

American University Washington College of Law

Digital Commons @ American University Washington College of Law

Amicus Briefs

Public Discourse

10-2017

Brief of Public Knowledge, the Electronic Frontier Foundation, Engine Advocacy, and the R Street Institute as Amici Curiae in Support of Respondents

Charles Duan

Follow this and additional works at: https://digitalcommons.wcl.american.edu/pub_disc_briefs



Part of the [Intellectual Property Law Commons](#), and the [Science and Technology Law Commons](#)

No. 16-712

IN THE
Supreme Court of the United States

OIL STATES ENERGY SERVICES, LLC,
Petitioner,

v.

GREENE'S ENERGY GROUP, LLC, ET AL.,
Respondents.

ON WRIT OF CERTIORARI
TO THE UNITED STATES COURT OF APPEALS
FOR THE FEDERAL CIRCUIT

**BRIEF OF PUBLIC KNOWLEDGE, THE
ELECTRONIC FRONTIER FOUNDATION, ENGINE
ADVOCACY, AND THE R STREET INSTITUTE AS
AMICI CURIAE IN SUPPORT OF RESPONDENTS**

VERA RANIERI
ELECTRONIC FRONTIER
FOUNDATION
815 Eddy Street
San Francisco, CA 94109
(415) 436-9333
vera@eff.org

CHARLES DUAN
Counsel of Record
PUBLIC KNOWLEDGE
1818 N Street NW, Suite 410
Washington, DC 20036
(202) 861-0020
cduan@publicknowledge.org

Counsel for amici curiae

TABLE OF CONTENTS

TABLE OF AUTHORITIES	ii
INTEREST OF <i>AMICI CURIAE</i>	1
NOTE ON HISTORICAL SOURCES	2
SUMMARY OF ARGUMENT	3
ARGUMENT	6
I. History Confirms Congress’s Authority to Serve the Public Interest by Placing Conditions on the Patent Grant	6
A. In 1789, Patents Were Discretionary, Ad Hoc Privileges Granted to Advance Public Policies	6
B. The Framers Saw Patents as Government Is- sued Monopolies, and Expected the Legislature to Regulate Them	13
C. Early Federal Patent Law Confirms Congress’s Power to Limit the Patent Grant	17
II. <i>Inter Partes</i> Review Is a Classic Type of Adminis- trative Scheme That Congress May Devise Under Article I	19
A. Congress Has a Long History of Statutorily Ad- justing Patent Cancellation Procedures	20
B. Administration of Patent Law Is a Complex Problem, Given Modern Invention Practices	23
C. Like Many Agency Proceedings, Patent Cancel- lation Targets a Generalized Public Harm	25
D. <i>Inter Partes</i> Review Is Integral and Important to the Modern Patent Regulatory Scheme	28
CONCLUSION	33
APPENDIX A: Patents Bill, H.R. 41, February 16, 1790	1a

TABLE OF AUTHORITIES

CASES AND ADMINISTRATIVE DECISION

<i>Aronson v. Quick Point Pencil Co.</i> , 440 U.S. 257 (1979)	26
<i>Atlas Roofing Co. v. Occupational Safety & Health Re- view Commission</i> , 430 U.S. 442 (1977)	25, 30
<i>Boulton v. Bull</i> , 126 Eng. Rep. 651 (C.P. 1795)	15
<i>Butterworth v. United States ex rel. Hoe</i> , 112 U.S. 50 (1884)	32
<i>Edgeberry v. Stephens</i> , 90 Eng. Rep. 1162 (K.B. 1693)	7, 15
<i>Evans v. Jordan</i> , 8 F. Cas. 872 (C.C.D. Va. 1813) (No. 4,564)	17
<i>Federal Trade Commission v. Actavis, Inc.</i> , 133 S. Ct. 2223 (2013)	28
<i>Gibbons v. Ogden</i> , 22 U.S. (9 Wheat.) 1 (1824)	15
<i>Graham v. John Deere Co.</i> , 383 U.S. 1 (1966)	15, 24
<i>Hornblower v. Boulton</i> , 101 Eng. Rep. 1285 (K.B. 1799)	15
<i>Lear, Inc. v. Adkins</i> , 395 U.S. 653 (1969)	26
<i>Loom Co. v. Higgins</i> , 105 U.S. 580 (1882)	20
<i>McCormick Harvesting Machine Co. v. Aultman</i> , 169 U.S. 606 (1898)	21

(iii)

<i>McGaw v. Bryan</i> , 16 F. Cas. 96 (S.D.N.Y. 1821) (No. 8,793)	19
<i>Microsoft Corp. v. i4i Ltd. Partnership</i> , 564 U.S. 91 (2011)	29
<i>MPHJ Technology Investments, LLC, In re</i> , 159 F.T.C. 1004 (Mar. 13, 2015)	27
<i>MPHJ Technology Investments, LLC</i> <i>v. Ricoh Americas Corp.</i> , 847 F.3d 1363 (Fed. Cir. 2017)	28
<i>Murray’s Lessee v. Hoboken Land & Improvement Co.</i> , 59 U.S. (18 How.) 272 (1855)	20, 32
<i>Northern Pipeline Construction Co.</i> <i>v. Marathon Pipe Line Co.</i> , 458 U.S. 50 (1982)	17
<i>Peck v. Collins</i> , 103 U.S. 660 (1880)	21
<i>Pennock v. Dialogue</i> , 27 U.S. (2 Pet.) 1 (1829)	15, 17
<i>Shaw v. Cooper</i> , 32 U.S. (7 Pet.) 292 (1833)	15
<i>Stern v. Marshall</i> , 564 U.S. 462 (2011)	17, 20, 25, 28
<i>Thomas v. Union Carbide Agricultural Products Co.</i> , 473 U.S. 568 (1985)	25, 28
<i>Turner v. Winter</i> , 99 Eng. Rep. 1274 (K.B. 1787)	15
<i>United States v. American Bell Telephone Co.</i> , 128 U.S. 315 (1888)	20

United States v. Duell,
172 U.S. 576 (1899) 32

United States v. Singer Manufacturing Co.,
374 U.S. 174 (1963) 28

Wheaton v. Peters,
33 U.S. (8 Pet.) 591 (1834) 17, 19

Wilson v. Rousseau,
45 U.S. (4 How.) 646 (1846) 15

CONSTITUTIONAL PROVISIONS

U.S. Const. art. I 3, 5, 13, 20–21, 25

U.S. Const. art. I, § 8, cl. 8 4, 15–17

U.S. Const. art. III 3–4, 19–20, 28

STATUTES

35 U.S.C. § 6 30

—— § 102 24

—— §§ 102–103 26, 30

—— § 103 24

—— § 120 24

—— § 122 31

—— § 261 22

—— § 302 22

—— § 303 22

—— § 311 (2011) (repealed 2012) 22

—— § 311 (2016) 22, 31

35 U.S.C. § 314	31
— § 316	31
— § 321	22
Act for the Encouragement of Arts and Sciences, ch. 1221, 4 Stat. S.C. 618 (1784), <i>available at</i> https://hdl.handle.net/2027/hvd.32044010560332 ? urlappend=%3Bseq=628	11
Act for the Encouragement of Mr. George Timmons, ch. 698, 3 Stat. S.C. 599 (1743), <i>available at</i> https://hdl. handle.net/2027/mdp.35112104865698?urlappend=% 3Bseq=629	12
Act of Mar. 19, 1787, ch. 57, 2 N.Y. Laws 472 (Weed Par- sons & Co. 1886), <i>available at</i> https://hdl.handle.net/ 2027/mdp.39015068627952?urlappend=%3Bseq=482	12
Act of Mar. 27, 1798, ch. 55, 4 N.Y. Laws 215 (Weed Par- sons & Co. 1887), <i>available at</i> https://hdl.handle.net/ 2027/mdp.39015068627937?urlappend=%3Bseq=225	12
America Invents Act, Pub. L. No. 112-29, 125 Stat. 284 (2011)	22
Bayh–Dole Act, Pub. L. No. 96-517, 94 Stat. 3015 (1980)	22
<i>The Book of the General Laws for the People Within the Jurisdiction of Connecticut</i> (1673), <i>available at</i> https://hdl.handle.net/2027/chi.26569851	14
<i>The Colonial Laws of Massachusetts</i> (William H. Whit- more ed., Rockwell & Churchill 1890) (1672), <i>avail- able at</i> https://hdl.handle.net/2027/nnc1.0063787636	14
Statute of Monopolies, 1624, 21 Jac. 1, c. 3 (Eng.), <i>avail- able at</i> https://hdl.handle.net/2027/pst.000017915502? urlappend=%3Bseq=464	7–8, 13
Patent Act of 1790 (1790 Act), ch. 7, 1 Stat. 109	18–20, 22

Patent Act of 1793, ch. 11, 1 Stat. 318 20
Patent Act of 1836 (1836 Act), ch. 357, 5 Stat. 117 20–21
Patent Act of 1870, ch. 230, 16 Stat. 198 21
Patent Act of 1952, ch. 950, 66 Stat. 792 21–22

