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The Supreme Court's Chief Justice of Intellectual Property Law

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THE SUPREME COURT’S CHIEF JUSTICE OF INTELLECTUAL PROPERTY LAW

Robert W. Gomulkiewicz*

Justice Clarence Thomas is one of the most recognizable members of the United States Supreme Court. Many people recall his stormy Senate confirmation hearing and notice his fiery dissenting opinions that call on the Court to reflect the original public meaning of the Constitution. Yet observers have missed one of Justice Thomas’s most significant contributions to the Court—his intellectual property law jurisprudence. Justice Thomas has authored more majority opinions in intellectual property cases than any other Justice in the Roberts Court era and now ranks as the most prolific author of patent law opinions in the history of the Supreme Court. Thus, at a time when intellectual property has become one of America’s most important assets, Justice Thomas has played an important role in the evolution of America’s innovation law and policy.

This Article is the first to highlight the significance of Justice Thomas’s intellectual property jurisprudence. It considers how Justice Thomas emerged as the Roberts Court’s “chief justice” of intellectual property law, authoring more majority opinions than even colleagues known for their intellectual property law prowess. The Article analyzes Justice Thomas’s key intellectual property opinions to understand their importance. It also highlights the distinguishing features of these opinions, including their faithful adherence to textualism, appreciation for the role of remedies, attention to technological and business context, awareness of the impact on intellectual property practitioners, and surprising unanimity. The Article concludes that Justice Thomas’s deep respect for the constitutional separation of powers is at the heart of his intellectual property jurisprudence, as his opinions invite and sometimes nudge Congress to play its leading role in crafting intellectual property law.

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INTRODUCTION

Since the recent passing of the “notorious” Ruth Bader Ginsburg,¹ Clarence Thomas may be the most famous Justice on the United States Supreme Court. We remember his stormy Senate confirmation hearing. His fiery dissenting opinions often call for the Court to overrule important and longstanding constitutional law precedents so that the law can reflect the original public meaning of the Constitution. For most of the Roberts Court era, he has been the

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¹ See generally IRIN CARMON & SHANA KNIZHNIK, NOTORIOUS RBG: THE LIFE AND TIMES OF RUTH BADER GINSBURG (2015). In this context, of course, “notorious” is being used ironically as a term of endearment and respect for the late Justice Ginsburg.

only member of the Court born and raised in the South and the only Justice who is Black.² He even draws attention to himself when he remains silent—as he has done during most oral arguments before the Court.³

Despite this notoriety, observers have missed one of Justice Thomas’s most significant contributions on the Court—his intellectual property law jurisprudence. Justice Thomas has written more majority opinions in intellectual property cases than any other Justice during the Roberts Court era and now ranks as the most prolific author of patent law opinions in the history of the Supreme Court. This Article is the first to highlight the significance of Justice Thomas’s intellectual property jurisprudence.⁴

Justice Thomas has emerged as the Roberts Court’s “chief justice” of intellectual property law at a time when intellectual property has become one of America’s most valuable assets in the world economy. As the Roberts Court has focused on patent law, Justice Thomas’s opinions for the Court have contributed to reducing the incidence of junk patents and the power of predatory

² Justice Amy Coney Barrett, who was born in Louisiana, joined the Supreme Court in October 2020. See *About the Court: Current Members*, SUP. CT. OF THE U.S., <https://www.supremecourt.gov/about/biographies.aspx> [<https://perma.cc/WMV8-GCNP>]. Ketanji Brown Jackson will join the Court in autumn 2022, becoming the second Justice who is Black on the Roberts Court. See Mary Clare Jalonick & Mark Sherman, *Jackson Confirmed as First Black Female High Court Justice*, AP NEWS, (Apr. 7, 2022), <https://apnews.com/article/ketanji-brown-jackson-supreme-court-confirmation-f39263cddb0c59c8a20a48edf9b6786e> [<https://perma.cc/5V5G-T5L2>].

³ See generally RonNell Andersen Jones & Aaron L. Nielson, *Clarence Thomas the Questioner*, 111 NW. U. L. REV. ONLINE 197 (2017). See also Brent Kendall & Jess Bravin, *Under Coronavirus Court Procedures, Clarence Thomas Finds His Voice*, WALL ST. J. (May 10, 2020, 12:33 PM), <https://www.wsj.com/articles/justice-clarence-thomas-finds-his-voice-11589036401> [<https://perma.cc/4XK7-H5EX>]; Editorial Board, *Justice Thomas’s Question Time*, WALL ST. J., (May 4, 2020, 6:16 PM), <https://www.wsj.com/articles/justice-thomass-question-time-11588630584> [<https://perma.cc/SAY2-GMA5>] (“Justice Thomas’s habit is to let his colleagues make the inquiries. He once went 10 years without posing a question at oral argument. . . . But holding oral arguments by conference call [during the COVID-19 pandemic] has . . . [given] a great chance for the public to witness the thoughtful Justice Thomas in action.”). When the Court returned to in-person oral arguments in autumn 2021, Chief Justice Roberts instituted a new hybrid format that supplemented the familiar free-for-all questioning with a round of one-at-a-time questioning. See Adam Tiptak, *Supreme Court Tries to Tame Unruly Oral Argument*, N.Y. TIMES (Nov. 1, 2021), <https://www.nytimes.com/2021/11/01/us/supreme-court-oral-arguments.html> [<https://perma.cc/NF8W-MGVE>] (noting why Justices Thomas and Sotomayor like this format).

⁴ Other commentators have discussed Justice Thomas’s jurisprudence in other areas of the law. See, e.g., Marah Stith McLeod, *A Humble Justice*, 127 YALE L.J.F. 196 (2017) (criminal law); Joel K. Goldstein, *Calling Them as He Sees Them: The Disappearance of Originalism in Justice Thomas’s Opinions on Race*, 74 MD. L. REV. 79, 80–96 (2014) (constitutional issues related to race); Christopher E. Smith, *Rights Behind Bars: The Distinctive Viewpoint of Justice Clarence Thomas*, 88 DET. MERCY L. REV. 829, 830–37 (2011) (prisoner rights); Scott D. Gerber, *Justice for Clarence Thomas: An Intellectual History of Justice Thomas’s Twenty Years on the Supreme Court*, 88 DET. MERCY L. REV. 667 (2011); Steven B. Lichtman, *Black Like Me: The Free Speech Jurisprudence of Clarence Thomas*, 114 PENN. ST. L. REV. 415 (2009); Online Symposium, *Justice Thomas and the First Amendment*, FIRST AMENDMENT CENTER (2008).

patent trolls. Yet even as the Supreme Court asserts itself in patent law, Justice Thomas's incremental approach to deciding intellectual property cases allows the Court to move carefully in the face of the ever-evolving technology and business models of the information economy. His textualist approach continually reminds and sometimes nudges Congress to take the lead in innovation policy, showing a fundamental respect for constitutional separation of powers. Indeed, despite his reputation as the Court's conservative iconoclast, liberal and conservative Justices have consistently joined Justice Thomas's opinions in intellectual property law cases.

This Article will make two contributions, one to intellectual property law scholarship and the other to the scholarship about Justice Thomas as a member of the Supreme Court. First, the Article will build on the work of scholars who have tracked the Supreme Court's recent interest in intellectual property cases. These scholars address the reasons for the Court's interest in intellectual property law and the general nature of its opinions.⁵ Peter Lee, for example, has explained how the Court's patent law jurisprudence reflects a project of eliminating patent exceptionalism and assimilating patent doctrine into general legal principles.⁶ This Article will extend previous scholarship by exploring the particular fingerprint that Justice Thomas has placed on the Court's intellectual property cases, especially in patent law.

Second, the Article will contribute to the scholarship about Justice Thomas's contribution to the Supreme Court. Many scholars have taken an interest in Justice Thomas, including publication of several recent books about his jurisprudence.⁷ As already mentioned, many commentators have addressed issues related to Justice Thomas's nomination to the Supreme Court and confirmation by the Senate. Other commentators have discussed Justice Thomas's originalist approach to constitutional interpretation,⁸ emphasizing his opinions related to civil rights and often reflecting on the role that race plays in his decisions. Corey Robin's recent book, for example, argues that Black nationalism lies at the heart of Justice Thomas's jurisprudence.⁹ This Article, by contrast, will explore

⁵ See, e.g., Rochelle Cooper Dreyfuss, *What the Federal Circuit Can Learn from the Supreme Court—and Vice Versa*, 59 AM. U. L. REV. 787, 792–93 (2010); Timothy R. Holbrook, *Explaining the Supreme Court's Interest in Patent Law*, 3 IP THEORY 62, 63–65 (2013).

⁶ See generally Peter Lee, *The Supreme Assimilation of Patent Law*, 114 MICH. L. REV. 1413, 1422 (2016).

⁷ See generally COREY ROBIN, *THE ENIGMA OF CLARENCE THOMAS* (2019); MYRON MAGNET, *CLARENCE THOMAS AND THE LOST CONSTITUTION* (2019); RALPH A. ROSSUM, *UNDERSTANDING CLARENCE THOMAS: THE JURISPRUDENCE OF RESTORATION* (2014); KEVIN MERIDA & MICHAEL A. FLETCHER, *SUPREME DISCOMFORT: THE DIVIDED SOUL OF CLARENCE THOMAS* (2007); ANDREW PEYTON THOMAS, *CLARENCE THOMAS: A BIOGRAPHY* (2001); JOHN GREENYA, *SILENT JUSTICE: THE CLARENCE THOMAS STORY* (2001); SCOTT DOUGLAS GERBER, *FIRST PRINCIPLES: THE JURISPRUDENCE OF CLARENCE THOMAS* (1999).

⁸ See, e.g., MAGNET, *supra* note 7; ROSSUM, *supra* note 7; GERBER, *supra* note 7.

⁹ ROBIN, *supra* note 7; see also Stephen F. Smith, *Clarence X? The Black Nationalist Behind Justice Thomas's Constitutionalism*, 4 N.Y.U. J.L. & LIBERTY 583 (2009); Angela Onwuachi-Willig, *Using the Master's "Tool" to Dismantle His House: Why Justice Clar-*

contributions by Justice Thomas outside of race and civil rights, in an area of law that is also vitally important to our national welfare, albeit in a different way than issues of social justice.

Following this Introduction, Part I will provide a brief biography of Justice Thomas, which provides context for a discussion of his intellectual property jurisprudence. Part II will explain that the Roberts Court has taken a special interest in intellectual property cases and that Justice Thomas has written the most intellectual property law majority opinions during the Roberts Court era. It will then address how Justice Thomas came to play a leading role in the Court's intellectual property law jurisprudence. Part III will discuss Justice Thomas's key intellectual property law cases and will analyze their significance. Building on Part III, Part IV will highlight the distinguishing features of Justice Thomas's opinions, including their faithful adherence to textualism, appreciation for the role of remedies, attention to technological and business context, awareness of the impact on intellectual property practitioners, and surprising unanimity. Part V will provide concluding observations about Justice Thomas's important role in the evolution of United States innovation law and policy.

I. A BRIEF BIOGRAPHY OF JUSTICE THOMAS

Clarence Thomas was born in 1948 in Pin Point, Georgia, a small, predominantly Black community near Savannah, Georgia.¹⁰ His ancestors were enslaved West Africans who lived in the barrier islands and low country of Georgia, South Carolina, and northern Florida.¹¹ He was the second of three children born to M.C. Thomas and Leola Williams.¹² Williams moved with her three children to Savannah just before Clarence entered the first grade.¹³ Their accommodations were bleak, and as a single parent, Williams had difficulty making ends meet, so she sent Clarence and his brother to live with their grandparents across town.¹⁴ Clarence Thomas called his grandfather "Daddy" and his grandmother "Aunt Tina."¹⁵

Thomas's grandparents believed in hard work and the value of a good education. Thomas attended Catholic primary and secondary schools, often as one

ence Thomas Makes the Case for Affirmative Action, 47 ARIZ. L. REV. 113 (2005); Mark V. Tushnet, *Clarence Thomas's Black Nationalism*, 47 HOW. L.J. 323 (2004); Angela Onwuachi-Willig, *Just Another Brother on the SCT: What Justice Clarence Thomas Teaches Us About the Influence of Racial Identity*, 90 IOWA L. REV. 931 (2004); Justin Driver, *Justice Thomas and Bigger Thomas*, in FATAL FICTIONS: CRIME AND INVESTIGATION IN LAW AND LITERATURE (Alison LaCroix et al. eds., 2017).

¹⁰ Justice Thomas tells his story in CLARENCE THOMAS, MY GRANDFATHER'S SON: A MEMOIR 1 (2007).

¹¹ *Id.* at 2–3.

¹² *Id.* at 1–3.

¹³ *Id.* at 6.

¹⁴ *Id.* at 8–9.

¹⁵ *Id.* at 2, 9.

of the first Black students to attend the school in segregated Savannah.¹⁶ Thomas helped his grandfather with his fuel and ice delivery businesses and, during summers, worked on his grandfather's farm.¹⁷ A few months shy of his sixteenth birthday, Thomas decided to prepare for the Catholic priesthood and eventually went to seminary in Missouri.¹⁸

After becoming disenchanted with the Catholic Church's official silence on racial injustice and following the racist comments of some of his classmates, he left the seminary.¹⁹ He enrolled at the College of the Holy Cross in Massachusetts, and following graduation, he attended Yale Law School, graduating in 1974.²⁰ After finding it difficult to land a law firm job in Georgia, he accepted John Danforth's offer to join the Missouri state attorney general's office.²¹ Later, Thomas moved to an in-house counsel position at Monsanto Corporation.²² But three years after John Danforth's election to the U.S. Senate, Thomas joined Danforth's Senate staff.²³

In 1981, President Reagan appointed Thomas as an assistant secretary for civil rights in the Department of Education.²⁴ Following that service, he became chair of the Equal Employment Opportunity Commission, where he served two four-year terms.²⁵ Following his time at EEOC, President George H.W. Bush nominated Thomas to the Court of Appeals for the District of Columbia Circuit, and he joined the court in 1990.²⁶ When Justice Thurgood Marshall retired from the Supreme Court, President Bush nominated Thomas to replace Marshall.²⁷ Following a stormy confirmation hearing,²⁸ Thomas joined

¹⁶ *Id.* at 14.

¹⁷ *Id.* at 21–28.

¹⁸ *Id.* at 30–32.

¹⁹ *Id.* at 32–44.

²⁰ *Id.* at 89.

²¹ Justice Thomas has described the decision to work for Danforth as a critical juncture in his life. Clarence Thomas et al., *The Second Annual William French Smith Memorial Lecture: A Conversation with Justice Clarence Thomas*, 37 PEPP. L. REV. 7, 27–28 (2009). According to Thomas, “I had tried in vain, during my third year at Yale Law School, to get a job in my home state of Georgia at one of the big law firms. . . . So I was basically unemployed and married with a little kid, and student loans. That’s not a good position to be in.” *Id.*

²² THOMAS, *supra* note 10, at 109–10.

²³ *Id.* at 119–20.

²⁴ *Id.* at 137–38.

²⁵ *Id.* at 148–49.

²⁶ *Id.* at 196–97, 204.

²⁷ See generally Julian Abele Cook, Jr., *Thurgood Marshall and Clarence Thomas: A Glance at their Philosophies*, 73 MICH. BAR J. 298 (1994); Maureen Dowd, *Conservative Black Judge, Clarence Thomas, Is Named to Marshall’s Court Seat*, N.Y. TIMES, July 2, 1991, at A1.

²⁸ Much has been written about Justice Thomas’s Senate confirmation hearing. It is not the purpose of this Article to explore that history further.

the Supreme Court in October 1991 and is now the longest-serving member of the Court.²⁹

II. JUSTICE THOMAS'S ROLE IN DECIDING INTELLECTUAL PROPERTY CASES

A. *By the Numbers: Majority Opinions in Intellectual Property Cases on the Roberts Court*

The Supreme Court has not been particularly involved in intellectual property law for most of its history. Congress seemed to diminish the Supreme Court's role in patent law in 1982 when it created the Court of Appeals for the Federal Circuit with its patent-specialist judges.³⁰ However, the Roberts Court³¹ has taken a keen interest in intellectual property cases,³² firmly inserting itself into United States innovation law and policy.

The Supreme Court has decided nearly seventy intellectual property law cases during the Roberts Court era as of December 31, 2021. In determining whether a case was an "intellectual property law" case, I counted cases in which a copyright, patent, trademark, or trade secret-related issue played a material role in the Court's decision.³³ This includes cases that touch on antitrust, contract, civil procedure, and administrative law in relation to intellectual property rights.

²⁹ See James Taranto, *We May Get a Conservative Chief Justice*, WALL ST. J. (Oct. 26, 2020, 6:00 PM), <https://www.wsj.com/articles/we-may-get-a-conservative-chief-justice-11603749647> [<https://perma.cc/P47D-VB2J>]; Linda Greenhouse, *Thomas Sworn in as 106th Justice*, N.Y. TIMES, Oct. 24, 1991, at A18.

³⁰ See Rochelle Cooper Dreyfuss, *The Federal Circuit: A Case Study in Specialized Courts*, 64 N.Y.U. L. REV. 1, 3 (1989); Glynn S. Lunney, Jr., *Patent Law, the Federal Circuit, and the Supreme Court: A Quiet Revolution*, 11 SUP. CT. ECON. REV. 1, 2 (2003); Pauline Newman, *The Federal Circuit in Perspective*, 54 AM. U. L. REV. 821, 821, 823 (2005).

³¹ The Roberts Court began when John Roberts became Chief Justice in September 2005, succeeding Chief Justice William Rehnquist. See JOAN BISKUPIC, *THE CHIEF: THE LIFE AND TURBULENT TIMES OF CHIEF JUSTICE JOHN ROBERTS* 2 (2019); see also Jess Bravin & Brent Kendall, *Latest Term Shows John Roberts in Command of Shifting Coalitions*, WALL ST. J. (July 12, 2020, 1:08 PM), <https://www.wsj.com/articles/latest-term-shows-john-roberts-in-command-of-shifting-coalitions-11594573678> [<https://perma.cc/SYV8-SEX9>] ("Taken together, the court's output reflected the overarching message Chief Justice Roberts has sought to deliver since taking the helm in 2005: The judiciary stands apart from the partisanship that consumes its coequal branches of government, Congress and the presidency.")

³² See Alan D. Lourie, *One Judge's Historical View of a Changing Patent World*, 34 BERKELEY TECH. L.J. 323, 329–30 (2019); John F. Duffy, *The Federal Circuit in the Shadow of the Solicitor General*, 78 GEO. WASH. L. REV. 518, 523–24 (2010); John F. Duffy, *The Festo Decision and the Return of the Supreme Court to the Bar of Patents*, SUP. CT. REV. 273, 288 (2002).

³³ This approach is consistent with Joseph Miller's comprehensive mapping of the Supreme Court's intellectual property cases. See Joseph S. Miller, *U.S. Supreme Court I.P. Cases, 1810–2019: Measuring and Mapping the Citation Networks*, 69 CATH. U. L. REV. 537, 542–43 (2020); Joseph S. Miller, *Which Supreme Court Cases Influenced Recent Supreme Court Decisions? A Citation Study*, 21 UCLA J.L. & TECH. 1, 18–19 (2017).

As shown in the table below, Justice Thomas has written the most majority opinions for the Roberts Court in intellectual property cases.³⁴ When considering intellectual property majority opinions over the entire history of the Supreme Court, Justice Thomas has surpassed even Justices known for their intellectual property opinions, such as Justice Sandra Day O'Connor,³⁵ Justice Anthony Kennedy,³⁶ Justice John Paul Stevens,³⁷ and Chief Justice Warren Burger.³⁸ Additionally, fifteen of Justice Thomas's opinions have been in patent law cases, which now ranks him as the top author of patent law majority opinions in the history of the Supreme Court,³⁹ putting him ahead of Justice

³⁴ See *infra* Table 1.

³⁵ See Keith Aoki, *Balancing Act: Reflections on Justice O'Connor's Intellectual Property Jurisprudence*, 44 HOUS. L. REV. 965, 966–67 (2008); Marci A. Hamilton, *Justice O'Connor's Intellectual Property Opinions: Currents and Crosscurrents*, 13 WOMEN'S RTS. L. REP. 71, 71 (1991).

³⁶ See Eileen Hyde, *Flexible and Fact-Dependent: A Review of Justice Kennedy's Intellectual Property Opinions*, 30 INTELL. PROP. & TECH. L.J. 14, 14 (2018).

³⁷ See Pamela Samuelson, *The Generativity of Sony v. Universal: The Intellectual Property Legacy of Justice Stevens*, 74 FORDHAM L. REV. 1831, 1831–32 (2006); Ryan Davis & Bill Donahue, *Justice Stevens Sought Careful Limits on Reach of IP Law*, LAW360 (July 17, 2019, 10:09 PM), <https://www.law360.com/articles/1179473/justice-stevens-sought-careful-limits-on-reach-of-ip-law> [<https://perma.cc/H9SA-C6DW>].

³⁸ See Alan D. Lourie, *The Intellectual Property Contributions of Chief Justice Warren E. Burger*, 45 OKLA. L. REV. 151, 151 (1992). Chief Justice Burger wrote the majority opinion in five intellectual property cases. See *Dow Chemical Co. v. United States*, 476 U.S. 227 (1986) (trade secret); *Diamond v. Chakrabarty*, 447 U.S. 303 (1980) (patent); *Aronson v. Quick Point Pencil Co.*, 440 U.S. 257 (1979) (patent); *Kewanee Oil Co. v. Bicron Corp.*, 416 U.S. 470 (1974) (trade secret and patent); *Goldstein v. California*, 412 U.S. 546 (1973) (copyright).

³⁹ Undoubtedly, the volume of Justice Thomas's patent law opinions is related to the Roberts Court's keen interest in patent law, although Justice Thomas authored two patent law opinions of the Court during the Rehnquist Court era, including a significant opinion on the doctrine of equivalents. See *Warner-Jenkinson Co. v. Hilton Davis Chemical Co.*, 520 U.S. 17 (1997). As discussed *infra* Section II.B, it is possible that Justice Thomas played a role in fueling the Roberts Court's interest in patent cases.

