

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 INTEL, APPLIED MATERIALS,
CISCO, GOOGLE, LG ELECTRONICS, ON
SEMICONDUCTOR, SAMSUNG, AND XEROX AS
AMICI CURIAE IN SUPPORT OF RESPONDENTS**

MATTHEW J. HULT
INTEL CORPORATION
2200 Mission College Blvd.
Santa Clara, California 95054
(408) 765-8080

DONALD B. VERRILLI, JR.
Counsel of Record
GINGER D. ANDERS
MUNGER, TOLLES & OLSON LLP
1155 F. Street, NW, 7th Floor
Washington, D.C. 20004
(202) 220-1100
donald.verrilli@mto.com

JORDAN D. SEGALL
MUNGER, TOLLES & OLSON LLP
350 S. Grand Ave., 50th Floor
Los Angeles, California 90071
(213) 683-9208

(Additional Counsel Listed on Inside Cover)

KEITH R. WEED
APPLIED MATERIALS, INC.
P.O. Box 58039
Santa Clara, California 95054
(408) 727-5555

ROBERT M. TUTTLE
ON SEMICONDUCTOR CORP.
5005 East McDowell Road
Phoenix, Arizona
602-244-3419

DAN LANG
BRYAN SINCLAIR
CISCO SYSTEMS, INC.
170 W. Tasman Dr.
San Jose, California 95134
(408) 526-4000

MICHELLE WAITES
XEROX CORPORATION
201 Merritt 7
XWHQ 6NW113
Norwalk, Connecticut 06851
(213) 968-3000

JAMES SUH*
LG ELECTRONICS INC.
Intellectual Property Center
19, Yangjae-daero 11gil,
Seocho-gu
Seoul, Rep. of Korea 06772
+82-(0)2-3777-1114

** Admitted to practice in New York*

TABLE OF CONTENTS

	Page
TABLE OF AUTHORITIES.....	iii
INTEREST OF <i>AMICI CURIAE</i>	1
INTRODUCTION AND SUMMARY OF THE ARGUMENT.....	2
ARGUMENT.....	6
I. <i>INTER PARTES</i> REVIEW IS CONSTITUTIONAL.....	6
A. Historical Practice Demonstrates That Article III Permits the Executive Branch to Adjudicate Patentability, in Both Granting and Reviewing Issued Patents.....	7
1. The Framers viewed patent rights as the creation of Congress, subject to whatever limits Congress placed on them.	7
2. The Executive Branch has always adjudicated patentability in issuing patents.....	9
3. Historical practice demonstrates that adjudicating the validity of issued patents is not the exclusive province of the courts.....	11
B. <i>Inter Partes</i> Review Does Not Aggrandize the Executive Branch at the Expense of the Judiciary	16

C. These Historical Characteristics of Patent Rights Confirm that Patent Rights Are Quintessentially Public	21
D. <i>Inter Partes</i> Review Does Not Impinge on the Individual Liberty Interests Protect-ed by Article III	25
E. <i>Inter Partes</i> Review Does Not Deprive Patent-Holders of Seventh Amendment Rights	27
II. <i>INTER PARTES</i> REVIEW SERVES SOUND POLICY CONSIDERATIONS	28
A. The PTO Frequently Issues Patents That Are in Fact Invalid	29
B. <i>Inter Partes</i> Review Provides the PTO and the Public with an Efficient Means of Correcting Erroneous Patent Grants	32
C. <i>Inter Partes</i> Review Is Effective	34
CONCLUSION	36

TABLE OF AUTHORITIES

	Page
CASES	
<i>In re Affinity Labs of Texas, LLC</i> , 856 F.3d 883 (Fed. Cir. 2017)	19
<i>Atlas Roofing Co. v. Occupational Safety & Health Review Commission</i> , 430 U.S. 442 (1977)	23, 27
<i>Ex parte Bakelite Corp.</i> , 279 U.S. 438 (1929)	21
<i>Bank Markazi v. Peterson</i> , 136 S. Ct. 1310 (2016)	26
<i>Blanchard v. Sprague</i> , 3 F. Cas. 648 (C.C.D. Mass. 1839)	8
<i>Bonito Boats, Inc. v. Thunder Craft Boats, Inc.</i> , 489 U.S. 141 (1989)	7, 23
<i>Butterworth v. United States</i> , 112 U.S. 50 (1884)	11
<i>Commil USA, LLC v. Cisco Systems, Inc.</i> , 135 S. Ct. 1920 (2015)	32
<i>Commodity Futures Trading Commission v. Schor</i> , 478 U.S. 833 (1986)	16, 20, 25
<i>Crossroads Systems, Inc. v. Cisco Systems, Inc.</i> , 694 F. App'x 780 (Fed. Cir. 2017)	35

<i>Cuozzo Speed Technologies, LLC v. Lee</i> , 136 S. Ct. 2131 (2016).....	15, 24
<i>Dickinson v. Zurko</i> , 527 U.S. 150 (1999).....	11, 19
<i>Freytag v. Commissioner of Internal Revenue</i> , 501 U.S. 868 (1991).....	9, 10, 22, 24
<i>In re Gartside</i> , 203 F.3d 1305 (Fed. Cir. 2000).....	14
<i>Granfinanciera, S.A. v. Nordberg</i> , 492 U.S. 33 (1989).....	5, 22, 23, 24, 27
<i>Halo Electronics, Inc. v. Pulse Electronics, Inc.</i> , 136 S. Ct. 1923 (2016).....	23
<i>Intel Corp. v. FuzzySharp Technologies, Inc.</i> , No. IPR2014-00001, (PTAB Jan. 13, 2015) (Paper 23).....	35
<i>Livingston v. Van Ingen</i> , 9 Johns. 507 (N.Y. 1812).....	12
<i>McCormick Harvesting Machine Co. v. C.</i> <i>Aultman & Co.</i> , 169 U.S. 606 (1898).....	13
<i>McKart v. United States</i> , 395 U.S. 185 (1969).....	17
<i>Microsoft Corp. v. i4i Limited Partnership</i> , 564 U.S. 91 (2011).....	10, 19, 29

<i>Morgan v. Daniels</i> , 153 U.S. 120 (1894).....	11, 12, 13, 20
<i>Motion Picture Patents Co. v. Universal Film Manufacturing Co.</i> , 243 U.S. 502 (1917).....	4, 5, 22
<i>Murray’s Lessee v. Hoboken Land & Improvement Co.</i> , 59 U.S. 272 (1855).....	21
<i>Northern Pipeline Construction Co. v. Marathon Pipe Line Co.</i> , 458 U.S. 50 (1982).....	19, 20
<i>In re Oetiker</i> , 977 F.2d 1443 (Fed. Cir. 1992).....	30
<i>RCA v. Radio Engineering Laboratories, Inc.</i> , 293 U.S. 1 (1934).....	12, 19
<i>Schlesinger v. Councilman</i> , 420 U.S. 738 (1975).....	17
<i>Sears, Roebuck & Co. v. Stiffel Co.</i> , 376 U.S. 225 (1964).....	22
<i>Stern v. Marshall</i> , 564 U.S. 462 (2011).....	16, 19, 20, 22, 24, 25
<i>Teva Pharmaceuticals USA, Inc. v. Sandoz, Inc.</i> , 135 S. Ct. 831 (2015).....	8, 22, 23, 25
<i>Thomas v. Union Carbide Agricultural Products Co.</i> , 473 U.S. 568 (1985).....	16, 24