OTHER SOURCES

Tahir Amin & Aaron S. Kesselheim, *Secondary Patenting of Branded Pharmaceuticals*, 31 Health Aff. 2286 (2012) 27

Autobiography of Benjamin Franklin (John Bigelow ed., J.B. Lippincott & Co. 1868), available at <https://hdl.handle.net/2027/nyp.33433082363858> 15

Christopher Beauchamp, *Repealing Patents* (Brooklyn Law Sch. Legal Studies, Res. Paper No. 534, Sept. 2017), <http://ssrn.com/abstract=3044003> 19

Doron S. Ben-Atar, *Trade Secrets: Intellectual Piracy and the Origins of American Industrial Power* (2004) 11

William Blackstone, *Commentaries on the Laws of England* (1765) 6, 32

Oren Bracha, *Owning Ideas: The Intellectual Origins of American Intellectual Property, 1790–1909* (2016) 6–11, 18

———, *The Commodification of Patents 1600–1836*, 38 Loy. L.A. L. Rev. 177 (2004) 8–9

Bruce W. Bugbee, *Genesis of American Patent and Copyright Law* (1967) 6, 8, 10–12, 14

Calendar of Treasury Papers (Joseph Redington ed., London, Longmans etc. 1868–1889), available at <https://hdl.handle.net/2027/umn.31951p002966805> 7

I. Bernard Cohen, *Science and the Founding Fathers* (1995) 7

Edward Coke, *Institutes of the Laws of England* (1628–1644), available at <https://hdl.handle.net/2027/osu.32437121661652> 13, 26

Comm. of the Bd. of Trade, *Working of the Patent Acts*, 1901, Cd. 506 (U.K.), available at <https://hdl.handle.net/2027/mdp.39015033908172?urlappend=%3Bseq=609> 9

Documentary History of the First Federal Congress of the United States of America (Charlene Bangs Bickford & Helen E. Veit eds., 1972–2012) 1a

The Federalist No. 43 (James Madison) 17

P.J. Federico, *State Patents*, 13 J. Pat. Off. Soc’y 166 (1931) 11–12

Fed. Trade Comm’n, *Generic Drug Entry Prior to Patent Expiration* (July 2002) 27

———, *To Promote Innovation* (2003), available at <http://www.ftc.gov/sites/default/files/documents/reports/promote-innovation-proper-balance-competition-and-patent-law-and-policy/innovationrpt.pdf> 24

Thomas G. Fessenden, *An Essay on the Law of Patents for New Inventions* (Boston, D. Mallory & Co. 1810), available at <https://hdl.handle.net/2027/uc1.31822038207890> 15

Richard Godson, *A Practical Treatise on the Law of Patents for Inventions and of Copyright* (London, Joseph Butterworth & Son 1823), <https://hdl.handle.net/2027/uc1.aa0007706781> 8

- Jennifer S. Haas, *Potential Savings from Substituting Generic Drugs for Brand-Name Drugs*, 142 *Annals Internal Med.* 891 (2005) 26
- W.M. Hindmarch, *A Treatise on the Law Relative to Patent Privileges for the Sole Use of Inventions* (London, V. & R. Stevens etc. 1846), available at <https://www.ipmall.info/content/antique-rare-ip-library-e-treatise-reading-room-patent-books> 8–9
- E. Wyndham Hulme, *Privy Council Law and Practice of Letters Patent for Invention from the Restoration to 1794, Part II*, 33 *L.Q. Rev.* 180 (1917) 10
- , *The History of the Patent System Under the Prerogative and at Common Law*, 12 *L.Q. Rev.* 141 (1896), available at <https://hdl.handle.net/2027/hvd.32044061980397?urlappend=%3Bseq=159> 7, 9
- Innovation Act: Hearing Before the H. Comm. on the Judiciary*, 113th Cong. (2013) (Letter of Teresa Stanek Rea) 22
- James I, *Proclamation Against Monopolies and Protections* (May 7, 1603), in 4 John Strype, *Annals of the Church and State* 379 (2d ed., London, Edward Symon 1725–1731), available at <https://hdl.handle.net/2027/nnc1.0036698865?urlappend=%3Bseq=419> 9
- Thomas Jefferson, Letter to Isaac McPherson (Aug. 13, 1813), in 13 *The Writings of Thomas Jefferson* 326 (1907), available at <https://catalog.hathitrust.org/Record/006664301> 16, 18
- , Letter to James Madison (July 31, 1788), in 7 *The Writings of Thomas Jefferson* 93 (1907), available at <https://catalog.hathitrust.org/Record/006664301> 14

Cuthbert William Johnson, *The Life of Sir Edward Coke* (1835), available at <https://hdl.handle.net/2027/mdp.39015074634273> 13

Chris R. Kyle, “*But a New Button to an Old Coat*”: *The Enactment of the Statute of Monopolies*, 19 *J. Legal Hist.* 203 (1998) 9

Megan M. La Belle, *Patent Law as Public Law*, 20 *Geo. Mason L. Rev.* 41 (2012) 26–28

Mark A. Lemley, *Rational Ignorance at the Patent Office*, 95 *Nw. U. L. Rev.* 1495 (2001) 29

Letters and Other Writings of James Madison (1884), available at <https://catalog.hathitrust.org/Record/006785162> 14, 16

Christine MacLeod, *Inventing the Industrial Revolution: The English Patent System, 1660–1800* (1988) 7, 9–10

James Madison, Letter to Thomas Jefferson (Oct. 17, 1788), in 1 *Letters and Other Writings of James Madison* 421 (1884), available at <https://catalog.hathitrust.org/Record/006785162> 14

James Madison, *Vices of the Political System of the United States* (Apr. 1787), in 1 *Letters and Other Writings of James Madison* 320 (1884), available at <https://catalog.hathitrust.org/Record/006785162> 16

George Mason, *Objections to the Proposed Federal Constitution*, 2 *Am. Museum* 534 (1787), available at <https://hdl.handle.net/2027/osu.32435073185456?urlappend=%3Bseq=544> 13

Frank Moore, *American Eloquence* (N.Y., D. Appleton & Co. 1859), available at <https://hdl.handle.net/2027/mdp.39015050669897?urlappend=%3Bseq=392> 16

Beth Simone Noveck, “Peer to Patent”: *Collective Intelligence, Open Review, and Patent Reform*, 20 Harv. J.L. & Tech. 123 (2006) 24

Tyler T. Ochoa & Mark Rose, *The Anti-Monopoly Origins of the Patent and Copyright Clause*, 84 J. Pat. & Trademark Off. Soc’y 909 (2002) 14

Dotan Oliar, *Making Sense of the Intellectual Property Clause: Promotion of Progress as a Limitation on Congress’s Intellectual Property Power*, 94 Geo. L.J. 1771 (2006) 16

Lisa Larrimore Ouellette, *Pierson, Peer Review, and Patent Law*, 69 Vand. L. Rev. 1825 (2016) 31

Patent Pub. Advisory Comm., *Annual Report* (2009) 25

Patents Bill, H.R. 41, First Cong. (Feb. 16, 1790), *reprinted in Appendix A infra* p. 1a 18

Patents in the Knowledge-Based Economy (Wesley M. Cohen & Stephen A. Merrill eds., 2003), *available at* <https://www.nap.edu/catalog/10770/patents-in-the-knowledge-based-economy> 29

William Penn, *The Excellent Privilege of Liberty and Property* (J.B. Lippincott Co. 1897) (1687), *available at* [https://upload.wikimedia.org/wikipedia/commons/2/2b/William_Penn,_The_Excellent_Priviledge_of_Liberty_and_Property_\(1897_reprint\).pdf](https://upload.wikimedia.org/wikipedia/commons/2/2b/William_Penn,_The_Excellent_Priviledge_of_Liberty_and_Property_(1897_reprint).pdf) 14

Charles Pinckney, Address at the Constitutional Convention: Observations on the Federal Constitution (May 1787), *in* 1 Frank Moore, *American Eloquence* 362 (N.Y., D. Appleton & Co. 1859), *available at* <https://hdl.handle.net/2027/mdp.39015050669897?urlappend=%3Bseq=392> 16

Andrew Pollack, *Makers of Humira and Embrel Using Patents to Delay Generic Versions*, N.Y. Times, Jan. 16, 2017, at B1, <https://www.nytimes.com/2016/07/16/business/makers-of-humira-and-enbrel-using-new-drug-patents-to-delay-generic-versions.html> . . . 23

Public Records of the Colony of Connecticut (1850–1890), available at <https://hdl.handle.net/2027/wu.89067359430> 10

Cecil D. Quillen, Jr. & Ogden H. Webster, *Continuing Patent Applications and Performance of the U.S. Patent and Trademark Office*, 11 Fed. Cir. B.J. 1 (2001) 24

Arti K. Rai, *Allocating Power over Fact-Finding in the Patent System*, 19 Berkeley Tech. L.J. 907 (2004) 30

Records of the Governor and Company of the Massachusetts Bay (Nathaniel B. Shurtleff ed., Boston, William White 1853–1854), available at <https://catalog.hathitrust.org/Record/006784513> 10–11