William O. Douglas's fourteen patent law opinions⁴⁰ and Justice Hugo Black's⁴¹ ten opinions.⁴²

⁴⁰ *Cuno Eng'g Corp. v. Automatic Devices Corp.*, 314 U.S. 84 (1941); *Automatic Devices Corp. v. Sinko Tool & Mfg. Co.*, 314 U.S. 94 (1941); *United States v. Masonite Corp.*, 316 U.S. 265 (1942); *Altvater v. Freeman*, 319 U.S. 359 (1943); *Mercoid Corp. v. Mid-Continent Inv. Co.*, 320 U.S. 661 (1944); *Mercoid Corp. v. Minneapolis-Honeywell Regul. Co.*, 320 U.S. 680 (1944); *Gen. Elec. Co. v. Jewel Incandescent Lamp Co.*, 326 U.S. 242 (1945); *Transparent-Wrap Mach. Corp. v. Stokes & Smith Co.*, 329 U.S. 637 (1947); *Funk Bros. Seed Co. v. Kalo Inoculant Co.*, 333 U.S. 127 (1948); *Simpson v. Union Oil Co. of Cal.* 377 U.S. 13 (1964); *Wilbur-Ellis Co. v. Kuther*, 377 U.S. 422 (1964); *Brulotte v. Thys Co.*, 379 U.S. 29 (1964); *Anderson's Black Rock, Inc. v. Pavement Salvage Co.*, 396 U.S. 57 (1969); *Gottschalk v. Benson*, 409 U.S. 63 (1972). One of Justice Douglas's fourteen opinions, *Automatic Devices Corp. v. Sinko Tool & Manufacturing Co.*, is a very brief order in a companion case to *Cuno Engineering Corp. v. Automatic Devices Corp.* Nonetheless, I counted it as a separate patent law opinion. Also, I counted *Simpson v. Union Oil Co.* as a patent case even though it focused on consignment agreements under antitrust law, but the case has a significant discussion of patent licenses.

⁴¹ Justice Black and Justice Thomas have also been linked because of their free speech jurisprudence. See Lichtman, *supra* note 4.

⁴² *Shawkee Mfg. Co. v. Hartford-Empire Co.*, 322 U.S. 271 (1944); *Halliburton Oil Well Cementing Co. v. Walker*, 329 U.S. 1 (1946); *McCullough v. Kammerer Corp.*, 331 U.S. 96 (1947); *Edward Katzinger Co. v. Chi. Metallic Mfg. Co.*, 329 U.S. 394 (1947); *Macgregor v. Westinghouse Elec. & Mfg. Co.*, 329 U.S. 402 (1947); *Mandel Bros., Inc. v. Wallace*, 335 U.S. 291 (1948); *Sanford v. Kepner*, 344 U.S. 13 (1952); *Sears, Roebuck & Co. v. Stifel Co.*, 376 U.S. 225 (1964); *Compco Corp. v. Day-Brite Lighting, Inc.*, 376 U.S. 234 (1964); *Hazeltine Rsch., Inc. v. Brenner*, 382 U.S. 252 (1965).

TABLE 1: INTELLECTUAL PROPERTY MAJORITY OPINIONS BY THE NUMBERS

Supreme Court Justice	IP Majority Opinions: Career Total	IP Majority Opinions: Roberts Court Era	IP Majority Opinions: Rehnquist and Burger Court Eras
Thomas	18	14	4
Ginsburg	11	7	4
Stevens	11	2	9
Breyer	10	8	2
Scalia	9	2	7
Sotomayor	9	9	N.A.
Kagan	7	7	N.A.
Kennedy	7	4	3
Roberts	7	7	N.A.
O'Connor	6	0	6
Alito	5	5	N.A.
Souter	4	0	4
Gorsuch	2	2	N.A.
Kavanaugh	1	1	N.A.

A list of the specific cases for each Justice can be found cited in the annotated chart in the Appendix.

B. Why Has Justice Thomas Emerged as the Roberts Court's "Chief Justice" of Intellectual Property Law?

The Roberts Court has no shortage of Justices with an interest in intellectual property law. Before joining the Court, Justice Breyer wrote a famous law review article, *The Uneasy Case For Copyright*.⁴³ Justice Ginsburg has been noted for her copyright jurisprudence,⁴⁴ and her daughter is Professor Jane

⁴³ Stephen Breyer, *The Uneasy Case for Copyright: A Study of Copyright in Books, Photocopies, and Computer Programs*, 84 HARV. L. REV. 281, 345 (1970). See also Stephen Breyer, *Copyright: A Rejoinder*, 20 UCLA L. REV. 75 (1972); Stephen Breyer, *The Uneasy Case for Copyright: A Look Back over Four Decades*, 79 GEO. WASH. L. REV. 1635 (2011).

⁴⁴ See Ryan Vacca & Ann Bartow, *Ruth Bader Ginsburg's Copyright Jurisprudence*, 22 NEV. L.J. (forthcoming 2022); see also Nicole Lamberson, *The Enduring Copyright Legacy of Justice Ruth Bader Ginsburg*, LIBR. OF CONG.: COPYRIGHT CREATIVITY AT WORK (Feb. 12, 2021), <https://blogs.loc.gov/copyright/2021/02/the-enduring-copyright-legacy-of-justice-ruth-bader-ginsburg> [<https://perma.cc/D8CZ-AMQS>]; Maria A. Pallante, *Ginsburg, Scalia, and Possibly Barrett on Copyright*, ASS'N OF AM. PUBLISHERS BLOGS (Oct. 14, 2020), <https://publishers.org/ginsburg-scalia-and-possibly-barrett-on-copyright> [<https://perma.cc/2F5Y-4WC6>]; Samantha Levin, *"It Is so Ordered"—a Look Back at Justice Ginsburg's Copyright Legacy*, COPYRIGHT ALL. BLOGS (Sept. 24, 2020), <https://copyrightalliance.org/a-look-back-at-justice-ginsburgs-copyright-legacy> [<https://perma.cc/YE65-BTBJ>].

Ginsburg, one of the world's most respected copyright law scholars.⁴⁵ Justice Sotomayor was a commercial litigation partner at a New York law firm where she specialized in intellectual property litigation.⁴⁶ She also authored a well-known opinion on software licensing when she was sitting on the Second Circuit Court of Appeals.⁴⁷ Even newcomer Justice Gorsuch has received attention for his approach to patent cases.⁴⁸ So why did Justice Thomas emerge as the most prolific author of intellectual property opinions of the Court?⁴⁹ To answer that question, it is important to understand some fundamentals of Supreme Court practice, especially how the Court accepts and decides cases, and how the Court assigns and drafts its opinions.⁵⁰

Cases come to the Supreme Court's attention when a party files a writ of certiorari (cert petition) seeking review of a decision by a federal circuit court of appeals or a state supreme court.⁵¹ The Supreme Court receives several thousand cert petitions each term. From these petitions, the Court will choose around 150 cases. Each Justice is responsible for reviewing the cert petitions, although some Justices pool their law clerks to streamline the process by writing summaries of the facts and contentions of each petition. The Chief Justice circulates a list of cases that the Chief Justice thinks should be considered for acceptance, and the Associate Justices can add cases to this "discuss list" as well. The Justices then meet to discuss and choose which cases to accept. It takes four votes to accept a case.

Once a case is accepted by the Court, the parties (and any *amici*) file their briefs according to the appointed schedule, and then the Court hears oral argument. After oral argument, the Justices meet in the Chief Justice's conference room to decide the case. Only the Justices are present during this conference.

⁴⁵ Jane Ginsburg is the Morton L. Janklow Professor of Literary and Artistic Property Law at Columbia Law School, where she directs the law school's Kernochan Center for Law, Media and the Arts. *Jane C. Ginsburg*, COLUM. L. SCH., <https://www.law.columbia.edu/faculty/jane-c-ginsburg> [<https://perma.cc/4F44-F3C7>]; see Jess Bravin, *Ruth Bader Ginsburg, a Pioneering Justice on Supreme Court, Dies at 87*, WALL ST. J. (Sept. 19, 2020, 1:31 PM), <https://www.wsj.com/articles/ruth-bader-ginsburg-dies-11600472623> [<https://perma.cc/V6XQ-3L64>] ("Justice Ginsburg was the Court's most aggressive defender of copyright, for example, an interest she said she adopted from her daughter, Jane, herself an expert in intellectual property at Columbia Law School.").

⁴⁶ Justice Sotomayor tells her story in her memoir, *SONIA SOTOMAYOR, MY BELOVED WORLD* 267 (2013).

⁴⁷ *Specht v. Netscape Comm'ns Corp.*, 306 F.3d 17, 20 (2d Cir. 2002).

⁴⁸ Daniel D. Kim & Jonathan Stroud, *Administrative Oversight: Justice Gorsuch's Patent Opinions, the PTAB, and Antagonism Toward the Administrative State*, 18 CHI.-KENT J. INTELL. PROP. L. 53, 54–55 (2019).

⁴⁹ It is interesting to note, however, that Justice Sotomayor has already authored the second most majority opinions in intellectual property cases on the Roberts Court even though she has only been on the Court since 2009. See *infra*, Appendix. She is poised to become the Supreme Court's next "chief justice" of intellectual property law.

⁵⁰ See generally RICHARD SEAMON ET AL., *THE SUPREME COURT SOURCEBOOK* (2013).

⁵¹ See generally STEPHEN M. SHAPIRO ET AL., *SUPREME COURT PRACTICE* (11th ed. 2019).

The Chief Justice sits at one end of a rectangular table, the senior Associate Justice (currently, Justice Thomas) sits at the opposite end, and the other Associate Justices sit on the sides in order of seniority.

The Chief Justice begins consideration of each case by reviewing the facts, the decision of the lower court, and the applicable law. Following that review, the Chief Justice votes to affirm or reverse the lower court and explains the supporting rationale. The discussion and voting then proceeds down the line of Associate Justices from the most to the least senior Justice. Typically, these are not round table discussions with interplay between the Justices. Each Justice simply presents his or her views without interruption. At the end of the discussion, the Chief Justice announces how the vote will be recorded.

Next comes the assignment of the opinion writing. If the Chief Justice is in the majority, then the Chief Justice assigns the opinion; otherwise, the most senior Associate Justice in the majority assigns the opinion. In his book on the Supreme Court, former Chief Justice Rehnquist notes how important these assignments are to each member of the Court: “This is an important responsibility, and it is desirable that it be discharged carefully and fairly.”⁵² In Justice Rehnquist’s view, the Chief Justice is expected to retain some opinions that are of great significance but also to share the significant opinions with the other Justices.⁵³ Justice Rehnquist also notes that since the discussion in the conference is, by necessity, general in nature, the details of the Court’s decision often get worked out in the writing of the opinion of the Court. And votes from the conference can (and do) change during the opinion writing process.⁵⁴

With this background in mind, why has Justice Thomas been assigned the most intellectual property opinions in the Roberts Court era? One reason may be that the Chief Justice knows that Justice Thomas has an interest in and experience with commercial law. At Yale Law School, Justice Thomas relished taking courses in corporate law, bankruptcy, and commercial transactions.⁵⁵ He notes in his memoir that the honors grade he received in tax law “would be my most satisfying experience in law school.”⁵⁶ Building on that interest, Justice

⁵² WILLIAM H. REHNQUIST, *THE SUPREME COURT: HOW IT WAS, HOW IT IS* 297 (1987).

⁵³ *Id.*

⁵⁴ See Christopher B. Seaman & Sheena X. Wang, *An Inside History of the Burger Court’s Patent Eligibility Jurisprudence*, 53 AKRON L. REV. 915, 922–23 (2019) (describing vote changes in key patent cases during the Burger Court); John Eastman, *Reflections on Justice Thomas’s Twenty Years on the Bench*, 88 U. DET. MERCY L. REV. 691, 702 (2011) (noting that when votes change during the drafting of the opinion of the Court, the votes normally go down, creating a closer majority or changing a clear majority into a plurality).

⁵⁵ THOMAS, *supra* note 10, at 75.

⁵⁶ *Id.*

When Justice Thomas was at Yale Law School, he decided that avoiding constitutional law and civil rights issues was a way to make a mark: to be treated not as a black lawyer, but as a lawyer who happened to be black. He got into fields that were the least tied to race as you can get in order to try to establish his independence from that history, of people telling him what he ought to be doing. And so he went into corporate law and tax law

Thomas represented the Department of Revenue and State Tax Commission during his time working as an associate attorney general in Missouri. Following his stint in the Missouri attorney general's office, he took a corporate counsel position at Monsanto rather than go into academia or join a large law firm because of the opportunity at Monsanto to mix law and business.⁵⁷ While at Monsanto he spent a considerable amount of time studying books, periodicals, and reports about business and government policy.⁵⁸ As a legislative assistant for Senator Danforth, he worked on energy-related issues.⁵⁹ Thus, Justice Thomas's experience makes him particularly well-situated to understand and wrestle with issues of intellectual property law and policy. Given his experience, perhaps Justice Thomas even signals his enthusiasm⁶⁰ for intellectual property cases during the Court's consideration of the cert petition "discuss list" or in the conferences where the Court decides its cases on the merits.⁶¹

Another reason may relate to Justice Thomas's approach to many important constitutional issues that come before the Court. Justice Thomas's originalist viewpoint often puts him in dissent.⁶² Even if he agrees with the majority's outcome, he often does not agree with its reasoning and thus finds himself concurring only in part of the majority opinion or only in the Court's judgment.⁶³ Consequently, this narrows the number of cases in which the opinion of the Court could be assigned to Justice Thomas, since the Justice who writes the opinion of the Court needs to reflect the views expressed at the conference by the Justices who form the majority.⁶⁴ And as mentioned, many important details of the decision get worked out in the writing of the opinion. Per-

Eastman, *supra* note 54, at 701. Eastman, a professor and former dean of the law school at Chapman University, clerked for Justice Thomas from 1996 to 1997. *Id.*

⁵⁷ THOMAS, *supra* note 10, at 109–10.

⁵⁸ *Id.* at 116.

⁵⁹ *Id.* at 123.

⁶⁰ In his book on the Rehnquist Court, Mark Tushnet notes that Justice Thomas's "willingness to handle complex cases involving statutory interpretation and economic regulation limited what he had to say about major constitutional questions in the Rehnquist years." MARK TUSHNET, A COURT DIVIDED: THE REHNQUIST COURT AND THE FUTURE OF CONSTITUTIONAL LAW 103 (2005). *Sandoz Inc. v. Amgen Inc.*, 137 S. Ct. 1664 (2017), is a good example of Justice Thomas construing a complex statute, the Biologics Price Competition and Innovation Act of 2009, in an intellectual property case in the Roberts Court era.

⁶¹ The same reasoning may account for why Justice Sotomayor has authored the second most intellectual property opinions on the Roberts Court. *See infra*, Appendix. This suggests Justice Sotomayor is poised to become the Court's next "chief justice" of intellectual property law.

⁶² *E.g.*, *United States v. Comstock*, 560 U.S. 126, 158–59 (2010) (Thomas, J., dissenting).

⁶³ *E.g.*, *Allen v. Cooper*, 140 S. Ct. 994, 1007 (2020) (Thomas, J., concurring in part and concurring in the judgment); *Morse v. Fredrick*, 551 U.S. 393, 410 (2007) (Thomas, J., concurring).

⁶⁴ However, by the same logic, these cases could have been assigned to Justices Ginsburg, Breyer, Kagan, or Sotomayor who populate the liberal wing of the Court—in other words, if intellectual property opinions were relatively safe to assign, then Chief Justice Roberts could have assigned them to the liberal Justices just as readily as to Justice Thomas.

haps, then, intellectual property cases are a particular category of cases in which Justice Thomas's views are more likely to be in step with his colleagues.⁶⁵ And to the extent certain intellectual property cases are considered interesting or of great significance, then it would make sense for the Chief Justice to assign Justice Thomas those opinions in the course of fairly allocating the most desirable opinions among the Justices.

A final reason may relate to Justice Thomas's approach to writing opinions in cases of statutory construction. Justice Thomas considers himself a textualist in these cases. His careful application of textualism may be a particularly good fit for the Court's approach to deciding intellectual property cases. I explore this reason more fully in the next Parts of this Article.

III. JUSTICE THOMAS'S KEY INTELLECTUAL PROPERTY LAW OPINIONS FOR THE ROBERTS COURT

Congress created the Federal Circuit in 1982 to unify patent law appeals, hoping this would improve the climate for innovation by giving inventors a uniform body of patent law decided by judges with patent expertise.⁶⁶ Over time, however, commentators expressed concern that the Federal Circuit had become too friendly to patent holders, turning patents from promoters of innovation to drags on innovation.⁶⁷ For example, the Federal Circuit often favored bright-line legal rules that would provide certainty for patent holders and their lawyers but, either explicitly or implicitly, favored the interests of patent holders.⁶⁸

Beginning with the *eBay v. MercExchange* case in 2006, the Roberts Court began to take a particular interest in patent law and began to reset the Federal Circuit's patent law jurisprudence.⁶⁹ This Part discusses Justice Thomas's key intellectual property law majority opinions as the Roberts Court became more

⁶⁵ *But see* *Matal v. Tam*, 137 S. Ct. 1744, 1744, 1769 (2017) (Thomas, J., concurring in part and concurring in the judgment) (finding that the disparagement clause of the Lanham Act violates the First Amendment); *Allen*, 140 S. Ct. at 997, 1007 (Thomas, J., concurring in part and concurring in the judgment) (discussing state sovereign immunity for copyright infringement); *Georgia v. Public.Resource.Org, Inc.*, 140 S. Ct. 1498, 1502, 1513 (2020) (Thomas, J., dissenting) (finding annotations of official state reports ineligible for copyright protection); *Google v. Oracle*, 141 S. Ct. 1183, 1210 (2021) (Thomas, J., dissenting).

⁶⁶ *See* Dreyfuss, *supra* note 30, at 3; Rochelle Cooper Dreyfuss, *The Federal Circuit: A Continuing Experiment in Specialization*, 54 CASE W. RES. L. REV. 769, 770 (2004); R. Polk Wagner & Lee Petherbridge, *Is the Federal Circuit Succeeding?: An Empirical Assessment of Judicial Performance*, 152 U. PA. L. REV. 1105, 1108 (2004); Newman, *supra* note 30, at 821.

⁶⁷ *See* Paul M. Janicke & LiLan Ren, *Who Wins Patent Infringement Cases?*, 34 AIPLA Q.J. 1, 3, 38 (2006); Kimberley A. Moore, *Judges, Juries, and Patent Cases—an Empirical Peek Inside the Black Box*, 99 MICH. L. REV. 365, 368–69 (2000).

⁶⁸ *See* *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 415 (2007) (“We begin by rejecting the rigid approach of the Court of Appeals.”).

⁶⁹ *See generally* Lourie, *supra* note 32.

engaged in intellectual property cases, especially in patent law.⁷⁰ These opinions stand out because of their importance in the evolution of America's information economy. And, as explained in Part IV, they highlight the fingerprint that Justice Thomas places on intellectual property cases.

A. *eBay Inc. v. MercExchange LLC*, 547 U.S. 388 (2006)

eBay Inc. operates a popular Internet platform for buying and selling goods either at a fixed price or through an auction. MercExchange is a company founded by inventor and patent attorney Thomas Woolston to commercialize his patents.⁷¹ eBay and MercExchange attempted to negotiate a license for Woolston's online auction technology patents, but when negotiations broke down, MercExchange sued eBay for patent infringement.⁷²

A jury awarded MercExchange \$30 million⁷³ in damages, but the trial judge denied MercExchange's request for a permanent injunction.⁷⁴ The Court of Appeals for the Federal Circuit reversed the trial court's denial of injunctive relief, citing its "general rule" that trial courts should issue permanent injunctions against patent infringement "absent exceptional circumstances."⁷⁵ The Supreme Court granted certiorari to determine the appropriateness of the Federal Circuit's general rule.

Justice Thomas's opinion for a unanimous Court began by reciting historical practice: "According to well-established principles of equity, a plaintiff seeking a permanent injunction must satisfy a four-factor test."⁷⁶ He emphasized that "[t]he decision to grant or deny permanent injunctive relief" based on the four-factor test "is an act of equitable discretion by the district court, reviewable on appeal [only] for abuse of discretion."⁷⁷ Any major departure from this historical practice "should not be lightly implied."⁷⁸

Justice Thomas then turned to the text of the Patent Act. He found nothing in the Patent Act indicating that Congress intended to depart from traditional

⁷⁰ During the Rehnquist Court era, his most notable intellectual property opinion was *Warner-Jenkinson v. Hilton Davis Chem.*, 520 U.S. 17 (1997), well known for its contribution to patent law's doctrine of equivalents.

⁷¹ Jon Schwartz, *eBay Settles Seven-Year Dispute over Patents*, USA TODAY (Mar. 3, 2008, 3:21AM), <https://abcnews.go.com/Technology/story?id=4363568&page=1> [<https://perma.cc/V8T6-8XAF>].

⁷² See *eBay v. MercExchange*, 547 U.S. 388, 390 (2006).

⁷³ Mylene Mangalindan, *eBay Is Ordered to Pay \$30 Million in Patent Rift*, WALL ST. J., (Dec. 13, 2007) <https://www.wsj.com/articles/SB119751056840625503> [<https://perma.cc/VND2-BQ6X>]; Mark Schwanhauser, *eBay Patent Case Settled*, MERCURY NEWS (Feb. 28, 2008, 6:38 PM) <https://www.mercurynews.com/2008/02/28/ebay-patent-case-settled-2> [<https://perma.cc/LU7P-RJEY>].

⁷⁴ *MercExchange v. eBay*, 275 F. Supp. 2d 695, 722 (E.D. Va. 2003).

⁷⁵ *MercExchange v. eBay*, 401 F.3d 1323, 1339 (Fed. Cir. 2005).

⁷⁶ *eBay*, 547 U.S. at 391.

