect on the probability of voting for or against the IP owner. These last results show that although it is true that ideology is highly determinative of IP outcomes, there is still merit to the claim that IP is different from other cases, if not entirely exceptional.

IV IMPLICATIONS AND EXTENSIONS

This Article has shown that the common claim among IP scholars and practitioners that liberal-conservative ideological division plays no role in determining IP case outcomes is erroneous. As our statistical analysis has shown, ideology is a significant determinant of whether an individual justice will vote for or against an IP owner. In other words, attitudes about IP are part of the liberal-conservative ideological continuum, not an exception to it. These results raise significant implications for both IP jurisprudence and the study of judicial ideology.

^{186.} The difference is statistically significant at the 0.05 level.

^{187.} Note that although our analysis in Part III.D.5 only found a statistically significant effect for conservatives, our general findings apply to both ends of the ideological spectrum.

Our central finding, that ideology affects outcomes in IP cases, is significant for the IP community in a number of respects. First, not only are our findings contrary to the orthodoxy of the IP community, they are also contrary to the limited empirical evidence that had been available until now. Prior research addressing the relationship between IP and ideology focused on particular narrow issues within IP—the application of the *Polaroid* factors in trademark cases and patent claim construction appeals—and found no effect. Is In contrast, our broad-based study of all areas of IP establishes a clear relationship between ideology and voting patterns in the context of Supreme Court decisions.

Nevertheless, the evidence does suggest that factors beyond ideology are also significant. In particular, we found that the justices were significantly more likely to vote for the IP owner in copyright cases compared to patent cases. We also found some evidence that the justices were more inclined to side with the IP claimant after the creation of the Federal Circuit in 1982.

The Supreme Court has been unusually active in patent law in the last few years. Between 2002 and 2007, the Court decided nine patent cases. ¹⁸⁹ The Court ruled on seven of these cases in 2006 and 2007 alone. ¹⁹⁰ The Court's renewed interest in patents arguably reflects both the crisis of confidence in the U.S. patent system and a belief that the Federal Circuit has strayed too far from Supreme Court authority in recent years. ¹⁹¹ Although these recent cases provide strong impressionistic evidence of another shift in the Supreme Court's attitude with respect to IP (or at least with respect to patents), there is at present not enough data to assess this trend statistically. Revisiting the Court's IP jurisprudence in the post-2000 era in light of future cases would be a valuable extension of our work.

Another valuable extension of our research would be to consider the effect of ideology on IP cases heard at the federal courts of appeal and the federal district courts. In particular, it would be interesting to see whether the ideological effect we find in relation to the Supreme Court is also evident in the

^{188.} Responding to our study in this Article, Barton Beebe has subsequently tested the effect of ideology in copyright cases dealing with the fair use doctrine. Beebe's preliminary results produced a null result. See Barton Beebe, Does Judicial Ideology Affect Copyright Fair Use Outcomes?: Evidence From the Fair Use Case Law, 31 COLUM. J.L. & ARTS 517 (2008).

^{189.} See, e.g., Microsoft Corp. v. AT&T Corp., 127 S. Ct. 1746 (2007); KSR Int'l Co. v. Teleflex Inc., 127 S. Ct. 1727 (2007); MedImmune, Inc. v. Genentech, Inc., 549 U.S. 118 (2007); eBay Inc. v. MercExchange, L.L.C., 547 U.S. 388 (2006); Ill. Tool Works Inc. v. Indep. Ink, Inc., 547 U.S. 28 (2006); Unitherm Food Sys., Inc. v. Swift-Eckrich, Inc., 546 U.S. 394 (2006); Merck KGaA v. Integra Lifesciences I, Ltd., 545 U.S. 193 (2005); Holmes Group, Inc. v. Vornado Air Circulation Sys., Inc., 535 U.S. 826 (2002); Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., 535 U.S. 722 (2002).

^{190.} The 2006–2007 term was the most significant term for patent law in the Supreme Court since the 1965–1966 term.

^{191.} Matthew Sag & Kurt Rohde, *Patent Reform and Differential Impact*, 8 MINN. J.L. Sci. & Tech. 1 (2007).