Revision of Title 35, United States Code, H.R. Rep. No. 82-1923 (1952) 22

John Strype, *Annals of the Church and State* (2d ed., London, Edward Symon 1725–1731), available at <https://hdl.handle.net/2027/nnc1.0036698865?urlappend=%3Bseq=419> 9

Stuart J.H. Graham et al., *Patent Quality Control: A Comparison of U.S. Patent Re-examinations and European Patent Oppositions*, in *Patents in the Knowledge-Based Economy* 74 (Wesley M. Cohen & Stephen A. Merrill eds., 2003), available at <https://www.nap.edu/catalog/10770/patents-in-the-knowledge-based-economy> 29

U.S. Dep't of State, *Documentary History of the Constitution of the United States of America* (1894–1905), available at <https://catalog.hathitrust.org/Record/100883906> 14, 16

U.S. Gov't Accountability Office, *GAO-16-479, Patent Office Should Strengthen Search Capabilities and Better Monitor Examiners' Work* (June 2016) 25

———, *GAO-16-490, Patent Office Should Define Quality, Reassess Incentives, and Improve Clarity* (June 2016) 24

U.S. Patent & Trademark Office, *Performance and Accountability Report* (2016), available at <https://www.uspto.gov/sites/default/files/documents/USPTOFY16PAR.pdf> 23

Edward C. Walterscheid, *The Nature of the Intellectual Property Clause* (2002) 7, 14, 16

———, *To Promote the Progress of Science and Useful Arts* (1998) 18

Stu Woolman et al., *Evidence of Patent Thickets in Complex Biopharmaceutical Technologies*, 53 *IDEA* 1 (2013) 23

The Writings of Thomas Jefferson (1907), available at <https://catalog.hathitrust.org/Record/006664301> . . 14, 16

INTEREST OF *AMICI CURIAE*

*Amici curiae*¹ are non-profit organizations that seek to advance a balanced patent system that promotes the public interest.

Public Knowledge is a non-profit organization that is dedicated to preserving the openness of the Internet and the public's access to knowledge, promoting creativity through balanced intellectual property rights, and upholding and protecting the rights of consumers to use innovative technology lawfully. Public Knowledge advocates on behalf of the public interest for a balanced patent system, particularly with respect to new and emerging technologies.

The Electronic Frontier Foundation is a non-profit civil liberties organization that has worked for over 25 years to protect consumer interests, innovation, and free expression in the digital world. EFF and its more than 38,000 dues-paying members have a strong interest in helping the courts ensure that intellectual property law serves the public interest.

Engine Advocacy has worked with Congress, federal agencies, and state and local governments to discuss policy issues, write legislation, and introduce the tech community to Washington insiders. Engine Advocacy conducts research, organizes events, and spearheads campaigns to educate elected officials, the entrepreneur com-

¹Pursuant to Supreme Court Rule 37.3(a), all parties have provided blanket consent for the filing of briefs. Pursuant to Rule 37.6, no counsel for a party authored this brief in whole or in part, and no counsel or party made a monetary contribution intended to fund the preparation or submission of the brief. No person or entity, other than *amici*, their members, or their counsel, made a monetary contribution to the preparation or submission of this brief.

munity and the general public on issues vital to fostering technological innovation.

The R Street Institute is a non-profit, non-partisan public-policy research organization. R Street's mission is to engage in policy research and educational outreach that promotes free markets, as well as limited yet effective government, including properly calibrated legal and regulatory frameworks that support Internet economic growth and individual liberty. R Street's particular focus on Internet law and policy is one of offering research and analysis that show the advantages of a more market-oriented society and of more effective, more efficient laws and regulations that protect freedom of expression and privacy.

NOTE ON HISTORICAL SOURCES

For purposes of readability, spelling and capitalization have been modernized in quotations from historical sources, without notation.

SUMMARY OF ARGUMENT

Where Congress places conditions upon the patent grant in furtherance of the public interest in individual liberty, Congress acts at the apex of its powers under the Constitution. *Inter partes* review is a legislative condition on the patent grant, designed for an innovative modern world, specifically crafted to dispose of erroneously issued patents that burden the public. It is the traditional place of Congress to make these balanced political judgments, and Article III poses no barrier to Congress executing its Article I obligation to protect the public by limiting patents.

To be as useful as possible to this Court, *amici* forgo recapitulation of Article III doctrine in favor of detailed, practical facts supporting the need for and permissibility of *inter partes* review. Those facts fall into two categories: historical evidence of the Framers' intent, and modern evidence of the complex, administrative nature of the patent system today.

1. History confirms that Congress has the power and mandate to impose conditions on the patent grant that protect the public and individual liberties. Pre-ratification practices in England, the colonies, and the early states consistently treat patents as a privilege granted as a matter of sovereign discretion, with the objective in granting patents being not merely to reward inventors but also to induce economic productivity to the benefit of the state and the public. And as matters of sovereign discretion, the patents of England, the colonies, and the states included conditions intended to advance economic and public interests—including, in many cases, conditions for automatic, non-judicial revocation.

The Framers considered these antecedent practices when crafting the constitutional patent power. They also accounted for their aversion to government-granted exclusivities (“monopolies” in 18th-century parlance), which could be easily abused by ambitious leaders. The Patent Clause that emerged thus embodied in its text a limitation—“to promote the progress of science and useful arts”—intended at least to instruct Congress to issue patents only with conditions protecting the public from monopoly abuse. The early Congress took the Framers’ message to heart in enacting the first Patent Act, which included provisions for discretion in the decision to grant, and for revocation when that decision was mistaken.

History and original intent confirm that Congress may construct checks and balances on patents such as *inter partes* review, in order to protect the public from the odious monopolies that the Framers abhorred. More importantly, history reveals the danger of Article III interceding in matters of patent cancellation: To do so, this Court would have to usurp from Congress a political determination of the best procedures and mechanisms to balance the interests of patent owners and the public.

2. The complexities of patent law—including patent cancellation procedures—confirm Congress’s power and ability to shape those procedures. Indeed, the patent system resembles a classic administrative or regulatory scheme of the kind this Court has repeatedly held legitimate.

Patent law deals with highly technical fields of engineering and science. Rapid scientific and technological development have left the patent system struggling to keep pace: The Patent Office is overwhelmed with patent applications, and examiners have insufficient resources

to give each application the comprehensive review that would prevent incorrect issuance of patents. *Inter partes* review reflects a political choice—the latest in a long line of choices since 1790—to allow patents to issue somewhat under-examined, and then to correct errors post-issuance through a defined administrative procedure. And like other Article I proceedings, *inter partes* review places a narrow domain of technologically-oriented questions before technologically-skilled adjudicators.

Patent cancellation also resembles permissible agency proceedings in another, more important way: It is a proceeding designed to vindicate a generalized public harm. An invalid patent is a regulatory tax on every American, prohibiting all individuals from exercising liberties they had prior to the wrongful patent. It is especially pertinent that *inter partes* review is arguably the sole effective avenue by which any member of the public may challenge a patent, and that the effect of cancellation inures not just to the challenger but to the whole public.

A proceeding designed in the public interest, for the public's use, that works to the public's benefit—that is a public right. *Inter partes* review is constitutional, and the judgment should be affirmed.

ARGUMENT

I. HISTORY CONFIRMS CONGRESS'S AUTHORITY TO SERVE THE PUBLIC INTEREST BY PLACING CONDITIONS ON THE PATENT GRANT

Congress has power to impose limitations on patents in the service of public policy and individual liberty, based on the historical state of patent law in three time frames: leading up to, during, and immediately subsequent to the ratification of the Constitution.

A. IN 1789, PATENTS WERE DISCRETIONARY, AD HOC PRIVILEGES GRANTED TO ADVANCE PUBLIC POLICIES

Antecedents to United States patent law treated patents as discretionary grants of privilege, which the sovereign was free to constrain in furtherance of public policy. Two antecedents are relevant: English patent practice, and colonial and state patents in America.

1. Early English patents had little to do with inventions; they were instead a tool of public policy. *Litterae patentis* were simply a form of royal decree, which were used for grants of “lands, honours, liberties, franchises, or aught besides.” 2 William Blackstone, *Commentaries on the Laws of England* *346 (1765); see Oren Bracha, *Own- ing Ideas: The Intellectual Origins of American Intellectual Property, 1790–1909*, at 16 (2016).

Letters patent relating to technology were drawn to advance public economic interests, not to reward invention. Early patents were granted to encourage importation of foreign technology into the English realm—Italian dredgers and German metallurgy, for example. See Bruce W. Bugbee, *Genesis of American Patent and*

Copyright Law 28 (1967); E. Wyndham Hulme, *The History of the Patent System Under the Prerogative and at Common Law*, 12 L.Q. Rev. 141, 143–44 (1896) [hereinafter Hulme, *History*], available online.² Novelty was no requirement; “if the invention is new in England, a patent may be granted for it, even though the thing was practiced beyond sea before.” *Edgeberry v. Stephens*, 90 Eng. Rep. 1162 (K.B. 1693); see Edward C. Walterscheid, *The Nature of the Intellectual Property Clause* 46–52 (2002) [hereinafter Walterscheid, *Nature*].³ As we understand the word *invention* today, “patents for invention were at first only a collateral issue.” Bracha, *supra*, at 20.