<i>United States v. American Bell Telephone Co.</i> , 128 U.S. 315 (1888).....	13
<i>United States v. Schurz</i> , 102 U.S. 378 (1880).....	13
<i>Victor Talking Machine Co. v. Brunswick-Balke-Collender Co.</i> , 290 F. 565 (1923).....	13
<i>Zivotofsky v. Kerry</i> , 135 S. Ct. 2076 (2015).....	13
STATUTES	
Administrative Procedure Act, 5 U.S.C. § 706.....	11, 19
Leahy-Smith America Invents Act, Pub. L. No. 112-29, 125 Stat. 284 (2011)	2, 28
Patent Act of 1790, 1 Stat. 109	9, 12, 27, 28
Patent Act of 1836, 5 Stat. 117	13
Patent Act of 1952, 35 U.S.C. § 6 <i>et seq.</i> :	
35 U.S.C. § 6.....	15
35 U.S.C. § 6(a)	14
35 U.S.C. § 102.....	3
35 U.S.C. § 103.....	3
35 U.S.C. § 131.....	30
35 U.S.C. § 134.....	30
35 U.S.C. § 135(a)	14

35 U.S.C. § 141.....	11, 19
35 U.S.C. § 261.....	25, 26
35 U.S.C. § 307.....	14
35 U.S.C. § 311.....	16
35 U.S.C. § 311(b)	16
35 U.S.C. § 314(b)(2)	14
35 U.S.C. § 315.....	21
35 U.S.C. § 315(b)	14
35 U.S.C. § 316(a)	14
35 U.S.C. § 316(a)(11)	34
35 U.S.C. § 316(d)	17
35 U.S.C. § 317(a)	17
35 U.S.C. § 318.....	20
35 U.S.C. § 319.....	15, 19
 CONSTITUTIONAL PROVISIONS	
U.S. Const. amend. VII.	3, 5, 27
U.S. Const. art. I, § 8, cl. 8	8
U.S. Const. art. III.....	<i>passim</i>
 LEGISLATIVE MATERIALS	
2 Annals of Congress 1413 (1790).....	9, 28
H.R. Rep. No. 112-98 (2011).....	14

OTHER MATERIALS

- American Intellectual Property Law
Association, *Report of the Economic
Survey* (2017).....31, 34
- Claire Bushey, *Why This Lawyer Is
Rethinking Patent Lawsuits*, Crain’s Chi.
Bus., June 6, 2015,
[http://www.chicagobusiness.com/article/
20150606/ISSUE01/306069991/why-this-
lawyer-is-rethinking-patent-lawsuits](http://www.chicagobusiness.com/article/20150606/ISSUE01/306069991/why-this-lawyer-is-rethinking-patent-lawsuits) 36
- Julie E. Cohen & Mark A. Lemley, *Patent
Scope and Innovation in the Software
Industry*, 89 Cal. L. Rev. 1 (2001) 31
- Federal Trade Commission, *To Promote
Innovation: The Proper Balance of
Competition and Patent Law and Policy*
(2003).....30, 32
- P.J. Federico, *Operation of the Patent Act of 1790*,
18 J. Pat. Off. Soc’y 237 (1936).....9
- Michael D. Frakes & Melissa F. Wasserman,
*Does Agency Funding Affect
Decisionmaking?: An Empirical Assessment
of the PTO’s Granting Patterns*,
66 Vand. L. Rev. 67 (2013)..... 30

- Michael D. Frakes & Melissa F. Wasserman, *Is the Time Allocated to Review Patent Applications Inducing Examiners to Grant Invalid Patents? Evidence from Microlevel Application Data*, 99 Rev. Econ. Stat. 550 (2017).....28, 29
- W.M. Hindmarch, *A Treatise on the Law Relative to Patent Privileges for the Sole Use of Inventions* (1846).....8
- Andrew J. Lagatta & George C. Lewis, *How Inter Partes Review Became a Valuable Tool So Quickly*, Law 360, Aug. 16, 2013, <https://www.law360.com/articles/463372/how-inter-partes-review-became-a-valuable-tool-so-quickly>34, 35
- Mark A. Lemley, *Rational Ignorance at the Patent Office*, 95 Nw. L. Rev. 1495 (2001).....33
- Christopher R. Leslie, *The Anticompetitive Effects of Unenforced Invalid Patents*, 91 Minn. L. Rev. 101 (2006).....31
- Letter from Thomas Jefferson to Isaac McPherson (Aug. 13, 1813), Founders Online, National Archives, <http://founders.archives.gov/documents/Jefferson/03-06-02-0322>7, 10
- Caleb Nelson, *Adjudication in the Political Branches*, 107 Colum. L. Rev. 559 (2007)24

Note, <i>The Patent Act of 1836</i> , 18 J. Pat. Off. Soc’y 91 (1936).....	10
Frank D. Prager, <i>The Steam Boat Interference—1787–1793</i> , 40 J. Pat. Off. Soc’y 611 (1958).....	12
PricewaterhouseCooper, <i>2017 Patent Litigation Study</i> (2017), https://www.pwc.com/us/en/forensic- services/publications/assets/2017-patent- litigation-study.pdf	31
Greg Reilly, <i>The Constitutionality of Administrative Patent Cancellation</i> , 23 B.U. J. Sci. & Tech. L. 377 (2017)	13
William C. Robinson, <i>The Law of Patents for Useful Inventions</i> (1890).....	8, 11
RPX Blog, <i>Q3 Data Update</i> (Oct. 2, 2017), https://www.rpxcorp.com/2017/10/02/q3- data-update-patent-litigants-and-courts- adjust-to-recent-rulings-with-further- changes-brewing/	35
U.S. Patent & Trademark Office, <i>PTO Performance & Accountability Report for Fiscal Year 2016</i> , https://www.uspto.gov/sites/default/files/d ocuments/USPTOFY16PAR.pdf	30

U.S. Patent & Trademark Office, *Trial Statistics: IPR, PGR, CBM* (2017),
https://www.uspto.gov/sites/default/files/documents/Trial_Stats_2017-09-30.pdf 34

U.S. Patent & Trademark Office, *U.S. Patent Statistics Chart, Calendar Years 1963–2015*,
https://www.uspto.gov/web/offices/ac/ido/oeip/taf/us_stat.htm 28

INTEREST OF *AMICI CURIAE*¹

Amici are some of the country's leading technology companies, together representing over 1.5 trillion dollars in market capitalization. *Amici* employ many of the world's most innovative inventors, software developers, and engineers. Each *amicus* holds a substantial patent portfolio, and each is involved frequently in patent litigation before the federal courts. *Amici* share a common interest in high-quality patents that promote social welfare and represent genuine inventions—and an equally strong interest in supporting the processes Congress has enacted to address erroneously granted patents that hinder innovation and encourage abusive litigation.