⁷⁷ *Id.*

⁷⁸ *Id.*

equitable principles.⁷⁹ To the contrary, the Patent Act preserved traditional equitable principles by expressly providing that injunctions “may” issue “in accordance with the principles of equity.”⁸⁰ Drawing parallels with copyright law, Justice Thomas noted that the Copyright Act takes the same approach as the Patent Act, and, consequently, the Court has “rejected invitations to replace traditional equitable considerations with a rule that an injunction automatically follows” from an infringement.⁸¹

Justice Thomas rejected an argument advanced by the Federal Circuit to justify its general rule on injunctive relief: that patents have the attributes of personal property,⁸² including the right to exclude others from making, using, and selling an invention.⁸³ That is true, acknowledged Justice Thomas, but the creation of a right is different than provision of a remedy.⁸⁴ Moreover, even though patents have attributes of personal property, the Patent Act provides that patents-as-property are “subject to the provisions of this title,” including the provision that injunctive relief may only issue in accordance with traditional principles of equity.⁸⁵

Finally, Justice Thomas turned to the disposition of the case. In doing so, he corrected the approach of both the district court and the Federal Circuit. The trial court erred by creating certain categorical exclusions—namely, that injunctions could not issue in certain categories of cases because, according to the trial court, the patent holder would never suffer irreparable harm in those contexts.⁸⁶ For example, the trial court had singled out cases in which the plaintiff had offered to license its patents or did not practice its patents.⁸⁷ But according to Justice Thomas, no such categorical rules are permitted by traditional equitable principles, and they cannot be squared with principles of equity adopted by Congress in the Patent Act. To illustrate his point, he noted that university patent holders and self-made inventors may reasonably prefer licensing their patents to making and selling products, and he suggested that such patent holders may sometimes be able to satisfy the traditional four-factor test.⁸⁸

As for the Federal Circuit, it departed from the traditional four-part test by establishing a rule unique to patent cases.⁸⁹ Under the Federal Circuit’s patent exceptionalism, injunctions should only be denied in rare, exceptional, or un-

⁷⁹ *Id.* at 391–92.

⁸⁰ 35 U.S.C. § 283.

⁸¹ *eBay*, 547 U.S. at 392–93.

⁸² 35 U.S.C. § 261.

⁸³ 35 U.S.C. § 154(a)(1).

⁸⁴ *eBay*, 547 U.S. at 392.

⁸⁵ *See id.*

⁸⁶ *Id.* at 393.

⁸⁷ *Id.*

⁸⁸ *Id.*

⁸⁹ *Id.*

sual cases.⁹⁰ Justice Thomas concluded that “[j]ust as the District Court erred in its categorical denial of injunctive relief, the Court of Appeals erred in its categorical grant of such relief.”⁹¹

The Court remanded the case to the district court, expressly taking no position on whether the trial court should issue a permanent injunction.⁹² Indeed, Justice Thomas emphasized that the Court was taking no position about whether a permanent injunction would be issued “in any number of disputes arising under the Patent Act.”⁹³ However, the Court did provide signals about future cases through dueling concurring opinions authored by Chief Justice Roberts (joined by Justices Scalia and Ginsburg) and Justice Kennedy (joined by Justices Stevens, Souter, and Breyer).

Chief Justice Roberts noted that since the early nineteenth century, courts had granted injunctive relief in the vast majority of patent cases, and, while this did not justify a general rule, the historical practice should be given serious consideration by trial judges to “promote the basic principle of justice that like cases should be decided alike.”⁹⁴ Justice Kennedy agreed that historical practice might be instructive when a modern case bears substantial parallels to prior cases. But, he cautioned, “in many instances the nature of the patent being enforced” (e.g., business method patents and component patents) and “the economic function of the patent holder” (e.g., nonpracticing entities) might present “considerations quite unlike earlier cases.”⁹⁵

The Significance of eBay

One of Justice Thomas’s first intellectual property opinions for the Roberts Court is also one of the most important.⁹⁶ The Court decided *eBay* at a time when commentators were raising concerns about patent owners who acquire patents simply to monetize them (often called *nonpracticing entities*, *patent holding companies*, or, less generously, *patent trolls*).⁹⁷ Since a nonpracticing entity (NPE) makes and sells no products, it has a single-minded focus on collecting royalties and never faces a threat of a patent countersuit. Thus, in the hands of an NPE, a patent appears to be a pernicious monopoly, far removed from the constitutional goal of promoting innovation.

⁹⁰ *Id.* at 394.

⁹¹ *Id.*

⁹² *Id.*

⁹³ *Id.*

⁹⁴ *Id.* at 395 (Roberts, C.J., concurring).

⁹⁵ *See id.* at 395–96 (Kennedy, J., concurring).

⁹⁶ Within four years of the *eBay* decision, the case had been cited more than 4,000 times. *See* Ryan T. Holte, *Clarity in Remedies for Patent Cases*, 26 GEO. MASON L. REV. 127, 127 (2018).

⁹⁷ *See* Robin C. Feldman & Mark A. Lemley, *The Sound and Fury of Patent Activity*, 103 MINN. L. REV. 1793, 1794–95 (2019); Collen V. Chien & Mark A. Lemley, *Patent Holdup, the ITC, and the Public Interest*, 98 CORNELL L. REV. 1, 2 (2012).

NPEs come in various shapes and sizes. When people think of NPEs, they tend to think of patent licensing firms such as Intellectual Ventures or Uniloc.⁹⁸ However, since passage of the Bayh-Dole Act, many research universities (private and public) have become large and often powerful patent holders and licensors.⁹⁹ Small inventors can also be NPEs. These inventors often have no interest in or aptitude for commercializing their inventions and therefore rely on patent licensing as the way to productize their patents and receive compensation for their inventive work. Sometimes, universities and small inventors engage NPEs such as Intellectual Ventures as an agent to license their patents. They do so because licensing activities, such as finding and contacting potential licensees, negotiating and drafting license contracts, and monitoring and collecting royalties, can be time consuming and resource intensive.¹⁰⁰

One of the biggest weapons that an NPE can wield is the prospect of obtaining injunctive relief, especially a permanent injunction. It is sobering to pay money for patent royalties, to be sure, but even more disconcerting for a company to face disruption of its product development and distribution. The Federal Circuit's injunction-presumed general rule made the threat of injunctive relief particularly acute.

Justice Thomas's rejection of the Federal Circuit's general rule on patent injunctions significantly ratcheted back the threat of injunctive relief posed by NPEs,¹⁰¹ thus greatly reducing their bargaining power.¹⁰² Many commentators have applauded that result from a policy standpoint, arguing that the *eBay* decision restores patents to their proper role in promoting innovation rather than thwarting it.¹⁰³ While cutting back the power of NPEs, however, Justice Thom-

⁹⁸ See generally Mark A. Lemley & Nathan Myhrvold, *How to Make a Patent Market*, 36 HOFSTRA L. REV. 257 (2007).

⁹⁹ See Peter Lee, *Patents and the University*, 63 DUKE L.J. 1, 31–32 (2013).

¹⁰⁰ See Sean O'Connor, *The Use of MTAs to Control Commercialization of Stem Cell Diagnostics and Therapeutics*, 21 BERKELEY TECH. L.J. 1017, 1027–28 (2006). Most major research universities have a technology transfer office, but these offices tend to be resource constrained and cannot handle a large volume of patent licensing activity. See Hans Wiesendanger, *A History of OTL*, STAN. UNIV.: OFF. OF TECH. LICENSING, <https://otl.stanford.edu/history-otl> [<https://perma.cc/9XB5-NNCA>].

¹⁰¹ See James M. Fisher, *The "Right" to Injunctive Relief for Patent Infringement*, 24 SANTA CLARA COMPUT. & HIGH TECH. L.J. 1, 25 (2007) ("The strongest case for injunctive relief is when [a] patentee is or will soon be practicing the patent.").

¹⁰² See Holte, *supra* note 96, at 128; Christopher B. Seaman, *Permanent Injunctions in Patent Litigation After eBay: An Empirical Study*, 101 IOWA L. REV. 1949, 1952, 1970 (2016).

¹⁰³ See, e.g., Seaman, *supra* note 102, at 2002; Sarah R. Wasserman Rajec, *Tailoring Remedies to Spur Innovation*, 61 AM. U. L. REV. 733, 735–36 (2012); Mark P. Gergen et al., *The Supreme Court's Accidental Revolution? The Test for Permanent Injunctions*, 112 COLUM. L. REV. 203, 244 (2012). But see Andrew Beckerman-Rodau, *The Supreme Court Engages in Judicial Activism in Interpreting the Patent Law in eBay, Inc. v. MercExchange, LLC*, 10 TUL. J. TECH. & INTELL. PROP. 165, 202 (2007) (arguing that the *eBay* decision ignores the Court's prior decisions and constitutional limitations). See also Elizabeth A. Rowe, *eBay, Permanent Injunctions, and Trade Secrets*, 77 WASH. & LEE L. REV. 553 (2020); Pamela

as left the door open for NPEs to obtain injunctive relief if they can convince a trial court that that makes sense. Justice Thomas does not say “never,” but he does say “prove it.” This nuanced approach¹⁰⁴ gives courts agility to adapt as the technology sector evolves. In other words, perhaps a good-for-innovation NPE can get an injunction, but a bad-for-innovation NPE cannot.¹⁰⁵

On top of the concerns about NPEs, the Court decided *eBay* amidst concerns about business method patents, sparked by Amazon’s attempt to enforce its “One Click” patent.¹⁰⁶ To detractors, business method patents are the epitome of junk patents; to supporters, they recognize the importance and value of business model innovation. The *eBay* decision took the sting out of business method patents in the same way it took the sting out of NPEs. Inventors can still get business method patents, but the *eBay* decision reduced the practical power of those patents.

The *eBay* case is also important because it launched the Supreme Court’s campaign to reset the Federal Circuit’s patent law jurisprudence.¹⁰⁷ Justice Thomas’s opinion for the Court in *eBay* rejected the Federal Circuit’s patent exceptionalism. In the coming years, the Court would reject the Federal Circuit’s patent exceptionalism time after time, following Justice Thomas’s approach in *eBay*.¹⁰⁸

Despite the focus on patent law, Justice Thomas’s opinion looked across different types of intellectual property law for guiding principles. In doing so, he followed the Court’s approach in cases such as *Sony Corp. v. Universal City Studios*, in which the Court looked to patent law’s staple-article-in-commerce

Samuelson, *Withholding Injunctions in Copyright Cases: The Impact of eBay*, 63 WM. & MARY L. REV. (forthcoming 2021).

¹⁰⁴ Ryan Holte provides an alternative explanation of the Court’s nuanced approach, arguing that it may indicate that the Supreme Court did not intend for the case to have such a grand impact. See Holte, *supra* note 96, at 161; see also Gergen et al., *supra* note 103, at 244. However, as I argue, *infra* Section IV.F., Justice Thomas seems acutely aware of the important role that remedies can play in intellectual property cases.

¹⁰⁵ See Gergen et al., *supra* note 103, at 244–45 (arguing that the actual practice of district courts substantially conforms to the Supreme Court’s admonition against a categorical rule).

¹⁰⁶ See Troy Wolverton, *Amazon, Barnes & Noble Settle Patent Suit*, CNET NEWS (Mar. 6, 2002, 7:40 PM), <https://web.archive.org/web/20090730055049/http://news.cnet.com/2100-1017-854105.html> [<https://perma.cc/PS3Z-W4RX>]. The United States Patent Office issued a patent for the one-click technique to Amazon in September 1999. U.S. Patent No. 5960411 (issued Sept. 28, 1999). Amazon filed a patent infringement lawsuit in October 1999 when Barnes & Noble offered an ordering option called “Express Lane.” Leslie Kaufman, *Amazon Sues Big Bookseller over System for Shopping*, N.Y. TIMES, Oct. 23, 1999, at C1. The parties settled the lawsuit in 2002. Wolverton, *supra*. Amazon’s one-click patent expired in 2017. See *Amazon’s Patent on One-Click Payments to Expire*, INSIDER (Jan. 5, 2017, 8:43 AM), <https://www.businessinsider.com/amazons-patent-on-one-click-payments-to-expire-2017-1> [<https://perma.cc/25L6-ZDHH>]. See generally *Bilski v. Kappos*, 561 U.S. 593 (2010) (addressing business method patents).

¹⁰⁷ See generally Lourie, *supra* note 32.

¹⁰⁸ See, e.g., *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 427–28 (2007); *Microsoft Corp. v. AT&T Corp.*, 550 U.S. 437, 458–59 (2007); *MedImmune, Inc. v. Genentec, Inc.*, 549 U.S. 118, 136–37 (2007).

doctrine to develop an approach to copyright contributory infringement.¹⁰⁹ This approach has the virtue of unifying intellectual property law and practice, which can be especially useful for products such as software,¹¹⁰ which may be covered by multiple types of intellectual property.¹¹¹

B. Quanta Computer, Inc. v. LG Electronics, Inc., 553 U.S. 617 (2008)

LG Electronics (LGE) is a large computer technology firm with an extensive patent portfolio covering computer systems.¹¹² Like many such companies, LGE enters into patent portfolio cross-license agreements with other computer technology firms. These agreements vary in scope. Some cover all patents across all technologies, but others exclude certain technologies or fields of use or limit the ability to shield certain partners or customers from patent claims.¹¹³ Sometimes, the license scope comes down to financial considerations. For example, a company will calculate whether it makes good business sense to pay to shield its downstream customers (and incorporate that expense into the product purchase price) or let its customers pay for the patent rights on their own.¹¹⁴

LGE had a patent portfolio cross-license agreement with microprocessor powerhouse Intel.¹¹⁵ In that agreement, LGE granted Intel the right to make, use, and sell its microprocessors and chipsets under LGE's entire portfolio of computer system patents. However, the license grant contained an important downstream shielding carve-out: it did not cover any computer manufacturer who combined Intel products with non-Intel products.¹¹⁶ This exception made sound business sense. A number of Intel's customers neither needed nor wanted to pay for downstream shielding because they either had their own patent portfolio cross license with LGE, or their computer systems did not infringe LGE's patents.

¹⁰⁹ *Sony Corp. of Am. v. Universal City Studios, Inc.*, 464 U.S. 417 (1984); *see also* *Global-Tech Appliances, Inc. v. SEB S.A.*, 563 U.S. 754 (2011) (looking to copyright law to determine mental state for induced infringement in patent law); *Octane Fitness, LLC v. Icon Health & Fitness, Inc.*, 572 U.S. 545 (2014) (drawing on copyright law to determine attorneys' fees in patent case).

¹¹⁰ *See generally* ROBERT W. GOMULKIEWICZ, *SOFTWARE LAW AND ITS APPLICATION* (2d ed. 2018).

¹¹¹ *See* *Impression Prods., Inc. v. Lexmark Int'l, Inc.*, 137 S. Ct. 1523, 1532 (2017); *see also* Robert W. Gomulkiewicz, *Is the License Still the Product?*, 60 ARIZ. L. REV. 425, 430 (2018).

¹¹² *See* Robert W. Gomulkiewicz, *The Federal Circuit's Licensing Law Jurisprudence: Its Nature and Influence*, 84 WASH. L. REV. 199, 233 (2009). Like many computer-technology companies, some of LGE's patents cover the inventions of its employees, and other patents are purchased from third parties. The patents in suit in the *Quanta* case had been purchased by LGE. *Quanta Comput., Inc. v. LG Elecs., Inc.*, 553 U.S. 617, 621 (2008).

¹¹³ Gomulkiewicz, *supra* note 112, at 233.

¹¹⁴ *Id.*

¹¹⁵ *Quanta*, 553 U.S. at 623.

¹¹⁶ *Id.*

There were two other notable aspects of the patent agreements between LGE and Intel. First, the patent cross-license agreement contained a provision that the agreement did not “in any way limit or alter the effect of patent exhaustion that would otherwise apply.”¹¹⁷ Second, in a separate but related Master Agreement, Intel agreed that it would give notice to its customers that they were not licensed to practice LGE’s patents in combinations of Intel and non-Intel products.¹¹⁸

Quanta Computer manufactures a variety of computer products that are sold under the brands of other companies.¹¹⁹ According to some sources, nearly one out of every three laptop PCs sold worldwide was manufactured by Quanta.¹²⁰ Quanta builds its computer systems by assembling a variety of third-party components, including microprocessors and chipsets from Intel.¹²¹ Intel provided notice to Quanta that Intel’s sale of microprocessors and chipsets did not shield Quanta from LGE’s patents for any computer systems that Quanta created by combining Intel products with non-Intel parts.¹²²

LGE sued Quanta, claiming that Quanta infringed LGE’s computer system patents by combining Intel products with non-Intel memory¹²³ and buses.¹²⁴ Quanta raised patent exhaustion as a defense. Specifically, Quanta argued that its purchase of Intel microprocessors and chipsets extinguished LGE’s right to exclude Quanta from combining the Intel products with other components for use in and sale of its computer systems.

The district court granted summary judgment to Quanta, ruling that the LGE-Intel patent cross license shielded any legitimate purchaser of Intel products from patent infringement.¹²⁵ Even though the Intel products did not fully practice the LGE patents at issue, the Intel products had no reasonable non-infringing use except combined in a computer system, so Intel’s sale exhausted LGE’s patent rights.¹²⁶ However, the district court later limited its ruling in a significant way: it ruled that patent exhaustion applies only to apparatus or

¹¹⁷ *Id.*

¹¹⁸ *Id.* at 623–24. Intel likely agreed to provide this notice both because LGE requested it and because it might prevent a claim that Intel was inducing or contributing to infringement.

¹¹⁹ See *About Quanta: Company Profile*, QUANTA, <https://www.quantatw.com/Quanta/english/about/company.aspx> [<https://perma.cc/L6Y7-5H4H>].

¹²⁰ See HELEEN MEES, *THE CHINESE BIRDCAGE: HOW CHINA’S RISE ALMOST TOPPLED THE WEST* 27 (2016) (ebook); see also *Product Information: Notebook PC*, QUANTA, https://www.quantatw.com/Quanta/english/product/qci_nb.aspx [<https://perma.cc/J44A-7Y2F>] (stating that the top ten PC companies in the world all use Quanta’s services).

¹²¹ *Quanta*, 553 U.S. at 624.

¹²² *Id.*

¹²³ *Id.* A computer *memory* refers to hardware that stores data, such as a hard drive or random-access memory (RAM).

¹²⁴ *Id.* A computer *bus* is a communication system that transfers data between components in a computer system or between computer systems. *Id.* at 621.

¹²⁵ *LG Elecs., Inc. v. Asustek Comput., Inc.*, 65 U.S.P.Q.2d (BNA) 1589, 1600–01 (N.D. Cal. 2002).

¹²⁶ *Id.* at 1598–1600.

composition of matter patent claims and does not apply to process or method patent claims. Because the LGE patents included method claims, patent exhaustion did not apply, and thus, Quanta's defense ultimately failed.¹²⁷

The Federal Circuit affirmed in part and reversed in part. It agreed with the district court that the defense of patent exhaustion does not apply to method claims.¹²⁸ But it did not agree that Intel's sale to Quanta exhausted LGE's patents because the LGE-Intel cross license did not license Intel for combinations of Intel and non-Intel components.¹²⁹ The Supreme Court granted certiorari to address "whether patent exhaustion applies to the sale of components of a patented system that must be combined with additional components in order to practice the patented methods."¹³⁰ The United States Solicitor General and several *amicus* briefs urged the Court to use the *Quanta* case to overturn the entire line of Federal Circuit cases, beginning in 1992 with *Mallinkrodt v. Medipart*, that established the Federal Circuit's distinctive patent exhaustion jurisprudence.¹³¹

Justice Thomas's opinion for a unanimous Court addressed the two main issues in the case: (1) whether patent exhaustion applies to method patent claims, and (2) whether Intel's sale to Quanta exhausted LGE's patents.

As to the first issue, Justice Thomas observed that a method patent may indeed be embodied in a product and that the Court had never distinguished between types of patent claims for purposes of patent exhaustion.¹³² To the contrary, the "Court ha[d] repeatedly held that method patents were exhausted by the sale of an item that embodied the method."¹³³ Justice Thomas then turned to a deeply practical, real-world reason why these precedents rested "on solid footing."¹³⁴ He noted that apparatus claims and method claims are nearly alike and often difficult to distinguish.¹³⁵ Consequently, a clever patent drafter could avoid exhaustion by simply describing a method instead of an apparatus or by including a method claim when a machine performs a task.¹³⁶

But then, Justice Thomas needed to address a complication: sales of a component article normally do not trigger patent exhaustion in the complete article, so why did sale of Intel's microprocessors and chipsets exhaust patents related to Quanta's complete computer system? A key issue was the extent to

¹²⁷ *LG Elecs., Inc. v. Asustek Comput., Inc.*, 248 F. Supp. 2d 912, 918 (N.D. Cal. 2003).

¹²⁸ *LG Elecs., Inc. v. Bizcom Elecs., Inc.*, 453 F.3d 1364, 1370 (Fed. Cir. 2006).

¹²⁹ *Id.*

¹³⁰ *Quanta Comput., Inc. v. LG Elecs., Inc.*, 553 U.S. 617, 621 (2008).

¹³¹ *Mallinkrodt, Inc. v. Medipart, Inc.*, 976 F.2d 700, 703–09 (Fed. Cir. 1992); *see also* *B. Braun Med., Inc. v. Abbott Lab'ys*, 124 F.3d 1419, 1423–27 (Fed. Cir. 1997); *Monsanto Co. v. McFarling*, 363 F.3d 1336, 1341–42 (Fed. Cir. 2004); *Monsanto Co. v. Scruggs*, 459 F.3d 1328, 1335–39 (Fed. Cir. 2006).

¹³² *Quanta*, 553 U.S. at 628–29.

¹³³ *Id.* at 629.

¹³⁴ *Id.*

¹³⁵ *Id.*

¹³⁶ *Id.* at 629–30.

which a component embodies the patents in suit. To address that issue, Justice Thomas looked to the Court's then-most recent patent exhaustion case, *United States v. Univis Lens Co.*¹³⁷ *Univis* held that if a component's only reasonable and intended use is to practice the patent, then that component embodies the patent.¹³⁸ Justice Thomas observed that the only reasonable use of Intel's microprocessors and chipsets was to incorporate them into computer systems that practiced LGE patents. "[H]ere, as in *Univis*, the only apparent object of Intel's sales to Quanta was to permit Quanta to incorporate the Intel [p]roducts into computers that would practice the [LGE] patents."¹³⁹

According to Justice Thomas, *Univis* also found that a component sufficiently embodies a patented invention for purposes of patent exhaustion if the component embodies the essential features of the invention.¹⁴⁰ In this case, everything inventive about the LGE patents in suit was embodied in Intel's microprocessors and chipsets. "Intel all but practiced the patent itself by designing its products to practice the patents, lacking only the addition of standard parts."¹⁴¹

Having concluded that Intel products sufficiently embodied LGE's patents, Justice Thomas turned to whether Intel's sale to Quanta exhausted LGE's patents. Justice Thomas began with an important admonition from *Univis*: exhaustion is triggered only by a sale authorized by the patent holder.¹⁴² LGE had argued that Intel's sale to Quanta was *not* authorized because the LGE-Intel patent cross license did not permit Intel to sell its products for use in combination with non-Intel products to practice LGE's patents.¹⁴³

To assess LGE's argument, Justice Thomas looked closely at the patent cross-license agreement between LGE and Intel. The license grant broadly permitted Intel to make, use, or sell products.¹⁴⁴ Nothing in the agreement restricted Intel's right to sell microprocessors and chipsets to purchasers who intended to combine them with non-Intel parts.¹⁴⁵ In other words, Intel could sell its products to anyone, but some sales were not shielded from LGE patents. To be sure, the Master Agreement required Intel to give notice to its customers that LGE was not licensing them to combine Intel and non-Intel parts, but LGE's license to Intel was not conditioned on the notice requirement or a customer's decision to abide by it.¹⁴⁶ Indeed, LGE did not claim that breach of the Master Agreement constituted a breach of the cross-license agreement.¹⁴⁷ As a conse-

¹³⁷ *Id.* at 627; *United States v. Univis Lens Co.*, 316 U.S. 241 (1942).