Where an invention was contrary to state economic interests, a patent might be denied. In the early 18th century, the Crown received substantial excise tax revenue on salt, and denied at least three petitions for patents on more efficient salt production on the grounds that they would produce stronger salt and thereby “much prejudice the revenue.” 4 *Calendar of Treasury Papers, 1708–1714* 120–21, 409, 557 (Joseph Redington ed., London, Longmans etc. 1879), available online; see Christine MacLeod, *Inventing the Industrial Revolution: The English Patent System, 1660–1800*, at 22–23 (1988).

The Statute of Monopolies confirms that patents were a matter of royal grace. Enacted in 1624, the statute revoked all outstanding patents and declared that no patents should thenceforth issue, with an exception made

²Locations of authorities available online are shown in the Table of Authorities.

³As several commentators observe, the word *invention* derives from the Latin *invenio*, “I come upon,” which naturally encompasses importation of foreign ideas. Walterscheid, *Nature*, *supra*, at 316 n.109 (quoting I. Bernard Cohen, *Science and the Founding Fathers* 241 (1995)).

(among many others⁴) for “making of any manner of new manufactures within this Realm, to the true and first inventor” (referring not just to modern-day “inventors” but also to importers). 21 Jac. 1, c. 3, § VI (1624) (Eng.), *available online*; see Bugbee, *supra*, at 30. And the Statute of Monopolies continued to treat patents as tools of economic policy: The statute prohibited invention patents that would be “mischievous to the State, by raising prices of commodities at home, or hurt of trade, or generally inconvenient.” Statute of Monopolies § VI; see Oren Bracha, *The Commodification of Patents 1600–1836*, 38 Loy. L.A. L. Rev. 177, 199 (2004) [hereinafter Bracha, *Commodification*].

Even as late as the mid-1800s—well after the Constitution was ratified—English treatises still confirmed that the “grant of a patent is a matter of grace and favour.” W.M. Hindmarch, *A Treatise on the Law Relative to Patent Privileges for the Sole Use of Inventions* 431 (London, V. & R. Stevens etc. 1846), *available online*. And “there is not any clause or enactment, by which the subject can demand them as a right.” Richard Godson, *A Practical Treatise on the Law of Patents for Inventions and of Copyright* 47 (London, Joseph Butterworth & Son 1823), *available online*; see Bracha, *supra*, at 23.⁵

⁴Patents were also permitted on, for example, manufacture of ordinance, trading of seacoals on the river Tyne, and James Maxwell’s exportation of calf skins. 21 Jac. 1, c. 3, §§ X, XII & XIII (1624) (Eng.), *available online*.

⁵While some have noted a disconnect between stated English patent principles and actual practice, see Bracha, *supra*, at 22–23, this is less relevant to the present analysis. The Framers were not patent lawyers, and their understanding of patents would have been informed by the published laws and reports, not day-to-day practitioner experience. And daily practice does not affect latent government power, even if that power is rarely exercised.

Because patents were discretionary sovereign grants to effect economic policy, they unsurprisingly included numerous, often ad hoc, conditions on the grant. Most common were working clauses, by which the patent would be revoked automatically if the holder did not put the invention into practice within a certain amount of time. Hulme, *History, supra*, at 153; Bracha, *supra*, at 17. English patents also imposed such conditions as compulsory licensing and limitations on sub-licensing. See Hindmarch, *supra*, at 66, 71.

Most importantly, English patents consistently included terms of revocation. Each patent from 1605 through at least 1901 contained a defeasance clause rendering the patent “void to all intents and purposes” if “it be made to appear to us,” namely the Crown or its Privy Council, that the patent was wrongly granted. Comm. of the Bd. of Trade, *Working of the Patent Acts, 1901*, Cd. 506, app. 4, at 162 (U.K.), *available online* (memorandum of J.W. Gordon). The defeasance clause saved the public “the trouble or cost of resisting the unlawful patent.” Hindmarch, *supra*, at 431.

The royal prerogative to revoke patents was exercised repeatedly prior to 1789. It was the basis for King James’s 1603 blanket suspension of all Elizabethan patent monopolies. See James I, *Proclamation Against Monopolies and Protections* (May 7, 1603), in 4 John Strype, *Annals of the Church and State* 379, 380 (2d ed., London, Edward Symon 1731), *available online*; Chris R. Kyle, “*But a New Button to an Old Coat*”: *The Enactment of the Statute of Monopolies*, 19 *J. Legal Hist.* 203, 205 (1998). Thereafter, the Privy Council adjudicated patent revocation actions, in parallel with common law courts. See MacLeod, *supra*, at 19; Bracha, *Commodification, supra*,

at 189–91. In 1752 the Council relinquished jurisdiction over infringement actions but retained revocation power, and indeed redirected infringement cases to the common law courts “under the threat of revocation.” See E. Wyndham Hulme, *Privy Council Law and Practice of Letters Patent for Invention from the Restoration to 1794, Part II*, 33 L.Q. Rev. 180, 194 (1917); MacLeod, *supra*, at 59–60.

Sovereign discretion, exercised to further economic policy, was the theme of 1700s English patent practice. The Crown’s prerogative to grant patents included a prerogative to revoke them.

2. Early American law followed this English treatment of patents as sovereign exercises of discretion, but with one key change: Having no king, the colonies and later, states, lodged the discretionary power over patents with the legislature.

“As in England, colonial patents were ad hoc, discretionary, and tailored privileges.” Bracha, *supra*, at 26. Early American patents were granted on a variety of subjects, such as a 21-year Massachusetts patent to a “free company of adventurers” on trade with Native Americans in 1644. 2 *Records of the Governor and Company of the Massachusetts Bay* 60, 138–39 (Nathaniel B. Shurtleff ed., Boston, William White 1853), *available online*.

Importation of new industry continued to be the touchstone for patents. Connecticut advertised numerous patents of importation, in 1691 for example calling for those “experienced in the making of salt in any of the usual ways of doing it in other parts of the world” to set up a salt industry, on the incentive of “a patent to be given for 10 years.” 4 *Public Records of the Colony of Connecticut* 44 (1868), *available online*. See generally Bugbee, *supra*, at 57–83. In 1788, the Pennsylvania So-

ciety for the Encouragement of Manufactures and Useful Arts praised one Joseph Hague, who had smuggled an English machine into the country, as “the ingenious artisan, who counterfeited the carding and spinning machine, though not the original inventor (being only the introducer).” Doron S. Ben-Atar, *Trade Secrets: Intellectual Piracy and the Origins of American Industrial Power* 80 (2004) (quoting papers of Tench Coxe); *see also* Bracha, *supra*, at 29. One who “counterfeited” deserved reward, where the counterfeiting stimulated manufacturing.

The key change between English and early American patents was the locus of discretion. Rather than being royal decrees, “American patents consisted almost entirely of private enactments of colonial legislatures in behalf of individual inventors, and included varying provisions and terms of effectiveness.” Bugbee, *supra*, at 57 (reviewing all such patents). Post-Revolution state patents were simply “a continuation of the colonial practice of enacting private laws of varying provisions,” reemphasizing the legislative discretion component of early patenting. *Id.* at 84; *see* Bracha, *supra*, at 28.⁶

Colonial legislatures used discretion over patents to impose conditions in service of public policy. A working clause is found in the first known American patent, issued to Samuel Winslow for making salt but only if he “shall, within the space of one year, set upon the said work.” 1 *Records of the Governor and Company of the*

⁶A 1784 South Carolina statute declared a 14-year “exclusive privilege” to “inventors of useful machines.” Act for the Encouragement of Arts and Sciences, ch. 1221, § IV, 4 Stat. S.C. 618, 620 (1784), *available online*. But that law “only operated as an invitation to inventors to request the legislature for patents”; the state continued to issue patents by private legislative acts. P.J. Federico, *State Patents*, 13 J. Pat. Off. Soc’y 166, 167 (1931); *see* Bugbee, *supra*, at 93–95.

Massachusetts Bay, *supra*, at 331. South Carolina went further, requiring the patent recipient to prove to “a committee of both Houses of Assembly” that his rice cleaning machine had been “brought to perfection,” or else the patent “shall cease and be void.” Act for the Encouragement of Mr. George Timmons, ch. 698, 3 Stat. S.C. 599 (1743), *available online*; see Bugbee, *supra*, at 79. That enactment reflects the legislature’s power to revoke unsatisfactory patents.