Federal Circuit, given its narrow jurisdiction. There is no equivalent of the Martin-Quinn scores for appellate and district court judges; however, alternative techniques may prove amenable. 192

Although we can resoundingly reject the notion that IP is immune to the effects of ideological division, there is evidence that IP differs from other areas of the law. There is a significant difference between the extent to which ideology shapes IP cases and the extent to which it affects other areas of the law. This could be because IP is a commercial subject that less clearly evokes the sometimes emotional division between liberals and conservatives that areas such as civil rights and abortion raise. Or it could be for the diametrically opposite reason: because, as we discussed in our theory section, IP raises salient but somewhat contradictory core principles of liberty, property, free speech, and the proper role of government.

Our research also highlights the complexity of the relationship between ideology and IP. Critically, we found that the effect of ideology is not uniform across the ideological spectrum: once we differentiated between liberal and conservative justices, the effect of ideology on IP was significant only for conservative justices. We know that liberal justices are equally ideological generally, so this difference is unlikely to be because conservatives are acting ideologically in IP but liberals are not. Since we have also rejected the notion that IP cases are simply not salient enough to trigger an ideological response, it is likely that the difference we see between liberals and conservatives in IP is due to the two groups of justices being differently affected by the theoretical tensions underlying IP: natural rights versus utilitarianism, respect for property versus suspicion of government regulation, and the disputed impact of IP on individual liberty and freedom of expression. These theoretical tensions appear to create more ambiguity for liberals than for conservatives.

In particular, the stronger relationship between IP and ideology for conservatives suggests that the status of IP rights as private property may well be a trump against other competing values. This suggests a further extension of our analysis in future work: a direct comparison of the voting behavior of the justices in real property cases and IP cases.

In politics it is commonly observed that the conservative camp is split between libertarians and conservatives. ¹⁹³ In IP, however, our research suggests that it is the conservative justices who are unified and the liberals who are split.

^{192.} See, e.g., Joshua B. Fischman, Decision-Making Under a Norm of Consensus: A Structural Analysis of Three-Judge Panels (1st Annual Conference on Empirical Legal Studies Paper, Working Paper, 2008), available at http://ssrn.com/abstract=912299. The party of the appointing president is unlikely to be a useful measure of ideology in Federal Circuit decisions because Republican-appointed judges accounted for 92.3% of opinions in their sample. See Allison & Lemley, supra note 7.

^{193.} See, e.g., Patricia Cohen, A Split Emerges As Conservatives Discuss Darwin, N.Y. TIMES, May 5, 2007, at A1.

This implication has repercussions for litigation strategies in IP cases. Once again, the *Eldred* decision brings this point into focus.

Lawrence Lessig, the architect of the constitutional challenge to the CTEA, argues that the *Eldred* case could have been won if he had adopted a different strategy. Lessig believed he could persuade the same conservative justices who, after the Court's decision in *Lopez*, had increasingly voted to restrict Congress's attempts to create legislation pursuant to its authority under the Commerce Clause. Lessig therefore based his strategy in *Eldred* on an appeal to the conservative members of the Court to limit the power of Congress under the Copyright Clause.

Our empirical findings suggest that Lessig's attempt to persuade the conservative justices that interpretive fidelity should trump their pro-property inclinations was quixotic. The relationship between ideology and voting in IP cases is clear for conservative justices but ambiguous for liberals. Lessig would have been better off focusing on the issues that would persuade liberals and moderate swing justices, highlighting the redistributive effects of the CTEA, the dangers of corporate control over cultural resources, and the need to tailor copyright monopolies more closely to incentives. The attitudinal model predicts that ideology will trump interpretive fidelity. Unfortunately, Lessig finds the idea that Supreme Court justices decide cases based on their political preferences "extraordinarily boring." Perhaps a greater appreciation for the attitudinal model would have improved his chances before the Supreme Court.

This Article also makes a significant contribution to the study of judicial decision-making more broadly. Although there is considerable evidence supporting the attitudinal model of judicial decision-making in non-economic areas, such as criminal procedure and administrative law, there is much less evidence to support the attitudinal model in economic areas such as taxation, securities, and antitrust.