While each *amicus* has been involved in patent litigation, over the last fifteen years, *amici's* experience—like that of most successful technology companies—overwhelmingly has been as defendants in suits brought by increasingly sophisticated non-practicing entities seeking return on litigation as a portfolio investment strategy. In *amici's* experience, *inter partes* review is an invaluable means of combating weak and

¹ Pursuant to Supreme Court Rule 37.6, counsel for *amici curiae* state that no counsel for a party authored this brief in whole or in part, and no party or counsel for a party, or any other person other than *amici curiae* or their counsel, made a monetary contribution intended to fund the preparation or submission of this brief. All parties have consented in writing to the filing of this brief.

overbroad patents asserted by these entities. In light of the increasing offensive assertion of invalid patents by third parties who are strangers to their issuance, especially in areas of emerging technology, *amici* believe that *inter partes* review performs a critical function within the patent system.

INTRODUCTION AND SUMMARY OF THE ARGUMENT

Since the Founding, the Executive Branch has possessed unquestioned authority to determine whether an invention merits a patent. Over time, Congress has given the Patent and Trademark Office (PTO) increasing authority to conclude that existing patents are invalid, beginning with interference proceedings in the nineteenth century, continuing with reexamination, and most recently with *inter partes* review authorized by the Leahy-Smith America Invents Act, Pub. L. No. 112-29, 125 Stat. 284 (2011). *Inter partes* review's most immediate predecessor—reexamination—has for almost 40 years provided a targeted administrative error-correction mechanism permitting the PTO to review its own patent issuance decisions. Over that period, it became increasingly clear that the PTO erroneously issues significant numbers of patents, with harmful consequences for innovation and commerce.

In response, Congress refined and expanded post-issuance review to make it more effective, efficient, and readily available—culminating in *inter partes* review. *Inter partes* review allows a three-judge panel of the Patent Trial and Appeals Board (PTAB) to revisit the agency's initial patentability determination, subject to the same degree of judicial review as when a patent

application is denied in the first instance. That limited expansion of the agency's adjudicative authority does not aggrandize the Executive Branch at the expense of the Judiciary. Nor does it authorize the Executive to abrogate core private rights for which there historically would have been a right to trial by jury.

I. *Inter partes* review does not violate Article III or the Seventh Amendment.

A. Since the Founding, patent rights have been created by Congress, and the Executive Branch has adjudicated patentability and granted individual patents. The Executive's authority to adjudicate whether a claimed invention warrants a patent has never been questioned on Article III grounds. As far back as the nineteenth century, moreover, Congress has given the PTO authority to use adjudicatory proceedings to cancel existing patents, including through reexamination proceedings. Invalidating *inter partes* review would therefore work a sea change in patent law, depriving the PTO of post-grant review authority that it has long exercised, and Congress of flexibility to calibrate the administrative process to ensure patent quality.

B. *Inter partes* review does not aggrandize the Executive Branch at the expense of the Judiciary. The sole question in an IPR proceeding is whether the PTO's original decision to issue the patent was correct. The PTO considers only whether the patent is invalid as anticipated or obvious based on certain written prior art. *See* 35 U.S.C. §§ 102, 103. The PTO may not invalidate a patent based on any post-grant conduct or other issues that it could not have considered in the initial examination proceeding. *Inter partes* review is therefore no different from any other administrative recon-

sideration proceeding that enables an agency to correct its own errors and reduces the need for judicial intervention.

Inter partes review also does not deprive the Judiciary of any core judicial authority. While courts have long adjudicated validity challenges, that adjudication consists of judicial review of the PTO's issuance decision under a deferential standard. *Inter partes* review merely provides the option to obtain initial review of the agency's issuance decision in the agency itself. The proceeding does not supplant or alter the Judiciary's ultimate review of the validity issues, as the PTO's conclusions remain subject to judicial review, under the same standards that have long been viewed as adequate to superintend the PTO's issuance decisions.

C. The constitutionality of *inter partes* review is confirmed by the fact that patentability is a matter of public rights. Patent rights are created by statute and conferred on inventors to further the public purposes of the patent regulatory scheme. Absent government action, the right to use inventions would inhere in the public. Although petitioner emphasizes that a patent confers on its holder property rights that may be enforced against third parties in infringement litigation, that is not inconsistent with the fact that the patentee's rights as created and defined by the government remain public rights.

D. *Inter partes* review does not infringe on the individual liberty interests protected by Article III. "The primary purpose of our patent laws is not the creation of private fortunes for the owners of patents, but is to promote the progress of science and the useful arts." *Motion Picture Patents Co. v. Universal Film Mfg. Co.*,

243 U.S. 502, 511 (1917) (internal quotation marks omitted). Congress therefore has broad discretion to place conditions and limitations on the scope of patent rights to ensure that the patent system furthers its public objectives, including fostering innovation and disclosure of new inventions. Given that the PTO's longstanding authority to decide whether an invention merits a patent in the first place has never been viewed as threatening to individual liberties, it is difficult to see why the PTO's revisiting its issuance decision should be.

IPR proceedings also vindicate public interests, not merely private ones. The PTAB has the authority to continue an *inter partes* review even if the parties settle or otherwise seek to terminate it. And in all events, the PTO's decision on *inter partes* review remains subject to judicial review.

E. Because *inter partes* review is consistent with Article III, it is also consistent with the Seventh Amendment. *See Granfinanciera, S.A. v. Nordberg*, 492 U.S. 33 (1989). While juries traditionally decided validity questions in infringement suits, petitioner offers no evidence that juries were constitutionally required. Indeed, the first Patent Act gave a judge authority to determine whether a patent should be invalidated in certain circumstances.

II. *Inter partes* review is serving its intended purposes. A broad consensus exists among regulators and practitioners that a proliferation of invalid patents poses serious problems, particularly in emerging technology industries. These patents, and the non-practicing entities that exploit them, inhibit innovation and impose significant costs on commercial actors.

Challenging the validity of these patents in litigation has proven to be an incomplete and inefficient solution that many targeted companies cannot undertake.

Beginning in 1981, Congress has addressed this problem by giving the PTO increasing authority to reexamine and cancel granted patents. Earlier reexamination mechanisms were inefficient and underutilized. Congress therefore enacted *inter partes* review to provide a more efficient, agency-level method for challenging invalid, commercially harmful patents. That system has been a success: aided by third-party challengers, the PTO has been able to evaluate whether to initiate proceedings and, in appropriate circumstances, to reevaluate and cancel erroneously issued patents.

ARGUMENT

I. *INTER PARTES* REVIEW IS CONSTITUTIONAL

Inter partes review does not encroach on the Judiciary's Article III power because it only enables the PTO to correct errors in its own earlier decision to grant a patent. Article III unquestionably permits the PTO to adjudicate whether particular inventions satisfy the statutory criteria for patentability in the first instance. Enabling the PTO to revisit that same question, after the patent has been issued, does not arrogate to the Executive Branch any adjudicative authority that it does not already have. The validity of a patent, moreover, is a matter of public rights that Congress may commit to the Executive consistent with Article III.

- A. Historical Practice Demonstrates That Article III Permits the Executive Branch to Adjudicate Patentability, in Both Granting and Reviewing Issued Patents**
- 1. The Framers viewed patent rights as the creation of Congress, subject to whatever limits Congress placed on them.**

The Framers of the Constitution understood patent rights to be entirely creatures of statute, created to advance innovation by granting inventors a limited right to exclude competition in exchange for dedicating knowledge to the public. Thomas Jefferson, who helped draft the first patent statutes and led the first board of patent examiners, explained that the right to exclusive use of an invention was a creation of the government rather than “a natural right” enjoyed by inventors:

Inventions then cannot in nature be a subject of property. Society may give an exclusive right to the profits arising from them, as an encouragement to men to pursue ideas which may produce utility, but this may or may not be done, according to the will and convenience of the society, without claim or complaint from any body.

