IN THE

Supreme Court of the United States

→ ↔

OIL STATES ENERGY SERVICES, LLC,

Petitioner,

υ.

GREENE'S ENERGY GROUP, LLC,

Respondent.

On Writ of Certiorari to the United States Court of Appeals for the Federal Circuit

BRIEF OF AMICI CURIAE PROFESSORS OF ADMINISTRATIVE LAW, FEDERAL COURTS, AND INTELLECTUAL PROPERTY LAW IN SUPPORT OF RESPONDENT

John M. Golden	Thomas H. Lee <i>Counsel of Record</i> FORDHAM UNIVERSITY SCHOOL OF LAW 150 West 62nd Street New York, New York 10023 212-636-6728 thlee@fordham.edu
October 30, 2017	Counsel for Amici Curiae Professors of Administrative Law, Federal Courts, and Intellectual Property Law

QUESTION PRESENTED

Whether inter partes review—an adversarial process used by the Patent and Trademark Office (PTO) to analyze the validity of existing patents violates the Constitution by extinguishing private property rights through a non-Article III forum without a jury.

TABLE OF CONTENTS

Page

QUESTI	ON PRESENTED	i
TABLE (OF AUTHORITIES	. iv
INTERE	ST OF AMICI CURIAE	1
SUMMA	RY OF ARGUMENT	3
ARGUM	ENT	5
SC TC	N INVENTION PATENT IS A OVEREIGN GRANT OF RIGHTS O EXCLUDE, NOT A COMMON- AW PROPERTY RIGHT	6
IS OF A FF	TER PARTES REVIEW OF AN SUED PATENT FOR NOVELTY & NONOBVIOUSNESS, WITH RIGHT OF APPEAL TO THE EDERAL CIRCUIT, DOES NOT OLATE ARTICLE III	18
A.		
В.	For Purposes of the Public Rights Exception, IPR Compares Favorably to Adjudicatory Regimes Addressed in the Court's Precedents	25

	C. The Results of IPR Are Subject to an Appeal as of Right with Robust Review by an Article III Court
III.	IPR IS A CRITICAL DEVICE IN CONGRESS'S EFFORTS TO OPERATE A PATENT SYSTEM THAT PROCESSES HUNDREDS OF THOUSANDS OF PATENT APPLICATIONS EACH YEAR
IV.	HOLDERS OF PATENTS BASED ON U.S. APPLICATIONS FILED AFTER NOVEMBER 29, 1999, WHEN CONGRESS FIRST AUTHORIZED INTER PARTES REEXAMINATION, SHOULD BE DEEMED TO HAVE CONSENTED TO INTER PARTES REVIEW WITH A RIGHT OF APPEAL ONLY TO THE FEDERAL CIRCUIT
CON	CLUSION

iii

TABLE OF AUTHORITIES

Page(s)

Cases

Ass'n for Molecular Pathology v. Myriad Genetics, Inc., 133 S. Ct. 2107 (2013)
B & B Hardware, Inc. v. Hargis Indus., Inc., 135 S. Ct. 1293 (2015)
Bank Markazi v. Peterson, 136 S. Ct. 1310 (2016)
Bloomer v. McQuewan, 55 U.S. (14 How.) 539 (1852)
Chadha v. Immigration & Naturalization Serv., 634 F.2d 408 (9th Cir. 1980), aff'd, 462 U.S. 919 (1983)
Commil USA, LLC v. Cisco Sys., Inc., 135 S. Ct. 1920 (2015)
Commodity Futures Trading Comm'n v. Schor, 478 U.S. 833 (1986) 5, 26, 27, 36
Cont'l Paper Bag Co. v. E. Paper Bag Co., 210 U.S. 405 (1908)

iv

Crowell v. Benson, 285 U.S. 22 (1932) 19, 26, 28, 29
Dickinson v. Zurko, 527 U.S. 150 (1999)
<i>Evans v. Eaton</i> , 16 U.S. (4 Wheat.) 454 (1818)11
Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., 535 U.S. 722 (2002)
Gayler v. Wilder, 51 U.S. 477 (1850)
Granfinanciera, S.A. v. Nordberg, 492 U.S. 33 (1989)
Grant v. Raymond, 31 U.S. 218 (1832)11
In re Gartside, 203 F.3d 1305 (Fed. Cir. 2000)
In re Hatschek's Patents, [1909] 26 Rep. Pat. Cas. 228 (High Ct. of Justice, Ch. Div.)
<i>In re Honibal's Patent</i> , [1855] 9 Moore 378 (P.C.)
In re Teles AG Informationstechnologien, 747 F.3d 1357 (Fed. Cir. 2014)

v

Kappos v. Hyatt, 132 S. Ct. 1690 (2012)	37
Kimberly-Clark Corp. v. Johnson & Johnson, 745 F.2d 1437 (Fed. Cir. 1984)	. 8
KSR Int'l Co. v. Teleflex Inc., 550 U.S. 398 (2007)	. 8
Lear, Inc. v. Adkins, 395 U.S. 653 (1969)	36
Leo Sheep Co. v. United States, 440 U. S. 668 (1979)	. 7
Marbury v. Madison, 1 Cranch 137 (1803)	29
Markman v. Westview Instruments, Inc., 517 U.S. 370 (1996)	31
Mathews v. Eldridge, 424 U.S. 319 (1976)	31
Microsoft v. i4i Limited Partnership, 131 S. Ct. 2238 (2011)	30
Murray's Lessee v. Hoboken Land & Improvement Co., 59 U.S. (18 How.) 272 (1855)	21

vi

Nautilus, Inc. v.	
Biosig Instruments, Inc.,	
134 S. Ct. 2120 (2014)	
Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.,	01
851 F.3d 1270 (2017)	31
Northern Pipeline Constr. Co. v. Marathon Pipe Line Co., 458 U.S. 50 (1982)	19, 26
Parke-Davis & Co. v. H.K. Mulford Co., 189 F. 95 (S.D.N.Y. 1911), rev'd in part, 196 F. 496 (2d Cir. 1912)	24
Queen v. E. Archipelago Co., [1853] 1 E. & B. 310 (Q.B.)	15
Stern v. Marshall, 564 U.S. 462 (2011) 5, 19,	23, 26
<i>Teva Pharm. USA, Inc. v. Sandoz, Inc.,</i> 135 S. Ct. 831 (2015)	10, 17
<i>Thomas v. Union Carbide Agric. Prods</i> Co., 473 U.S. 568, 586 (1985) <i>p</i>	passim
Wellness Int'l Network, Ltd. v. Sharif, 135 S. Ct. 1932 (2015)	5, 36
Constitutional Provisions	

Fifth Amendment...... 11, 28

vii

U.S. Const. art. I, § 8, cl. 8	7
U.S. Const. art. III, § 1	5
U.S. Const. art. IV, § 3, cl. 2	7

viii

Statutes

5 U.S.C. § 706	29, 30
35 U.S.C. § 141(c)	30, 38
35 U.S.C. § 143	
35 U.S.C. § 151	10
35 U.S.C. § 301	
35 U.S.C. § 301 (1982)	
35 U.S.C. § 302	
35 U.S.C. § 302 (1982)	
35 U.S.C. § 311 2	2, 24, 25
35 U.S.C. § 314(a)	23, 24
35 U.S.C. § 319	23, 30
1787 N.Y. Laws 472–473	13
1798 N.Y. Laws 215–216	13
Act of Apr. 10, 1790, ch. 7, § 1, 1 Stat 109–110	10