The significance of our contribution showing the effect of ideology in IP cases is best understood in relation to comparable studies in the tax field. The most comprehensive study of the effect of ideology in tax cases found no support for the role of ideology using the coding of the general database. Staudt et al. argue that the conventional coding of all tax outcomes favoring the government as pro-Underdog is overinclusive, given the heterogeneity of nongovernment parties. For example, it seems unreasonable to classify a ruling denying a poor taxpayer the right to the Earned Income Tax Credit as a pro-Underdog outcome. Staudt et al. sought to overcome this limitation in the conventional coding by focusing on a particular class of taxpayers for which

^{194.} United States v. Lopez, 514 U.S. 549 (1995); Lessig, *supra* note 103.

^{195.} Lessig, supra note 103; see also Lopez, 514 U.S. 549.

^{196.} See Staudt et al., supra note 24. Note that this study also uses Martin-Quinn scores as a measure of ideology.

they believe the conventional coding is apposite: corporate taxpayers. With the parameters thus refined, the authors found ideology is significant in corporate tax cases. ¹⁹⁷ In contrast, our study found a significant effect for ideology in an economic area of the law without the need for any such refinements.

Our central finding that ideology is a significant determinant of how Supreme Court justices vote in relation to IP addresses a significant gap in the attitudinal literature: the effect of ideology in economic cases. And our additional finding that ideology has less of an effect on IP than other areas of the law emphasizes the need for further inquiry into the differences between the effect of ideology on economic and non-economic areas of the law in general.

Finally, locating judicial attitudes toward IP within the liberal-conservative ideological continuum enables us to make some predictions about the direction of the Court in relation to IP. The Supreme Court's most recent appointments, Chief Justice Roberts and Justice Alito, have decided only a few IP cases to date. Our study indicates that despite this sparse record, we can deduce the likely predispositions of these justices in relation to IP by observing their votes in cases that have nothing to do with IP. Based on their voting record in the 2005–2006 term, Justices Roberts and Alito are conservative to the same degree that Chief Justice Rehnquist was, and they are significantly more conservative than Justice O'Connor was. All other things being equal, this forecasts a Roberts Court that is more sympathetic to IP claims than the Rehnquist Court. The model we have presented here can be utilized in future work to assess these predictions and other theories about Supreme Court judicial attitudes toward IP.

^{197.} See id.

^{198.} The 2005–2006 Martin-Quinn scores for Chief Justice Roberts and Justice Alito are 1.38 and 1.41 respectively. The 2004–2005 Martin-Quinn scores for former chief justice Rehnquist and former justice O'Connor are 1.41 and 0.08, respectively.

APPENDIX: CASES IN THE INTELLECTUAL PROPERTY DATASET

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

Illinois Tool Works Inc. v. Independent Ink, Inc., 547 U.S. 28 (2006)

Unitherm Food Systems, Inc. v. Swift-Eckrich, Inc., 546 U.S. 394 (2006)

Metro-Goldwyn-Mayer Studios Inc. v. Grokster, Ltd., 545 U.S. 913 (2005)

Merck KGaA v. Integra Lifesciences I, Ltd., 545 U.S. 193 (2005)

KP Permanent Make-Up, Inc. v. Lasting Impression I, Inc., 543 U.S. 111 (2004)

Dastar Corp. v. Twentieth Century Fox Film Corp., 539 U.S. 23 (2003)

Moseley v. V Secret Catalogue, Inc., 537 U.S. 418 (2003)

Eldred v. Ashcroft, 537 U.S. 186 (2003)

Holmes Group, Inc. v. Vornado Air Circulation Systems, Inc., 535 U.S. 826 (2002)

Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., 535 U.S. 722 (2002)

J.E.M. Ag Supply, Inc. v. Pioneer Hi-Bred International, Inc., 534 U.S. 124 (2001)

New York Times Co. v. Tasini, 533 U.S. 483 (2001)

Traffix Devices, Inc. v. Marketing Displays, Inc., 532 U.S. 23 (2001)