Letter from Thomas Jefferson to Isaac McPherson (Aug. 13, 1813), Founders Online, National Archives (“Jefferson Letter”)²; *see also* *Bonito Boats, Inc. v. Thunder Craft Boats, Inc.*, 489 U.S. 141, 146 (1989). That conception of patent rights reflected the Ameri-

² <http://founders.archives.gov/documents/Jefferson/03-06-02-0322>.

can patent system's roots in the English patent system, where "[i]nvention patents originated not as private property rights, but as royal prerogatives" that could be "issued and revoked only by the Crown." *Teva Pharm. USA, Inc. v. Sandoz, Inc.*, 135 S. Ct. 831, 847 (2015) (Thomas, J., dissenting) (internal citations omitted); see also W.M. Hindmarch, *A Treatise on the Law Relative to Patent Privileges for the Sole Use of Inventions* 3 (1847) ("[I]nventors are *never entitled as of right* to letters patent ... but they must obtain them from the Crown by petition, *and as a matter of grace and favour*["]).

Because patent rights are created by statute rather than common law, Congress has always possessed broad latitude to define their scope. See *Blanchard v. Sprague*, 3 F. Cas. 648, 650 (C.C.D. Mass. 1839) (Story, J.). As a nineteenth-century treatise explained, "[t]he issue of a patent is ... the creation of a new right in favor of the inventor ... whose character and extent, as well as duration, the government must define." See 2 William C. Robinson, *The Law of Patents for Useful Inventions* § 415 (1890). In particular, because "[t]he authority to grant letters-patent when the required conditions are performed implies an authority to repeal them whenever it is ascertained that the grant had been improperly conferred," Congress "has always ... exercised the power to provide methods for invalidating its own grants upon discovering that the patentee had no right to retain them." *Id.* § 418.

2. The Executive Branch has always adjudicated patentability in issuing patents.

The Constitution vests Congress with broad discretion to “secur[e] for limited Times to... Inventors the exclusive Right to their ... Discoveries.” U.S. Const. art. I, § 8, cl. 8. Beginning in 1790, Congress exercised its constitutional power to delegate the authority to issue patents to Executive Branch officials—and in so doing, to adjudicate compliance with the statutory requirements for a patent.

The Patent Act of 1790 provided that an inventor could “petition ... the Secretary of State, the Secretary for the department of war, and the Attorney General of the United States” for a patent. Patent Act of 1790, § 1, 1 Stat. 109 (“1790 Act”). Those officials (the first Patent Board) could grant the patent if they concluded that the invention was “sufficiently useful and important.” *Id.* A disappointed applicant had no right to judicial review. Congress considered and rejected the possibility of permitting an appeal to a jury, reasoning that it would be “highly improper that juries should be called to judge” upon “matters of invention” on which “they may not be supposed competent to form a judgment,” and in any event, “the right of trial by juries is not universal.” 2 Annals of Cong. 1413 (1790).

The first Patent Board “adjudicated the patentability of inventions, sometimes hearing argument by petitioners” in support of their applications. *Freytag v. Comm’r of Internal Revenue*, 501 U.S. 868, 910 (1991) (Scalia, J., concurring); P.J. Federico, *Operation of the Patent Act of 1790*, 18 J. Pat. Off. Soc’y 237, 251 (1936). More broadly, the Board viewed the Patent Act as

granting it authority to establish, through adjudication, “general rules” that would “draw[] a line between the things which are worth to the public the embarrassment of an exclusive patent, and those which are not.” Jefferson Letter. The first Congress and the Framers of the Constitution viewed Executive adjudication of patentability as a permissible exercise of “executive power.” *Freytag*, 501 U.S. at 910 (Scalia, J., concurring).

Congress learned from hard experience that Executive Branch adjudication of patentability was crucial to preventing wasteful litigation. Between 1793 and 1836, patents were granted without any examination by the Executive Branch. Note, *The Patent Act of 1836*, 18 J. Pat. Off. Soc’y 91 (1936). That system proved unworkable: patents issued for “common machinery and long known improvements,” leading to “a great number of law suits aris[ing], which are daily increasing in an alarming degree, onerous to the courts, ruinous to the parties, and injurious to society.” *Id.* at 93 (reprinting report of Senate investigative committee). For that reason, Congress returned to an examination system in 1836, creating the Patent Office within the Executive Branch and delegating to it “the burden ... to determine the ... patentability of the invention when and where the patent is granted.” *Id.* at 97. The objective was to “eliminate litigation before it begins.” *Id.* (internal quotation marks omitted).

The examination process endures today. “In evaluating whether” the statutory criteria of patentability “have been met, PTO examiners must make various factual determinations” and apply the law to the facts. *Microsoft Corp. v. i4i Ltd. P’ship*, 564 U.S. 91, 96 (2011). If the PTO grants the patent, it confers exclu-

sive rights that the applicant did not possess before. If the PTO declines to grant a patent, that decision is reviewable in the Federal Circuit under the standards set forth in the Administrative Procedure Act, 5 U.S.C. § 706 (APA). *See* 35 U.S.C. § 141; *Dickinson v. Zurko*, 527 U.S. 150, 165 (1999).

This Court has long approved Congress’s delegation of the power to adjudicate patentability to the Executive. In *Butterworth v. United States*, the Court stated that the Patent Office’s “investigation of every claim presented involves the adjudication of disputed questions of fact, upon scientific or legal principles, and is, therefore, essentially judicial in its character, and requires the intelligent judgment of a trained body of skilled officials.” 112 U.S. 50, 59 (1884). The Court did not question the constitutionality of conferring that adjudicative power on the Executive Branch. To the contrary, the Court affirmed the primacy of the Patent Office in adjudicating patentability, holding that courts should defer to the Patent Office’s factual determinations because the office was “a special tribunal, intrusted with full power in the premises.” *Morgan v. Daniels*, 153 U.S. 120, 124 (1894).

3. Historical practice demonstrates that adjudicating the validity of issued patents is not the exclusive province of the courts.

Because patents are statutorily created rights, Congress has the power to “provide methods for invalidating its own grants.” 2 Robinson, *supra*, § 418. Although Congress at first conferred that authority on the courts, no evidence suggests that Congress believed that the Constitution required it to do so. Over time,

Congress granted the PTO increasing authority to reevaluate the validity of existing patents. *Inter partes* review is the latest manifestation of that authority.

a. At the time of the Constitution’s adoption, there was no established rule that only courts could invalidate patents. Patents were generally granted by the legislature, and they could be repealed by the legislature. See *Livingston v. Van Ingen*, 9 Johns. 507, 507 (N.Y. 1812) (describing state patent that was repealed by the legislature); Frank D. Prager, *The Steam Boat Interference—1787–1793*, 40 J. Pat. Off. Soc’y 611, 630 (1958). Even after Congress delegated patent invalidation to the courts by providing that an accused infringer could raise the patent’s invalidity as a defense, 1790 Act §§ 4, 6, this Court did not view judicial validity determinations as traditional common-law determinations of one party’s rights against another. Rather, the Court understood the validity adjudication to be a form of judicial review of the Patent Office’s decision to grant the patent. See *Morgan*, 153 U.S. at 123–25; *RCA v. Radio Eng’g Labs., Inc.*, 293 U.S. 1, 8–10 (1934). This Court accordingly held that when a third party challenged a patent, that patent should be presumed valid to reflect the Patent Office’s primary responsibility and expertise, and overturned by a court only upon a “thorough conviction” of error. *Morgan*, 153 U.S. at 123–25.