Act of July 4, 1836, § 7, 5 Stat. 11910
American Inventors Protection Act of November 29, 1999
Patent Act of 1790 10, 12, 17
Patents Act, 1902, 2 Edw. 80, 81–82, c. 34, § 3 14
Pub. L. No. 96-517, 94 Stat. 3015 (1980)
Rules
Sup. Ct. R. 37.6 1
Treatises, Periodical Materials, and Other
Paul M. Bator, The Constitution as Architecture: Legislative and Administrative Courts Under Article III, 65 Ind. L.J. 233 (1990)
Christopher Beauchamp, Repealing Patents 19–26 (2017), available at http://ssrn.com/abstract=304400311
2 William Blackstone, Commentaries on the Laws of England 346 (1766) (U. Chi. Press, 1979)

ix

Sean Bottomley, The British Patent System During the Industrial Revolution 1700–1852: From Privilege to Property 18 (2014)
Oren Bracha, The Commodification of Patents 1600–1836: How Patents Became Rights and Why We Should Care, 38 Loyola L.A. L. Rev. 177, 205 (2004)
Oren Bracha, Owning Ideas: A History of Anglo-American Intellectual Property, ch. 1, at 110 (2005) (S.J.D. diss., Harv. Univ.), available at https://law.utexas.edu/ faculty/obracha/dissertation/
Oren Bracha, Owning Ideas: The Intellectual Origins of American Intellectual Property, 1790–1909, at 16–18 (2016)6
Bruce W. Bugbee, Genesis of American Patent and Copyright Law (1967) 10, 12
Davis Rich Dewey, Early Financial History of the United States 246 (1903)
P.J. Federico, State Patents, 13 J. Pat. Off. Soc'y 166, 172–173 (1931)

х

John M. Golden, Proliferating Patents and Patent Law's "Cost Disease," 51 Hous. L. Rev. 455 (2013) 32, 33, 34
John M. Golden, Working Without <i>Chevron</i> : The PTO as Prime Mover,
65 Duke L.J. 1657 (2016)
<i>Facias</i> 1700–1883: An Addendum to the Brief for H. Tómas Gómez- Arostegui and Sean Bottomley as
<i>Amici Curiae</i> in Support of Neither Party (Oct. 18, 2017), available at http://ssrn.com/abstract=305498915
P.A. Howell, The Judicial Committee of the Privy Council 1833–1876: Its Origins, Structure and Development
(1979)
E. Wyndham Hulme, Privy Council Law and Practice of Letters Patent for Invention from the Restoration to
1794, 33 L.Q. Rev. 180, 193–194 (1917)
Louis L. Jaffe, Judicial Control of Administrative Action (1965)

xi

Letter from Thomas Jefferson to Isaac McPherson (Aug. 13, 1813), in 6 Thomas Jefferson, The Papers of Thomas Jefferson: Retirement Series 384 (J. Jefferson Looney ed., 2009)22
Christine MacLeod, Inventing the Industrial Revolution: The English Patent System, 1660–1800 (1988) 14, 16
James Madison, Monopolies, Perpetuities, Corporations, Ecclesiastical Endowments, in James Madison, Writings 756, 757 (Jack N. Rakove ed., 1999)
William Martin, The English Patent System 111 (1904)14
Jerry L. Mashaw, Creating the Administrative Constitution: The Lost One Hundred Years of American Administrative Law (2012)
Caleb Nelson, Adjudication in the Political Branches, 107 Colum. L. Rev. 559, 567 (2007)9
James E. Pfander, Jurisdiction- Stripping and the Supreme Court's Power to Supervise Inferior Tribunals, 78 Tex. L. Rev. 1433, 1446 & n.52 (2000)

xii

U.S. Patent & Trademark Office, Data Visualization Center: Patents Dashboard, https://www.uspto.gov/dashboards/ patents/ main.dashxml (last visited Oct. 26, 2017)
U.S. Patent & Trademark Office, Maintenance Fee Statement, available via https://fees.uspto.gov/ MaintenanceFees/fees/ details? applicationNumber=09373418& patentNumber=6179053 (last visited Oct. 26, 2017)
U.S. Patent & Trademark Office, Trial Statistics: IPR, PGR, CBM 5 (Sept. 2017), available at https://www.uspto.gov/ sites/ default/files/documents/Trial_ Stats_2017-09-30.pdf
U.S. Patent & Trademark Office, U.S. Patent Activity: Calendar Years 1790 to the Present, https://www.uspto.gov/web/offices/ac/ ido/oeip/taf/h_counts.htm (last visited Oct. 24, 2017)
U.S. Patent No. 6,179,053

xiii

xiv

INTEREST OF AMICI CURIAE

Amici curiae are law professors, specializing in administrative law, federal courts, and intellectual property law who have an interest in the efficient operation of the United States' patent system in promoting technological advance in conformity with constitutional and other legal requirements. The views expressed in this brief represent their individual views and are not intended to represent the views of their states of residence or employment, their educational institutions, or any administrative subdivisions thereof.¹ The names of *amici* are listed below, with institutional affiliations provided for purposes of identification.

> Dan L. Burk Chancellor's Professor of Law University of California, Irvine, School of Law

Christopher A. Cotropia Professor of Law University of Richmond School of Law

¹ No "counsel for a party authored th[is] brief in whole or in part," and no such counsel or party "made a monetary contribution intended to fund the preparation or submission of the brief." Sup. Ct. R. 37.6. Funds to support submission of the brief came from Professor Golden's faculty development allowance at the University of Texas at Austin. The parties gave blanket consent to the filing of *amicus curiae* briefs such as this one.

Samuel Estreicher Dwight D. Opperman Professor of Law New York University School of Law

John M. Golden Professor in Law The University of Texas at Austin

Harold J. Krent Dean and Professor of Law Chicago-Kent College of Law

Megan M. La Belle Professor of Law The Catholic University of America Columbus School of Law

Thomas H. Lee Leitner Family Professor Fordham University School of Law

Kali Murray Associate Professor of Law Marquette University Law School

Xuan-Thao Nguyen Gerald L. Bepko Chair in Law Indiana University McKinney School of Law

SUMMARY OF ARGUMENT

A government's grant of an invention patent does not create a core private property right immunized from administrative reexamination for compliance with statutory requirements. In Great Britain and the states of the early Republic, the sovereign retained the right to revoke invention patents. In the early United States, reliance on Article III courts to handle questions of the validity of issued patent rights reflected the general resources and comparative competences of government institutions, not constitutional mandate. Trial courts were better suited to fact-finding and evidence-taking regarding prior art than Congress or Cabinet officers. And like Britain's Privy Council, which exercised its summary revocation power as late as 1779 and retained but did not exercise that power in the nineteenth century, Congress and Cabinet officers had other pressing responsibilities.

Congress enacted inter partes review (IPR) as a mechanism to police patent validity in response to a choking multitude of issued patents (many including claims of dubious validity), an influx of several hundred thousand new patent applications per year, and aggressive practices of patent assertion. IPR is limited to giving the Patent and Trademark Office (PTO) authority to reexamine patentability requirements of novelty and nonobviousness for which the PTO has long been the gatekeeper prior to patent issuance. Questions of patent infringement or remedies for infringement are outside IPR's domain. Further, Congress has provided for a robust right to appeal a final decision in IPR to an Article III court: the U.S. Court of Appeals for the Federal Circuit.

The PTO's inter partes review of issued patents subject to judicial review does not violate Article III. The subject matter considered in IPRwhether specific patent claims satisfy statutory requirements of novelty and nonobviousness concerns the validity of patent rights against the world and thus falls within the so-called "public rights" exception for non-Article III adjudication. Even if the traditional public rights exception does not apply. anv lingering concerns about encroachment on Article III judicial power are answered by the existence of a right to an appeal to the Federal Circuit that is de novo on questions of law and meaningful on questions of fact.

Finally, in 1980, Congress enacted not only requirements for maintenance fees, but also provisions for ex parte reexamination by the PTO of the same validity questions at issue in IPR today. Hence, as of 1980, inventors and their assignees had clear notice that, by applying for a patent, they would be participating voluntarily in a regulatory scheme under which the enforceability and validity of patent rights were subject to the PTO's continuing jurisdiction. Since at least November 29, 1999, such persons had notice that, for patents resulting from applications filed after that date, any challenge to the results of a reexamination, whether ex parte or inter partes, would need to take the exclusive path of an appeal to the Federal Circuit.