¹³⁸ *Quanta*, 553 U.S. at 629–30.

¹³⁹ *Id.* at 631–32.

¹⁴⁰ *Id.* at 633.

¹⁴¹ *Id.* at 634.

¹⁴² *Id.* at 621.

¹⁴³ *Id.* at 636.

¹⁴⁴ *Id.*

¹⁴⁵ *Id.* at 637.

¹⁴⁶ *Id.* at 636–37.

¹⁴⁷ *Id.* at 636.

quence, Intel's sale to Quanta was an *authorized* sale of microprocessors and chipsets, and, since Intel's products substantially embodied LGE's patents, the sale exhausted LGE's right to exclude under patent law.¹⁴⁸ The only remaining claim might have been for breach of contract, but LGE had not pled that claim, so Justice Thomas expressed no opinion on whether contract damages might be available even when patent damages are not.¹⁴⁹

The Significance of Quanta

The *Quanta* case marked the Supreme Court's return to its patent exhaustion jurisprudence for the first time in over sixty-five years.¹⁵⁰ It also marked the Court's first comment on the Federal Circuit's patent exhaustion jurisprudence, which had been evolving in the Federal Circuit for over twenty-five years.¹⁵¹ Indeed, the Court's most recent patent exhaustion case, *Impression Products v. Lexmark*, asserted that *Quanta* had "settled" any "lingering doubt" about the Supreme Court's approach to patent exhaustion.¹⁵²

Yet, one of the significant aspects of the *Quanta* opinion—and I would argue one of its virtues—is that Justice Thomas did not attempt to proactively settle patent exhaustion issues for every context in which they may arise.¹⁵³ Justice Thomas's careful reading of the complex contract documents used by LGE, Intel, and Quanta revealed that the parties had not successfully made Intel's sale to Quanta *unauthorized*. Justice Thomas allowed sophisticated parties to architect their contractual relations in ways that made the most sense given the business context. Indeed, this approach was consistent with the Court's approach in a case that pre-dates *Univis: General Talking Pictures Corp. v. Western Electric Co.*¹⁵⁴ At the end of the day, Justice Thomas's approach left ample room for business model innovation by sticking closely to the facts of the case.

¹⁴⁸ *Id.* at 637–38.

¹⁴⁹ *Id.* at 637 n.7.

¹⁵⁰ *United States v. Univis Lens Co.*, 316 U.S. 241 (1942).

¹⁵¹ See *Mallinkrodt, Inc. v. Medipart, Inc.*, 976 F.2d 700 (Fed. Cir. 1992); *B. Braun Med., Inc. v. Abbott Lab'ys*, 124 F.3d 1419 (Fed. Cir. 1997); *Monsanto Co. v. McFarling*, 363 F.3d 1336 (Fed. Cir. 2004); *Monsanto Co. v. Scruggs*, 459 F.3d 1328 (Fed. Cir. 2006).

¹⁵² *Impression Prods., Inc. v. Lexmark Int'l, Inc.*, 137 S. Ct. 1523, 1533 (2017).

¹⁵³ See generally Andrew T. Dufrense, *The Exhaustion Doctrine Revisited? Assessing the Scope and Possible Effects of the Supreme Court's Quanta Decision*, 24 BERKELEY TECH. L.J. 11 (2009); Seth Jaffe, *Manufacturing a System of Remanufacturing: How the Patent Office Can Facilitate Environmentally Conscious Product Design*, 48 HOUS. L. REV. 919 (2011); William LaFuze et al., *The Conditional Sale Doctrine in a Post-Quanta World and Its Implications on Modern Licensing Agreements*, 11 J. MARSHALL REV. INTELL. PROP. L. 295 (2011); Herbert Hovenkamp, *Post-Sale Restraints and Competitive Harm: The First Sale Doctrine in Perspective*, 66 NYU ANN. SURV. AM. L. 487 (2011); Alfred C. Server & William J. Casey, *Contract-Based Post-Sale Restrictions on Patented Products Following Quanta*, 64 HASTINGS L.J. 561 (2013).

¹⁵⁴ See *Gen. Talking Pictures Corp. v. W. Elec. Co.*, 305 U.S. 124 (1938).

The virtue of Justice Thomas's careful approach could be seen three years later in *Bowman v. Monsanto*.¹⁵⁵ In that case, the Court considered the patent exhaustion doctrine in the context of Monsanto's sale of its patented Roundup Ready soybean seeds. Monsanto's end user license agreement for its seeds permitted their use for only one growing season.¹⁵⁶ When Mr. Bowman violated Monsanto's license by planting seeds, Monsanto sued for patent infringement, and Bowman raised patent exhaustion as a defense.¹⁵⁷ When the case reached the Federal Circuit, the court rejected Mr. Bowman's defense, citing its *Mallinkrodt v. Medipart* line of cases.¹⁵⁸

Justice Kagan's opinion for the Court rejected Mr. Bowman's patent exhaustion defense and affirmed the Federal Circuit's judgment.¹⁵⁹ Justice Kagan's opinion, like Justice Thomas's opinion in *Quanta*, paid close attention to the context. The patent exhaustion doctrine only applies to the patent holder's right to control *use*. In substance, the restriction in Monsanto's license agreement touched on the "make" right in patent law rather than the "use" right, thus eliminating the possibility of a patent exhaustion defense.¹⁶⁰ Like Justice Thomas's approach in *Quanta*, Justice Kagan's opinion expressly noted that it was limited to the facts before it and did not prejudge how the doctrine of patent exhaustion would apply in other technological contexts.¹⁶¹

Justice Thomas's approach in *Quanta* can be contrasted with the approach used by Chief Justice Roberts in *Impression Products v. Lexmark*.¹⁶² The *Impression Products* opinion used sweeping language to assert that restraints on alienation are always "hateful" and "obnoxious" to the public interest¹⁶³ and that end user licensing "clogs the channels of commerce," which is necessarily magnified as the complexity of technology and supply chains advance.¹⁶⁴ Patent exhaustion is important for innovation and consumer welfare, to be sure, but so are the various business models that technology companies use to develop products and bring them to market.¹⁶⁵ The *Impression Products* opinion raised doubts about whether the Court has left adequate breathing space for

¹⁵⁵ *Bowman v. Monsanto Co.*, 569 U.S. 278 (2013).

¹⁵⁶ *Id.* at 281.

¹⁵⁷ *Id.* at 282–83.

¹⁵⁸ *Monsanto Co. v. Bowman*, 657 F.3d 1341, 1347–48 (Fed. Cir. 2011).

¹⁵⁹ *Bowman*, 569 U.S. at 289.

¹⁶⁰ *Id.* at 287–88.

¹⁶¹ *Id.* at 289.

¹⁶² *Impression Prods., Inc. v. Lexmark Int'l, Inc.*, 137 S. Ct. 1523 (2017).

¹⁶³ *Id.* at 1532.

¹⁶⁴ *Id.*

¹⁶⁵ See generally ROBERT W. GOMULKIEWICZ ET AL., LICENSING INTELLECTUAL PROPERTY: LAW & APPLICATION (4th ed. 2018). Indeed, the Court approved an end-user conditional-sale business model in *Bowman*, 569 U.S. at 281, 289.

business model innovation in the information economy.¹⁶⁶ For instance, the broad and breezy language used by Chief Justice Roberts in *Impression Products* could prove troublesome for business models in the software industry.¹⁶⁷ Justice Thomas's careful and measured approach in *Quanta*, by contrast, encouraged sophisticated parties¹⁶⁸ in the software industry to structure economically optimal business relationships.¹⁶⁹

C. *Association for Molecular Biology v. Myriad Genetics, Inc.*, 569 U.S. 576 (2013)

Myriad Genetics is one of the world's first genomics companies.¹⁷⁰ Its products include molecular diagnostic tests for hereditary cancer, urological cancer, autoimmune disorders, depression, and other diseases.¹⁷¹ During its research and development, Myriad discovered the precise location and sequence of the human genes that, when certain mutations occur, can substantially increase the risks of breast and ovarian cancer. These genes are known as BRCA1 and BRCA2.¹⁷² Scientists knew that heredity played a role in the risk of developing breast and ovarian cancer prior to Myriad's discovery, but no one had identified the genes associated with those cancers.¹⁷³ Myriad's discoveries allowed it to develop medical tests used by medical professionals to help assess whether a patient has an increased risk of cancer by detecting the applicable BRCA mutations in a patient's genes.¹⁷⁴

Myriad obtained several composition-of-matter patents based on its discovery of BRCA1 and BRCA2.¹⁷⁵ Some of the claims in the patents gave Myriad the exclusive right to isolate an individual's BRCA1 and BRCA2 genes by breaking the bonds that connect the DNA to the rest of the individual's genome. Other patent claims gave Myriad the exclusive right to synthetically cre-

¹⁶⁶ See, e.g., Herbert Hovenkamp, *Reasonable Patent Exhaustion*, 35 YALE J. REG. 513, 513 (2018) ("*Impression Products* reveals an economic deficiency that manifests all too frequently when patent law is brought to bear on market practices.>").

¹⁶⁷ See generally Robert W. Gomulkiewicz, *supra* note 111.

¹⁶⁸ Intel, LGE, and Quanta Computer are all sophisticated companies, like most litigants in technology licensing cases.

¹⁶⁹ See David McGowan, *The Unfallen Sky*, 51 HOUS. L. REV. 337, 373–74 (2013) (highlighting the risk of legal rules that limit freedom to choose approaches that suit particular business needs).

¹⁷⁰ *History*, MYRIAD GENETICS, <https://myriad.com/about-myriad/inside-myriad/history> [<https://perma.cc/N3ZF-K4RL>].

¹⁷¹ *Myriad Genetic Tests*, MYRIAD GENETICS, <https://myriad.com/products-services/all-products/overview> [<https://perma.cc/D8X6-VPSU>].

¹⁷² See Jorge L. Contreras, *Association for Molecular Pathology v. Myriad Genetics: A Critical Reassessment*, 27 MICH. TECH. L. REV. 1, 4–9 (2020).

¹⁷³ See generally KEVIN DAVIES & MICHAEL WHITE, *BREAKTHROUGH: THE RACE TO FIND THE BREAST CANCER GENE* (1996); MICHAEL WALDHOLZ, *CURING CANCER: THE STORY OF THE MEN AND WOMEN UNLOCKING THE SECRETS OF OUR DEADLIEST ILLNESS* (1999).

¹⁷⁴ *Ass'n for Molecular Pathology v. Myriad Genetics, Inc.*, 569 U.S. 576, 582–83 (2013).

¹⁷⁵ *Id.* at 583.

ate BRCA cDNA. When competitors began offering BRCA-based genetic testing, Myriad asserted its patents against them.¹⁷⁶ Eventually, a group of physicians, medical patients, and advocacy groups filed a petition for declaratory judgment challenging several of Myriad's patents.¹⁷⁷ The district court granted summary judgment to the petitioners, ruling that Myriad's patents were products of nature and thus invalid subject matter under 35 U.S.C. § 101¹⁷⁸. The Federal Circuit reversed, ruling that Myriad's discoveries were patent eligible under § 101.¹⁷⁹

Justice Thomas's opinion for the Court began by quoting the relevant text of 35 U.S.C. § 101, which describes patent-eligible subject matter, such as new and useful compositions of matter.¹⁸⁰ Next, Justice Thomas noted an important, long-held, Court-developed implicit exception to § 101: no one can patent laws of nature, natural phenomena, or abstract ideas. Without this exception, Justice Thomas noted, patents could tie up the basic tools of invention and thereby inhibit innovation rather than foster it.¹⁸¹ That said, all inventions at some level embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas, so the Court should be cautious about interpreting the exception too broadly. Thus, Justice Thomas emphasized, patent law must strike a delicate balance between creating exclusive-rights incentives that lead to innovation and impeding the flow of information that spurs innovation.¹⁸²

Turning to Myriad's patents in suit, Justice Thomas noted that for some of the patents, Myriad's principal contribution was uncovering the precise location and genetic sequence of the BRCA1 and BRCA2 genes.¹⁸³ Fundamentally, Myriad did not create or alter any of the genetic information encoded in the genes. At most, Myriad separated the gene from its surrounding genetic material, but that, Justice Thomas observed, is not an act of invention.¹⁸⁴ Thus, these patents were invalid because they covered a product of nature. Groundbreaking discovery alone, Justice Thomas observed, is not enough to satisfy § 101 patent eligibility.¹⁸⁵

However, other Myriad patents in suit covered synthetically created cDNA.¹⁸⁶ cDNA differs from natural DNA in that its creation results in a mole-

¹⁷⁶ *Id.* at 585.

¹⁷⁷ *Id.* at 586.

¹⁷⁸ *Ass'n for Molecular Pathology v. U.S. Pat. and Trademark Off.*, 702 F. Supp. 2d 181, 238 (S.D.N.Y. 2010).

¹⁷⁹ *Ass'n for Molecular Pathology v. U.S. Pat. and Trademark Off.*, 653 F.3d 1329, 1333–34 (Fed. Cir. 2011) (affirming the district court's ruling on standing, but reversing on the merits of the patent infringement case).

¹⁸⁰ *Myriad*, 569 U.S. at 589.

¹⁸¹ *Id.* at 589.

¹⁸² *Id.* at 590.

¹⁸³ *Id.*

¹⁸⁴ *Id.* at 591.

¹⁸⁵ *Id.*

¹⁸⁶ *Id.* at 595.

cule that is not naturally occurring. Since cDNA is not naturally occurring, the Court ruled that it does not present the same obstacles to patentability as naturally occurring DNA.¹⁸⁷

Before concluding the opinion of the Court, Justice Thomas made several important clarifications. First, he clarified that the case before the Court only involved composition of matter patent claims. It did not involve method patent claims or any claims involving the application of knowledge about BRCA1 and BRCA2.¹⁸⁸ Second, he clarified that the case did not involve patent claims for altered DNA.¹⁸⁹

The Significance of Myriad

As mentioned previously, after more than two decades of decisions with little Supreme Court intervention, commentators began to criticize the Federal Circuit as too patent friendly. Justice Thomas's *eBay* decision marked the beginning of the Supreme Court's reset of the Federal Circuit's jurisprudence. Following *eBay*, the Court in *KSR International Co. v. Teleflex Inc.* adjusted the Federal Circuit's approach to assessing whether an invention is "obvious" to someone skilled in the art, thus making it easier to challenge a patent on that basis.¹⁹⁰

Then, in *Mayo Collaborative Services v. Prometheus Laboratories*,¹⁹¹ the Court began to re-shape the Federal Circuit's jurisprudence on patent eligibility, which is one of the most significant issues in patent law.¹⁹² In doing so, the Court highlighted the importance of its longstanding implicit exceptions to § 101 patent eligibility: laws of nature, natural phenomena, and abstract ideas. The Court in *Mayo* ruled that a personalized medicine dosing process invented by Prometheus was not eligible for patent protection because the process was effectively an unpatentable law of nature.¹⁹³ *Myriad* followed right on the heels of *Mayo*, illustrating how natural phenomena, like laws of nature, can limit patent eligibility.¹⁹⁴

¹⁸⁷ *Id.* at 594.

¹⁸⁸ *Id.* at 595–96.

¹⁸⁹ *Id.* at 596.

¹⁹⁰ *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 420 (2007).

¹⁹¹ *Mayo Collaborative Servs. v. Prometheus Lab'ys, Inc.*, 566 U.S. 66 (2012).

¹⁹² See generally John M. Golden, *Flook Says One Thing, Diehr Says Another: A Need for Housecleaning in the Law of Patent Eligible Subject Matter*, 82 GEO. WASH. L. REV. 1765 (2014); Jacob M. Sherkow, *The Natural Complexity of Patent Eligibility*, 99 IOWA L. REV. 1137 (2014).

¹⁹³ See generally Contreras, *supra* note 172; Dan L. Burk, *The Curious Incident of the Supreme Court in Myriad Genetics*, 90 NOTRE DAME L. REV. 505, 513–20 (2014).

¹⁹⁴ *Myriad*, 569 U.S. at 589. The Court's approach in *Myriad* runs counter to an approach adopted by Federal Circuit judges, such as Judge Newman and then-Chief Judge Rader, and promoted by the government in *Mayo* to use the implicit exceptions as a coarse, rather than a fine, sieve for screening out unworthy cases, and then to use §§ 102, 103, and 112 to sift out bad patents. See *id.*

As Justice Thomas explained in his *Myriad* opinion, underlying the Court's focus on patent eligibility is a deep concern that patenting basic research tools will impede innovation.¹⁹⁵ That concern takes on particular urgency in the context of human health when people can benefit from new or more cost-effective treatments based on breakthroughs in the biological sciences. To be sure, the Court sees the value of patent-based incentives to perform the research and development necessary to create products to treat diseases such as breast cancer. At the same time, however, the Court does not want the patent monopoly to create a barrier to follow-on innovation or impede access to treatment or drive prices for treatments too high.¹⁹⁶ The world seems poised for a biotechnology and biomedical revolution—and the Supreme Court wants to make sure that patent law does not stand in the way of it.¹⁹⁷

D. Alice Corp. v. CLS Bank International, 134 S. Ct. 2347 (2014)

Alice Corporation is an Australian company that describes itself as an innovator in derivatives markets.¹⁹⁸ Derivatives are financial contracts, settled at some point in the future, where the contract's value at settlement depends on the value of another financial instrument or economic index. The "Alice Market" is Alice's end-user-driven electronic platform for the creation, administration, and settlement of derivatives.¹⁹⁹ Alice acquired U.S. patents on methods, systems, and computer programs related to its Alice Market design.²⁰⁰ When CLS Bank International began operating a specialist foreign exchange settlement utility, Alice contacted CLS about potential infringement of Alice's patents. In 2017, CLS filed a declaratory judgment action, challenging Alice's patents.²⁰¹

The district court granted summary judgment for CLS, ruling that all of Alice's patent claims were ineligible because they were essentially an abstract idea.²⁰² After a divided Federal Circuit panel reversed the district court, the

¹⁹⁵ *Id.* at 589–90; see also Peter Lee, *The Supreme Court's Myriad Effects on Scientific Research: Definitional Fluidity and the Legal Construction of Nature*, 5 UC IRVINE L. REV. 1077, 1082 (2015).

¹⁹⁶ Cf. Derek So & Yann Joly, *Commercial Opportunities and Ethical Pitfalls in Personalized Medicine: A Myriad of Reasons to Revisit the Myriad Genetics Saga*, 11 CURRENT PHARMACOGENOMICS & PERSONALIZED MED. 98, 99–100 (2013) (discussing Myriad's strategy of patent acquisitions and threats of enforcement and finding that "[b]y 1999, Myriad had shut down eight competing diagnostic services").

¹⁹⁷ See generally Arti K. Rai, *Diagnostic Patents at the Supreme Court*, 18 MARQ. INTELL. PROP. L. REV. 1 (2014) (arguing that the *Myriad* decision is good for innovation).

¹⁹⁸ *About Us*, ALICE CORP., http://www.alicecorp.com/fs_about_us.html [<https://perma.cc/CN57-MCQC>].

¹⁹⁹ *Id.*

²⁰⁰ See *Alice Corp., v. CLS Bank Int'l*, 573 U.S. 208, 212–13 (2014).

²⁰¹ *Id.* at 214.

²⁰² *CLS Bank Int'l v. Alice Corp.*, 768 F. Supp. 2d 221, 255 (D.D.C. 2011).

Federal Circuit vacated the panel opinion and granted rehearing en banc.²⁰³ In a one-paragraph *per curiam* opinion, the Federal Circuit affirmed the district court, with the Federal Circuit judges filing an array of concurring and dissenting opinions.²⁰⁴

Just as in *Myriad*, Justice Thomas's opinion for the Court in *Alice* began by quoting the relevant text of 35 U.S.C. § 101 and then noting the Court's implicit exception to § 101 that no one can patent laws of nature, natural phenomena, or abstract ideas.²⁰⁵ This exception, Justice Thomas noted, is needed to prevent patents from preempting fields of endeavor or from tying up the basic tools of scientific and technological work. However, Justice Thomas observed, all inventions at some level embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas, so the Court should "tread carefully in construing this exclusionary principle lest it swallow all of patent law."²⁰⁶ In applying the § 101 exception, Justice Thomas emphasized, the Court must distinguish between patents that claim the building blocks of ingenuity and those that integrate the building blocks into something more, thereby transforming them into a patent-eligible invention.²⁰⁷

Justice Thomas stated that the Court in *Mayo* had laid out a "framework" for making this distinction.²⁰⁸ He described that framework as follows: "First, we determine whether the claims at issue are directed to one of those patent-ineligible concepts."²⁰⁹ To answer that question, the Court "consider[s] the elements of each claim both individually and 'as an ordered combination' to determine whether the additional elements 'transform the nature of the claim' into a patent-eligible application."²¹⁰ Then, step two of this analysis is a search for an "inventive concept."²¹¹ That is, an element or combination of elements that is "sufficient to ensure that the patent amounts to significantly more than a patent upon the [ineligible concept] itself."²¹²

Justice Thomas turned to an assessment of *Alice*'s patent claims using the *Mayo* framework. He noted that *Alice*'s patents were drawn to the concept of using intermediated settlement, which the Court in *Bilski v. Kappos* had concluded was a fundamental economic practice and thus an abstract idea.²¹³ This

²⁰³ CLS Bank Int'l v. Alice Corp., 685 F.3d 1341, 1356 (Fed. Cir.), *reh'g en banc granted, opinion vacated*, 484 F. App'x 559 (Fed. Cir. 2012).