Petitioner asserts that Congress’s delegation to the courts reflected the view that “[o]nly” courts were “competent” to adjudicate the validity of issued patents. Pet. Br. 29. But the decisions on which petitioner relies describe the courts’ role as a function of the Patent Act, not the Constitution. None mentioned any constraints on Congress’s authority to determine how

patents should be invalidated. In *McCormick Harvesting Machine Co. v. C. Aultman & Co.*, for instance, the Court described the available methods of cancelling a patent as a matter of congressional choice, similar to Congress’s decision to vest authority to issue patents in the Patent Office. 169 U.S. 606, 609 (1898); *see also United States v. Am. Bell Tel. Co.*, 128 U.S. 315, 364 (1888); *United States v. Schurz*, 102 U.S. 378, 384 (1880) (cited in *American Bell*) (“Congress alone can confer” authority to repeal land patents).

b. Over time, Congress has delegated to the Patent Office increasing authority to adjudicate the validity of issued patents. That this historical practice has not been questioned is strong evidence of its constitutionality. *See Zivotofsky v. Kerry*, 135 S. Ct. 2076, 2091 (2015).

In the Patent Act of 1836, Congress gave the Patent Office the authority to declare an interference in order to determine priority of invention as between a patent applicant and the holder of an existing patent. The Office would then conduct an adversarial proceeding, with both sides offering evidence. *Morgan*, 153 U.S. at 127–29. When the Office ruled that the applicant had established priority over the patentee, it would issue an interfering patent to the applicant, who could then seek judicial cancellation of the existing patent in a proceeding in which the Office’s findings were given deference. Patent Act of 1836, ch. 357, § 8, 5 Stat. 120; *see also Victor Talking Mach. Co. v. Brunswick-Balke-Collender Co.*, 290 F. 565, 575 (1923); Greg Reilly, *The Constitutionality of Administrative Patent Cancellation*, 23 B.U. J. Sci. & Tech. L. 377, 387 (2017). Congress and the courts evidently viewed the Patent Office’s primary authority to conclude that an existing

patent should be canceled as consistent with Article III. Indeed, for the past 65 years since the Patent Act of 1952, Congress has provided that the PTO's judgment against a patentee in an interference proceeding "shall constitute cancellation of the claims involved in the patent" after the conclusion of judicial review. 35 U.S.C. § 135(a).

Congress has expanded the PTO's ability to cancel patents in other contexts as well. Since 1981, the PTO has had the authority to conduct an *ex parte* reexamination of an issued patent at the request of any interested party, and to cancel claims on certain grounds of unpatentability. 35 U.S.C. § 307. In 1999, Congress expanded reexamination by creating *inter partes* reexamination, which permits third-party challengers to participate in the proceeding by filing written comments and evidence rebutting the patentee's contentions. 35 U.S.C. §§ 314(b)(2), 315(b). In both proceedings, the PTO's decision is reviewable in the Federal Circuit under APA standards. *See In re Gartside*, 203 F.3d 1305, 1316 (Fed. Cir. 2000).

Inter partes review grows directly out of these earlier proceedings. Congress enacted *inter partes* review to refine the reexamination system. *See* H.R. Rep. No. 112-98, at 46–47 (2011) (stating that the America Invents Act would modify *inter partes* reexamination "and rename[] the proceeding '*inter partes* review'"). *Inter partes* review's primary innovation is that it offers expanded participation rights to the third-party challenger, including the opportunity to submit depositions and expert evidence to administrative judges "with legal knowledge and scientific ability." 35 U.S.C. §§ 6(a), 316(a). As with the other PTO proceedings, a

disappointed party may appeal and obtain review under the APA. *Id.* § 319.

Petitioner argues that the increased third-party participation rights render *inter partes* review different in kind, and not merely in degree, from its predecessors, and that IPR proceedings are adversarial and therefore “judicial” in nature. Pet. Br. 8, 20. But this Court has already rejected that argument, explaining that despite the additional adversarial features of *inter partes* review, the proceeding shares the same “basic purposes” as reexamination: it “offers a second look at an earlier administrative grant of a patent.” *Cuozzo Speed Techs., LLC v. Lee*, 136 S. Ct. 2131, 2136, 2143–44 (2016). In any event, the distinctions that petitioner seeks to draw make no difference under its theory of Article III: petitioner contends that Congress may not “transfer[] the responsibility for deciding” patent validity “to administrative agency employees.” Pet. Br. 15. If *inter partes* review is unconstitutional under petitioner’s theory, so is reexamination.

Accepting petitioner’s arguments would therefore work a sea change in patent law. Congress has always exercised broad discretionary authority to determine the procedures by which patents can be canceled, and it has relied increasingly on the PTO to sift out bad patents. 35 U.S.C. § 6. Throughout the nation’s history, Congress has adjusted the balance between executive and judicial scrutiny of patents in service of two overriding objectives: furthering “the public’s paramount interest in seeing that patent monopolies ... are kept within their legitimate scope,” and avoiding burdensome litigation. *Cuozzo*, 136 S. Ct. at 2144 (internal quotation marks omitted); *see supra* pp. 9–11. Petitioner would deprive Congress of that historical flexibility.

B. *Inter Partes* Review Does Not Aggrandize the Executive Branch at the Expense of the Judiciary

The history recounted above demonstrates that Executive *inter partes* review does not encroach on the Judiciary's Article III authority. The sole purpose of *inter partes* review is to enable the agency to reconsider its initial issuance decision—a decision that it unquestionably may make in the first instance without offending Article III. Petitioner barely mentions the error-correcting function of *inter partes* review. But it is critical to the Article III analysis. The overarching question for Article III purposes is whether *inter partes* review erodes the Judiciary's ability to serve as an independent check on the Executive. See *Stern v. Marshall*, 564 U.S. 462, 482–84 (2011); *Commodity Futures Trading Comm'n v. Schor*, 478 U.S. 833, 847 (1986); *Thomas v. Union Carbide Agric. Prods. Co.*, 473 U.S. 568, 586–87 (1985). Expanding the PTO's ability to correct errors in its own original issuance decisions, subject to judicial review, does not erode judicial authority any more than adding pre-issuance layers of PTO administrative review would.

1. In an IPR proceeding, the PTAB adjudicates only whether the PTO was correct to grant a patent in the first place. See 35 U.S.C. § 311. The PTAB evaluates a subset of the patentability criteria that the PTO considered in the initial examination process. *Id.* § 311(b) (IPR proceedings consider certain arguments “under section 102 or 103”). Although the PTAB may consider evidence that was not before the PTO at the time the patent was granted, the PTAB does not consider any peripheral facts that developed after the patent's issu-

ance. The ultimate question remains whether, in light of the totality of the evidence, the PTO's original decision was correct.³

As petitioner observes, *inter partes* review has elements of an adversarial proceeding because it permits the third-party challenger to present evidence supporting its argument that the patent is invalid. But the PTO may continue the adjudication, and defend it on appeal, even if the challenger settles. *Id.* § 317(a). That makes sense: the purpose of the proceeding is not to adjudicate private rights, but to undo invalid patents that impede the innovation-encouraging policies of the patent system. The challenger is therefore best thought of as an interested member of the public whose role is to aid the PTO in evaluating the correctness of its original issuance decision.