In sum, by instituting IPR with a right of appeal to the Federal Circuit, Congress has maintained Article III judicial power while supplying an appropriate administrative response to systemic need.

ARGUMENT

In interpreting the Constitution's vesting of "[t]he judicial Power of the United States" in Article III courts, U.S. Const. art. III, § 1, this Court has recognized that "a matter of 'public right' ... can be decided outside the Judicial Branch." Stern v. Marshall, 564 U.S. 462, 488 (2011). In applying this public rights doctrine, the Court has been attentive to historical understandings and practice. Murray's Lessee v. Hoboken Land & Improvement Co., 59 U.S. (18 How.) 272, 277 (1855). The Court has also emphasized more practical concerns: "the extent to which the 'essential attributes of judicial power' are reserved to Article III courts, and, conversely, the extent to which the non-Article III forum exercises the range of jurisdiction and powers normally vested only in Article III courts, the origins and importance of the right to be adjudicated, and the concerns that drove" resort non-Article to III adjudication. Commodity Futures Trading Comm'n v. Schor, 478 U.S. 833, 851 (1986). Finally, the Court has highlighted the potential relevance of parties' consent to non-Article III adjudication. Wellness Int'l Network, Ltd. v. Sharif, 135 S. Ct. 1932, 1944 (2015). All of these considerations favor a conclusion that IPR does not violate Article III, most particularly as applied to patents resulting from U.S. applications filed after November 29, 1999.

I. AN INVENTION PATENT IS A SOVEREIGN GRANT OF RIGHTS TO EXCLUDE, NOT A COMMON-LAW PROPERTY RIGHT.

In the Anglo-American legal order, a "patent" -more accurately "letters to be made patent"—is a sovereign government's public announcement of a grant of an exclusive right to a private person.² These grants have historically included such diverse objects as government ranks or posts, lands for development and settlement, exclusive licenses for fishing in territorial waters or mining public lands, and exclusive rights in inventions. See James E. Pfander, Jurisdiction-Stripping and the Supreme Court's Power to Supervise Inferior Tribunals, 78 Tex. L. Rev. 1433, 1446 & n.52 (2000). Prior to the founding, invention patents commonly granted rights to make or use an invention as well as to exclude others from such activities. See Oren Bracha, Owning Ideas: The Intellectual Origins of American Intellectual Property, 1790–1909, at 16–18 (2016).

All patents are grants of exclusive right from the government to a person, but not all patents were

 $^{^2}$ "Letters patent" was the English translation of the Latin expression "literae patentes," literally "open letters," meaning a sovereign grant that was publicly proclaimed, by contrast to secret "literae clausae" or "closed letters." See 2 William Blackstone, Commentaries on the Laws of England 346 (1766) (U. Chi. Press, 1979).

created equal as to the grantee's rights. On one end was the land patent, which typically gave the grantee a permanent exclusive right to specified land. See, e.g., Leo Sheep Co. v. United States, 440 U. S. 668 (1979) (detailing history of Congress's "checkerboard" land grants to build a transcontinental railroad). Letters patent conveying land were thus essentially title transfers creating a traditional private property right. Congress's power to confer land patents has neither a purpose nor a duration limitation. Instead, the Constitution simply states, "The Congress shall have Power to dispose of and make all needful Rules and Regulations respecting the Territory or other Property belonging to the United States." U.S. Const. art. IV, § 3, cl. 2.

Congress's power to In contrast, grant invention patents is limited in several respects. The U.S. Constitution provides Congress with power "[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." U.S. Const. art. I, § 8, cl. 8. This language authorizes grants of invention patents only "for limited Times." Further, the grant is to be to an "Inventor[]" and in the service of "promot[ing] the Progress of Science and useful Arts." U.S. Const. art. I, § 8, cl. 8; see also Cont'l Paper Bag Co. v. E. Paper Bag Co., 210 U.S. 405, 423 (1908) ("The patent law is the execution of a policy having its first expression in the Constitution"). And for relevant purposes, the "exclusive Right" is to "Discoveries." U.S. Const. art. I, § 8, cl. 8.

The bases for such limitations on invention patents are not hard to grasp. Human innovation is cumulative: it is the nature of invention to comprehend and improve upon prior inventions and See Ass'n for Molecular Pathology v. knowledge. Myriad Genetics, Inc., 133 S. Ct. 2107, 2116 (2013). Perpetual patents could stifle innovation by leading to ever-increasing accumulations of exclusive rights. Likewise, without requirements of novelty and nonobviousness, patent claims might proliferate to cover matter already invented or slight variations thereto. See KSR Int'l Co. v. Teleflex Inc., 550 U.S. 398, 427 (2007). Lack of a requirement of patent claim definiteness could leave patent rights in an invention with highly uncertain scope. See Nautilus, Inc. v. Biosig Instruments, Inc., 134 S. Ct. 2120, 2129 (2014).

But such requirements are often difficult to implement in practice. Words may fall short in describing new inventions. See Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., 535 U.S. 722. 731 (2002). Assessment of novelty or nonobviousness may require laborious sifting through decades of prior art. See Kimberly-Clark Corp. v. Johnson & Johnson, 745 F.2d 1437, 1452 (Fed. Cir. 1984) (observing that, for purposes of assessing nonobviousness, the Patent Act "requires us to presume full knowledge by the inventor of the prior art in the field of his endeavor" (internal quotation marks and emphasis omitted)). Resulting uncertainty in scope and validity distinguishes patents for inventions from patents for subject matter with more readily determinable metes and bounds, such as parcels of land. Consequently, even before the U.S. patent system approached its modern caseload of hundreds of thousands of patent applications each year, the Anglo-American legal order long recognized a continuing sovereign power to revoke invention patents mistakenly bestowed.

The fact that, around the time of the United States' founding, challenges to patent validity were frequently entertained by English common law courts does not entail the conclusion that invention patents were "core" private property rights in the Lockean sense of "natural rights that individuals would enjoy even in the absence of political society," Caleb Nelson, Adjudication in the Political Branches, 107 Colum. L. Rev. 559, 567 (2007). The Constitution's explicit tying of patents' "exclusive Right[s]" to the public end of "promot[ing] the Progress of Science and useful Arts" suggests the contrary. Core private rights have been contrasted to "'privileges' or 'franchises'" that "were but means to carry out public ends." Id. In the mid-nineteenth century, this Court characterized a patent as granting a "franchise ... consist[ing] altogether in the right to exclude every one from the making, using, or vending the thing patented, without the permission of the patentee." Bloomer v. McQuewan, 55 U.S. (14 How.) 539, 549 (1852).

Indeed, the right to exclude granted by letters patent did "not exist at common law." Gayler v. Wilder, 51 U.S. 477, 494 (1850). As Justice Thomas recently explained:

> Invention patents originated not as private property rights, but as royal

prerogatives. They could be issued and revoked only by the Crown, which sometimes used the patent to delegate governmental power to regulate an industry. Provoked by the Crown's use of these so-called "monopoly patents" to promote private economic interests over innovation and beneficial commerce, Parliament enacted the Statute of Monopolies in 1624. But even under the regime that Parliament put in place, patents remained sovereign grants, issued, enforced, and revoked by the Privy Council. The Framers adopted a similar scheme.

Teva Pharm. USA, Inc. v. Sandoz, Inc., 135 S. Ct. 831, 847 (2015) (Thomas, J., dissenting) (internal citations omitted).