Legislative power to revoke patents was most apparent in New York. The state first granted a patent on steamboat operation to John Fitch, but later repealed that patent in favor of Robert Livingston. See Act of Mar. 27, 1798, ch. 55, 4 N.Y. Laws 215 (Weed Parsons & Co. 1887), *available online* (repealing Act of Mar. 19, 1787, ch. 57, 2 N.Y. Laws 472 (Weed Parsons & Co. 1886), *available online*). Notably, the basis for repeal was not non-inventiveness, but rather economic policy. The legislature found that Fitch had failed to start a steamboat industry for ten years, so his patent “is justly forfeited.” *Id.* See generally P.J. Federico, *State Patents*, 13 J. Pat. Off. Soc’y 166, 172–73 (1931).⁷

Colonial and state patent practices in America reiterate that patents were a privilege granted as a matter of sovereign discretion, with the sovereign exercising wide latitude in setting out the terms of the patent grant, including possible revocation of that grant. Conditions imposed on patent grants have been treated from the very beginning as a matter of political judgment and public policy decision-making.

⁷Another steamboat entrepreneur, James Rumsey, also sought to have Fitch’s state patents repealed, failing in Pennsylvania but apparently succeeding in Virginia. See Federico, *supra*, at 172.

B. THE FRAMERS SAW PATENTS AS GOVERNMENT ISSUED MONOPOLIES, AND EXPECTED THE LEGISLATURE TO REGULATE THEM

Congress’s power to legislate checks on the patent grant is within the original understanding of the Constitution. The Framers saw patents as state monopolies with potential for abuse by an ambitious government. As a result, the Article I patent power reflects the Framers’ skepticism of patent monopolies and their expectation that Congress would seek to restrain them.

1. To the Framers, the term *monopoly* referred not to market power concentration (as it does today), but rather to a government grant of exclusivity to a private entity. Sir Edward Coke,⁸ author of the Statute of Monopolies, defined monopoly as an “allowance by the King . . . for the sole buying, selling, making, working, or using of any thing, whereby any person or persons . . . are sought to be restrained of any freedom, or liberty that they had before, or hindered in their lawful trade.”³ Edward Coke, *Institutes of the Laws of England* ch. 85, at 181 (1644), *available online*. They are a strong form of a government-granted privilege—what today would be called an entitlement.

The Framers understood monopolies to be one of the most repulsive powers of government. George Mason refused to sign the Constitution because, among other things, under it “the congress may grant monopolies in trade and commerce.” George Mason, *Objections to the*

⁸The proper style of the English jurist is Sir Edward Coke. The misappellation “Lord Coke” is especially inapt here, because as sponsor of the Statute of Monopolies, Coke belonged not to the House of Lords but to the House of Commons. See 2 Cuthbert William Johnson, *The Life of Sir Edward Coke* 91 (1835), *available online*.

Proposed Federal Constitution, 2 Am. Museum 534, 536 (1787), *available online*. And the baseline position of the states was against monopolies: Massachusetts and Connecticut had statutes banning them,⁹ and William Penn had decried them as “against the liberty and freedom of the subject.”¹⁰ Thus, during the ratification debate, several states requested amendments to the effect “that the congress do not grant monopolies.” *E.g.*, 2 U.S. Dep’t of State, *Documentary History of the Constitution of the United States of America* 198 (1894), *available online*. See generally Tyler T. Ochoa & Mark Rose, *The Anti-Monopoly Origins of the Patent and Copyright Clause*, 84 J. Pat. & Trademark Off. Soc’y 909, 927 (2002).

With regard to patents, the Framers “viewed these limited-term grants as monopolies,” albeit tolerable ones. See Walterscheid, *Nature*, *supra*, at 242. Madison and Jefferson described “encouragements to . . . ingenious discoveries” as “monopolies,” in debating their desirability. Letter from James Madison to Thomas Jefferson (Oct. 17, 1788), in 1 *Letters and Other Writings of James Madison* 421, 427 (1884) [hereinafter *Madison Writings*], *available online*; see Letter from Thomas Jefferson to James Madison (July 31, 1788), in 7 *The Writings of Thomas Jefferson* 93, 98 (1907) [hereinafter *Jefferson Writings*], *available online*. See generally Walterscheid, *Nature*, *supra*, at 6–8. And the words *patent* and *monopoly* are

⁹See *The Colonial Laws of Massachusetts* 35 (William H. Whitmore ed., Rockwell & Churchill 1890) (1672), *available online*; *The Book of the General Laws for the People Within the Jurisdiction of Connecticut* 52 (1673), *available online*. See generally Bugbee, *supra*, at 61, 69. Both notably excepted monopolies on “new inventions that are profitable to the Country.”

¹⁰William Penn, *The Excellent Privilege of Liberty and Property* 27 (J.B. Lippincott Co. 1897) (1687), *available online*.

interchangeably juxtaposed in contemporaneous English cases, American cases, and American commentary.¹¹

Perhaps the sentiment among the Framers is best captured by Franklin’s recollection of having been offered a Pennsylvania patent on an iron stove. He declined the patent because “as we enjoy great advantages from the inventions of others, we should be glad of an opportunity to serve others by any invention of ours; and this we should do freely and generously.” *Autobiography of Benjamin Franklin* 274 (John Bigelow ed., J.B. Lippincott & Co. 1868), *available online*. Franklin, Jefferson, and Madison would have agreed that monopolies were generally odious, and to the extent that patent monopolies should be granted, they ought to be tightly controlled.

2. Fear of improper monopolies led the Framers to prescribe only a “limited patent monopoly under the Constitution.” *Graham v. John Deere Co.*, 383 U.S. 1, 7 (1966). The Patent Clause that emerged gives Congress not a wholesale power to grant patents on inventions, but rather a limited power to “promote the progress of science and useful arts,” using patents as a means to achieve that end. U.S. Const. art. I, § 8, cl. 8.

The Constitutional Convention delegates added the “promote the progress” language as an explicit limitation

¹¹English cases—see *Hornblower v. Boulton*, 101 Eng. Rep. 1285, 1288–89 (K.B. 1799); *Boulton v. Bull*, 126 Eng. Rep. 651, 665 (C.P. 1795); *Turner v. Winter*, 99 Eng. Rep. 1274, 1276 (K.B. 1787); *Edgeberry*, 90 Eng. Rep. 1162. American cases—see *Gibbons v. Ogden*, 22 U.S. (9 Wheat.) 1, 229 (1824) (Johnson, J., concurring); *Wilson v. Rousseau*, 45 U.S. (4 How.) 646, 678, 681–83 (1846); *Shaw v. Cooper*, 32 U.S. (7 Pet.) 292, 320 (1833); *Pennock v. Dialogue*, 27 U.S. (2 Pet.) 1, 19, 23 (1829). Commentary—see Thomas G. Fessenden, *An Essay on the Law of Patents for New Inventions* 186 (Boston, D. Mallory & Co. 1810), *available online*.

on the power to grant patent monopolies. *See* Dotan Oliar, *Making Sense of the Intellectual Property Clause: Promotion of Progress as a Limitation on Congress’s Intellectual Property Power*, 94 *Geo. L.J.* 1771 (2006). Madison and Pinckney, both proponents of a strong central government,¹² proposed plenary patent powers with no such limitation.¹³ *See id.* at 1789 tbl.1; *id.* at 1813–14. Other delegates, who tended to be more skeptical of central power, amended the proposal to add the “promote the progress” language (borrowed from other proposals of Madison and Pinckney), thereby reducing the patent power to one constrained by an objective of promoting progress. *See id.* at 1814–16. The unique ends-means structure of the Patent Clause thus embodies, in a way, the Framers’ vision for limited federal government. *See id.* at 1816–18.

3. The opposing view of petitioner and its supporting *amici*, that patents are traditional common-law rights rather than monopolies, lacks historical basis.

The Framers rejected any common law origin of patent protection. *See generally* Walterscheid, *Nature, supra*, at 201–38. Jefferson most starkly described “the exclusive right to invention as given not of natural right, but for the benefit of society.” Letter from Thomas Jefferson to Isaac McPherson (Aug. 13, 1813) [hereinafter Jefferson to McPherson], in 13 *Jefferson Writings, supra*, at 326, 335. Though Madison averred that copyrights were

¹²Exemplary of their centralist views are James Madison, *Vices of the Political System of the United States* (Apr. 1787), in 1 *Madison Writings, supra*, at 320, 321, and Charles Pinckney, Address at the Constitutional Convention: Observations on the Federal Constitution (May 1787), in 1 Frank Moore, *American Eloquence* 362, 365 (N.Y., D. Appleton & Co. 1859), *available online*.

¹³*See* 1 U.S. Dep’t of State, *supra*, at 131 (Convention journal, Aug. 18, 1781); 3 *id.* at 554–55 (Madison’s journal, same day).

“a right of common law,” he declined to say the same of patents, only suggesting that they “seem[ed] with equal reason” to merit a parallel exclusivity, in view of the “public good.” *The Federalist No. 43* (James Madison).

The idea of a common law property right in inventions was so foreign that, in *Wheaton v. Peters*, it was not only this Court that rejected any “right, at common law, to sell the thing invented.” See 33 U.S. (8 Pet.) 591, 661 (1834). Even the plaintiff’s counsel conceded: “There is at common law no property in them; there is not even a legal right entitled to protection.” *Id.* at 600 (abstract of argument); see also *Pennock v. Dialogue*, 27 U.S. (2 Pet.) 1, 14–15 (1829) (invention gives rise only to “inchoate right”); *Evans v. Jordan*, 8 F. Cas. 872, 873 (C.C.D. Va. 1813) (No. 4,564) (Marshall, Circuit J.) (same).