At bottom, *inter partes* review involves the sort of administrative error correction that agencies perform all the time when they reconsider their own decisions. Administrative exhaustion, for instance, is required of litigants because it enables the agency to correct its errors—and perhaps obviate the need for judicial intervention. *See Schlesinger v. Councilman*, 420 U.S. 738, 756–57 (1975); *McKart v. United States*, 395 U.S. 185, 195 (1969). Providing an agency with additional

³ *Inter partes* review also shares some characteristics of the initial examination—which, in petitioner's view, should support its constitutionality. Pet. Br. 8. The patentee may move to amend or add claims if they are supported by the original specification. 35 U.S.C. § 316(d). In deciding whether those claims should be issued, the PTO exercises essentially the same authority as in conducting initial examination proceedings.

opportunities to correct its own mistakes—thereby reducing the courts’ agency-review docket—has never been thought to erode the Judiciary’s authority.

Indeed, *inter partes* review (and other reexamination proceedings) ordinarily will present the PTO with its first opportunity to engage in PTAB- or Director-level review of an examiner’s decision to grant a patent. (When an examiner decides to grant a patent, there is no higher-level review of that decision; the patent simply issues.) Congress could have provided for additional pre-issuance PTO review of all examiner grant decisions. Such procedures clearly would not offend Article III. Instead, Congress has chosen to delay higher-level agency review until after the patent issues, when it becomes clearer which patents are of sufficient importance to merit such review. It should not matter, for purposes of determining whether the Executive Branch is encroaching on the Judiciary, whether the PTO’s error-correction review takes place before or after patent issuance.

Petitioner argues that there is a dispositive difference between pre-issuance and post-issuance review: once the PTO issues a patent, it becomes the province of the Judiciary because courts historically have adjudicated patent validity. Pet. Br. 28–29.⁴ But judicial validity determinations do not involve “the most prototypical exercise of judicial power”—i.e., adjudicating

⁴ It is worth noting that *inter partes* review does not completely transfer responsibility for adjudicating validity to the PTO, as a party may opt to challenge a patent in court (either as a defense to an infringement action or in a declaratory-judgment suit), rather than before the PTO.

private parties' respective rights *de novo*. *Stern*, 564 U.S. at 494. Rather, the validity adjudication that courts perform is a form of agency review, in which courts employ a presumption of validity that approximates the standards of review used to evaluate the agency's refusal to grant a patent in the first instance. *See supra* pp. 11–12; *Microsoft*, 564 U.S. at 101. While a judicial validity determination also resolves whether the patentee may enforce the patent against another private party, enforceability depends entirely on the correctness of the agency's decision. *See RCA*, 293 U.S. at 7. Congress's creation of *inter partes* review thus gives parties expanded options to challenge an agency decision in the agency itself and reduces reliance on courts.

2. That the PTO's IPR determinations are subject to judicial review further confirms that *inter partes* review is consistent with Article III. The agency's correction of its own errors always remains subject to judicial control.

The PTAB's invalidity decision in an IPR proceeding may be appealed to the Federal Circuit by any dissatisfied party. 35 U.S.C. § 319. That court will review the decision under the traditional standards for agency review set forth in the APA. *See* 5 U.S.C. § 706; *In re Affinity Labs of Tex., LLC*, 856 F.3d 883, 889 (Fed. Cir. 2017). Those are the same standards that the Federal Circuit uses to review the PTO's refusal to issue a patent in the first place—standards that this Court has held provide adequate judicial supervision of the PTO's factual determinations in that context. *Dickinson*, 527 U.S. at 161, 165; *see also* 35 U.S.C. § 141. *Inter partes* review, moreover, possesses all the characteristics that make appellate review adequate to address

Article III concerns: the PTO has authority only to make “specialized, narrowly confined factual determinations regarding a particularized area of law”; the courts retain control over issues of law through de novo review; and the PTO may issue only one narrow type of order—canceling patent claims—that takes effect only after the conclusion of judicial review. 35 U.S.C. § 318; *Northern Pipeline Constr. Co. v. Marathon Pipe Line Co.*, 458 U.S. 50, 85 (1982); *Schor*, 478 U.S. at 853.

Petitioner contends, however, that APA review is too deferential to provide adequate judicial supervision of the PTO’s decision in an IPR proceeding. Pet. Br. 42–43. To be sure, this Court has indicated that appellate review may not ameliorate Article III concerns when a non-Article III body exercises broad power to determine general common-law claims between two parties. That is because the non-Article III entity is the primary adjudicator of claims that would otherwise be the sole province of the Judiciary. *See Stern*, 564 U.S. at 500–01; *Northern Pipeline*, 458 U.S. at 85. That concern is not present here. The Court has historically recognized that the PTO—not the courts—plays the primary role in adjudicating the facts underlying patentability at the patent-issuance stage. *See Morgan*, 153 U.S. at 124–25. Even in the district-court invalidity adjudications that petitioner views as the Article III baseline, courts employ a presumption of validity that recognizes the PTO’s delegated authority and technical expertise. *See supra* p. 12. Congress has thus provided courts with essentially the same ability to supervise the PTO’s reconsideration of its issuance decision that courts have historically possessed in reviewing that issuance decision itself. Petitioner has proffered no reason to conclude that the judicial review that is ade-

quate in every other context is somehow insufficient here.⁵

C. These Historical Characteristics of Patent Rights Confirm that Patent Rights Are Quintessentially Public

Any remaining question whether *inter partes* review encroaches on the Judiciary's prerogatives is answered by the fact that *inter partes* review adjudicates a matter of public rights: the validity of a right granted by the government for the purpose of furthering the public interest. Congress may choose to commit adjudication of public rights to executive agencies. See *Ex parte Bakelite Corp.*, 279 U.S. 438, 451 (1929); *Murray's Lessee v. Hoboken Land & Improvement Co.*, 59 U.S. 272, 284 (1855).

⁵ *Inter partes* review does not raise any concern that the PTO can effectively overturn a district-court decision concerning the same patent. When there are parallel IPR and district-court proceedings concerning the same patent, the district court may stay the litigation while the *inter partes* review proceeds. 35 U.S.C. § 315. If the PTO cancels the patent, the district court need not adjudicate its validity, thereby conserving judicial resources. Conversely, if the district court proceeds to judgment first and concludes that the patent is invalid, the IPR may still proceed. In a judicial validity challenge, the challenger must establish the patent's invalidity by clear and convincing evidence; a decision upholding the patent thus holds only that that demanding standard was not met. In *inter partes* review, by contrast, the challenger need only establish that the patent is invalid under the lower preponderance-of-the-evidence standard. The PTO's conclusion that the challenger has established that the patent is invalid under the lower standard neither conflicts with nor casts doubt on the district court's conclusion that the challenger did not satisfy the higher standard of proof.