It is unsurprising, then, that before the First Congress enacted the Patent Act of 1790, the established practice in the States was to grant patent rights by special statute. See Bruce W. Bugbee, Genesis of American Patent and Copyright Law 102– 103, 132–136 (1967). Under the 1790 Act and its successors, Congress generally delegated the task of granting patents to the Executive Branch. See, e.g., 35 U.S.C. § 151; Act of July 4, 1836, § 7, 5 Stat. 119; Act of Apr. 10, 1790, ch. 7, § 1, 1 Stat 109–110.

As noted above, the U.S. Constitution vests the Legislative Branch with power to grant a limitedtime "exclusive Right" to a "Discovery." Accordingly, Congress may extend a patent term in the public interest and may also repeal a patent upon

determining that there was in fact no "Discovery."³ Congress has occasionally passed statutes extending the terms of individual patents. See, e.g., Evans v. Eaton, 16 U.S. (4 Wheat.) 454, 506–507 (1818). The courts, however, were historically the forum for repeals of patents for non-compliance with statutory requirements. See Christopher Beauchamp, Repealing Patents 19 - 26(2017),available at http://ssrn.com/abstract=3044003. This was. presumably in part, because grounds for challenging the validity of an issued patent, such as the existence of invalidating prior art or an inadequate patent disclosure, see, e.g., Grant v. Raymond, 31 U.S. 218, 239(1832)—required scrutiny of written specifications and particularized fact-finding, tasks for which courts and juries were relatively well-suited in comparison to Congress. During this period, Congress "seemed to have little hesitation in using courts or judicial personnel as administrators." Jerry L. Mashaw. Creating the Administrative Constitution: The Lost One Hundred Years of American Administrative Law 74 (2012).

It would be anachronistic to infer from the absence of post-issuance review by a patent office and the leading role of courts in early validity challenges that Article III of the Constitution required the courts to play the role they did. It was a state of play keyed not to constitutional command, but rather to the

 $^{^3}$ We express no view on whether and under what circumstances such a repeal would constitute a "taking" requiring just compensation because that Fifth Amendment issue is not before the Court. Cf. *Union Carbide*, 473 U.S. at 585.

practical realities of a relatively bare-bones Executive The "Patent Board" established by the Branch. Patent Act of 1790 consisted of the Secretary of State, the Secretary of War, and the Attorney General, all of whom had other substantial responsibilities. Bruce W. Bugbee, Genesis of American Patent and Copyright Law 149–150 (1967). The influx of new patent applications soon overwhelmed this Board, and the result was congressional enactment in 1793 of a pure registration system for patents that prevailed until 1836. Id. In that year, Congress created a Patent Office with professional examiners to check applications for compliance with statutory requirements such as novelty. See Edward C. Walterscheid, To Promote the Progress of Useful Arts: American Patent Law and Administration, 1798–1836, at 1 (1998).

With respect to repeals, the general American view at the time of the founding was apparently that a legislature had the power to cancel invention patents, just as it had the right to grant them. Oren Bracha, Owning Ideas: A History of Anglo-American Intellectual Property, ch. 1, at 110 (2005) (S.J.D. diss., Harv. Univ.), available at https://law.utexas.edu/faculty/obracha/dissertation/. Multiple patents enacted by early state legislatures provided expressly for their repeal and specified payment to the patentee upon such action. Bugbee, *supra*, at 96–97, 100. In at least one instance, a state patent was repealed even in the absence of such a provision.⁴ P.J. Federico,

⁴ See Oren Bracha, Owning Ideas: A History of Anglo-American Intellectual Property, ch. 1, at 110 (2005) (S.J.D. diss., Harv.

State Patents, 13 J. Pat. Off. Soc'y 166, 172–173 (1931) (discussing repeal in New York and repeal petitions in Pennsylvania). Compare 1798 N.Y. Laws 215–216 (repealing act granting "an exclusive privilege" to make and use a steamboat after concluding that the privilege was "justly forfeited"), with 1787 N.Y. Laws 472–473 (original grant). James Madison supported providing for repeal in advance, explaining:

> In all cases of monopoly, not excepting those specified in favor of authors & inventors, it would be well to reserve to the State, a right to terminate the monopoly by paying a specified and reasonable sum. This would guard against the public discontents resulting from the exorbitant gains of individuals, and from the inconvenient restrictions combined with them. This view of the subject suggested, the clause in the bill relating to J. Rumsey in the Virg[inia] Legislature in the year 178[4] providing that the State might cancel his privilege by paying him ten thousand dollars.

James Madison, Monopolies, Perpetuities, Corporations, Ecclesiastical Endowments, in James Madison, Writings 756, 757 (Jack N. Rakove ed., 1999).

The mother country, with a larger footprint of governance institutions, did have a state mechanism

Univ.), available at https://law.utexas.edu/faculty/obracha/ dissertation/.

for revoking patents improvidently granted. The Crown or at least six members of the Privy Council could revoke issued British patents on grounds that they were contrary to law, generally prejudicial, mistakenly granted to someone other than the inventor, or improperly granted for an invention that lacked novelty. See Christine MacLeod, Inventing the Industrial Revolution: The English Patent System, 1660-1800, at 42 (1988); William Martin, The English Patent System 111 (1904). This power of revocation was memorialized in defeasance clauses in issued British patents from at least the early seventeenth century to 1902. See In re Hatschek's Patents, [1909] 26 Rep. Pat. Cas. 228 (High Ct. of Justice, Ch. Div.) [244-245]; Oren Bracha, The Commodification of Patents 1600-1836: How Patents Became Rights and Why We Should Care, 38 Loyola L.A. L. Rev. 177, 205 (2004). In 1902, Parliament separately granted the Judicial Committee of the Privy Council power to order a compulsory license or to revoke a patent to satisfy "the reasonable requirements of the public." Patents Act, 1902, 2 Edw. 80, 81–82, c. 34, § 3.

Even after relinquishing more general jurisdiction over patent cases, the Privy Council continued "performance of duties imposed by the defeasance clause in Letters Patent." E. Wyndham Hulme, Privy Council Law and Practice of Letters Patent for Invention from the Restoration to 1794, 33 L.Q. Rev. 180, 193–194 (1917). Although the last known instance of the Privy Council revoking a patent occurred in 1779, the Council continued to receive petitions for revocation of English or Scottish patents, apparently until at least 1810. H. Tómas Gómez-Arostegui & Sean Bottomley, Privy Council and *Scire Facias* 1700–1883: An Addendum to the Brief for H. Tómas Gómez-Arostegui and Sean Bottomley as *Amici Curiae* in Support of Neither Party 18 (Oct. 18, 2017), available at http://ssrn.com/abstract=3054989.

Moreover, even after the Privy Council's revocation power became dormant, British jurists continued to recognize the power's existence. In 1853, for instance, the Chief Judge of Queen's Bench, asserted that the Council's "summary power, if exercised, is considered not to be necessary or ancillary to a scire facias" but in addition to it. Queen v. E. Archipelago Co., [1853] 1 E. & B. 310 (Q.B.) [357] (Campbell, C.J.). Likewise, in 1909, Mr. Justice Parker of the High Court of Justice's Chancery Division opined that continued existence of that revocation power "afford[ed] a good reason for the fact that modern legislation [such as the 1902 act's provisions for compulsory licensing or revocation by the Privy Council] has never drawn any distinction between existing Patents and Patents to be granted in the future." Hatschek's Patents, supra, at 245.