²⁰⁴ CLS Bank Int'l v. Alice Corp., 717 F.3d 1269, 1273 (Fed. Cir. 2013); *Alice Corp.*, 573 U.S. at 214–15 (describing the various Federal Circuit concurring and dissenting opinions).

²⁰⁵ *Alice Corp.*, 573 U.S. at 216.

²⁰⁶ *Id.* at 217.

²⁰⁷ *Id.*

²⁰⁸ *Id.* Justice Breyer wrote the Court's opinion in *Mayo*. *Mayo Collaborative Servs. v. Prometheus Lab'ys, Inc.*, 566 U.S. 66, 70 (2012).

²⁰⁹ *Id.*

²¹⁰ *Id.* (quoting *Mayo*, 566 U.S. at 78–79).

²¹¹ *Id.*

²¹² *Id.* at 217–18 (alteration in original) (quoting *Mayo*, 566 U.S. at 73).

²¹³ *Id.* at 219.

allowed Justice Thomas to move easily to the second step of the *Mayo* framework, which searches for an inventive concept. He concluded that, viewed as a whole, the claims in Alice’s patent simply recited the basic concept of intermediated settlement as performed by a generic computer. And according to Justice Thomas, adding performance on a generic computer did not add anything of substance to transform the abstract idea into a patentable invention.²¹⁴ In *Mayo*, the Court ruled that adding “apply it” to an abstract idea was not an inventive concept; in *Alice*, the Court ruled that adding “computerize it” is also not inventive enough for patent eligibility.²¹⁵

The Significance of Alice

The *Alice* case is arguably one of the Court’s most significant intellectual property cases because it changed the way patent prosecutors, patent examiners, patent litigators, and judges in patent cases approached § 101 analysis. After *Alice*, everyone had to articulate a substantive “inventive concept.” The U.S. Patent Office adopted new patent examination guidelines in response to *Alice*.²¹⁶ The district courts and Federal Circuit began to place the *Mayo* framework front and center in their analysis.²¹⁷ The Court’s decisions in *eBay* and *Bilski* significantly reduced the number of business method patents,²¹⁸ but *Alice* cast doubt on a whole host of software-related inventions, even though the Court did not directly address software patents.²¹⁹ Following *Alice*, software-related inventions have suffered high rates of mortality in both the U.S. Patent Office and the courts.²²⁰

²¹⁴ *Id.* at 223–24.

²¹⁵ *See id.* at 224–26.

²¹⁶ *See* 2014 Interim Guidance on Patent Subject Matter Eligibility, 79 Fed. Reg. 74618 (Dec. 16, 2014) (to be codified at 37 C.F.R. pt. 1); *see also* U.S. PAT. & TRADEMARK OFF., PRELIMINARY EXAMINATION INSTRUCTIONS IN VIEW OF THE SUPREME COURT DECISION IN *ALICE CORPORATION PTY. LTD. V. CLS BANK INTERNATIONAL, ET AL.* (2014).

²¹⁷ *See generally*, Mark A. Perry & Jaysen S. Chung, *Alice at Six: Patent Eligibility Comes of Age*, 20 CHI.-KENT J. INTELL. PROP. L. 64, 71–86 (2021).

²¹⁸ *See* Mark A. Lemley et al., *Life After Bilski*, 63 STAN. L. REV. 1315 (2010); Peter S. Menell, *Forty Years of Wondering in the Wilderness and No Closer to the Promised Land: Bilski’s Superficial Textualism and the Missed Opportunity to Return Patent Law to Its Technological Mooring*, 63 STAN. L. REV. 1289 (2011).

²¹⁹ *See* David O. Taylor, *Confusing Patent Eligibility*, 84 TENN. L. REV. 157, 184 (2016); Ongjen Zivojnovic, *Patentable Subject Matter After Alice—Distinguishing Narrow Software Patents from Overly Broad Business Methods*, 30 BERKELEY TECH. L.J. 807, 808 (2015); Mark A. Lemley & Samantha Zyontz, *Does Alice Target Patent Trolls?*, 18 J. EMPIRICAL STUD. 47, 67 (2021) (concluding that 90% of post-*Alice* decisions on patent eligibility come from the software/information technology industry).

²²⁰ *See* Jasper L. Tran, *Software Patents: A One Year Review of Alice v. CLS Bank*, 97 J. PAT. & TRADEMARK OFF. SOC’Y 532, 540 (2015); Daniel Taylor, *Down the Rabbit Hole: Who Will Stand Up for Software Patents After Alice?*, 68 ME. L. REV. 217, 222 (2016) (“Within the first ten months after the *Alice* decision, U.S. courts had invalidated 3,026 claims in 117 U.S. patents in pretrial motions. By comparison, this represents more patents than those same courts had invalidated in the previous five years.” (footnote omitted)). *But*

E. Star Athletica, LLC v. Varsity Brands, Inc., 137 S. Ct. 1002 (2017)

Varsity Brands designs, manufactures, and sells cheerleading uniforms that are decorated using arrangements of chevrons, lines, curves, stripes, and colorful shapes.²²¹ Varsity obtained over 200 copyright registrations for its uniform decorations.²²² Star Athletica also sells cheerleading uniforms.²²³ Varsity sued Star Athletica for allegedly infringing the copyrights in five of Varsity's designs.²²⁴

The district court granted summary judgment in favor of Star Athletica, ruling that Varsity's designs were not copyrightable under 17 U.S.C. § 101²²⁵ because they served the utilitarian function of identifying the uniforms as cheerleading uniforms, and therefore, the designs could not be physically or conceptually separated from the uniform as a useful article.²²⁶ The Court of Appeals for the Sixth Circuit reversed, ruling that Varsity's designs were copyrightable under 17 U.S.C. § 101 because the designs were capable of existing independently, as they could be incorporated onto the surface of different mediums of expression.²²⁷ The Supreme Court granted certiorari "to resolve widespread disagreement over the proper test" for implementing the Copyright Act's separate-identification and independent-existence requirements for the copyrightability of works of authorship incorporated into the design of a useful article.²²⁸

Justice Thomas's opinion of the Court began by noting that Congress does not provide copyright protection for industrial designs.²²⁹ However, he explained that the Copyright Act established a special rule for copyrighting works of authorship incorporated into a useful article.²³⁰ A useful article is one that has "an intrinsic utilitarian function that is not merely to portray the appearance

see ANDREW A. TOOLE & NICHOLAS A. PAIROLERO, U.S. PAT. & TRADEMARK OFF., ADJUSTING TO *ALICE*: USPTO OUTCOMES AFTER *ALICE CORP. V. CLS BANK 1* (2020) (noting that once the USPTO issued revised guidelines on patent eligibility in 2019, the chances of Section 101 rejections decreased by 25%).

²²¹ *Star Athletica, LLC v. Varsity Brands, Inc.*, 137 S. Ct. 1002, 1007 (2017).

²²² *Id.*

²²³ *Id.*

²²⁴ *Id.*

²²⁵ Under 17 U.S.C. § 101, "the design of a useful article, as defined in this section, shall be considered a pictorial, graphic, or sculptural work only if, and only to the extent that, such design incorporates pictorial, graphic, or sculptural features that can be identified separately from, and are capable of existing independently of, the utilitarian aspects of the article."

²²⁶ *Star Athletica*, 137 S. Ct. at 1007–08.

²²⁷ *Id.* at 1008.

²²⁸ *Id.* at 1007.

²²⁹ *Id.*

²³⁰ *Id.*

of the article or to convey information.”²³¹ Copyright does not protect useful articles as such but does protect designs “if, and only to the extent that, such design incorporates pictorial, graphic, or sculptural features that can be identified separately from, and are capable of existing independently of, the utilitarian aspects of the article.”²³² The central inquiry is *separability*—whether a design feature can be identified and exist independently from a useful article.²³³ Justice Thomas observed that the Court’s ruling on this issue was solely a matter of statutory interpretation, not a “free-ranging search for the best copyright policy.”²³⁴

Justice Thomas first addressed whether the Court needed to apply a separability analysis in this case.²³⁵ Varsity argued that a separability analysis is necessary only when a work *is* the design of a useful article, not when a work appears *on* a useful article. Under this theory, a design placed on the surface of a useful article, such as a chevron on a cheerleading uniform, is inherently separable. Justice Thomas stated that Varsity’s argument was inconsistent with the text of § 101 of the Copyright Act.²³⁶ He reasoned that the plain text requires a separability analysis for any pictorial, graphic, or sculptural feature incorporated into the design of a useful article.²³⁷

Justice Thomas outlined how to assess separate identification and independent existence:

We hold that a feature incorporated into the design of a useful article is eligible for copyright protection only if the feature (1) can be perceived as a two- or three-dimensional work of art separate from the useful article and (2) would qualify as a protectable pictorial, graphic, or sculptural work—either on its own or fixed in some other tangible medium of expression—if it were imagined separately from the useful article into which it is incorporated.²³⁸

Justice Thomas noted that identifying a separate feature of a useful article is normally not onerous.²³⁹ The decisionmaker need only ascertain elements that appear to have pictorial, graphic, or sculptural qualities. The independent-existence requirement, however, is often more difficult to ascertain. To assess independent existence, “the decisionmaker must determine that the separately

²³¹ 17 U.S.C. § 101 (“A ‘useful article’ is an article having an intrinsic utilitarian function that is not merely to portray the appearance of the article or to convey information. An article that is normally a part of a useful article is considered a ‘useful article.’”).

²³² *Star Athletica*, 137 S. Ct. at 1008 (quoting 17 U.S.C. § 101).

²³³ *Id.*

²³⁴ *Id.* at 1010. This observation appears to be a response to Justice Breyer’s extensive discussion of copyright policy in his dissent.

²³⁵ *Id.* at 1009.

²³⁶ *Id.*

²³⁷ *Id.*

²³⁸ *Id.* at 1007.

²³⁹ *Id.* at 1010.

identified feature has the capacity to exist apart from the utilitarian aspects of the article.”²⁴⁰

After describing this framework, Justice Thomas evaluated the copyrightability of Varsity’s designs in suit. He first identified the decorations on the surface of the uniforms as features having pictorial and graphic qualities.²⁴¹ Then, he noted that the arrangements of colors, shapes, stripes, and chevrons could be separated and applied to a separate medium such as a painter’s canvas.²⁴² Indeed, Varsity had applied the decorations to other types of clothing without replicating the cheerleading uniform. He concluded, “The decorations are therefore separable from the uniforms and eligible for copyright protection.”²⁴³

Justice Thomas stated several important caveats to the Court’s ruling. First, the Court was expressing no opinion about whether Varsity’s decorations were sufficiently original for copyright protection or whether other prerequisites of a valid copyright had been satisfied.²⁴⁴ Second, the Court’s ruling did not give Varsity the right to prohibit anyone from manufacturing a cheerleading uniform of identical shape, cut, and dimension to the ones on which the decorations in suit appeared.²⁴⁵

Justice Ginsburg filed a short opinion concurring only in the Court’s judgment. She would not have taken up the separability analysis because Varsity’s designs were themselves copyrightable.²⁴⁶ To emphasize her point, she attached five of Varsity’s copyright registrations.²⁴⁷ Justice Breyer filed a dissent joined by Justice Kennedy. Although he agreed “with much in the Court’s opinion,” he did not agree that Varsity’s designs were eligible for copyright protection even applying the majority’s separability test.²⁴⁸

The Significance of Star Athletica

At one level, the *Star Athletica* case is quite important for several reasons. First, the Supreme Court does not decide many copyright cases, so each decision is carefully studied for its potential impact on future copyright cases. Second, the case came to the Court amidst a robust debate in the United States about potential statutory protection for fashion design. This debate is reflected in Justice Breyer’s dissent and his concern that the Court not inadvertently enact fashion legislation through the back door of statutory construction.²⁴⁹ In-

²⁴⁰ *Id.*

²⁴¹ *Id.* at 1012.

²⁴² *Id.*

²⁴³ *Id.*

²⁴⁴ *Id.* at 1012 n.1.

²⁴⁵ *Id.* at 1013.

²⁴⁶ *Id.* at 1018 (Ginsburg, J., concurring).

²⁴⁷ *Id.* at 1018–30.

²⁴⁸ *Id.* at 1030 (Breyer, J., dissenting).

²⁴⁹ *See id.* at 1031 (Breyer, J., dissenting). *See generally* Christopher Buccafusco & Jeanne Frommer, *Fashion’s Function in Intellectual Property Law*, 93 NOTRE DAME L. REV. 51

deed, Justice Breyer and Justice Thomas strongly agree on one thing in *Star Athletica*: that Congress can best assess the costs and benefits of drawing copyright's statutory lines.²⁵⁰

At another level, however, the *Star Athletica* case is of limited importance for copyright law and practice. The ruling reflects the fact that copyrights are easy to get, requiring very little originality. However, the most important question in copyright is not whether you can get a copyright but the extent to which a copyright holder has the power to exclude others from copying, distributing, and creating derivative works.²⁵¹ The copyright in certain works provides strong power to exclude, such as highly original works of art or literary works, but for many works, the ability to exclude is quite limited. In general, the more functional or the less original a work is, the weaker the copyright holder's ability to exclude because of a variety of limiting doctrines in copyright law. The copyright holder cannot prevent anyone from using ideas,²⁵² works where an idea and the expression have essentially merged,²⁵³ works where there are a limited number of ways to express an idea,²⁵⁴ works where the expression is constrained by its function,²⁵⁵ works that are standard treatments,²⁵⁶ or works in the public domain.²⁵⁷ A copyright holder in a compilation, for example, can only exclude works that are virtually identical to the compilation.²⁵⁸

To bring this back to the facts of the *Star Athletica* case, Justice Thomas emphasized that the Court's ruling did not give Varsity the right to prohibit anyone from manufacturing a cheerleading uniform of identical shape, cut, and dimension to the ones on which the decorations in suit appeared. Can *Star Athletica* copy the Varsity designs verbatim? No, that it cannot do. But can Varsity prevent *Star Athletica* from using chevrons, lines, curves, stripes, and colorful shapes to decorate its uniforms? No, Varsity's copyright is only in a certain combination of elements. Can *Star Athletica* use combinations that resemble Varsity's uniforms? Most likely, yes, because many resemblances will be related to uncopyrightable ideas, designs where an idea and the expression have essentially merged, designs where there are a limited number of ways to express

(2017); Christopher Buccafusco & Jeanne Frommer, *Forgetting Functionality*, 166 U. PA. L. REV. (2017).

²⁵⁰ *Id.* at 1034.

²⁵¹ See generally Margot E. Kaminski & Guy A. Rub, *Copyright's Framing Problem*, 64 UCLA L. REV. 1102 (2017); Mark A. Lemley & Mark P. McKenna, *Scope*, 57 WM. & MARY L. REV. 2197 (2016).

²⁵² *Comput. Assoc. Int'l, Inc. v. Altai, Inc.*, 982 F.2d 693, 703 (2d Cir. 1992).

²⁵³ *Id.* at 707–08.

²⁵⁴ *Id.* at 708.

²⁵⁵ *Id.* at 714.

²⁵⁶ See *Frybarger v. Int'l Bus. Machs. Corp.*, 812 F.2d 525, 530 (9th Cir. 1987).

²⁵⁷ *Comput. Assoc. Int'l, Inc.*, 982 F.2d at 714.

²⁵⁸ See *Apple Comput., Inc. v. Microsoft Corp.*, 35 F.3d 1435, 1442 (9th Cir. 1994).

an idea, designs where the expression is constrained by its function, designs that are stock treatments, or designs that are in the public domain.²⁵⁹

F. TC Heartland LLC v. Kraft Foods Group Brands LLC, 137 S. Ct. 1514 (2017)

In the *TC Heartland* case, the Supreme Court decided the proper venue for patent infringement cases brought against a domestic corporation. The Federal Circuit had ruled that the general federal venue statute, 28 U.S.C. § 1391, applied to patent infringement cases, thus allowing venue in any judicial district in which the defendant was subject to the court's personal jurisdiction.²⁶⁰ Justice Thomas's opinion of the Court disagreed, ruling that the patent venue statute, 28 U.S.C. § 1400(b), applied instead.²⁶¹ The text of § 1400(b) limits venue to any judicial district where the defendant resides or has a regular and established place of business. According to the Court, "resides" means the state of incorporation.²⁶²

The Significance of TC Heartland

The Federal Circuit's liberal view of venue gave patent plaintiffs (including NPEs) great latitude in choosing their venue. Over time, certain judicial districts became known as particularly patentee-friendly venues, especially the Eastern District of Texas.²⁶³ Indeed, patent infringement litigation became a cottage industry there. Justice Scalia once referred to the Eastern District of Texas as a "renegade" court.²⁶⁴ Justice Thomas's opinion had the practical effect of preventing the Eastern District of Texas from continuing to serve as the go-to district for patent litigation. And, consequently, Justice Thomas's opinion leveled the playing field in patent litigation, reducing the threat of infringement just as he had in *eBay*.²⁶⁵

²⁵⁹ See generally Robert C. Denicola, *Imagining Things: Copyright for Useful Articles After Star Athletica v. Varsity Brands*, 79 U. PITT. L. REV. 635 (2018); Lili Levi, *The New Separability*, 20 VAND. J. ENT. & TECH. 709 (2018); David E. Shipley, *All for Copyright Stand Up and Holler! Three Cheers for Star Athletica and the U.S. Supreme Court's Perceived and Imagined Separability Test*, 35 CARDOZO ARTS & ENT. L.J. 149 (2018); Tyler Ochoa, *What Is a "Useful Article" in Copyright Law After Star Athletica?*, 166 U. PA. L. REV. ONLINE 105 (2017); Jane C. Ginsburg, *The Sum Is More Public Domain than Its Parts: U.S. Copyright Protection for Works of Applied Art under Star Athletica's Imagination Test*, 166 U. PA. L. REV. 83 (2017).

²⁶⁰ *TC Heartland v. Kraft Foods Grp. Brands LLC*, 137 S. Ct. 1514, 1517–18 (2017).

²⁶¹ *Id.* at 1520.

²⁶² *Id.* at 1520–21.

²⁶³ See Robert G. Bone, *Forum Shopping and Patent Law—a Comment on TC Heartland*, 96 TEX. L. REV. 141, 147 (2017).

²⁶⁴ See J. Jonas Anderson, *Reining in a "Renegade Court": TC Heartland and the Eastern District of Texas*, 39 CARDOZO L. REV. 1569, 1571, 1576 (2018).

²⁶⁵ *Id.* at 1607–08.

G. Oil States Energy Services, LLC v. Greene's Energy Group, LLC, 138 S. Ct. 1365 (2018)

The *Oil States* case considered the constitutionality of a procedure to challenge issued patents, called *inter partes* review, that Congress created in the America Invents Act.²⁶⁶ Under this procedure, anyone can request cancellation of a patent on the grounds that, based on prior art, it fails the non-obviousness or novel standards for patentability.²⁶⁷ Before review is instituted, however, the director of the Patent Office must determine that there is a reasonable likelihood that the petitioner will prevail with respect to at least one of the patent claims challenged.²⁶⁸ Once the director institutes *inter partes* review, a three-member panel of administrative law judges from the Patent Trial and Appeal Board examines the patent's validity.²⁶⁹ Once the panel's decision becomes final, any party dissatisfied with the panel's decision can appeal to the Federal Circuit.²⁷⁰

Does the *inter partes* procedure violate Article III or the Seventh Amendment of the U.S. Constitution? Article III vests judicial power "in one supreme Court, and in such inferior Courts as the Congress may from time to time ordain and establish."²⁷¹ By implication, Congress cannot vest judicial power in entities outside of Article III courts. In determining whether a proceeding involves the exercise of Article III judicial power, the Supreme Court has differentiated between public and private rights.²⁷² Congress has "significant latitude to assign adjudication of public rights to [non-Article III adjudicators]."²⁷³

Justice Thomas's opinion of the Court concluded that the government's grant of a patent right is a government-granted public franchise.²⁷⁴ *Inter partes* review is simply the government's reconsideration of its grant of this public franchise.²⁷⁵ Thus, Congress can grant the Patent Office the right to reconsider the grant of a patent without violating Article III. Furthermore, "when Congress properly assigns a matter to adjudication in a non-Article III tribunal, 'the Seventh Amendment poses no independent bar to the adjudication of that action by a nonjury factfinder.'"²⁷⁶ Thus, Justice Thomas's resolution of the Article III issue also resolved the Seventh Amendment challenge.

²⁶⁶ Leahy-Smith America Invents Act, 35 U.S.C. §§ 299–319.

²⁶⁷ *Id.* § 311(b).

²⁶⁸ *Id.* § 314(a).

²⁶⁹ *Id.* § 316(c).

²⁷⁰ *Id.* § 319.

²⁷¹ U.S. CONST. art. III, § 1.

²⁷² *Oil States Energy Servs., LLC v. Greene's Energy Grp., LLC*, 138 S. Ct. 1365, 1373 (2018) (citing *Exec. Benefits Ins. Agency v. Arkison*, 573 U.S. 25, 32 (2014)).

²⁷³ *Id.*

²⁷⁴ *Id.* at 1369, 1373.

²⁷⁵ *Id.* at 1373.

²⁷⁶ *Id.* at 1379 (quoting *Granfinanciera, S.A. v. Nordberg*, 492 U.S. 33, 53–54 (1989)).