“The primary purpose of our patent laws is not the creation of private fortunes for the owners of patents, but is to promote the progress of science and the useful arts.” *Motion Picture Patents*, 243 U.S. at 511 (internal quotation marks omitted). Accordingly, Members of this Court have indicated that patentability should be adjudicated as a public right. Justice Thomas has observed that the “Anglo-American legal tradition” has traditionally viewed patent rights as “privileges” or “franchises” that public authorities create by “express legislation,” “purely for reasons of public policy.” *Teva Pharm.*, 135 S. Ct. at 848 n.2 (Thomas, J., dissenting). These characteristics traditionally had “significant implications for the way in which [patent] rights are adjudicated.” *Id.* In an opinion joined by Justice Kennedy, moreover, Justice Scalia cited “the patentability of inventions” as a prototypical example of a matter that “could ... be committed to executive adjudicators” rather than Article III courts. *Freytag*, 501 U.S. at 910 (Scalia, J., concurring).

1. Although this Court has used slightly different verbal formulations to describe public rights, its decisions make clear that public rights share three essential characteristics: they (1) derive from a federal statute; (2) are “closely intertwined with a federal regulatory program”; and (3) are assigned to an expert administrative agency with a “limited regulatory objective.” *Granfinanciera*, 492 U.S. at 54; *see also Stern*, 564 U.S. 490–91. Considered under this framework, entitlement to patent is clearly a matter of public rights.

First, patent rights “exist only by virtue of statute.” *Sears, Roebuck & Co. v. Stiffel Co.*, 376 U.S. 225, 229 n.5 (1964). Congress and the Executive determine the

existence as well as the scope and extent of those rights. *See supra* pp. 7–9. Petitioner cites *Atlas Roofing Co. v. Occupational Safety & Health Review Commission*, 430 U.S. 442, 455 (1977), for the proposition that public rights must “arise from a *new* statutory obligation created by Congress without a historical analogue to actions adjudicated by courts.” Pet. Br. 33 (internal quotation marks omitted). But that formulation perfectly describes patent rights, which have “no counterpart in the Lockean state of nature.” *Teva Pharm.*, 135 S. Ct. at 848 n.2 (Thomas, J., dissenting). Contrary to petitioner’s argument (Pet. Br. 35), recognizing patentability as a matter of public rights would not suggest that *any* right arising under federal law could be treated as a public right. Unlike in mine-run federal statutory contexts, the government in granting a patent takes rights that otherwise would be held by the public—namely, the rights to develop and use the invention—and confers them on a private individual. The question whether that initial grant was erroneous is therefore literally a matter of the public’s rights.

Second, this Court has repeatedly recognized that patent rights are “closely intertwined with a federal regulatory program.” *Granfinanciera*, 492 U.S. at 54. Patent rights are government grants, the substance and scope of which Congress defines in order to serve public purposes within a “pervasive” “scheme of federal regulation” designed to balance competing interests and promote “creative activity.” *Bonito Boats*, 489 U.S. at 146; *accord Halo Elecs., Inc. v. Pulse Elecs., Inc.*, 136 S. Ct. 1923, 1935 (2016). *Inter partes* review simply adjudicates the validity of a patent granted by the government to ensure that it serves the public purpos-

es of the patent system. That question is at the very heart of the patent regulatory scheme.

Third, patentability is “appropriate for ... resolution” by an expert administrative agency with specialized jurisdiction over a particularized, complex area of law. *Granfinanciera*, 492 U.S. at 54; *Stern*, 564 U.S. at 493–94. Patent issuance is clearly a matter of public rights that can be entrusted to an agency. *See supra* pp. 9–10, 16; *see also Freytag*, 501 U.S. at 910. Both the initial validity determination by the PTO and *inter partes* review address the same question and therefore require the same degree of technical expertise. *See Cuozzo*, 136 S. Ct. at 2144. If a federal agency may be trusted to decide patentability in issuing a patent, subject to appellate review, there is no reason why the agency should not be able to revisit that same question after issuance, subject to the same appellate review.

2. Petitioner’s primary argument that entitlement to a patent is a matter of private rights is that the issuance of the patent confers on the patentee “private property rights” that can be enforced against third parties. Pet. Br. 28–31. As an initial matter, petitioner is conflating private property and private rights: this Court has made clear that property rights created by federal statutory schemes can be public rights if they satisfy the criteria described above. *See, e.g., Thomas*, 473 U.S. at 585–89.

More broadly, petitioner conflates a patentee’s rights against other third parties with a patentee’s rights against the government. While it is true that the grant of a patent gives the patentee a right to enforce “the boundaries of his property” against third-party infringers (Pet. Br. 29), that does not create a private

right to enforce an invalid patent. The question of the patentee’s rights against the world—i.e., the question of patent validity and the service of the public interest—remains a matter of public rights. Historically, government-granted rights in the nature of “privileges” could “form the basis for private claims against other individuals” while “the legislature permitted them to exist,” but that did not make the existence of the privilege a private right as against the government. Caleb Nelson, *Adjudication in the Political Branches*, 107 Colum. L. Rev. 559, 567 (2007); accord *Teva Pharm.*, 135 S. Ct. at 848 n.2 (Thomas, J., dissenting). *Inter partes* review focuses solely on whether the government should have granted the patent in the first place, leaving patentees’ “private claims against other individuals” to the courts.

D. *Inter Partes* Review Does Not Impinge on the Individual Liberty Interests Protected by Article III

Petitioner suggests, with no concrete evidence, that *inter partes* review will subject patentees to unfair treatment. Pet. Br. 44–47. Article III, like other structural constitutional provisions, does safeguard “individual liberty.” *Stern*, 564 U.S. at 495; see also *Schor*, 478 U.S. at 848. But post-grant review of patent validity by the same administrative agency that issued the patent in the first place poses no threat to the liberty interests that Article III was intended to protect, for two reasons.

First, the Patent Act itself makes explicit what the history described above shows: patents have always existed at the sufferance of the sovereign. Section 261 provides that patents shall have “the attributes of

personal property,” but that those rights are subject “to the provisions of this title.” 35 U.S.C. § 261. Congress’s power to establish administrative cancellation therefore inheres in the very property right that is “vested” in the patent’s owner whenever the PTO issues a patent—indeed, through *ex parte* and *inter partes* reexamination, the PTO has had the ability to revisit all patents currently extant. If a patentee contends (as petitioner does not) that Congress impermissibly altered the patent bargain after the patentee had already procured a patent, those concerns would be better addressed by constitutional doctrines other than Article III, such as anti-retroactivity and takings principles.⁶ *Cf. Bank Markazi v. Peterson*, 136 S. Ct. 1310, 1325 (2016).

Liberty concerns are also mitigated by the error-correcting character of *inter partes* review. Unlike ordinary adjudication, *inter partes* review entails an expert agency’s revisiting its own earlier determination that the applicant satisfied the standards of patentability. The PTO does not adjudicate post-issuance rights or strip patent holders of property rights that

⁶ Conversely, holding that *inter partes* review violates Article III would raise a host of difficult questions associated with reviving the thousands of patents that have been canceled in *inter partes* review and reexamination proceedings. Thousands of parties have relied on those cancellations. Calling into question the procedures by which those patents were canceled would give rise to significant uncertainty (and a flood of litigation) concerning the parties’ respective rights going forward. Among other difficult issues, permitting infringement liability based on conduct taken after a patent had been canceled would raise serious fairness concerns.

exist independently of that determination. Rather, where appropriate, it may extinguish patents that never should have been issued. If the agency can be entrusted to make unbiased initial validity determinations, there is no reason to think it cannot do the same upon revisiting them.