Actions such as patent cancellation are thus not “the stuff of the traditional actions at common law tried by the courts at Westminster in 1789,” *Stern v. Marshall*, 564 U.S. 462, 484 (2011) (quoting *N. Pipeline Constr. Co. v. Marathon Pipe Line Co.*, 458 U.S. 50, 90 (1982) (Rehnquist, J., concurring in judgment)), because patents are not the stuff of the common law. Instead, to the Framers, patents were monopolies, upon which Congress was to place conditions in service of the public good.

C. EARLY FEDERAL PATENT LAW CONFIRMS CONGRESS’S POWER TO LIMIT THE PATENT GRANT

Under the Patent Clause, Congress has from the very beginning limited the patent grant in furtherance of public policy. This confirms an original understanding of Congress’s power to serve the public interest through conditions on patents.

The Patent Act of 1790 accommodated the Framers' public interest concerns and fears of monopolies in several ways. It made the patent grant optional ("shall and may be lawful" to issue), with the decision to issue a patent delegated to a Patent Board of three high-ranking executive officials, "if they shall deem the invention or discovery sufficiently useful and important." Ch. 7, § 1, 1 Stat. 109, 110. "[T]he clear logic underlying the statute is that of giving the board full discretionary power to weigh public policies and decide whether the benefits offered by a petitioner justified the grant of a patent." Bracha, *supra*, at 194.

The Board's discretionary power is evident from patent applicants' arguments, largely devoted to the "substantial social benefits" of their inventions. *Id.* at 196. It is also evident from the Board's demands for detail on the workings of inventions, so as to assess their usefulness and importance. *See* Edward C. Walterscheid, *To Promote the Progress of Science and Useful Arts* 174 (1998). Jefferson, a member of the Board from 1790 to 1793, would later remark that his job was "drawing a line between the things which are worth to the public the embarrassment of an exclusive patent, and those which are not"—again confirming the public policy dimension of the patent grant decision. Jefferson to McPherson, *supra*, at 335; *see also* Bracha, *supra*, at 194.

The patent revocation provisions of the 1790 Act further evinced Congress's use of conditions on the patent grant to protect the public. *See* § 5, 1 Stat. at 111. Drafts of the provision observed a policy rationale, that wrongly granted patents "may not only be prejudicial to individuals, but to the community." Patents Bill, H.R. 41, First Cong. § 4 (Feb. 16, 1790), *reprinted in* Appendix A *infra*

p. 1a. Judge William Van Ness wrote that the provision serves “to protect the public against frauds and impositions” resulting from invalid patents. *McGaw v. Bryan*, 16 F. Cas. 96, 97 (S.D.N.Y. 1821) (No. 8,793).¹⁴

“No one can deny that when the legislature are about to vest an exclusive right in an author or an inventor, they have the power to prescribe the conditions on which that right shall be enjoyed.” *Wheaton*, 33 U.S. (8 Pet.) at 663–64. The 1790 Act confirms what historical precedents foretold and what the Framers intended: that patents are not mere private rewards but rather instruments for advancing public policies. Congress has power to circumscribe those instruments, and *inter partes* review is an exercise of that power. Petitioners’ challenge to *inter partes* review thus does not merely run headlong into established Article III doctrine; it collides with the very underpinnings of the Framers’ design.

II. *INTER PARTES* REVIEW IS A CLASSIC TYPE OF ADMINISTRATIVE SCHEME THAT CONGRESS MAY DEVISE UNDER ARTICLE I

Inter partes review is the latest exercise of Congress’s power to condition the patent grant in service of the public interest. Specifically, Congress made a political choice that administrative cancellation was the best remedy for those patents that were issued contrary to the “progress of science and useful arts.”

¹⁴Van Ness was describing a later statute, but its revocation provision was substantially identical. He goes on to explain why United States patent law is unrelated to English *scire facias* practice; this argument is expected to be discussed in other briefs. *See id.* at 101; Christopher Beauchamp, *Repealing Patents* 29 (Brooklyn Law Sch. Legal Studies, Res. Paper No. 534, Sept. 2017), *available online*.

A review of the nature and background of *inter partes* review shows that the proceeding is the most quintessential sort of federal agency procedure that this Court has approved under the Article III public rights doctrine. Four observations are especially pertinent and discussed below: Congress’s longstanding involvement in prescribing patent cancellation procedures, the complexity of the modern patent system, the generalized public harm resulting from invalid patents, and the integral nature of *inter partes* review to the larger patent scheme.

A. CONGRESS HAS A LONG HISTORY OF STATUTORILY ADJUSTING PATENT CANCELLATION PROCEDURES

Throughout history, Congress has adjusted the procedures for patent cancellation, confirming that cancellation procedure is squarely within Congress’s Article I domain.

Early patent statutes reject the notion that patent cancellation is a matter of private rights. Those statutes limited court actions to repeal a patent to one year or three years from issuance of the patent. 1790 Act § 5, 1 Stat. at 111; Patent Act of 1793, ch. 11, § 10, 1 Stat. 318, 323. Indeed, the Patent Act of 1836 cut off all private causes of action for patent cancellation entirely, as this Court recognized on several occasions. Ch. 357, 5 Stat. 117; *see United States v. Am. Bell Tel. Co.*, 128 U.S. 315, 372 (1888); *Loom Co. v. Higgins*, 105 U.S. 580, 589 (1882).¹⁵ Under the public rights doctrine “Congress may set up the terms of adjudicating a suit when the suit could not otherwise proceed at all,” *Stern*, 564 U.S. at 489 (describing *Murray’s Lessee v. Hoboken Land & Im-*

¹⁵Courts could still declare patents void as part of an interference proceeding between two patents. *See* 1836 Act § 16, 5 Stat. at 124.

provement Co., 59 U.S. (18 How.) 272, 284 (1855)); these statutes show that, absent congressional action, a patent cancellation suit could not otherwise proceed at all.

The 1836 Act also created the Patent Office, an Article I agency in which patents would be examined—and even canceled. The statute authorized a proceeding called “reissue,” where a patent owner could seek correction of a defect in a patent by surrendering a patent to obtain a new, corrected one. 1836 Act § 13, 5 Stat. at 122. Importantly, if the Patent Office found no allowable correction to the patent, then no reissue patent would be granted, and the original patent was “extinguished” and “cancelled in law.” *Peck v. Collins*, 103 U.S. 660, 664 (1880).¹⁶

Again on the assumption that it could alter patent cancellation proceedings at will, Congress in the Patent Act of 1870 changed the reissue procedure such that failure resulted in return of the original patent rather than cancellation. Ch. 230, § 53, 16 Stat. 198, 205–06; *see also Peck*, 103 U.S. at 665 (discussing in *dicta* possible effects of new statute). It is in this context that *McCormick Harvesting Machine Co. v. Aultman* held that courts had the sole power to invalidate patents—because Congress had legislated it so. *See* 169 U.S. 606, 609 (1898). Indeed, *McCormick* discussed *Peck* and recognized that the changed result was the result of a changed statute, not a constitutional tenet that would have rendered *Peck* wrongly decided. *See McCormick*, 169 U.S. at 611.

The Patent Act of 1952 established the first explicit administrative procedure for patent cancellation. Within interference proceedings, in the course of determining se-

¹⁶Reissue under the 1836 Act differs from *inter partes* review today in many respects. But it shows that, from the very time the Patent Office was created in statute, it held a power to cancel patents.

niority between two patents, “a final judgment adverse to a patentee . . . shall constitute cancellation of the claims involved from the patent.” *See* ch. 950, § 135, 66 Stat. 792, 802. The House Report acknowledged that an administrative proceeding to cancel patents was “new,” but nevertheless describes the change as a “minor revision in the interference section.” *Revision of Title 35, United States Code*, H.R. Rep. No. 82-1923, at 7 (1952).

Since 1952, Congress has enacted many forms of administrative patent cancellation: third party–requested *ex parte* reexamination, 35 U.S.C. § 302, Office-initiated reexamination, § 303(a), and *inter partes* reexamination, § 311 (2011) (repealed 2012). The America Invents Act added review of certain business method patents, Pub. L. No. 112-29, sec. 18, 125 Stat. 284 (2011), post-grant review, 35 U.S.C. § 321, and *inter partes* review at issue here, § 311 (2016). These post-grant avenues for reviewing patents are now longstanding fixtures of the patent landscape Congress constructed.¹⁷

The consistent theme across these two centuries, from the 1790 Act to now, is that Congress has firmly held the reins in directing patent cancellation procedure, and iterated on various ways to do so over time. Congress

¹⁷Patent applicants are not caught unawares by the possibility of post-grant revocation. Every patent under Title 35 is granted “subject to the provisions of this title,” § 261, which have included at least some form of post-grant challenge proceeding since *ex parte* reexamination went into effect in 1981. *See* Bayh–Dole Act, Pub. L. No. 96-517, sec. 8(b), 94 Stat. 3015, 3027 (1980). Theoretically some pre-1981 patents could be in force now or even issue in the future, but the number is vanishingly small: The Patent Office reports that there are exactly five such applications still pending, at least some of which are likely defective for prosecution laches. *See Innovation Act: Hearing Before the H. Comm. on the Judiciary*, 113th Cong. 233–34, 243–44 (2013) (Letter of Teresa Stanek Rea).

found it unsurprising to give the Patent Office authority to cancel patents; the real surprise would be to learn that this authority is unconstitutional.