Wal-Mart Stores, Inc. v. Samara Bros., 529 U.S. 205 (2000)

Florida Prepaid Postsecondary Education Expense Board v. College Savings Bank, 527 U.S. 627 (1999)

Dickinson v. Zurko, 527 U.S. 150 (1999)

Pfaff v. Wells Electronics, Inc., 525 U.S. 55 (1998)

Feltner v. Columbia Pictures Television, Inc., 523 U.S. 340 (1998)

Quality King Distributors, Inc. v. L'Anza Research International, Inc., 523 U.S. 135 (1998)

Warner-Jenkinson Co. v. Hilton Davis Chemical Co., 520 U.S. 17 (1997)

Markman v. Westview Instruments, Inc., 517 U.S. 370 (1996)

Lotus Development Corp. v. Borland International, Inc., 516 U.S. 233 (1996)¹⁹⁹

Qualitex Co. v. Jacobson Products Co., 514 U.S. 159 (1995)

Asgrow Seed Co. v. Winterboer, 513 U.S. 179 (1995)

Campbell v. Acuff-Rose Music, Inc., 510 U.S. 569 (1994)

Fogerty v. Fantasy, Inc., 510 U.S. 517 (1994)

Cardinal Chemical Co. v. Morton International, Inc., 508 U.S. 83 (1993)

Professional Real Estate Investors, Inc. v. Columbia Pictures Industries, Inc., 508 U.S. 49 (1993)

Two Pesos, Inc. v. Taco Cabana, Inc., 505 U.S. 763 (1992)

Feist Publications, Inc. v. Rural Telephone Service Co., 499 U.S. 340 (1991)

Eli Lilly & Co. v. Medtronic, Inc., 496 U.S. 661 (1990)

Stewart v. Abend, 495 U.S. 207 (1990)

Community for Creative Non-Violence v. Reid, 490 U.S. 730 (1989)

Bonito Boats, Inc. v. Thunder Craft Boats, Inc., 489 U.S. 141 (1989)

K Mart Corp. v. Cartier, Inc., 486 U.S. 281 (1988)²⁰⁰

San Francisco Arts & Athletics, Inc. v. United States Olympic Committee, 483 U.S. 522 (1987)

Dow Chemical Co. v. United States, 476 U.S. 227 (1986)

Dennison Manufacturing Co. v. Panduit Corp., 475 U.S. 809 (1986)

Thomas v. Union Carbide Agricultural Products Co., 473 U.S. 568 (1985)

Dowling v. United States, 473 U.S. 207 (1985)

Harper & Row, Publishers v. Nation Enterprises, 471 U.S. 539 (1985)

Park 'n Fly, Inc. v. Dollar Park & Fly, Inc., 469 U.S. 189 (1985)

Mills Music, Inc. v. Snyder, 469 U.S. 153 (1985)

Ruckelshaus v. Monsanto Co., 467 U.S. 986 (1984)

Sony Corp. of America v. Universal City Studios, Inc., 464 U.S. 417 (1984)

General Motors Corp. v. Devex Corp., 461 U.S. 648 (1983)

Inwood Laboratories, Inc. v. Ives Laboratories, Inc., 456 U.S. 844

^{199.} Affirmed by an equally divided Court, not used in our statistical analysis.

^{200.} Not classified as either for or against the IP Owner.

(1982)

Diamond v. Bradley, 450 U.S. 381 (1981)²⁰¹

Diamond v. Diehr, 450 U.S. 175 (1981)

Dawson Chemical Co. v. Rohm & Haas Co., 448 U.S. 176 (1980)

Diamond v. Chakrabarty, 447 U.S. 303 (1980)

Chrysler Corp. v. Brown, 441 U.S. 281 (1979)

Aronson v. Quick Point Pencil Co., 440 U.S. 257 (1979)

Parker v. Flook, 437 U.S. 584 (1978)

Sakraida v. Ag Pro, Inc., 425 U.S. 273 (1976)

Dann v. Johnston, 425 U.S. 219 (1976)

Twentieth Century Music Corp. v. Aiken, 422 U.S. 151 (1975)