Justice Thomas's opinion emphasized the narrowness of the Court's holding.²⁷⁷ The Court was not deciding whether patent *infringement* actions could be heard by non-Article III courts or whether review would be constitutional "without any sort of intervention by a court at any stage of the proceedings."²⁷⁸ The Court also was not suggesting that patents are not property for purposes of the Due Process Clause or the Takings Clause.²⁷⁹

Justices Breyer, Ginsburg, and Sotomayor joined Justice Thomas's opinion of the Court in full but filed a short concurrence to say that the Court's opinion should not be read to say private rights may never be adjudicated by Article III courts.²⁸⁰ Justice Gorsuch wrote a dissent joined by Chief Justice Roberts based largely on the historical record of Article III at the time it was written by the Founders.²⁸¹ His dissent reviewed English legal history, including several English cases and the scholarly literature discussing them.²⁸² He argued that in England, around the time of the founding of the United States, only courts of law could hear patent challenges. He pointed out that the trajectory of English legal history demonstrated an important policy point—that courts acted as an important restraint on the executive's privilege to grant patents, which had been misused at times by the kings and queens of England.²⁸³ However, Justice Thomas's opinion of the Court reviewed the same historical record and came to a different conclusion about its implications.²⁸⁴

The Significance of Oil States

In the years leading up to enactment of the America Invents Act, patent scholars expressed concern that the Patent Office was chilling innovation by issuing too many low-quality patents.²⁸⁵ The resource-constrained Patent Office could not keep up with the large volume of patent applications in the information economy and found it difficult to access and assess prior art in emerging technological fields. Once a low-quality patent was issued, it cost hundreds of thousands of dollars to litigate its validity in the federal courts.²⁸⁶ Congress

²⁷⁷ *Id.*

²⁷⁸ *Id.* (quoting *Atlas Roofing Co. v. Occupational Safety and Health Rev. Comm'n*, 430 U.S. 442, 455 n.13 (1977)) (noting that *inter partes* review decisions by the U.S. Patent Office are appealable to the Federal Circuit).

²⁷⁹ *Id.*

²⁸⁰ *Id.* at 1379–80.

²⁸¹ *Id.* at 1380.

²⁸² *Id.* at 1381–83, 1385.

²⁸³ *Id.* at 1381–82.

²⁸⁴ *Id.* at 1376–78.

²⁸⁵ See, e.g., Robert P. Merges, *As Many as Six Impossible Patents Before Breakfast: Property Rights for Business Concepts and Patent System Reform*, 14 BERKELEY TECH. L.J. 577, 591 (1999).

²⁸⁶ See Christopher J. Walker, *Constitutional Tensions in Agency Adjudication*, 104 IOWA L. REV. 2679, 2700 (2019); Matthew G. Sipe, *Experts, Generalists, Laypeople—and the Federal Circuit*, 32 HARV. J.L. & TECH. 575, 582 (2019).

created the *inter partes* review procedure as a more economical way to challenge patent validity. By upholding *inter partes* review, the Supreme Court allowed Congress to adjust innovation policy at a point in history where patents seemed to be threatening rather than incentivizing innovation.

H. WesternGeco LLC v. ION Geophysical Corp., 138 S. Ct. 2129 (2018)

Normally, U.S. patent holders can only sue for infringements that occur in the United States. However, under § 271(f)(2) of the Patent Act, a U.S. patent holder can also sue for infringement if someone ships components of a patented invention abroad to be assembled there.²⁸⁷ If the patent is valid and infringed, the patent holder can recover damages adequate to compensate for the infringement.²⁸⁸

WesternGeco developed and patented technology for surveying the ocean floor. This technology is used primarily by oil and gas companies.²⁸⁹ When ION Geophysical began selling a competing system, WesternGeco sued for patent infringement and won.²⁹⁰ The jury awarded WesternGeco royalties and lost profits for contracts that WesternGeco lost to ION.²⁹¹ ION argued that the Patent Act does not apply extraterritorially, so WesternGeco could not recover lost profits based on any lost foreign survey contracts. The district court rejected ION's argument, but on appeal the Federal Circuit agreed with ION.²⁹²

Justice Thomas's opinion of the Court reversed the Federal Circuit. While acknowledging that the presumption against extraterritoriality has deep roots, the Court developed a two-step framework for deciding when that presumption could be rebutted.²⁹³ The key issue was identifying the "focus" of the statute, which, in the case of § 271(f)(2), was the exporting of components from the United States.²⁹⁴ As such, according to Justice Thomas, WesternGeco's damages were related to that domestic act (exporting) and therefore amounted to a domestic application of the Patent Act's damages provision, § 284.²⁹⁵ Justice Gorsuch filed a dissent joined by Justice Breyer, disagreeing with Justice Thomas's interpretation and application of the Patent Act.

²⁸⁷ 35 U.S.C. § 271(f)(2).

²⁸⁸ 35 U.S.C. § 284 authorizes "damages adequate to compensate for the infringement, but in no event less than a reasonable royalty for the use made of the invention by the infringer"

²⁸⁹ *WesternGeco LLC v. Ion Geophysical Corp.*, 138 S. Ct. 2129, 2135 (2018).

²⁹⁰ *Id.*

²⁹¹ *Id.*

²⁹² *Western Geco LLC v. Ion Geophysical Corp.*, 791 F.3d 1340, 1343 (Fed. Cir. 2015).

²⁹³ *WesternGeco*, 138 S. Ct. at 2136.

²⁹⁴ *Id.* at 2136–37.

²⁹⁵ *Id.* at 2139.

The Significance of WesternGeco

WesternGeco is a remedies case, which brings us full circle back to *eBay*, Justice Thomas's first intellectual property opinion for the Roberts Court. However, the surprise in *WesternGeco* is that the Court reversed the Federal Circuit to strengthen patents remedies, rather than weaken them as it had in *eBay*. More broadly, *WesternGeco* is one of only a handful of cases during the Roberts Court that can be characterized as pro-patent. As mentioned, Justices from both the liberal and conservative sides of the Court have overwhelmingly and often unanimously dialed back the rights of patent holders during the Roberts Court.

Does *WesternGeco* signal a shift in the Court toward a pro-patent holder perspective, especially coming on the heels of *Star Athletica*, which some commentators characterize as pro-copyright holder?²⁹⁶ I think not. *WesternGeco*, instead, is best read as an example of Justice Thomas faithfully construing the patent statute, earnestly attempting to ascertain congressional intent with no particular policy agenda, knowing that Congress can pass correcting legislation if the Court gets the interpretation wrong or has identified an unintended ambiguity in the statute.²⁹⁷

IV. FEATURES OF JUSTICE THOMAS'S INTELLECTUAL PROPERTY JURISPRUDENCE

This Part summarizes the distinctive features of Justice Thomas's intellectual property law opinions: namely, unanimity; use of history in the context of applying textualism; preference for flexible tests; aptitude for understanding technology and business context; sensitivity to the role played by intellectual property law practitioners; and appreciation for the role of remedies.

A. Unanimity

Although in many types of cases it can be difficult for Justice Thomas to find common ground with other members of the Court,²⁹⁸ that has not proven to

²⁹⁶ See generally Sam H. Boyer, *From Deepsouth to Westerngeco: The Patent Provision Heard Around the World*, 80 LA. L. REV. 165, 188–89 (2019); Timothy R. Holbrook, *Extra-territoriality and Proximate Cause After Westerngeco*, 21 YALE J.L. & TECH. 189, 224 (2019); Amy L. Landers, *Proximate Cause and Patent Law*, 25 B.U. J. SCI. & TECH. L. 329, 329 (2019); Andrew C. Michaels, *Implicit Overruling and Foreign Lost Profits*, 25 B.U. J. SCI. & TECH. L. 408, 409 (2019).

²⁹⁷ This aligns with the Court's approach in *Microsoft Corp. v. AT&T Corp.*, 550 U.S. 427, 442 (2007), and *Deepsouth Packing Co. v. Laitram Corp.*, 406 U.S. 518, 528 (1972).

²⁹⁸ Some commentators argue that Chief Justice Rehnquist assigned fewer majority opinions to Justice Thomas in important constitutional cases because Thomas's views made it difficult for him to persuade a majority of Justices to join his opinions. See TUSHNET, *supra* note 60, at 85–86; JEFFREY TOOBIN, *THE NINE: INSIDE THE SECRET WORLD OF THE SUPREME COURT* 119 (2007). Mark Tushnet notes, however, that Justice Thomas's skill in handling important and difficult cases involving statutory interpretation and economic regulation may

be so in intellectual property cases. His intellectual property majority opinions are unanimous or nearly so.²⁹⁹ Over time, as the papers of retired Supreme Court Justices become public, we may better understand the reasons for this unanimity, but for now, we can explore several possibilities.³⁰⁰

One straightforward explanation could be that Justice Thomas wrote the majority opinions only in clear-cut, noncontroversial cases.³⁰¹ While that may be true in certain instances, this explanation does not resonate for challenging cases such as *Alice*³⁰² and *Myriad* on patent eligibility,³⁰³ *Star Athletica* on copyrightability,³⁰⁴ *Oil States* on *inter partes* patent review,³⁰⁵ or *WesternGeco* on the extraterritorial application of patent law.³⁰⁶

have also limited the assignment of constitutional questions to him during the Rehnquist Court. TUSHNET, *supra* note 60, at 86.

²⁹⁹ *eBay Inc. v. Mercexchange LLC*, 547 U.S. 388, 389 (2006) (unanimous); *Quanta Comput., Inc. v. LG Elecs., Inc.*, 553 U.S. 617, 620 (2008) (unanimous); *Alice Corp. v. CLS Bank Int'l*, 573 U.S. 208, 208 (2014) (unanimous); *TC Heartland LLC v. Kraft Foods Grp. Brands LLC*, 137 S. Ct. 1514, 1516 (2017) (unanimous); *Helsinn Healthcare v. Teva Pharm.*, 139 S. Ct. 628, 630 (2019) (unanimous); *Sandoz Inc. v. Amgen Inc.*, 137 S. Ct. 1664, 1668 (2017) (unanimous); *Kappos v. Hyatt*, 566 U.S. 431, 432 (2012) (unanimous); *Ass'n for Molecular Pathology v. Myriad Genetics, Inc.*, 133 S. Ct. 2107, 2110 (2013) (Scalia, J., concurring in part); *Reed Elsevier, Inc. v. Muchnick*, 130 S. Ct. 1237, 1240 (2010) (Ginsburg, J., Breyer, J., and Sotomayor, J., concurring in part); *Star Athletica, LLC v. Varsity Brands, Inc.*, 137 S. Ct. 1002, 1006 (2017) (Ginsburg, J., concurring in judgment and Breyer, J. and Kennedy, J., dissenting); *Oil States Energy Servs. v. Green's Energy Grp. LLC*, 138 S. Ct. 1365, 1368 (2018) (Roberts, C.J. and Gorsuch, J., dissenting); *WesternGeco LLC v. Ion Geophysical Corp.*, 138 S. Ct. 2129, 2134 (2018) (Breyer, J. and Gorsuch, J., dissenting). Given the assumption that Justice Scalia and Justice Thomas always voted in tandem, it is ironic that in *Myriad*, Justice Scalia cheekily concurred only in part, simply because he did not appreciate the way Justice Thomas's opinion of the Court dove into the details of the technology. *Myriad*, 133 S. Ct. at 2120.

³⁰⁰ See Seaman & Wang, *supra* note 54, at 917 (using the papers of Justice Lewis Powell to better understand patent law decisions during the Burger Court).

³⁰¹ See Eastman, *supra* note 54, at 702 (disputing the notion that Justice Thomas gets assigned only the easy or boring cases). Justice Thomas's opinion of the Court in *Sandoz Inc. v. Amgen Inc.* provides a good example of Justice Thomas construing a complex statute (the Biologics Price Competition Act of 2009) and dealing with complex technology (filgrastim). *Sandoz*, 137 S. Ct. 1664.

³⁰² *Alice* was not a straight-forward case—the number of concurring and dissenting opinions in the Federal Circuit was truly remarkable. See *Alice Corp.*, 573 U.S. at 214–15 (summarizing the Federal Circuit opinions).

³⁰³ By comparison, Justice Kennedy's opinion of the Court on patent eligibility in *Bilski v. Kappos*, 561 U.S. 593 (2010), was not unanimous.

³⁰⁴ By comparison, Justice Roberts's opinion of the Court on copyrightability in *Georgia v. Public.Resource.Org, Inc.*, 140 S. Ct. 1498, 1503 (2020), only attracted a five Justice majority.

³⁰⁵ By comparison, Justice Gorsuch's opinion of the Court on *inter partes* review in *SAS Institute, Inc. v. Iancu*, 138 S. Ct. 1348, 1352 (2018), only attracted a five Justice majority.

³⁰⁶ By comparison, the Court's opinions in *Microsoft Corp. v. AT&T Corp.*, 550 U.S. 437, 440 (2007), are more fractured in a case where Justice Ginsburg wrote the opinion of the Court.

Another explanation could be that, given his prior experience, Justice Thomas is especially skillful at deciding intellectual property cases. As such, he may be particularly persuasive when the Justices discuss intellectual property cases in choosing or deciding them.³⁰⁷ In intellectual property cases, it is not a given that a Justice from a certain ideological wing of the Court can convince his or her colleagues to join the opinion of the Court.³⁰⁸ Although the Justices do not decide cases in a wide-open interactive fashion, their views can be shaped, molded, and sometimes changed as the discussion moves from colleague to colleague.³⁰⁹ And once the Court's opinion gets assigned, Justice Thomas may be particularly adept in the way he handles the decisional details that get fleshed out during the opinion-writing process³¹⁰ and good at incorporating the views expressed by the other Justices during the conference, thus maintaining a unanimous conference vote or picking up votes during the opinion writing process.³¹¹

Another reason could be that Justice Thomas crafts his intellectual property opinions in a way that stays close to facts of the case. As discussed later in this Article this style has several important advantages in intellectual property cases. But on top of those advantages, narrow opinions are more likely to receive greater support from colleagues. Indeed, this brand of incremental decision-making is a signature of the Roberts Court.³¹²

Finally, Justice Thomas may be particularly adept at consensus building in intellectual property cases. For example, the level of consensus in *Alice* stands in contrast to Justice Kennedy's opinion for the Court in *Bilski*, a case that resembled *Alice* in that the patents in suit were focused on intermediated settlement business methods. In *Bilski*, Justice Stevens wrote a lengthy opinion joined by Justices Ginsburg, Breyer, and Sotomayor concurring only in the

³⁰⁷ John Eastman predicts that once more papers of Justices from the Rehnquist Court become public, it will be revealed that Justice Thomas was particularly good at maintaining votes or even picking up votes during the opinion writing process. See Eastman, *supra* note 54, at 702. Some commentators argue that, contrary to the conventional wisdom that Justice Scalia persuaded Justice Thomas to join his opinions, it may be fairly said that Justice Scalia actually followed Justice Thomas on many critical issues. See JAN CRAWFORD GREENBURG, SUPREME CONFLICT: THE INSIDE STORY OF THE STRUGGLE FOR CONTROL OF THE UNITED STATES SUPREME COURT 117, 124–25 (2007).

³⁰⁸ See, e.g., *Georgia v. Public.Resource.Org, Inc.*, 140 S. Ct. 1489, 1503 (2020) (opinion of the Court by Chief Justice Roberts, with Justices Thomas and Alito dissenting, along with Justices Breyer and Ginsburg); *Return Mail, Inc. v. U.S. Postal Serv.*, 139 S. Ct. 1853, 1858 (2019) (opinion of the Court by Justice Sotomayor, with Justices Breyer, Ginsburg, and Kagan dissenting); *MedImmune, Inc. v. Genentech, Inc.*, 549 U.S. 118, 119 (2007) (opinion of the Court by Justice Scalia, with Justice Thomas dissenting).

³⁰⁹ REHNQUIST, *supra* note 52, at 293–95.

³¹⁰ *Id.* at 295.

³¹¹ See Seaman & Wang, *supra* note 54, at 922–23 (describing vote changes in key patent cases during the Burger Court).

³¹² See BISKUPIC, *supra* note 31, at 176–77.

Court's judgment.³¹³ In his *Bilski* concurrence, Justice Stevens argued categorically against the patentability of business methods.³¹⁴ He also criticized Justice Kennedy's analysis of when an abstract idea may be patent ineligible, writing that Justice Kennedy "never provides a satisfying account of what constitutes an unpatentable abstract idea" and that Justice Kennedy's "mode of analysis (or lack thereof) may have led to the correct outcome in this case, but it also means that the Court's musings on this issue stand for very little."³¹⁵

Perhaps Justice Thomas's addition of the framework from *Mayo* in his *Alice* opinion satisfied Justices Ginsburg, Breyer, and Sotomayor because they fully joined Justice Thomas's opinion of the Court. Justice Sotomayor, joined by Justices Ginsburg and Breyer, filed a short concurring opinion in *Alice* simply to re-state their view that business methods never qualify as a patent eligible process under § 101.³¹⁶ Justice Kagan, who had replaced Justice Stevens when he retired, simply joined Justice Thomas's opinion.

In *Star Athletica*, Justice Thomas's opinion of the Court was not unanimous, but five other Justices joined the opinion in full, including Justice Kagan and Justice Sotomayor.³¹⁷ Justice Thomas's opinion attracted more support than the opinions of either of the copyright experts on the Court—Justice Ginsburg and Justice Breyer. No other Justice joined Justice Ginsburg's opinion concurring in the judgment.³¹⁸ Only Justice Kennedy joined Justice Breyer's dissent, which, notably, agreed with much of Justice Thomas's opinion of the Court, just not its final disposition of the case.³¹⁹

B. History and Textualism

Justice Thomas's opinions show an appreciation for drawing lessons from historical practice.³²⁰ Central to the decision in *eBay*, for example, was an understanding of the traditional four-factor test used by trial courts in deciding whether to grant injunctive relief.³²¹ Justice Thomas's opinion in *Quanta* shows that history is important for contextualizing how the doctrine of patent exhaustion limits the patent rights that survive the initial authorized sale of a patented

³¹³ *Bilski v. Kappos*, 561 U.S. 593, 613 (2010) (Stevens, J., concurring).

³¹⁴ *Id.* at 614.

³¹⁵ *Id.* at 621.

³¹⁶ *Alice Corp. v. CLS Bank Int'l*, 573 U.S. 208, 227 (2014) (Sotomayor, J., concurring).

³¹⁷ *See Star Athletica, LLC v. Varsity Brands, Inc.*, 137 S. Ct. 1002 (2017).

³¹⁸ *See id.* at 1018 (Ginsburg, J., concurring).

³¹⁹ *Id.* at 1030 (Breyer, J., dissenting).

³²⁰ *See, e.g., Helsinn Healthcare S.A. v. Teva Pharms.*, 139 S. Ct. 628, 633–34 (2019); *Kappos v. Hyatt*, 132 S. Ct. 1690 (2012); *see also Adam Mossoff, Exclusion and Exclusive Use in Patent Law*, 22 HARV. J.L. & TECH. 321, 324 (2009) (highlighting how in repeatedly reversing the Federal Circuit, the Supreme Court has expressed fealty to historical patent doctrines).

³²¹ *See eBay Inc. v. Mercexchange LLC*, 547 U.S. 388, 392–93 (2006).

item.³²² In *Myriad*, Justice Thomas followed the Court's historical practice of employing a longstanding Court-created exception to 35 U.S.C. § 101 on patentable subject matter.³²³ And in *TC Heartland*, Justice Thomas used the historical development of the patent statute, Supreme Court precedents construing the statute, and the interplay between the two as aids to construe the text of the statute.³²⁴

This appreciation of historical practice is not originalism,³²⁵ of course, because the Court is not interpreting the U.S. Constitution, but, like originalism, Justice Thomas looks to history for precedent. For him, historical practice provides something like a default rule or at least a place to start. However, historical practice is not the final word when Congress has passed a statute—the text of the statute, rather than history, provides the relevant authority.³²⁶ In other words, textualism, rather than originalism, is the relevant tool of judicial decision-making in most of Justice Thomas's intellectual property opinions.³²⁷

For example, Justice Thomas's opinion in *Star Athletica* involving § 101 of the Copyright Act is a straightforward exercise in textualism,³²⁸ although Justice Thomas used history to shed light on the origins of modern copyright

³²² See *Quanta Comput., Inc. v. LG Elecs., Inc.*, 553 U.S. 617, 625–28 (2008).

³²³ See *Ass'n for Molecular Pathology v. Myriad Genetics, Inc.*, 569 U.S. 576, 589–90 (2013).

³²⁴ See *TC Heartland LLC v. Kraft Foods Grp. Brands LLC*, 137 S. Ct. 1514, 1517–21 (2017).

³²⁵ See MAGNET, *supra* note 7, at 61–108 (describing Justice Thomas's originalism in action). See generally Randy E. Barnett & Evan D. Bernick, *No Arbitrary Power: An Originalist Theory of the Due Process of Law*, 60 WM. & MARY L. REV. 1599 (2019); Randy E. Barnett & Evan D. Bernick, *The Letter and the Spirit: A Unified Theory of Originalism*, 107 GEO. L.J. 1 (2018); Kevin C. Walsh, *Originalist Law Reform, Judicial Departmentalism, and Justice Scalia*, 84 U. CHI. L. REV. 2311 (2017); Lawrence B. Solum, *Originalism Versus Living Constitutionalism: The Conceptual Structure of the Great Debate*, 113 NW. U. L. REV. 1243 (2019); Lawrence B. Solum, *Originalist Methodology*, 84 U. CHI. L. REV. 269 (2017).

³²⁶ In contrast, the Court relied only on historical practice in *Impression Products* because Congress has not codified the patent exhaustion doctrine in the Patent Act. *Lexmark Int'l, Inc. v. Impression Prods., Inc.*, 816 F.3d 721, 731 (Fed. Cir. 2016), *rev'd and remanded*, 137 S. Ct. 1523 (2017).

³²⁷ The word “textualism” was first used by Mark Pattison in 1863 to criticize Puritan theology. *Textualism*, OXFORD ENGLISH DICTIONARY, <http://oed.com> [<https://perma.cc/YE3D-VPQM>]. The term “textualism” first appeared in a Supreme Court opinion when Justice Robert Jackson used it in *Youngstown Sheet & Tube Co. v. Sawyer*, 343 U.S. 579, 640 (1952). See generally ANTONIN SCALIA & BRYAN A. GARNER, *READING LAW: THE INTERPRETATION OF LEGAL TEXTS* (2012); ROBERT A. KATZMANN, *JUDGING STATUTES* (2014); Brett M. Kavanaugh, *Fixing Statutory Interpretation*, 129 HARV. L. REV. 2118 (2016). The Court's recent decision in *Bostock v. Clayton Cty.*, 140 S. Ct. 1731, 1754 (2020). See also Scott A. Moss, *Judges' Varied Views of Textualism*, 88 U. COLO. L. REV. 1 (2017).