B. ADMINISTRATION OF PATENT LAW IS A COMPLEX PROBLEM, GIVEN MODERN INVENTION PRACTICES

When Congress legislates on patent cancellation procedures, it does not do so against a simple backdrop of common law; rather, it legislates in the face of a complex, dynamically changing ecosystem of patents and innovation. A review of the modern patent system reveals the specialized and complex nature of that system—and the consequent similarity of patent procedures like *inter partes* review to other technical agency proceedings.

Today, patents are sought at a remarkable rate. The Patent Office has received over 600,000 patent applications per year, every year since 2013. *See* U.S. Patent & Trademark Office, *Performance and Accountability Report* 179 tbl.2 (2016), *available online*. The speed of innovation accounts in large part for this, but changes in patent practices have also accelerated the filing rates.

For example, inventions today are covered often not with one patent but with dozens or thousands, due to the complexity of technology and legal strategies of creating “patent thickets.” *See* Stu Woolman et al., *Evidence of Patent Thickets in Complex Biopharmaceutical Technologies*, 53 IDEA 1, 7 (2013). The biologic drug Humira reportedly is protected by more than 70 patents—even though the lead composition-of-matter patent already has expired. *See* Andrew Pollack, *Makers of Humira and Embrel Using Patents to Delay Generic Versions*, N.Y. Times, Jan. 16, 2017, at B1, *available online*.

Furthermore, one application can be refiled to obtain multiple “continuation” patents using a procedure introduced in 1952. *See* 35 U.S.C. § 120. This accounts for 28% of the volume of applications before the Patent Office. *See* Cecil D. Quillen, Jr. & Ogden H. Webster, *Continuing Patent Applications and Performance of the U.S. Patent and Trademark Office*, 11 Fed. Cir. B.J. 1, 7–8 (2001).

For each of these 600,000 patent applications, a patent examiner must (among other tasks) determine whether the described invention is new under 35 U.S.C. § 102 and nonobvious under § 103. To do so, the examiner must learn the workings of the invention under application, search the universe of technical knowledge, reason scientifically about the similarities between the application and the prior art, and deliberate on the legal fiction of the “person having ordinary skill in the art.” § 103; *see Graham*, 383 U.S. at 17–18.

To perform all the scientific and legal analysis they must do, examiners receive only about 17 to 31 hours per application—a time frame so tight that the government estimates that “about 70 percent of examiners have less time than needed to complete a thorough examination.” U.S. Gov’t Accountability Office, *GAO-16-490, Patent Office Should Define Quality, Reassess Incentives, and Improve Clarity* 10, 25–26 (June 2016). They are also limited in the technical literature they may search, for legal, practical, and cost reasons. *See* Beth Simone Noveck, “Peer to Patent”: *Collective Intelligence, Open Review, and Patent Reform*, 20 Harv. J.L. & Tech. 123, 135 (2006). High turnover rates¹⁸ mean the examining corps does

¹⁸This is largely because “the private sector offers substantially higher salaries” than the Patent Office. Fed. Trade Comm’n, *To Promote Innovation* ch. 6, at 19 (2003), *available online*.

not maintain experience: Most examiners have a technical degree but not beyond a bachelor's, and many examiners leave the Office within five years. *See* U.S. Gov't Accountability Office, *GAO-16-479, Patent Office Should Strengthen Search Capabilities and Better Monitor Examiners' Work* 28–29 (June 2016). The Patent Office itself is under constant pressure from the patent owner community to issue patents more quickly and more easily.¹⁹ Patent examiners do a remarkable job under the circumstances,²⁰ but those circumstances are challenging.

This Court has approved Article I adjudication in the context of “administering a complex regulatory scheme.” *Thomas v. Union Carbide Agric. Prods. Co.*, 473 U.S. 568, 589 (1985); *see Atlas Roofing Co. v. Occupational Safety & Health Review Comm'n*, 430 U.S. 442, 455 (1977); *Stern*, 564 U.S. at 490. Patents are exactly that sort of complex regulatory scheme, because the nature of innovation today renders the matter of issuing correct patents a problem of extraordinary difficulty—and a problem best left to the judgment of the political branches.

C. LIKE MANY AGENCY PROCEEDINGS, PATENT CANCELLATION TARGETS A GENERALIZED PUBLIC HARM

Mistakenly granted patents impose substantial harm upon the entire American public. *Inter partes* review is targeted to relieve that public harm, confirming that the proceeding is within Congress's constitutional power to

¹⁹A patent stakeholder survey in 2008 identified reduction of application pendency as one of the top five recommendations. Patent Pub. Advisory Comm., *Annual Report* 28 (2009).

²⁰Counsel of record prosecuted patents for several years, and had many positive experiences working with examiners.

limit the patent grant in service of the public, and indicating the public-right nature of the proceeding.

1. The conditions for patentability in §§ 102 and 103 “seek to assure that ideas in the public domain remain there for the use of the public.” *Aronson v. Quick Point Pencil Co.*, 440 U.S. 257, 262 (1979). A patent wrongly granted, then, prevents “the use of ideas which are in reality a part of the public domain.” *Lear, Inc. v. Adkins*, 395 U.S. 653, 670 (1969). As a result, the public is “restrained” by the mistaken patent from “freedom, or liberty that they had before.” 3 Coke, *supra*, at 181. Such a patent is the very definition of an odious monopoly.

That monopoly injures everyone, in the form of increased consumer costs, decreased consumer choice, and loss of future innovations. Furthermore, “the existence of bad patents calls into question the legitimacy of all patents.” Megan M. La Belle, *Patent Law as Public Law*, 20 *Geo. Mason L. Rev.* 41, 55–56 (2012). Two examples among many illustrate these harms.

Pharmaceutical patents granted on known drugs injure not just the public pocketbook but also public health. Generic drugs reportedly reduce the annual cost of treatment by about \$46 per person under age 65 and \$78 for those over; “broad generic substitution of outpatient prescription drugs could save approximately \$8.8 billion . . . in the United States each year.” Jennifer S. Haas, *Potential Savings from Substituting Generic Drugs for Brand-Name Drugs*, 142 *Annals Internal Med.* 891, 894 (2005). An invalid patent that blocks generic entry thus denies the public those benefits for no good reason.

A study on HIV treatments identified two drugs for which the patents on the compounds were expired but for which generics were unavailable due to “secondary

patenting” of minor variations and methods of manufacturing and treatment. Tahir Amin & Aaron S. Kesselheim, *Secondary Patenting of Branded Pharmaceuticals*, 31 Health Aff. 2286, 2288–89 (2012). The researchers found 108 secondary patents that could potentially delay generic entry by 12 years after the expiration of the base-compound patents; they also found in the patents “signs of quality concerns” that “may serve as a basis for challenging their validity.” *Id.* at 2290–91. This is no outlier: A Federal Trade Commission study found that drug patents were invalidated at least 28% of the time in litigation. Fed. Trade Comm’n, *Generic Drug Entry Prior to Patent Expiration* 20 (July 2002).

Another example of public harm from invalid patents comes from a firm, MPHJ, who held a patent on obvious methods of using document scanners. *See In re MPHJ Tech. Invs., LLC*, 159 F.T.C. 1004, 1006 (Mar. 13, 2015). This patent on everyday technology enabled MPHJ to scam large swaths of the public. The firm reportedly sent over 16,000 letters to small businesses, demanding payment of \$1,000 or \$1,200 per employee. *See id.* at 1010–11. Broad public nuisance was possible only because MPHJ’s patent purported to take away a right to use technology in the public domain.

2. *Inter partes* review accrues benefits to the entire public, by undoing the damage caused by patents granted in contravention of the public’s rights to use known ideas. Since all members of the public are harmed when an improper patent is granted, invalidation of that improper patent “is the creation of a public good enjoyed by society as a whole.” La Belle, *supra*, at 61.²¹ The case of MPHJ

²¹The public-good nature of patent cancellation renders it distinguishable from patent infringement actions, in ways relevant to the

exemplifies this: Its invalid patents and associated scam were finally put to rest through a successful *inter partes* review challenge. See *MPHJ Tech. Invs., LLC v. Ricoh Americas Corp.*, 847 F.3d 1363 (Fed. Cir. 2017).

Cancellation of wrongly granted patents is at the heart of the public interest because “the public interest in granting patent monopolies exists only to the extent that the public is given a novel and useful invention in consideration for its grant.” *Fed. Trade Comm’n v. Actavis, Inc.*, 133 S. Ct. 2223, 2232 (2013) (quoting *United States v. Singer Mfg. Co.*, 374 U.S. 174, 199 (1963) (White, J., concurring)) (internal quotations omitted). Cancellation proceedings like *inter partes* review do not merely resolve a private dispute between two litigants—they vindicate the rights of the public.