Williams & Wilkins Co. v. United States, 420 U.S. 376 (1975)²⁰²

Kewanee Oil Co. v. Bicron Corp., 416 U.S. 470 (1974)

Teleprompter Corp. v. Columbia Broadcasting System, Inc., 415 U.S. 394 (1974)

Goldstein v. California, 412 U.S. 546 (1973)

United States v. Glaxo Group, Ltd., 410 U.S. 52 (1973)

Gottschalk v. Benson, 409 U.S. 63 (1972)

Brunette Machine Works, Ltd. v. Kockum Industries, Inc., 406 U.S. 706 (1972)

Deepsouth Packing Co. v. Laitram Corp., 406 U.S. 518 (1972)

United States v. Topco Associates, Inc., 405 U.S. 596 (1972)

Blonder-Tongue Laboratories, Inc. v. University of Illinois Foundation, 402 U.S. 313 (1971)

Zenith Radio Corp. v. Hazeltine Research, 401 U.S. 321 (1971)

Standard Industries, Inc. v. Tigrett Industries, Inc., 397 U.S. 586 (1970)

Anderson's-Black Rock, Inc. v. Pavement Salvage Co., 396 U.S. 57 (1969)

Lear, Inc. v. Adkins, 395 U.S. 653 (1969)

Zenith Radio Corp. v. Hazeltine Research, Inc., 395 U.S. 100 (1969)

Fortnightly Corp. v. United Artists Television, Inc., 392 U.S. 390 (1968)

^{201.} Affirmed by an equally divided Court, not used in our statistical analysis.

^{202.} Affirmed by an equally divided Court, not used in our statistical analysis.

United States v. Sealy, Inc., 388 U.S. 350 (1967)

Fleischmann Distilling Corp. v. Maier Brewing Co., 386 U.S. 714 (1967)

Switzerland Cheese Ass'n v. E. Horne's Market, Inc., 385 U.S. 23 (1966)

Brenner v. Manson, 383 U.S. 519 (1966)

United States v. Adams, 383 U.S. 39 (1966)

Graham v. John Deere Co. of Kansas City, 383 U.S. 1 (1966)

Hazeltine Research, Inc. v. Brenner, 382 U.S. 252 (1965)

Walker Process Equipment, Inc. v. Food Machinery & Chemical Corp., 382 U.S. 172 (1965)

Brulotte v. Thys Co., 379 U.S. 29 (1964)

Aro Manufacturing Co. v. Convertible Top Replacement Co., 377 U.S. 476 (1964)

Wilbur-Ellis Co. v. Kuther, 377 U.S. 422 (1964)

Hudson Distributors, Inc. v. Eli Lilly & Co., 377 U.S. 386 (1964)

Compco Corp. v. Day-Brite Lighting, Inc., 376 U.S. 234 (1964)

Sears, Roebuck & Co. v. Stiffel Co., 376 U.S. 225 (1964)

United States v. Singer Manufacturing Co., 374 U.S. 174 (1963)

United States v. Loew's, Inc., 371 U.S. 38 (1962)

Dairy Queen, Inc. v. Wood, 369 U.S. 469 (1962)

Public Affairs Associates, Inc. v. Rickover, 369 U.S. 111 (1962)

Aro Manufacturing Co. v. Convertible Top Replacement Co., 365 U.S. 336 (1961)

Schnell v. Peter Eckrich & Sons, Inc., 365 U.S. 260 (1961)

Hoffman v. Blaski, 363 U.S. 335 (1960)

Miller Music Corp. v. Charles N. Daniels, Inc., 362 U.S. 373 (1960)

Columbia Broadcasting System, Inc. v. Loew's Inc., 356 U.S. 43 (1958)²⁰³

Fourco Glass Co. v. Transmirra Products Corp., 353 U.S. 222 (1957)

United States Gypsum Co. v. National Gypsum Co., 352 U.S. 457 (1957)

Cold Metal Process Co. v. United Engineering & Foundry Co., 351 U.S. 445 (1956)

United States v. E. I. Du Pont de Nemours & Co., 351 U.S. 377 (1956) Mazer v. Stein, 347 U.S. 201 (1954)