³²⁸ See generally John F. Manning, *Second-Generation Textualism*, 98 CAL. L. REV. 1287 (2010) (identifying Justice Thomas as a committed textualist); Judge H. Brent McKnight, *The Emerging Contours of Justice Thomas's Textualism*, 12 REGENT U. L. REV. 365 (2000).

law.³²⁹ He specifically rejected the suggestion inherent in Justice Breyer's dissent that the Court should be searching for the best copyright policy.³³⁰ According to Justice Thomas, if the Court misconstrues a copyright statute or if its construction reveals an unintended or unwanted consequence, then Congress can act accordingly to adjust copyright law.³³¹

However, in *Myriad*, Justice Thomas departed from textualism. Indeed, his opinion in *Myriad* departs from the plain language of both the Patent Act and the U.S. Constitution. The text of 35 U.S.C. § 101 would, on its face, allow a patent on any new and useful composition of matter. In addition, Article I, Section 8, Clause 8 of the U.S. Constitution (often called the "IP Clause") empowers Congress "[t]o 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."³³² Yet, in the face of this plain language, Justice Thomas invalidated *Myriad's* composition of matter patent claims because they were merely discoveries of a composition of matter found in nature.³³³

Although this departure is noteworthy given Justice Thomas's respect for textualism, it is not surprising for those familiar with patent law. Indeed, Justice Thomas's treatment of Article I, Section 8, Clause 8 is consistent with his respect for originalism. The Supreme Court previously construed the original public meaning of the term "discoveries" in the Constitution's IP Clause. In its original context, *discoveries* meant something akin to what we call *inventions* in modern nomenclature—i.e., inventing something new, rather than merely finding something that already exists in nature.³³⁴ Thus, Justice Thomas's originalism proved to be a comfortable fit for the *Myriad* case.

Originalism may help explain Justice Thomas's departure from the plain words of the Constitution's IP Clause in *Myriad*, but what explains his departure from the plain text of the Patent Act? An obvious explanation is respect for *stare decisis*.³³⁵ Another explanation relates to originalism. The Court's long-

³²⁹ *Star Athletica, LLC v. Varsity Brands, Inc.*, 137 S. Ct. 1002, 1011 (2017).

³³⁰ *Id.* at 1010 ("This is not a free-ranging search for the best copyright policy.").

³³¹ *Id.* at 1015. This approach is well illustrated in an example from patent law. *DeepSouth Packing Co. v. Laitram Corp.*, 406 U.S. 518, 528 (1972).

³³² U.S. CONST. art. I, § 8, cl. 8. (emphasis added).

³³³ See *Ass'n for Molecular Pathology v. Myriad Genetics, Inc.*, 569 U.S. 576, 590–94 (2013).

³³⁴ See *Diamond v. Diehr*, 450 U.S. 175, 185 (1981); *Gottschalk v. Benson*, 409 U.S. 63, 67 (1972); *Funk Bros. Seed Co. v. Kalo Inoculant Co.*, 333 U.S. 127, 130–31 (1948). See generally Sean O'Connor, *The Overlooked French Influence on the Intellectual Property Clause*, 82 U. CHI. L. REV. 733 (2015); Giles S. Rich, *Principles of Patentability*, 28 GEO. WASH. L. REV. 393 (1960).

³³⁵ See *Bilski v. Kappos*, 561 U.S. 593, 602 (2010) (noting that the three historical exceptions to patentability trace back to *Le Roy v. Tatham*, 14 How. 156, 174–75 (1853)). Often, however, Justice Thomas gives less deference to *stare decisis* than other members of the Court. See *Allen v. Cooper*, 140 S. Ct. 994, 1007–08 (2020) (Thomas, J., concurring in part and concurring in the judgment).

standing exception to 35 U.S.C. § 101 reflects the intent of the Founders to, on the one hand, provide incentives for invention using exclusive rights, but, on the other hand, leave ample room for innovation by limiting those exclusive rights.

Interestingly, the *Oil States* case pits two fervent originalists against one another: Justice Thomas and Justice Gorsuch.³³⁶ Both Justices Thomas and Gorsuch agreed that the Patent Clause of the Constitution was written against the backdrop of the English system. But Justice Thomas's opinion identifies two reasons for diverging from Justice Gorsuch's dissent³³⁷ based on the historical record.

First, Justice Thomas's reading of English legal history led to the conclusion that, in addition to proceedings in a court of law, a patent could be cancelled by a proceeding in the Privy Council.³³⁸ This proceeding by the executive branch of English government resembled executive branch action in *inter partes* review. Second, he argued that historical practice was not decisive because adjudications covered by the public rights doctrine from their very nature could, as Congress chose, be delegated to executive officers or judicial tribunals.³³⁹ As Justice Thomas put it, "That Congress chose the courts in the past does not foreclose its choice of the PTO today."³⁴⁰

However, Justice Thomas's opinion in *Myriad* reveals that certain historical practices do not always prove decisive. *Myriad* had argued that the Patent Office's past practice of awarding gene patents was entitled to deference and

³³⁶ See generally NEIL GORSUCH, A REPUBLIC, IF YOU CAN KEEP IT (2019) (describing Justice Gorsuch's views on originalism); Kyle Peterson, *The High Court's Rocky Mountain Originalist*, WALL ST. J. (Sept. 6, 2019), <https://www.wsj.com/articles/the-high-courts-rocky-mountain-originalist-11567792378> [<https://perma.cc/N5NY-WDQG>].

³³⁷ Justice Gorsuch criticized Justice Thomas's judicial restraint in *Oil States* as the judiciary ceding important constitutional ground to the political branches. *Oil States Energy Servs., LLC v. Greene's Energy Grp., LLC*, 138 S. Ct. 1365, 1381–86 (2018) (Gorsuch, J., dissenting). Justice Gorsuch also dissented in *WesternGeco*, although this time joined by Justice Breyer. *WesternGeco LLC v. ION Geophysical Corp.*, 138 S. Ct. 2129, 2139 (2018) (Gorsuch, J., dissenting). However, the disagreement between Justice Thomas and Justice Gorsuch in *WesternGeco* was not over the original intent of the U.S. Constitution but over the proper construction of the Patent Act. *Id.* Justice Gorsuch agreed with Justice Thomas's general analysis that lost profits claims may not always offend the presumption against extraterritorial application of statutes, but Justice Gorsuch disagreed with Justice Thomas's analysis in the context of the Patent Act. *Id.* at 2143.

³³⁸ *Oil States*, 138 S. Ct. at 1376–79.

³³⁹ *Id.* at 1377.

³⁴⁰ *Id.* at 1378. Perhaps we are just beginning to see the varieties of originalism on the Roberts Court. Editorial Board, *The Court's Unpolitical Conservatives*, WALL ST. J. (Jun. 17, 2019, 7:23 PM), <https://www.wsj.com/articles/the-courts-unpolitical-conservatives-11560813838> [<https://perma.cc/F2E6-53A8>] ("Two rulings [*Gamble v. U.S.* and *Virginia Uranium v. Warren*] show the varieties of originalist legal interpretation."). And perhaps we are also just beginning to see the varieties of textualism. Editorial Board, *The Supreme Court's Textualism Test*, WALL ST. J., (Nov. 21, 2019, 7:21 PM), <https://www.wsj.com/articles/the-supreme-courts-textualism-test-11574382080> [<https://perma.cc/4EH9-9MW8>] (discussing *Bostock v. Clayton County*).

cited the Supreme Court's *J.E.M. Ag Supply v. Pioneer Hi-Bred International* case for support.³⁴¹ However, Justice Thomas noted that in *J.E.M.* Congress had recognized and endorsed the Patent Office's position in subsequent legislation, something that had not happened in the *Myriad* case.³⁴²

C. Preference for Flexible Tests and Frameworks

Justice Thomas's opinions in patent cases show a preference for flexible facts and circumstances tests as opposed to bright lines or default rules. Justice Thomas suggested in *eBay* that this flexible approach works best when addressing the complex and ever-evolving nature of the parties and interests in the technology sector.³⁴³ In *eBay*, Justice Thomas criticized the district court for establishing a principle that a nonpracticing entity could never prove the need for an injunction or that a willingness to license patents would categorically rule out injunctive relief.³⁴⁴

Sometimes these tests get articulated as frameworks of analysis. For example, Justice Thomas's opinion in *Alice* sets out a framework for analyzing whether an abstract idea has been transformed into something patentable.³⁴⁵ Interestingly, although he implies that the framework was lifted directly from the *Mayo* case, Justice Breyer's opinion of the Court in *Mayo* never articulates such a framework.³⁴⁶ Instead, Justice Thomas synthesized Justice Breyer's opinion into a concise two-step analytical framework. As mentioned above, Justice Thomas likely created the framework in response to Justice Steven's criticism in *Bilski* that the Court had provided no meaningful way to assess the patentability of abstract ideas. It appears that Justice Thomas brought the Court together by elevating Justice Breyer's *Mayo* decision to the Court's guiding framework for patent eligibility.

D. Aptitude for Understanding Technology and the Business Context

To author an effective opinion of the Court in a patent case, a Justice should have an aptitude for understanding technology. To be sure, some patents

³⁴¹ *Ass'n for Molecular Pathology v. Myriad Genetics, Inc.*, 569 U.S. 576, 577 (2013); see also *J.E.M. Ag Supply, Inc. v. Pioneer Hi-Bred Int'l, Inc.*, 534 U.S. 124 (2001).

³⁴² *Myriad*, 569 U.S. at 577; *J.E.M. Ag Supply*, 534 U.S. at 127. Justice Thomas also wrote the majority opinion in *J.E.M. Ag Supply*.

³⁴³ *eBay Inc. v. Mercexchange LLC*, 547 U.S. 388, 393–94 (2006).

³⁴⁴ *Id.* at 393.

³⁴⁵ *Alice Corp. v. CLS Bank Int'l*, 573 U.S. 208, 217 (2014); see also *Star Athletica, LLC v. Varsity Brands, Inc.* 137 S. Ct. 1002, 1012 (2017) (summarizing the two-step analysis for determining when a useful article is eligible for copyright protection).

³⁴⁶ See *Mayo Collaborative Servs. v. Prometheus Lab'ys, Inc.* 566 U.S. 66 (2012).

do not cover complicated technology,³⁴⁷ but the patents in *Quanta* and *Myriad* did.³⁴⁸

In *Quanta*, Justice Thomas needed to understand computer systems, including the functions of and relationship between chipsets, microprocessors, buses, cache memory, random access memory, and peripheral devices. In particular, he needed to understand the computer system inventions described in LGE's three patents in suit and why they were useful inventions. One of the LGE patents solved an issue that arises when data is stored in both cache and random access memory; another patent related to the coordination of requests to read from and write to random access memory; and another patent addressed the problem of managing data traffic on a computer bus connecting two computer components so that no one device monopolizes the bus.³⁴⁹

Not only did Justice Thomas need a general understanding of computer systems, but the specific legal issue in the *Quanta* case also challenged him to understand the technology deeply because the test for whether a component can exhaust a patent comes down to whether the component *embodies* the patented invention. In other words, does the component contain the essence of the patented invention? In answering "yes" to that question, Justice Thomas had to appreciate the many aspects of computing that occur in microprocessors and chipsets and, at the same time, the distinct lack of novelty involved with simply assembling a computer system by combining microprocessors and chipsets with standard components.³⁵⁰

Moreover, Justice Thomas needed to understand the eyeglass lens technology from the *Univis* case because that case was the controlling precedent in *Quanta*.³⁵¹ In particular, he had to differentiate between the inventive and non-inventive parts of the lens production process to ascertain when the essence of the patents in suit were embodied in the lenses. To better understand the lens technology, Justice Thomas performed a detailed analysis of the patents in suit in *Univis*.³⁵² Analogizing this process to the facts in *Quanta* became complicated because in *Univis*, the defendant removed something from the component, and in *Quanta*, the defendant added something to the component.

Understanding technological innovation (computer systems and eyeglass lenses), however, was not sufficient to decide the *Quanta* case. The *Quanta* case also required Justice Thomas to understand the sophisticated business ar-

³⁴⁷ *E.g.*, *Return Mail, Inc. v. U.S. Postal Serv.*, 139 S. Ct. 1853, 1856 (2019) (business method patent for processing undeliverable mail); *Aronson v. Quick Point Pencil Co.*, 440 U.S. 257, 259 (1979) (key holder).

³⁴⁸ *Sandoz Inc. v. Amgen Inc.*, 137 S. Ct. 1664 (2017), is another good example of Justice Thomas dealing with complex technology (filgrastim) in the context of biosimilars.

³⁴⁹ *Quanta Comput., Inc. v. LG Elecs., Inc.*, 553 U.S. 617, 621–23 (2008).

³⁵⁰ Some people call firms like *Quanta* the "screwdriver guys" because these firm do little more than screw things together rather than do anything particularly inventive.

³⁵¹ *Quanta*, 553 U.S. at 631.

³⁵² *Id.* at 632–33 (citing *United States v. Univis Lens Co.*, 316 U.S. 241, 250–51 (1942)).

rangements that technology companies use to bring their products to market.³⁵³ These business arrangements are just as important in the information economy as the development of technology.³⁵⁴ In the early days of the computer business, firms such as IBM would create every component of a computer system and sell the system directly to customers. Today, the computer business is more complicated. Some firms still create and sell complete computer systems, but more often, firms such as Intel focus on creating certain components, and others, such as Quanta, focus on assembling components to build systems. It often takes a variety of firms to create computer systems and distribute them to the marketplace through a variety of channels.

LGE and Intel put together a license agreement structure that they believed would allow them to maximize product distribution, given the diverse array of partners that would be involved in creating and bringing computer systems to market. The complexity of these license agreements created challenges, especially about how the license grants would flow downstream. Even with sophisticated lawyers drafting them, ultimately these license agreements did not operate as LGE intended. For example, the boilerplate language in the LGE-Intel patent cross license providing that it would not alter normal patent exhaustion hurt LGE's patent exhaustion argument.³⁵⁵ Also, deciding not to draft Intel's sale of Intel products for combination with non-Intel products as a license condition rather than a contractual covenant hurt LGE's patent exhaustion argument.³⁵⁶

When the Federal Circuit looked at the license agreements, it said "good enough," but with a more exacting eye, Justice Thomas concluded "*not* good enough." Justice Thomas required clear and persuasive proof that the historical practice of patent exhaustion had been altered by a well-drafted, binding contract.³⁵⁷ In doing so, he provided important guidance for lawyers drafting patent license agreements.

The *Myriad* case, like the *Quanta* case, highlights Justice Thomas's aptitude for understanding complex technology and applying that understanding to the legal principles at work in the case. *Myriad* required an understanding of genetics and the application of genetics to diagnostic medicine. Justice Thomas seemed to revel in the details of the applicable science, to such a degree that

³⁵³ *Helsinn Healthcare S.A. v. Teva Pharms., Inc.*, 139 S. Ct. 628 (2019), provides another good illustration of Justice Thomas's engagement with technology-related business models.

³⁵⁴ See generally GOMULKIEWICZ ET AL., *supra* note 165. For example, it will be just as important to figure out how to manufacture and distribute a vaccine for COVID-19 as it will be to develop the vaccine.

³⁵⁵ *Quanta*, 553 U.S. at 636.

³⁵⁶ See generally Robert W. Gomulkiewicz, *Conditions and Covenants in License Contracts: Tales from a Test of the Artistic License*, 17 TEX. INTEL. PROP. L.J. 335 (2009).

³⁵⁷ In *eBay*, the question was whether the Patent Act had altered historical practice. *eBay Inc. v. MercExchange, LLC*, 547 U.S. 388, 392 (2006). In *Quanta*, the question was whether the contracts had altered the historical practice. *Quanta Comput., Inc. v. LG Elecs., Inc.*, 553 U.S. 617, 624 (2008).

Justice Scalia cheekily refused to concur in the parts of the opinion “going into fine details of molecular biology.”³⁵⁸ Going beyond the science lesson, Justice Thomas analyzed Myriad’s patent claims for a purpose: to see if they described anything inventive or essentially reflected Myriad’s discovery of the BRCA1 and BRCA2 genes. He also distinguished the biological invention from the *Diamond v. Chakrabarty* case from the claimed invention in *Myriad*, showing how the addition of plasmids to a bacterium in *Chakrabarty* created a new composition of matter, while the disaggregated gene sequence created in *Myriad* did not.³⁵⁹

Like *Quanta*, the *Myriad* case highlights Justice Thomas’s appreciation of the importance of the business aspects of technology. He understood that invalidating Myriad’s patents did not mean that Myriad could not profit from its discoveries. For one thing, Myriad’s discovery allowed it to enjoy a first mover advantage in genetic testing for breast and ovarian cancers. For another, invalidating Myriad’s patents merely changed the focus of Myriad’s business from monopolizing testing to providing superior testing products and services. Indeed, Myriad probably benefitted in its marketing from the cachet of its BRCA discoveries. Moreover, to the extent that Myriad invented a patentable method related to, or a patentable application of, its BRCA discoveries, Myriad could monetize those inventions as well as its synthetic cDNA invention.³⁶⁰ These insights undoubtedly led Justice Thomas to surmise that the reward Myriad obtained for its discoveries was sufficient to incentivize Myriad (and others in the gene discovery business) to make further genetic discoveries, even if the magnitude of the reward was less than Myriad desired.

One potentially puzzling aspect of Justice Thomas’s opinion in *Myriad* is his clarification that emphasized that the case involved composition of matter patent claims but not method claims or claims related to the application of the discovery of genetic information.³⁶¹ Is Justice Thomas encouraging the type of cleverness in drafting patent claims that he sought to avoid in *eBay*? I think not. Highlighting this difference relates to business models, not patent drafting. Justice Thomas is suggesting routes to successfully commercialize an invention of this nature and pathways that will not be successful. In other words, Justice Thomas is not encouraging manipulative patent drafting but pointing the way to productive business models.³⁶²

³⁵⁸ *Ass’n for Molecular Pathology v. Myriad Genetics, Inc.*, 569 U.S. 576, 596 (2013) (Scalia, J., concurring in part and concurring in the judgment).

³⁵⁹ *Id.* at 590–91 (majority opinion).

³⁶⁰ *See id.* at 596.

³⁶¹ *See id.* at 595–96.

³⁶² *Cf. Kimble v. Marvel Ent., LLC*, 576 U.S. 446, 453–54 (2015) (discussing, in a majority opinion written by Justice Kagan, approaches to patent licensing that avoid patent misuse).

E. Appreciating the Role of Intellectual Property Law Practice

The *Quanta* opinion teaches that license agreement drafters must carefully architect license conditions, so they flow successfully downstream at every step of the deal flow. However, *Quanta*'s requirement of rigor in license agreement drafting may lead some lawyers to the conclusion that it is a better business decision to permit patent exhaustion than to put into place the array of binding contracts necessary to avoid exhaustion.³⁶³ In either situation, Justice Thomas leaves matters in the hands of skilled intellectual property licensing lawyers and the business judgment of their clients, perhaps reflecting his experience as a corporate counsel.³⁶⁴

In addition to its sensitivity to license agreement drafting practices, the *Quanta* opinion is savvy about patent prosecution practices. In particular, Justice Thomas understood that a clever patent drafter could too easily swap between method and apparatus claims. The legal rule and the policy that it represents, he noted in *Quanta*, should not be so easily manipulated.³⁶⁵ In *Alice*, Justice Thomas renewed his warning that patent law principles should not depend on the patent drafter's art. This arose in the context of assessing Alice Corporation's patent claims for computer systems and a computer-readable medium. He noted that the special computer hardware mentioned in the patent claims was nothing special at all and just amounted to generic computer functions.³⁶⁶

F. Appreciating the Role of Remedies

Justice Thomas's opinion in *eBay* shows a keen awareness of how adjusting remedies is often the best legal tool for right-sizing intellectual property protection.³⁶⁷ Indeed, most scholars focus on the scope and length of protection and underappreciate the role of remedies.³⁶⁸ In contrast, Justice Thomas's ap-

³⁶³ See Gomulkiewicz, *supra* note 112, at 220–37; see also *FTC v. Qualcomm, Inc.* 969 F.3d 974, 994–95 (9th Cir. 2020) (describing sophisticated OEM licensing structure).

³⁶⁴ See generally XUAN-THAO N. NGUYEN ET AL., *INTELLECTUAL PROPERTY, INFORMATION, AND SOFTWARE LICENSING, LAW & PRACTICE* (2d ed. 2018); RAYMOND T. NIMMER & JEFF C. DODD, *MODERN LICENSING LAW* (2017).

³⁶⁵ Intellectual property license drafters can also shape and mold the difference between a contractual covenant and a license condition. See Robert W. Gomulkiewicz, *Enforcement of Open Source Software Licenses: The MDY Trio's Inconvenient Complications*, 14 *YALE J.L. & TECH.* 106, 124–28 (2011); Gomulkiewicz, *supra* note 356, at 342–44.

³⁶⁶ *Alice Corp. v. CLS Bank Int'l*, 573 U.S. 208, 221–24 (2014).

³⁶⁷ *Sandoz Inc. v. Amgen Inc.*, 137 S. Ct. 1664 (2017), is another example of Justice Thomas addressing the significance of remedies (federal and state injunctive relief) in the context of the Biologics Price Competition Act of 2009.

³⁶⁸ But see BJ Ard, *Notice and Remedies in Copyright Licensing*, 80 *MO. L. REV.* 313, 313–80 (2015); Robert W. Gomulkiewicz, *Fostering the Business of Innovation: The Untold Story of Bowers v. Baystate Technologies*, 7 *WASH. J.L. TECH. & ARTS* 445, 447–60 (2012); Orit Fischman Afori, *Flexible Remedies as a Means to Counteract Failures in Copyright*

proach looks at patents end-to-end (from filing to remedies), realizing that adjusting remedies is often the best-fitting restraint on potentially pernicious behavior. In this regard, Justice Thomas's approach has succeeded where proposed legislation and regulation of NPEs has largely failed.

Justice Thomas's opinion in *Quanta* also laid the foundation for the importance of contract remedies in patent licensing cases. Justice Thomas used a footnote in *Quanta* to insert contract law into the equation, although it was not actually in the equation in the *Quanta* case because neither party raised it.³⁶⁹ Building on the discrete footnote in *Quanta*, contract remedies took center stage when the Court returned to patent exhaustion five years later in *Impression Products*.³⁷⁰ On five separate occasions, Chief Justice Roberts's opinion of the Court in *Impression Products* mentions that conditions on end-user purchases are a matter of contractual arrangements and contract remedies.³⁷¹ This focus on right-sizing remedies—contract as opposed to patent law remedies—harkens back to Justice Thomas's approach to adjusting remedies in *eBay*.