D. INTER PARTES REVIEW IS INTEGRAL AND IMPORTANT TO THE MODERN PATENT REGULATORY SCHEME

Inter partes review does not conflict with Article III because it “serves a public purpose as an integral part of a program safeguarding the public,” specifically from the substantial harms of wrongly granted patents noted above. *Union Carbide*, 473 U.S. at 589. It safeguards the public and the public domain for at least three reasons: First, it provides a backstop to the problems with pre-grant patent examination; second, it assigns scientific and technological determinations to expert adjudicators with advanced technical training; and third, it provides

public rights doctrine. See *generally id.* at 52–54. In particular, cancellation proceedings are effectively “complaints about government conduct.” *Id.* at 43; cf. *Stern*, 564 U.S. at 489 (public right is one “arising between the Government and persons subject to its authority”).

an avenue for members of the public to challenge patents affecting them without needing to take the risk of infringing first.

Although the facts below tend to show that *inter partes* review is a preferable solution to the complex problem of invalid patents, the larger point is that finding the best solution is a fact-intensive inquiry. Congress is best suited “to judge the comparative force of these policy arguments,” and that body’s choice to use “*inter partes* proceedings” to “account for concerns about ‘bad’ patents” should not be second-guessed. *Microsoft Corp. v. i4i Ltd. P’ship*, 564 U.S. 91, 113 (2011).

1. Given the difficulty of accurate patent examination discussed above, *inter partes* review is an effective and efficient mechanism for avoiding the harms of erroneous patents. Broadly, Congress can choose between two options for reducing problematic patents: stronger pre-grant examination and post-grant revocation.

Post-grant revocation is an advantageous choice. Pre-grant examination suffers from numerous accuracy problems, as noted above, which cannot easily be solved. *See* Section II.B *supra* p. 23. Furthermore, bolstering examination can be economically wasteful, because most patents are never enforced, and no value is gained from any additional resources that are put to examining those patents. *See* Mark A. Lemley, *Rational Ignorance at the Patent Office*, 95 Nw. U. L. Rev. 1495, 1500–08 (2001).

Post-grant proceedings like *inter partes* review, by contrast, encourage challenges to the “more ‘valuable’ or technologically important patents,” as empirical research shows. Stuart J.H. Graham et al., *Patent Quality Control: A Comparison of U.S. Patent Re-examinations and European Patent Oppositions*, in *Patents in the Knowledge-*

Based Economy 74, 114 (Wesley M. Cohen & Stephen A. Merrill eds., 2003), *available online*. When a patent becomes of especial concern (say, by being enforced or asserted in cease-and-desist letters), interested private parties can invest targeted resources to find, for example, technical articles or other teachings that would have prevented the patent from ever issuing in the first place, but for the resource constraints on the Patent Office. See Arti K. Rai, *Allocating Power over Fact-Finding in the Patent System*, 19 Berkeley Tech. L.J. 907, 918 (2004).

This is not to say that the Patent Office should forgo efforts to improve its pre-grant examination, of course; the point is simply that *inter partes* review is a very reasonable choice by Congress to address the complex problem of administering a patent system.

2. *Inter partes* review also serves a public purpose in the patent scheme by having matters of science and technology decided by experts in science and technology. Patent validity turns on comparing the described and claimed invention to other patents, publications, scientific articles, and teachings, to assess whether the invention is identical to those prior-art teachings or is sufficiently similar so as to be obvious. See 35 U.S.C. §§ 102–103. This is a scientifically and technologically intensive inquiry, one that demands specialized knowledge.

The administrative judges who preside over *inter partes* review are statutorily required to be “persons of competent legal knowledge and scientific ability.” § 6(a). This Court has found no constitutional defect in “committing some new types of litigation to administrative agencies with special competence in the relevant field.” *Atlas Roofing*, 430 U.S. at 455. In adjudication of patents,

the quintessential government activity demanding special competence, there is no constitutional defect in assigning that task to experts.

3. *Inter partes* review also fills an important gap in the patent system because it is the sole avenue by which the general public can challenge a patent.

Pre-grant patent examination is conducted *ex parte*. Interested members of the public generally cannot help the Patent Office find relevant prior art or explain defects in a pending patent application, as “no protest or other form of pre-issuance opposition” is permitted. 35 U.S.C. § 122(c).²² Even if the most useful information relevant to an application is easily accessible to third parties such as competitors or scientists, patent prosecution still largely involves only applicants and examiners, neither of whom have a strong incentive to represent the public interest in avoiding mistaken patent grants.

In contrast, *inter partes* review allows any interested member of the public to request reconsideration of a patent. § 311(a). If the Patent Office agrees that there is a “reasonable likelihood” that the petitioner will be able to show that at least one claim of the patent should not have issued, § 314(a), the petitioner can participate in the proceedings and oppose any arguments the patent owner may make to the contrary, § 316(a)(10), (13). *Inter partes* review, in contrast to pre-grant *ex parte* examination, enables the sort of adversarial discovery and discourse that is the paradigm for accuracy, fairness, and justice.

²²A member of the public may protest an application with the applicant’s consent, or file a “preissuance submission” of prior art within a limited time. *See id.* § 122(c), (e). Both procedures are considered to be “of little practical use.” Lisa Larrimore Ouellette, *Pierson, Peer Review, and Patent Law*, 69 Vand. L. Rev. 1825, 1841 (2016).

* * *

A helpful perspective on the views expressed in this brief is found in *United States v. Duell*, 172 U.S. 576 (1899). Recognizing the types of rights identified in *Murray's Lessee*, this Court held matters of patent law to be public rights. *Duell*, 172 U.S. at 589. It held so because Congress had the power to “promote the progress of science and useful arts,” and thus “to make all laws which shall be necessary and proper for carrying that expressed power into execution.” *Id.* at 583; *cf.* Section I *supra* p. 6. The Court further noted of the patent system that “two interests are involved, that of the public . . . and that of the patentee”; and that review of patents “requires the intelligent judgment of a trained body of skilled officials.” *Duell*, 172 U.S. at 586 (quoting *Butterworth v. United States ex rel. Hoe*, 112 U.S. 50, 59 (1884)); *cf.* Section II.C *supra* p. 25; Section II.D *supra* p. 28.

The broad policy concerns noted in *Duell* and this brief are important here, because this case is not just about an idiosyncratic agency proceeding. It is about the very character of patent law—whether it shall remain as it was born and as the Framers intended, an instrument for Congress to use to promote the public good; or whether it shall become a matter of private right and private entitlement, where patent owners may exert, in Blackstone’s words, “sole and despotic dominion” over ideas that in fact should belong to the public. For two hundred and twenty-nine years, the United States patent system has kept to the path of the public interest. That should not change today.

CONCLUSION

For the foregoing reasons, the decision of the Court of Appeals should be affirmed.

Respectfully submitted,

CHARLES DUAN

Counsel of Record

PUBLIC KNOWLEDGE

1818 N Street NW, Suite 410

Washington, DC 20036

(202) 861-0020

cduan@publicknowledge.org

VERA RANIERI

ELECTRONIC FRONTIER

FOUNDATION

815 Eddy Street

San Francisco, CA 94109

(415) 436-9333

vera@eff.org

Counsel for amici curiae

October 2017

APPENDIX A
PATENTS BILL, H.R. 41, FEBRUARY 16, 1790

This excerpt is taken from the bill as published in 6 *Documentary History of the First Federal Congress of the United States of America 1626–32* (Charlene Bangs Bickford & Helen E. Veit eds., 1986). It is reprinted here to improve public access, as this is the sole historical primary source cited in this brief that is not readily available online.

* * *

SEC. 4. . . .

And whereas, Notwithstanding the precautions in this act contained, patents or grants of the sole and exclusive right and privilege of making, constructing, using, employing, and vending to others, divers inventions or discoveries, may be obtained surreptitiously, or upon false suggestions, which may not only be prejudicial to individuals, but to the community: *Be it therefore further enacted*, That upon oath or affirmation made before the judge of the said district court, that any patent, which shall be issued in pursuance of this act, was obtained surreptitiously by, or upon false suggestion, and motion made to the said court, within one year after issuing the said patent, but not afterwards, it shall and may be lawful to, and for the judge of the said district court, if the matter alledged shall appear to him to be sufficient, to grant a rule that the patentee or patentees, his, her, or their executors, administrators or assigns shew cause, why process should not issue against him, her, or them, to repeal such patents; and if sufficient cause shall not be shewn to the contrary, the rule shall be made absolute; and thereupon shall issue and be awarded and issued against the

said patentee or patentees, his, her, or their executors, administrators, or assigns, process in the name of him, her, or them, who shall complain thereof, and upon such writ, the proceedings, and judgment shall be such as to repeal the patents; and if the party at whose complaint the process issued, shall have judgment given against him, he shall pay all such costs as the defendant shall be put to in defending the suit, to be taxed by the court, and recovered in such manner as costs expended by defendants shall be recovered in due course of law.

* * *