Petitioner trumpets the fact that petitions to the Privy Council to revoke English patents in the 1700s were "rare." Brief for Petitioner 25. In facial support of this statement, there were apparently only ten petitions to the Privy Council to revoke English patents during the century of the 1700s, with three of these ending in revocations. Gómez-Arostegui & Bottomley, *supra*, at 8–18. In the abstract, however, such numbers can be misleading. "[B]efore 1760 ... it was very unusual for more than a dozen [English patents] to be awarded in any one year," Sean Bottomley, The British Patent System During the Industrial Revolution 1700–1852: From Privilege to Property 18 (2014). Historical records indicate that only 2,002 English patents were enrolled during the entire eighteenth century, MacLeod, *supra*, at 150 tab.8.2. If one scales up from those 2,002 patents per century to current U.S. patenting rates of about 300,000 utility patents per year, the ten Privy Council petitions of the 1700s correspond to about 1,500 petitions per year today—an annual total remarkably similar to the 1,812 petitions for IPR reported to have been filed in fiscal year 2017.⁵

The lack of known Privy Council revocations after 1779 likely reflects the Council's institutional limitations and the other, weighty duties in its portfolio. The Council heard all appeals from Britain's "overseas dominions." P.A. Howell, The Judicial Committee of the Privy Council 1833–1876: Its Origins, Structure and Development 7 (1979) (noting that, from the 1720s to 1815–1826, overseas appeals rose from an average of nine to forty-three per year). Even as those appeals multiplied, the late eighteenth early nineteenth centuries witnessed and "degeneration" in the Council's judicial competence: "the Master of the Rolls [was] the only judicial figure regularly participating in the Appeals Committee's work." Id. at 8-10. These constraints of volume and

⁵ See U.S. Patent & Trademark Office, Trial Statistics: IPR, PGR, CBM 5 (Sept. 2017), available at https://www.uspto.gov/sites/default/files/documents/Trial_Stats_2017-09-30.pdf.

lack of legal expertise likely plagued the Council's capacity to police patents too. Even after Parliament beefed up the Council's adjudicatory capacity by creating the Judicial Committee in 1833, *id.* at 33–37, the Council hesitated to exercise its statutory power to resuscitate patent rights struck down by a court of law. See In re Honibal's Patent, [1855] 9 Moore 378 (P.C.) [392] ("[T]he jurisdiction is one which is to be most cautiously and sparingly exercised.").

To summarize, an invention patent was the sovereign's grant of a limited-term right to exclude others from the inventor's "Discover[y]." The historical practices of the British Privy Council and early state legislatures support the notion that a legislature may revoke a patent itself and may delegate such authority to an expert agency. Since the Patent Act of 1790, the Executive Branch has bestowed letters patent for inventions as prescribed by statute. Invention patents, unlike land patents, did not vest a permanent private property right in the grantee; routinely had their validity questioned in collateral attacks in Article III courts;⁶ and were commonly characterized as "franchises," Bloomer, 55 U.S. at 549; see also Teva, 135 S. Ct. at 848 n.2 ("Notwithstanding dissenting) (Thomas, J., movement to recognize a 'core' property right in inventions, the English common law placed patents squarely in the ... category [of] franchises that

⁶ Cf. Mashaw, *supra*, at 137 ("[T]he courts treated the patent decisions of the land office as the decisions of a coordinate tribunal that could be attacked only for jurisdictional error.")

'depend upon express legislation'"). Overburdened and understaffed, the Executive Branch of the early Republic was ill-equipped to scrutinize applications effectively and the result was resort to a registration system. The consequent centrality of the federal courts in enforcing requirements for patent validity reflected a practical accommodation, not constitutional fiat.

II. INTER PARTES REVIEW OF AN ISSUED PATENT FOR NOVELTY OR NON-OBVIOUSNESS, WITH A RIGHT OF APPEAL TO THE FEDERAL CIRCUIT, DOES NOT VIOLATE ARTICLE III.

Part Ι has explained how historical understandings and practice support, and do not contradict, a conclusion that Congress properly granted the PTO authority to cancel patent claims in Even aside from this history, this Court's IPR. precedents and the principles enunciated therein indicate that IPR presents a substantially stronger case for validity under Article III than other administrative adjudication involving "'seemingly right[s]'" that this private Court has held constitutional, Union Carbide, 473 U.S. at 593.

A. IPRs Address Matters of Public Right.

"[T]here are matters, involving public rights, which may be presented in such form that the judicial power is capable of acting on them, and which are susceptible of judicial determination, but which Congress may or may not bring within the cognizance of the courts of the United States, as it may deem proper." Murray's Lessee v. Hoboken Land & Improvement Co., 59 U.S. (18 How.) 272, 284 (1855); see also Crowell v. Benson, 285 U.S. 22, 50–51 (1932); Northern Pipeline Constr. Co. v. Marathon Pipe Line Co., 458 U.S. 50, 69–71 (1982) (plurality). Such matters involving public rights may be assigned to Article III courts, but they may also be assigned to non-Article III decision-makers.

In Stern v. Marshall, 564 U.S. 462, 489–490 (2011), this Court characterized this doctrine as the "public rights exception" to a general requirement of adjudication in Article III courts. The doctrine's long persistence has enabled our constitutional order to accommodate "insisten[t] ... demand that we create special and/or temporary and/or specialized tribunals for the performance of distinctive tasks for which the use of permanent courts manned by life-tenured judges performing an exclusively judicial task through the apparatus of conventional adjudication seemed awkward and ill-adapted," Paul M. Bator, The Constitution as Architecture: Legislative and Administrative Courts Under Article III, 65 Ind. L.J. 233, 236 (1990).

Delineation of what cases fall within the public rights exception has defied easy description. Crowell v. Benson, 285 U.S. 22 (1932), is the modern starting point. Writing for the majority, Chief Justice Hughes explained that public rights cases were "those which arise between the government and persons subject to its authority in connection with the performance of the constitutional functions of the executive or legislative departments." Id. at 50. Despite this statement in Crowell, the Court has not limited the category of public rights cases to those in which the government is a party. See Thomas v. Union Carbide Agric. Prods. Co., 473 U.S. 568, 586 (1985). The 1855 decision in *Murray's Lessee*, the Court's foundational decision on the public rights exception, illustrates how critical public interests have been adjudicated without resort to Article III courts.

Murray's Lessee involved a challenge to the power of Treasury Department officials to audit the property of Samuel Swartwout, former U.S. Customs Collector for the Port of New York from 1830 to 1838. 59 U.S. at 275. As a result of a \$1.37 million shortage disclosed by the audit, the Department ordered the distress sale of land belonging to Swartwout. Id. at 274–275. All of the proceedings, including the forced sale of the land, were conducted without resort to the Article III courts. See *id*. Justice Curtis, in his opinion for the unanimous Court, conceded "that, in England, all these proceedings were had in what is denominated the court of exchequer," which effectively acted in part as a "judicial court[]." Id. at 282. Nonetheless, the Court held that "extra-judicial redress" did not offend the U.S. Constitution: "the recovery of public dues by a summary process of distress, issued by some public officer authorized by law, is an instance of redress of a particular kind of public wrong, by the act of the public through its authorized agents." Id. at 283. Nor could the claimant recover against the officer or the government without its consent because of sovereign immunity: "[A] public agent ... cannot be made responsible in a judicial tribunal for obeying the lawful command of the government; and the government itself, which gave the command, cannot be sued without its own consent." *Id*.

The facts of *Murray's Lessee* suggest a public rights doctrine of remarkable robustness for non-Article III action to secure key government interests. The Court ratified the seizure and forced sale of land in private possession without any Article III court involvement. From a practical standpoint, the outcome is understandable because customs duties generated the predominant portion of federal government revenue in the juvenile Republic. See Davis Rich Dewey, Early Financial History of the United States 246 (1903) (reporting that customs duties accounted for over 60% of total federal receipts in 1838). Similarly, Congress could have originally vested inquiries into the validity of issued patent claims, as well as the patentability of claims in a patent application, in an "extra-judicial" process. As noted above. Congress's decision to rely on the courts comported with the conventional approach to administration in a time of scarce government resources. The prominence of the Article III courts in patent validity proceedings was a marriage of convenience, not a constitutional shotgun wedding.