V. INCREMENTALISM AS RESPECT FOR SEPARATION OF POWERS

During the Roberts Court era, Justice Thomas has helped shape the Supreme Court's intellectual property law jurisprudence with his incrementalistic approach. His opinions consistently emphasize that the Court is only ruling on the specific facts before it. Justice Thomas's measured approach is well-represented by his statement in *Alice* that “we need not labor to delimit the precise contours of the ‘abstract ideas’ category in this case.”³⁷² However, many scholars and practitioners take issue with this approach.³⁷³ As Robert Merges put it in his critique of *Alice*, “To say we did not get an answer is to miss the depth of the non-answer we did get.”³⁷⁴

Law, 29 CARDOZO ARTS & ENT. L.J. 1, 2–45 (2011); Peter Lee, *The Evolution of Intellectual Property Infrastructure*, 83 WASH. L. REV. 39, 46–121 (2008).

³⁶⁹ *Quanta Comput., Inc. v. LG Elecs., Inc.*, 553 U.S. 617, 637 n.7 (2008). Historically, contracts have always been an important part of the intellectual property protection equation. See Robert W. Gomulkiewicz, *Contracts Mattered as Much as Copyrights*, 66 J. COPYRIGHT SOC'Y USA 441, 442–44 (2019).

³⁷⁰ *Impression Prods., Inc. v. Lexmark Int'l, Inc.*, 137 S. Ct. 1523, 1530–36 (2017).

³⁷¹ *Id.* at 1530–31, 1533, 1535, 1537.

³⁷² *Alice Corp. v. CLS Bank Int'l*, 573 U.S. 208, 221 (2014). Justice Ginsburg was also an incrementalistic who respected the separation of powers. See Ryan Vacca & Ann Bartow, *Ruth Bader Ginsburg's Copyright Jurisprudence*, 22 NEV. L.J. (forthcoming 2022).

³⁷³ See James M. Fischer, *The “Right” to Injunctive Relief for Patent Infringement*, 24 SANTA CLARA COMPUT. & HIGH TECH. L.J. 1, 20 (2007) (arguing that the *eBay* decision is “sufficiently terse, pithy, and fractured” as to “provide . . . support to practically any conclusion one wishes to draw from the decision”); Babak Nouri, *A Realistic Perspective on Post-Alice Software Eligibility*, IPWATCHDOG (Oct. 14, 2018), <https://www.ipwatchdog.com/2018/10/14/realistic-perspective-post-alice-software-patent-eligibility/id=101977/#> [https://perma.cc/G6JN-SQT4] (arguing that the *Alice* decision wreaked havoc).

³⁷⁴ Rob Merges, *Symposium: Go Ask Alice—What Can You Patent After Alice v. CLS Bank?*, SCOTUSBLOG (June 20, 2014, 12:04 PM), <https://www.scotusblog.com/2014/06/>

But judicial restraint is not an abdication of responsibility.³⁷⁵ Courts are simply not well equipped to make broad and thoughtful innovation policy through the case-by-case litigation process.³⁷⁶ By declining to play the role of policy-maker, the Supreme Court lets Congress and the Executive Branch play *their* leading roles in intellectual property policy-making.³⁷⁷ This emphasis on constitutional separation of powers in intellectual property law has been endorsed by both the conservative and liberal wings of the Supreme Court.³⁷⁸ And it may be working.

Post-*Alice*, both the Executive Branch and Congress have begun to focus intently on better defining unpatentable abstract ideas and clarifying when an abstract idea has been transformed into a patentable invention. Recently, Congress held extensive hearings on clarifying patent eligibility³⁷⁹ and the United

symposium-go-ask-alice-what-can-you-patent-after-alice-v-clis-bank [https://perma.cc/23U7-P9YA]; see also Jordanna Goodman, *Case Update: Alice Corp. v. CLS Bank Int'l*, 21 B.U. J. SCI. & TECH. L. 224, 226–30 (2015). But see Perry & Chung, *supra* note 217, at 73 (“What some register as a complaint, others see as a virtue. . . . The *Mayo-Alice* framework . . . constrain[s] eligibility decisions while still allowing for the claim-specific inquiry necessary in this area.”).

³⁷⁵ Justice Thomas describes his approach to decision-making this way: “What is my role in this case—as a judge? . . . In the legislative and executive branches, it’s acceptable . . . to make decisions based on your personal opinions or interests. The role of a judge, by contrast, is to interpret and apply the choices made in those branches, not to make policy choices of his own.” THOMAS, *supra* note 10, at 204.

³⁷⁶ Moreover, litigation does little to reveal information about intellectual property transactions. See Mark A. Lemley et al., *The Patent Enforcement Iceberg*, 97 TEX. L. REV. 801, 801 (2019). See generally GOMULKIEWICZ ET AL., *supra* note 165.

³⁷⁷ According to Justice Thomas,

[W]hether it’s federalism or separation of powers, it’s so important that we realize that our great protection is that everyone stays in their assigned roles. . . .

. . . I have looked my clerks in the eye at the end of the term, and the question is, have we ever, ever stepped beyond, one time, during the term, beyond our assigned roles?

Thomas, *supra* note 21, at 18–19.

³⁷⁸ See, e.g., *Sony Corp. of Am. v. Universal City Studios, Inc.*, 464 U.S. 417, 429 (1984) (majority opinion by Justice Stevens); *Eldred v. Ashcroft*, 537 U.S. 186, 212 (2003) (majority opinion by Justice Ginsburg); *Star Athletica, LLC v. Varsity Brands, Inc.*, 137 S. Ct. 1002, 1034 (2017) (Breyer, J., dissenting).

³⁷⁹ *Hearings to Examine the State of Patent Eligibility in America Before the Subcomm. on Intell. Prop. of the S. Comm. on the Judiciary*, 116th Cong. (2019). Senators Chris Coons (D-Del.) and Thom Tillis (R-N.C.) have led congressional efforts to revise the Patent Act, releasing proposals in April and May 2019. See Press Release, Sens. Tillis and Coons and Reps. Collins, Johnson, and Stivers Release Section 101 Patent Reform Framework (Apr. 17, 2019), https://www.tillis.senate.gov/2019/4/sens-tillis-and-coons-and-reps-collins-johnson-and-stivers-release-section-101-patent-reform-framework [https://perma.cc/X9MR-GMCX]; Press Release, Sens. Tillis and Coons and Reps. Collins, Johnson, and Stivers Release Draft Bill Text to Reform Section 101 of the Patent Act (May 22, 2019), https://www.tillis.senate.gov/2019/5/sens-tillis-and-coons-and-reps-collins-johnson-and-stivers-release-draft-bill-text-to-reform-section-101-of-the-patent-act [https://perma.cc/D5CB-CUVE]; see also Restoring America’s Leadership in Innovation Act, H.R. 6264, 115th Cong. (2018); Deferred Subject Matter Eligibility Response Pilot Program, 87 Fed. Reg. 776 (Jan. 6, 2022) (establishing a pilot program that provides opportunity to evaluate how de-

States Patent Office issued new guidelines for patent examiners.³⁸⁰ And most recently, Congress passed the Trademark Modernization Act of 2020 to restore the presumption of irreparable harm for injunctive relief in trademark cases, adjusting the approach outlined by Justice Thomas in his first significant intellectual property case for the Roberts Court, *eBay v. MercExchange*.³⁸¹ Thus, Justice Thomas's measured approach has jumpstarted conversations that Congress and the Executive Branch needed to have about intellectual property law and its role in innovation policy.³⁸²

CONCLUSION

This Article highlights Justice Thomas's intellectual property law jurisprudence in the Roberts Court era. His role in intellectual property cases has taken on historic importance as the number of his opinions for the Court has surpassed even Justices known for their intellectual property expertise. That role is particularly important given the significance of intellectual property in the modern information economy. If some find Justice Thomas's role as "chief justice" of intellectual property law surprising, then they will find it more surprising that Justice Thomas's opinions are normally unanimous, even in cases that have vexed the lower courts. Justice Thomas's intellectual property law opinions for the Court reflect a deep respect for the constitutional separation of powers, as he invites and sometimes nudges Congress to play the leading role in innovation policy given to it in the U.S. Constitution. That approach may not always be popular with scholars or practicing lawyers, but it represents a strong consensus among Justices, liberal and conservative alike, who want to provide ample breathing space for technological and business model innovation.

ferred applicant responses to subject matter eligibility rejections affect examination efficiency and patent quality).

³⁸⁰ 2019 Revised Patent Subject Matter Eligibility Guidance, 84 Fed. Reg. 50 (Jan. 7, 2019); see Brian Eakin, *Iancu Touts Patent Eligibility Guidance That Just "Works,"* LAW360, (Sept. 26, 2019, 7:12 PM), <https://law360.com/articles/1202980> [<https://perma.cc/F5WU-QTT2>]; TOOLE & PAIROLERO, *supra* note 220, at 5–6 (concluding that the USPTO's revised guidance in January 2019 had "reversed the upward trend in subject matter eligibility rejections" and "decreased uncertainty in patent examination"); Perry & Chung, *supra* note 217, at 73 (arguing that the Federal Circuit has provided patent practitioners with "a wealth of exemplars" in the six years after *Alice*).

³⁸¹ H.R. 6196, 116th Cong. (2020); S. Res. 3449, 116th Cong. (2020) (enacted Dec. 27, 2020, as part of the year-end Consolidated Appropriations Act for 2021). See generally Mark A. Lemley, *Did eBay Irreparably Harm Trademark Law?*, 92 NOTRE DAME L. REV. 1795 (2017).

³⁸² Justice Thomas believes strongly that the Court should not purport to give advice to Congress on how it might act or give the Court's blessing to hypothetical intellectual property legislation. See *Allen v. Cooper*, 140 S. Ct 994, 1008 (2020) (Thomas, J., concurring in part and concurring in the judgment).

APPENDIX

Supreme Court Justice	IP Majority Opinions: Career Total	IP Majority Opinions: Roberts Court Era	IP Majority Opinions: Rehnquist and Burger Court Eras
Thomas	18	14 ¹	4 ²
Ginsburg	11	7 ³	4 ⁴
Stevens	11	2 ⁵	9 ⁶
Breyer	10	8 ⁷	2 ⁸
Scalia	9	2 ⁹	7 ¹⁰
Sotomayor	9	9 ¹¹	N.A.
Kagan	7	7 ¹²	N.A.
Kennedy	7	4 ¹³	3 ¹⁴
Roberts	7	7 ¹⁵	N.A.
O'Connor	6	0 ¹⁶	6 ¹⁷
Alito	5	5 ¹⁸	N.A.
Souter	4	0 ¹⁹	4 ²⁰
Gorsuch	2	2 ²¹	N.A.
Kavanaugh	1	1 ²²	N.A.

1—*J. Helsinn Healthcare SA v. Teva Pharms. USA*, 139 S. Ct. 628 (2019) (patent); *WesternGeco LLC v. Ion Geophysical Corp.*, 138 S. Ct. 2129 (2018) (patent); *Oil States Energy Servs., LLC v. Greene's Energy Grp., LLC*, 138 S. Ct. 1365 (2018) (patent); *Sandoz, Inc. v. Amgen, Inc.*, 137 S. Ct. 1664 (2017) (patent); *TC Heartland LLC v. Kraft Foods Grp. Brands LLC*, 137 S. Ct. 1514 (2017) (patent); *Star Athletica, LLC v. Varsity Brands, Inc.*, 137 S. Ct. 1002 (2017) (copyright); *Alice Corp. v. CLS Bank Int'l*, 573 U.S. 208 (2014) (patent); *Ass'n for Molecular Pathology v. Myriad Genetics, Inc.*, 569 U.S. 576 (2013) (patent); *Kappos v. Hyatt*, 566 U.S. 431 (2012) (patent); *Reed Elsevier, Inc. v. Muchnick*, 559 U.S. 154 (2010) (copyright); *Carlsbad Tech. v. HIF Bio*, 556 U.S. 635 (2009) (patent); *Quanta Comput., Inc. v. LG Elecs., Inc.*, 553 U.S. 617 (2008) (patent); *eBay, Inc. v. MercExchange, LLC*, 547 U.S. 388 (2006) (patent); *Unitherm v. Swift-Eckrich*, 546 U.S. 394 (2006) (patent).

2—*J.E.M. Ag Supply, Inc. v. Pioneer Hi-Bred Int'l, Inc.*, 534 U.S. 124 (2001) (patent); *Feltner v. Columbia Pictures Television, Inc.*, 523 U.S. 340 (1998) (copyright); *Warner-Jenkinson Co. v. Hilton Davis Chem. Co.*, 520 U.S. 17 (1997) (patent); *Pro. Real Estate Invs., Inc. v. Columbia Pictures Indus., Inc.*, 508 U.S. 49 (1993) (copyright and antitrust).

3—*Thryv, Inc. v. Click-to-Call Techs.*, 140 S. Ct. 1367 (2020) (patent); *U.S. Pat. and Trademark Off. v. Booking.com*, 140 S. Ct. 2298 (2020) (trademark); *Fourth Est. Pub. Benefit Corp. v. Wall-Street.com*, 139 S. Ct. 881 (2019) (copyright); *Nautilus, Inc. v. BioSig Instruments, Inc.*, 572 U.S. 898 (2014) (patent); *Petrella v. Metro-Goldwyn-Mayer, Inc.*, 572 U.S. 663 (2014) (copyright); *Golan v. Holder*, 565 U.S. 302 (2012) (copyright); *Microsoft Corp. v. AT&T Corp.*, 550 U.S. 437 (2007) (patent).

4—*Eldred v. Ashcroft*, 537 U.S. 186 (2003) (copyright); *N.Y. Times Co. v. Tasini*, 533 U.S. 483 (2001) (copyright); *Cleveland v. United States*, 531 U.S. 12 (2000) (patent); *Nelson v. Adams USA, Inc.*, 529 U.S. 460 (2000) (patent).

5—*Am. Needle, Inc. v. Nat'l Football League*, 560 U.S. 183 (2010) (trademark); *Ill. Tools Works Inc. v. Indep. Ink, Inc.*, 547 U.S. 28 (2006) (patent).

6—*Moseley v. V. Secret Catalogue, Inc.*, 537 U.S. 418 (2003) (trademark); *Cooper Indus. v. Leatherman Tool Grp.*, 532 U.S. 424 (2001) (trademark); *Pfaff v. Wells Electronics, Inc.*,

525 U.S. 55 (1998) (patent); *Quality King Distribs., Inc. v. L'anza Rsch. Int'l, Inc.*, 523 U.S. 135 (1998) (copyright); *Cardinal Chem. Co. v. Morton Int'l, Inc.*, 508 U.S. 83 (1993) (patent); *Mills Music, Inc. v. Snyder*, 469 U.S. 153 (1985) (copyright); *Sony Corp. of Am. v. Universal City Studios, Inc.*, 464 U.S. 417 (1984) (copyright); *Jefferson Parish Hosp. Dist. No. 2 v. Hyde*, 466 U.S. 2 (1984) (patent licensing antitrust); *Parker v. Flook*, 437 U.S. 584 (1978) (patent).

7—*Google LLC v. Oracle Am., Inc.*, 141 S. Ct. 1183 (2021) (copyright); *Cuozzo Speed Tech v. Lee*, 136 S. Ct. 2131 (2016) (patent); *Teva Pharms. USA v. Sandoz, Inc.*, 135 S. Ct. 45 (2015) (patent); *Am. Broad. Cos. v. Aereo, Inc.*, 573 U.S. 431 (2014) (copyright); *Medtronic, Inc. v. Mirowski Fam. Ventures, LLC*, 571 U.S. 191 (2014) (patent); *Kirtsaeng v. John Wiley & Sons, Inc.*, 568 U.S. 519 (2013) (copyright); *FTC v. Actavis, Inc.*, 570 U.S. 136 (2013) (patent); *Mayo Collaborative Servs. v. Prometheus Lab'ys, Inc.*, 566 U.S. 66 (2012) (patent).

8—*Qualitex Co. v. Jacobson Prods. Co.*, 514 U.S. 159 (1995) (trademark); *Dickinson v. Zurko*, 527 U.S. 150 (1999) (patent).

9—*Lexmark Int'l, Inc. v. Static Control Components, Inc.*, 572 U.S. 118 (2014) (trademark); *MedImmune, Inc. v. Genentech, Inc.*, 549 U.S. 118 (2007) (patent).

10—*Merck KGAA v. Integra Lifesciences I*, 545 U.S. 193 (2005) (patent); *Dastar Corp. v. Twentieth Century Fox Film Corp.*, 539 U.S. 23 (2003) (copyright and trademark); *Holmes Grp., Inc. v. Vornado Air Circulation Sys., Inc.*, 535 U.S. 826 (2002) (patent jurisdiction); *Wal-Mart Stores, Inc. v. Samara Bros., Inc.*, 529 U.S. 205 (2000) (trademark); *Coll. Sav. Bank v. Fla. Prepaid Postsecondary Educ. Expense Bd.*, 527 U.S. 666 (1999) (trademark); *Asgrow Seed Co. v. Winterboer*, 513 U.S. 179 (1995).

11—*Lucky Brand Dungarees v. Marcel Fashions Grp.*, 140 S. Ct. 1589 (2020) (trademark); *Peter v. Nantkwest*, 140 S. Ct. 365 (2019) (patent); *Return Mail Inc. v. U.S. Postal Serv.*, 139 S. Ct. 1853 (2019) (patent); *Life Techs. Corp. v. Promega Corp.*, 137 S. Ct. 734 (2017) (patent); *Samsung Electronics Co. v. Apple Inc.*, 137 S. Ct. 429 (2016) (patent); *Hana Fin., Inc. v. Hana Bank*, 135 S. Ct. 907 (2015) (trademark); *Octane Fitness, LLC v. Icon Health & Fitness, Inc.*, 572 U.S. 545 (2014) (patent); *Highmark Inc. v. Allcare Health Mgmt. Sys., Inc.*, 572 U.S. 559 (2014) (patent); *Microsoft Corp v. 141 Ltd. P'ship*, 564 U.S. 91 (2011) (patent). *Octane Fitness* and *Highmark* both address attorneys' fees in relation to the Patent Act. *Highmark* is a very brief opinion simply applying the ruling in *Octane Fitness*. Nevertheless, I counted *Highmark* as a separate opinion.

12—*Minerva Surgical, Inc. v. Hologic, Inc.*, 141 S. Ct. 2298 (2021) (patent); *Allen v. Cooper*, 140 S. Ct. 994 (2020) (copyright); *Mission Prod. Holdings, Inc. v. Tempnology, LLC*, 139 S. Ct. 1652 (2019) (trademark); *Iancu v. Brunetti*, 139 S. Ct. 2294 (2019) (trademark); *Kimble v. Marvel Ent., Inc.*, 576 U.S. 446 (2015) (patent); *Bowman v. Monsanto Co.*, 569 U.S. 278 (2013) (patent); *Caraco Pharm. Lab'ys Ltd. v. Novo Nordisk A/S*, 566 U.S. 399 (2012) (patent).

13—*Commil USA, LLC v. Cisco Sys., Inc.*, 575 U.S. 632 (2015) (patent); *POM Wonderful LLC v. Coca-Cola Co.*, 573 U.S. 102 (2014) (trademark); *Bilski v. Kappos*, 561 U.S. 593 (2010) (patent); *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398 (2007) (patent).

14—*Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 535 U.S. 722 (2002) (patent); *TrafFix Devices, Inc. v. Mktg. Displays, Inc.*, 532 U.S. 23 (2001) (trademark); *K Mart Corp. v. Cartier, Inc.*, 486 U.S. 281 (1988) (trademark).

15—*United States v. Arthrex, Inc.*, 141 S. Ct. 1970 (2021) (patent); *Georgia v. Public.Resource.Org*, 140 S. Ct. 1498 (2020) (copyright); *Impression Prods., Inc. v. Lexmark Int'l, Inc.*, 137 S. Ct. 1523 (2017) (patent); *Halo Electronics v. Pulse Electronics*, 136 S. Ct. 1923 (2016) (patent); *Already LLC v. Nike, Inc.*, 568 U.S. 85 (2013) (trademark); *Gunn v. Minton*, 568 U.S. 251 (2013) (patent); *Bd. of Trs. v. Roche Molecular Sys., Inc.*, 563 U.S. 776 (2011) (patent).

16—Justice O'Connor served for only a few months on the Roberts Court before Justice Alito was sworn in, in January 2006.

17—Feist Publ'ns, Inc. v. Rural Tel. Serv. Co., 499 U.S. 340 (1991) (copyright); Stewart v. Abend, 495 U.S. 207 (1990) (copyright); Bonito Boats, Inc. v. Thunder Craft Boats, Inc., 489 U.S. 141 (1989) (patent); Park'N Fly, Inc. v. Dollar Park and Fly, Inc., 469 U.S. 189 (1985) (trademark); Harper & Row Publishers, Inc. v. Nation Enters., 471 U.S. 539 (1985) (copyright); Inwood Lab'ys, Inc. v. Ives Lab'ys, Inc., 456 U.S. 844 (1982) (patent).

18—Matal v. Tam, 137 S. Ct. 1744 (2017) (trademark); SCA Hygiene Prods. Aktiebolag v. First Quality Baby Prods., LLC, 137 S. Ct. 954 (2017) (patent); B&B Hardware, Inc. v. Hargis Indus., Inc., 135 S. Ct. 1293 (2015) (trademark); Limelight Networks, Inc. v. Akamai Tech., Inc., 134 S. Ct. 2111 (2014) (patent); Global-Tech Appliances, Inc. v. SEB S.A., 563 U.S. 754 (2011) (patent).

19—Justice Souter was replaced in June 2009 by Justice Sotomayor, so he only served briefly on the Roberts Court.

20—Metro-Goldwyn-Mayer Studios v. Grokster, 545 U.S. 913 (2005) (copyright); KP Permanent Make-Up, Inc. v. Lasting Impression I, Inc., 543 U.S. 111 (2004) (trademark); Markman v. Westview Instruments, Inc., 517 U.S. 370 (1996) (patent); Campbell v. Acuff-Rose Music, Inc., 510 U.S. 569 (1994) (copyright).

21—Romag Fasteners v. Fossil, 140 S. Ct. 1492 (2020) (trademark); SAS Inst. Inc. v. Iancu, 138 S. Ct. 1348 (2018) (patent).

22—Rimini Street, Inc. v. Oracle USA Inc., 139 S. Ct. 873 (2019) (copyright).

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