As Thomas Jefferson observed in reflecting on experience with the 1790 and 1793 Acts, the accommodation was less than ideal:

> these [patentability] investigations occupying more time of the members of the board [under the 1790 Act] than they could spare from higher duties, the whole was turned over to the judiciary [I]nstead of refusing a patent in

the first instance, as the board was authorised to do, the patent now issues of course, subject to be declared void on such principles as should be established by the courts of law. [T]his business, however, is but little analogous to their course of reading, since we might in vain turn over all the lubberly volumes of the law to find a single ray which would lighten the path of the Mechanic or the Mathematician. IIIt is more within the information of a board of Academical professors, and a previous refusal of patent would better guard our citizens against harassment by lawsuits. But England had given it to her judges, and the usual predominancy of her examples carried it to ours.

Letter from Thomas Jefferson to Isaac McPherson (Aug. 13, 1813), in 6 Thomas Jefferson, The Papers of Thomas Jefferson: Retirement Series 384 (J. Jefferson Looney ed., 2009).

IPR seeks to improve on such reliance on the courts by enabling the PTO to better harness private initiative and information in policing statutory requirements of patentability. At various stages, resulting agency proceedings and any associated judicial review involve, in practical terms, a dispute between government and private parties over the PTO's enforcement of these statutory requirements. IPR starts with a third party's challenge to the Patent and Trademark Office's initial decision to grant a patent. 35 U.S.C. § 311(a). The PTO may only institute IPR after the filings before it establish "a reasonable likelihood that [the petitioner] w[ill] prevail" in showing reversible error in the PTO's initial decision. *Id.* § 314(a). If the petitioner wins final judgment in its favor, the PTO's new decision becomes subject to challenge in an appeal by the patent owner. *See id.* § 319. In such an appeal, the PTO has a general statutory "right to intervene" to defend its decision, *id.* § 143, thereby making itself formally a party to the appeal and any subsequent proceedings in this Court—as has occurred in this case.

In analogous circumstances involving agency adjudication, this Court has applied the public rights exception to justify Congress's use of administrative agencies to enforce a regulatory scheme. The Court has done so when "the claim at issue derives from a federal regulatory scheme, or ... resolution of the claim by an expert government agency is deemed essential to a limited regulatory objective within the agency's authority." Stern, 564 U.S. at 490-491. For example, the Court upheld a scheme for binding, inter partes arbitration to decide compensation claims for follow-on use of proprietary data that a private party had filed with the Environmental Protection Agency in support of the registration of a pesticide. See Union Carbide, 473 U.S. at 568-569 ("Congress ... may create a seemingly 'private' right that is so closely integrated into a public regulatory scheme as to be a matter appropriate for agency resolution with limited involvement by the Article III judiciary.").

IPRs are narrowly focused on statutorily prescribed questions of patentability that are at the heart of the PTO's areas of expertise and responsibility. IPRs are limited to a subset of a subset of patentability questions: challenges to the novelty or nonobviousness of a patent claim for which a reasonable likelihood of success is established based on "prior art consisting of patents and printed publications," 35 U.S.C. §§ 311(b), 314(a). That is the entire scope of congressionally provided bases for IPR. Reviewing prior "patents and printed publications" such as peer-reviewed scientific articles to see if versions of the claimed invention of a challenged patent are new and nonobvious is a narrow and specialized task well-suited to an expert administrative tribunal. Further, questions of patent validity axiomatically derive from Congress's Article I power and the Patent Act, without which U.S. invention patents issued by the PTO would not exist. And as Part III shows, IPRs are critical to the "limited regulatory objective" of policing statutory requirements of patentability.

Indeed, in a case implicating the patentability of purified forms of adrenaline, Judge Learned Hand lamented "the extraordinary condition of the law which makes it possible for a man without any knowledge of even the rudiments of chemistry to pass upon such questions as these." Parke-Davis & Co. v. H.K. Mulford Co., 189 F. 95, 115 (S.D.N.Y. 1911), rev'd in part, 196 F. 496 (2d Cir. 1912). Hand wondered "[h]ow long we shall continue to blunder along without the aid of unpartisan and authoritative scientific assistance in the administration of justice." *Id.* This Court should not make Article III a barrier to Congress's sensible and narrowly-tailored-albeit century-delayed—response to Hand's plea. Cf. Chadha v. Immigration & Naturalization Serv., 634 F.2d 408, 425 (9th Cir. 1980) (Kennedy, J.) (observing that separation of powers serves a purpose of "facilitat[ing] administration" by promoting assignment of tasks to apt government actors), aff'd, 462 U.S. 919 (1983).

B. For Purposes of the Public Rights Exception, IPR Compares Favorably to Adjudicatory Regimes Addressed in the Court's Precedents.

As indicated in Section II.A, the tight linkage between IPR and the PTO's fundamental administrative mission makes a strong case for application of the public rights exception. But there is another way to appreciate IPR's public-rights This is to recognize that the PTO's character. cancellation of a claim that it should not have initially issued facially vindicates the public rights of people at large to enjoy their own property and liberty without the encumbrance of invalidly issued patent rights. Cf. B & B Hardware, Inc. v. Hargis Indus., Inc., 135 S. Ct. 1293, 1316 (2015) (Thomas, J., dissenting) ("Public rights are those belonging to the public as a whole.").

The successful third-party challenger in IPR is a member of the public who brings an error to the agency's attention. Any "person who is not the owner of a patent may file with the Office a petition to institute an inter partes review of the patent." 35 U.S.C. § 311. Although those who have been sued for patent infringement or who anticipate an infringement suit undoubtedly have special reason to consider petitioning for IPR, a petitioner who initiates an IPR need not be facing the possibility of infringement liability.

Consequently, inter partes review of patent claims by the Patent and Trademark Office contrasts dramatically with bankruptcy courts' adjudication of tort and contract claims that this Court held unconstitutional in Stern, 564 U.S. at 503, and Northern Pipeline, 458 U.S. at 87 (plurality); cf. Granfinanciera, S.A. v. Nordberg, 492 U.S. 33, 55–56 (1989) (holding that jury trial right applied to claim of fraudulent conveyance brought in bankruptcy). IPRs do not "involv[e] the most prototypical exercise of judicial power: the entry of a final, binding judgment by a court with broad substantive jurisdiction, on a common law cause of action, when the action neither derives from nor depends upon any agency regulatory regime." Stern, 564 U.S. at 494 (emphasis in original).

Moreover, IPR compares favorably to adjudicatory regimes that this Court has upheld against Article III challenges. IPR is not a "case]] of private right" as defined in *Crowell v. Benson*: it is not a proceeding for determining "the liability of one individual to another under the law as defined." 285 U.S. at 50–51. In contrast, *Crowell* involved such a claim: a claim by a ship rigger for workers' compensation as against an alleged employer on navigable waters that was a classic employeremployee disability case of the sort that, aside from the happenstance of being brought by a ship rigger. might have been brought in state court. Id. at 36–37. Likewise, *Schor* involved a dispute between a broker and his customer about "a debit balance," 478 U.S. at 837, 853—again, the sort of suit a state court might generally be expected to entertain. Finally, *Union Carbide* involved a claim for compensation by one private party as against another, albeit a claim for compensation that was the creature of a federal statutory regime, rather than a claim "depend[ing] on or replac[ing] a right to such compensation under state law." 473 U.S. at 584; cf. *id.* at 588–589 ("The Court has treated as a matter of 'public right' an essentially adversary proceeding to invoke tariff protections against a competitor, as well as an administrative proceeding to determine the rights of landlords and tenants.").

In contrast, because IPRs are statutorily restricted to questions of patent validity, they do not involve a claim of private liability. True, if one or more patent claims are canceled through an IPR, the result may absolve the third-party challenger of potential infringement of the patent. But that consequence of the cancellation of claims applies for the public in general. The PTO has not made a determination of non-liability specific to the thirdparty challenger, cf. Commil USA, LLC v. Cisco Sys., Inc., 135 S. Ct. 1920, 1928 (2015) ("[I]nfringement and validity are separate issues under the Act."), and the PTO's decision, by merely releasing the public from previously apparent obligations, does not involve or demand what Union Carbide indicates would be particularly suspect: "use of judicial process to enforce an obligation upon an unwilling defendant," Union Carbide, 473 U.S. at 591. In comparison with forms of agency adjudication that have withstood Article III challenge, IPR seems an a fortiori case for application of the public rights exception.

> C. The Results of IPR Are Subject to an Appeal as of Right with Robust Review by an Article III Court.

The status of patent invalidity questions as matters of public right does not mean that there are no constitutional limits to Congress's power to provide for the cancellation of issued patent claims outside the courts. For example, the Fifth Amendment Due Process Clause imposes constraints. See, e.g., John M. Golden, Working Without Chevron: The PTO as Prime Mover, 65 Duke L.J. 1657, 1663-64 & nn.33-36 (2016) [hereinafter Golden, Prime *Mover*] (questioning whether PTO rehearing practices satisfy requirements of due process). Further, even for matters of public right, Article III may impose limits on Congress's ability to constrain judicial review of agency adjudication, Union Carbide, 473 U.S. at 599–601 (Brennan, J., concurring). In relation to such posited limits, robust appellate review for the results of IPR supports a conclusion that the IPR regime is well within constitutional limits.

In the wake of *Crowell*, both this Court's precedents and sound reasoning have supported a view that, generally speaking under federal law, "even a suit involving 'private right,' that is 'the liability of one individual to another,' may also be adjudicated by an agency provided that a court is empowered on appeal to determine the law[, a

determination here understood to encompass substantial-evidence review of fact-finding], and provided that the matter is not one at 'common law' entitling the parties to a jury trial." Louis L. Jaffe, Judicial Control of Administrative Action 91, 595–596 (1965); see also *id.* at 89 ("[T]he analogy of the jury does at least support the thesis that fact finding by a judge is not a basic premise of our system of justice."); cf. 5 U.S.C. § 706 (setting forth "substantial evidence" standard for "case ... reviewed on the record of an agency hearing").

As Paul Bator observed, "[t]he important—and triumphantly viable—aspect of *Crowell* is the point as to which [Chief Justice] Hughes and [dissenting Justice] Brandeis agreed: the Constitution gives Congress wide discretion to assign the task of making the initial decision in a case arising under federal law to administrative agencies, but requires judicial review to assure the supremacy of law." Bator, *supra*, at 269. Bator further remarked "that the question whether it is expedient and wise to have a case litigated in an article III federal *trial* court is not a matter of constitutional principle at all." *Id.* at 268– 269 (emphasis in original). But this Court need not go so far to uphold IPR.

Direct appeal as of right to the United States Court of Appeals for the Federal Circuit ensures that, in relation to IPR, Article III courts retain their power "'to say what the law is,'" Bank Markazi v. Peterson, 136 S. Ct. 1310, 1322 (2016) (quoting Marbury v. Madison, 1 Cranch 137, 177 (1803)). Subject only to the constraints of Article III itself, any "party dissatisfied with the [PTO's] final written

decision [in IPR] may appeal the decision" to the Federal Circuit. 35 U.S.C. § 319; see also id. § 141(c). In such an appeal, the Federal Circuit, an Article III court with special expertise in patent law, Dickinson v. Zurko, 527 U.S. 150, 163 (1999), reviews legal questions de novo and generally without Chevron deference on fundamental patentability issues such as the meaning of the Patent Act's requirements of novelty and nonobviousness. See Golden. Prime In accordance with this Mover, supra, at 1569. Court's holding that "§ 706 [of the Administrative Procedure Act] applies when the Federal Circuit reviews [PTO] findings of fact," Zurko, 527 U.S. at 152, the Federal Circuit reviews PTO fact-finding to confirm its support by "substantial evidence." In re-Gartside, 203 F.3d 1305, 1315 (Fed. Cir. 2000).

This deferential review of PTO fact-finding resonates with the presumption of validity accorded issued patents in infringement litigation. In *Microsoft* v. i4i Limited Partnership, 131 S. Ct. 2238 (2011), this Court held that the Patent Act prescribes a presumption of validity for issued patents. This means that a party challenging the validity of an issued patent claim must prove invalidity by clear and convincing evidence. Id. at 2242. This heightened burden applies even when "the evidence before the factfinder [in an Article III proceeding] was not before the PTO during the examination process." Id. at 2249. Regardless of whether one deems substantialevidence review of IPR fact-finding to be somewhat more deferential than demands for clear-andconvincing evidence to invalidate an issued patent claim, the standards are in alignment in the sense that they both impose more than a preponderance-ofthe-evidence burden on the challenger to a PTO decision on patentability. Moreover, the Federal Circuit has proven that substantial-evidence review of IPR fact-finding has teeth. See, e.g., Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co., 851 F.3d 1270, 1275 (2017) (reversing IPR finding of lack of novelty because it was "not supported by substantial evidence").

Nonetheless, it might be asserted that the Article III objection lies not so much with the standard of review, but instead with a challenger's inability to supplement the administrative record with de novo fact finding in an Article III trial. But questions of novelty or nonobviousness based on prior-art patents and printed publications—the sole questions on which the PTO may institute IPRs—are particularly well suited to expert agency adjudication based on a limited, documentary record. Cf. Mathews v. Eldridge, 424 U.S. 319, 344 (1976) (holding due process did not require an evidentiary hearing where disability benefit determinations would "turn, in most cases, upon routine, standard, and unbiased medical reports" (internal quotation marks omitted)); Markman v. Westview Instruments, Inc., 517 U.S. 370, 388–39 (1996) (holding patent claim construction to be an issue for a judge, given that "[t]he construction of written instruments is one of those things that judges often do and are likely to do better than jurors"). In context, judicial review of the results of IPR compares more than favorably to the constrained judicial review of arbitration awards described in Union Carbide. See 473 U.S. at 592–593.

III. IPR IS A CRITICAL DEVICE IN CONGRESS'S EFFORTS TO OPERATE A PATENT SYSTEM THAT PROCESSES HUNDREDS OF THOUSANDS OF PATENT APPLICATIONS EACH YEAR.

The current volume of utility patents granted each year, 298,407 in 2015, is roughly comparable to the total number of patents, 428,450, issued during the 100-year span from 1790 through 1889.⁷ Despite a dramatic increase in the size of the examination corps since 1836, see fig.1, the PTO has strained to keep up with a rising workload, see fig.2 & tab.1; John M. Golden, Proliferating Patents and Patent Law's "Cost Disease," 51 Hous. L. Rev. 455, 480, 487 (2013) [hereinafter Golden, *Proliferating Patents*].

⁷Data is from U.S. Patent & Trademark Office, U.S. Patent Activity: Calendar Years 1790 to the Present, https://www.uspto.gov/web/offices/ac/ido/oeip/taf/h_counts.htm (last visited Oct. 24, 2017). Numbers for design and plant patents as well as design and plant patent applications are not included as only utility patents date back to the Acts of 1790 and 1793.

Fig. 1: Number of U.S. Patent Examiners from 1836 to 2012. From Golden, *Proliferating Patents*, *supra*, at 480 fig.6.

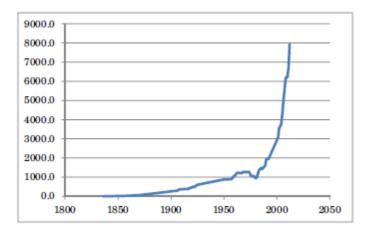
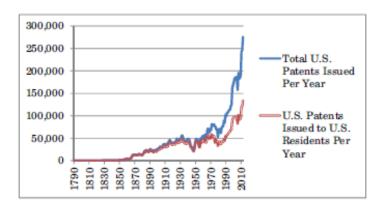


Fig. 2: Number of U.S. Utility Patents Issued Per Year from 1790 to 2012. From Golden, *Proliferating Patents, supra*, at 468 fig.1.



Year	Patents Issued
1790	3
1793	20
1810	223
1830	544
1850	884
1870	12,157
1890	25,308
1910	35,130
1930	45,226
1950	43,039
1970	64,429
1990	90,365
2010	219,614
2015	298,407

Table 1:
Utility Patent Numbers for Select Years ⁸

On average, a modern-day examiner has tended to have no more than a couple dozen hours to review any individual patent application. See Golden, *Proliferating Patents, supra*, at 496. In this time, the examiner must generally read and understand the application's contents, search for and comprehend prior art that might establish lack of novelty or nonobviousness, write up the grounds for any technical objections on matters of form or substantive rejections for lack of patentability, and consider and respond to applicant arguments or amendments. If PTO examiners spent much more time on individual applications, the backlog of

 $^{^{8}}$ See *supra* note 7 on source of the numbers.

"unexamined" applications pending at the PTO currently reported to total over 500,000⁹—and the average time from filing an application to the PTO's first substantive response—currently reported to be over 16 months¹⁰—would presumably grow, eroding the patent system's capacity to provide timely protection for fast-developing technology.

By enabling the PTO to leverage third parties' private information about both the validity of patent claims and the identity of patents worth extended attention, inter partes review plays a crucial role in facilitating the PTO's maintenance of overall patent quality. This Court has long recognized the public interest in harnessing private initiative to check the almost inevitable granting of invalid patent claims. In rejecting a doctrine of estoppel that would have barred a patent licensee from challenging patent validity, the Court remarked that "[a] patent, in the last analysis, simply represents a legal conclusion reached by the Patent Office" and that the Office can be hampered in its decision-making by having operated through "an ex parte proceeding, without the aid of the arguments which could be advanced by parties interested in proving invalidity." Lear, Inc. v. Adkins, 395 U.S. 653, 670 (1969). In this context, the Court found licensee challenges to patent validity likely to be crucial to vindicating "the important

 10 *Id*.

⁹ U.S. Patent & Trademark Office, Data Visualization Center: Patents Dashboard, https://www.uspto.gov/dashboards/patents/ main.dashxml (last visited Oct. 26, 2017).

public interest in permitting full and free competition in the use of ideas which are in reality part of the public domain." *Id.* at 670. "Licensees may often be the only individuals with enough economic incentive to challenge the patentability of an inventor's discovery." *Id.* Consequently, the Court "th[ought] it plain that the technical requirements of contract doctrine must give way before the demands of the public interest in the typical situation involving the negotiation of a license after a patent has issued." *Id.* at 670–671. The Court should similarly find that Article III does not prevent the harnessing of private interest to public purpose through IPR.

IV. HOLDERS OF PATENTS BASED ON U.S. APPLICATIONS FILED AFTER NOVEMBER 29, 1999. WHEN CONGRESS AUTHORIZED INTER FIRST PARTES **REEXAMINATION, SHOULD BE DEEMED** то HAVE CONSENTED TO INTER **REVIEW WITH A** PARTES **RIGHT OF** APPEAL ONLY TO THE **FEDERAL** CIRCUIT.

Parts II and III have explained why inter partes review of patent claims for novelty and nonobviousness with a right of appeal to the Federal Circuit is vital to the operation of the U.S. patent system and comports with Article III. But there is more to say in favor of IPR's constitutionality.

This Court has held that consent may support entrusting adjudication to a non-Article III tribunal. *Wellness*, 135 S. Ct. at 1944; *Schor*, 478 U.S. at 848– 850. In *Union Carbide*, the Court indicated a basis for inferring effective consent even when a patent owner protests against a specific instance of IPR: namely, the patent owner's "voluntary participa[tion] in the program," 473 U.S. at 590, known as the Since the 1980 enactment of patent system. provisions for ex parte reexamination, that system has featured opportunities for the PTO to cancel issued patent claims on the same grounds on which they may be canceled in IPR: lack of novelty or nonobviousness because of "prior art consisting of patents or printed publications." 35 U.S.C. §§ 301 & 302 (1982); see also *id.* §§ 301(a)(1) & 302 (2014). Thus, effective consent to post-issuance PTO review on the same grounds allowed in IPR can be understood to have been given by all the owners of patents resulting from patent applications filed after enactment of the statutory provisions for ex parte reexamination on December 12, 1980. Pub. L. No. 96-517, 94 Stat. 3015 (1980).

Nonetheless, there is an argument for a later date for effective consent. This argument results from the apparent, albeit disputable, fact that, from 1980 to 1999, a patent owner could challenge the result of ex parte reexamination by a civil suit in district court, rather than only by direct appeal to the Federal Circuit. The Patent Act has long accorded a patent applicant the right to such a trial when the PTO denies one or more claims in an initial Kappos v. Hyatt, 132 S. Ct. 1690, examination. 1693–1694 (2012). Further, the Federal Circuit has implicitly held that, from 1980 to 1999, the Patent Act accorded essentially the same opportunity for trial-level challenge when the PTO canceled one or more issued claims in ex parte reexamination. See In re Teles AG Informationstechnologien, 747 F.3d 1357, 1361 (Fed. Cir. 2014).¹¹

But the Federal Circuit has also held that the American Inventors Protection Act of November 29, 1999, eliminated this path of trial-level challenge and left patent owners disappointed by reexamination, whether ex parte or inter partes, with the sole option of appeal to the Federal Circuit. Id. at 1366. In providing for inter partes review, Congress likewise made appeal to the Federal Circuit the sole route to challenge an adverse determination. 35 U.S.C. § 141(c). Consequently, if the Court accepts the Federal Circuit's statutory interpretations and believes, contrary to Part II above, that provision for no more than appellate review of IPR is a potentially critical defect, the Court might understand that, among U.S. patent owners, only the owners of patents that have resulted from U.S. applications filed after November 29, 1999, have effectively consented to IPR subject to only direct appeal.

Interestingly, the patent at issue here, U.S. Patent No. 6,179,053, results from a U.S. application filed on August 12, 1999. Thus, under the analysis indicated above, this patent does not entail effective consent to lack of an Article III trial-level check to a proceeding such as an IPR. But Petitioner appears

¹¹ The Federal Circuit has suggested that this implicit holding might be infirm because, "[o]n its face, even before the 1999 amendments, § 145 only provided for district court actions by patent 'applicants.'" *Teles*, 747 F.3d at 1361.

not to have advanced this point. Thus, Petitioner might be understood to have waived or forfeited argument of lack of effective consent based on its application date. We express no view on whether payment to the PTO of a maintenance fee of \$4,730 on June 26, 2012,¹² should be understood to establish consent to changes to the patent system, including statutory provision for IPRs, that occurred between the Petitioner's application filing date and the date of the maintenance payment.

To repeat, we believe that Parts I through III of this brief provide ample grounds for the Court to hold IPR constitutional under Article III. This Part demonstrates that voluntary participation in the patent system may provide additional reason to reject Petitioner's Article III challenge. Nonetheless, because of complications relating to Petitioner's specific patent, the Court may wish to request supplemental briefing or to dismiss the case as improvidently granted if the Court believes the consent issue to be crucial.

¹² U.S. Patent & Trademark Office, Maintenance Fee Statement, available via https://fees.uspto.gov/MaintenanceFees/fees/ details?applicationNumber=09373418&patentNumber=6179053 (last visited Oct. 26, 2017).

CONCLUSION

For the reasons set forth above, this Court should affirm that the PTO's inter partes review of issued patents for novelty or nonobviousness, subject to a statutorily provided, robust right of appeal to the Federal Circuit, does not violate the vesting of "judicial Power" in Article III courts.

Respectfully submitted,

Thomas H. Lee Counsel of Record Fordham University School of Law 150 West 62nd Street New York, New York 10023 (212) 636-6728