Second, *inter partes* review proceedings are subject to appellate review by the Federal Circuit (and this Court on certiorari), consistent with the strictures of ordinary administrative procedure. The Article III judges of these courts serve as a bulwark against arbitrary or biased decision-making by executive-branch officials in the *inter partes* review process—just as appeal rights protect patent *applicants* from arbitrary or unduly influenced agency action.

E. *Inter Partes* Review Does Not Deprive Patent-Holders of Seventh Amendment Rights

Because Article III permits questions of patent validity to be decided by the PTO in post-issuance review proceedings, the Seventh Amendment does as well. *Granfinanciera*, 492 U.S. at 53–54. Indeed, when Congress creates statutory public rights, it may “assign their adjudication to an administrative agency ... even if the Seventh Amendment would have required a jury where the adjudication of those rights is assigned instead to a federal court of law[.]” *Atlas Roofing*, 430 U.S. at 455.

Petitioner emphasizes that juries historically decided validity issues when they arose in the context of infringement litigation. The Patent Act of 1790, for instance, entitled patentees to a jury on their infringement claims. § 4. But petitioner presents no

evidence that the Framers believed that *only* a jury possessed the constitutional authority to determine validity. In fact, the evidence points the other way. The 1790 Act expressly provided that “the judge” could adjudicate whether a patent should be repealed for fraud, and “order process” accordingly. § 5. In the same statute, moreover, the first Congress declined to provide jury review of the Patent Office’s determination that an inventor was not entitled to a patent in the issuance context, explaining that “the right of trial by juries is not universal.” 2 Annals of Cong. 1413 (1790). There is no reason that the same question requires a jury in the post-grant context.

II. *INTER PARTES* REVIEW SERVES SOUND POLICY CONSIDERATIONS

Just six years after Congress replaced *inter partes* reexamination with *inter partes* review by enacting the America Invents Act, IPR proceedings have come to play an important error-correction role in the patent system. The immense annual volume of patent applications, combined with the PTO’s limited resources, makes it inevitable that a significant number of issued patents should have been rejected for failure to satisfy the requirements for patentability set forth in the Patent Act. *See, e.g.*, U.S. Patent & Trademark Office, *U.S. Patent Statistics Chart, Calendar Years 1963–2015*⁷ (showing that patent applications more than doubled to approximately 630,000 between 2000 and 2015); Michael D. Frakes & Melissa F. Wasserman, *Is the Time Allocated to Review Patent Applications In-*

⁷ https://www.uspto.gov/web/offices/ac/ido/oeip/taf/us_stat.htm.

ducing Examiners to Grant Invalid Patents? Evidence from Microlevel Application Data, 99 Rev. Econ. Stat. 550 (2017) (time constraints lead patent examiners to increase grant rates for patent applications of below-average quality).

“Bad patents” can hamper innovation and commerce. After hearing from stakeholders in a range of industries, as well as regulators, former judges, and practitioners, Congress concluded that the most efficient and effective way to address those patents was to create *inter partes* review. Declaring *inter partes* review unconstitutional would have profoundly negative consequences for the patent system, as well as for companies that, like *amici*, operate at the vanguard of technological progress and rely on *inter partes* review to safeguard their ability to innovate free from the tax imposed by the assertion of invalid patents. Before Congress established *inter partes* review, patent asserters relied on the lengthy duration and exorbitant expense of litigating validity challenges before a jury to extract settlements from companies on invalid patents.

A. The PTO Frequently Issues Patents That Are in Fact Invalid

The PTO is charged with examining patent applications and determining whether the claimed inventions meet the criteria for patentability set forth in the Patent Act. To do so, the agency employs more than 8,000 examiners to examine patent applications, research the prior art, engage in an iterative process of narrowing and refining claims with the applicants, and apply the standards set forth in the statute. *See Microsoft*, 564 U.S. at 96. Patent examination is an *ex parte* process in which the burden is on the examiner to show

unpatentability, rather than on the applicant to show patentability. See *In re Oetiker*, 977 F.2d 1443, 1445 (Fed. Cir. 1992).

The sheer volume of patent applications—in 2016 alone, the PTO received approximately 650,000 patent filings and issued 334,000 patents⁸—strains the PTO’s resources. Research suggests that the average patent is examined for less than 20 hours before the PTO renders a decision. See Michael D. Frakes & Melissa F. Wasserman, *Does Agency Funding Affect Decisionmaking?: An Empirical Assessment of the PTO’s Granting Patterns*, 66 Vand. L. Rev. 67, 72 n.16 (2013). Because of this compressed examination schedule, even examiners who are skilled in the relevant technological art depend on applicants’ candor in identifying all known prior art. When an examiner grants a patent, no further review occurs within the agency; the patent issues without any check to ensure patent quality and validity. 35 U.S.C. §§ 131, 134.

For all these reasons, it is unsurprising that the PTO—according to a broad consensus among practitioners and policymakers—issues many patents of questionable validity. See, e.g., Fed. Trade Comm’n, *To Promote Innovation: The Proper Balance of Competition and Patent Law and Policy* 5–7 (2003) (“FTC Report”). Empirical evidence confirms that consensus view. Studies show that courts invalidate roughly half of litigated patents in cases that reach final judgment. See Christopher R. Leslie, *The Anticompetitive Effects*

⁸ See U.S. Patent & Trademark Office, *Performance & Accountability Report for Fiscal Year 2016* 15, 178, <https://www.uspto.gov/sites/default/files/documents/USPTOFY16PAR.pdf>.

of *Unenforced Invalid Patents*, 91 Minn. L. Rev. 101, 105–106 (2006).

The problem of invalid patents is particularly acute in areas of emerging technology. The last three decades have seen a radical expansion of the subject areas of patent applications, with many post-industrial innovations—from software to medical treatments—becoming patented for the first time. Patentability determinations are particularly likely to be erroneous in novel areas like these, both because examiners have not yet developed the requisite technical knowledge and because the repository of issued patents in these areas does not provide a thorough picture of prior art. See Julie E. Cohen & Mark A. Lemley, *Patent Scope and Innovation in the Software Industry*, 89 Cal. L. Rev. 1, 42–45 (2001).

Invalid patents impose real costs on third parties in the same technical domain, who must expend resources to license the patent, design around it, or risk a costly and lengthy infringement suit. See Am. Intellectual Prop. Law Assoc., *Report of the Economic Survey 41* (2017) (“AIPLA Survey”) (calculating median cost of litigating a single claim of a high-valued patent to be \$3 million); PricewaterhouseCooper, *2017 Patent Litigation Study 3* (2017)⁹ (median time to trial in infringement suits is 2.5 years). The defendant in such a suit may of course challenge the patent’s validity, but that necessity creates uncertainty and gives rise to significant litigation costs. Litigation is an incomplete solution because many accused infringers may choose

⁹ <https://www.pwc.com/us/en/forensic-services/publications/assets/2017-patent-litigation-study.pdf>.

to settle or license the patent rather than face litigation uncertainty. The Court has recognized this problem, particularly in the context of non-practicing entities who use patents “as a sword to go after defendants for money, even when their claims are frivolous.” *See Commil USA, LLC v. Cisco Sys., Inc.*, 135 S. Ct. 1920, 1930 (2015). The *in terrorem* effect of these patents diverts productive resources into attorney’s fees and royalties and deters the entry of innovative or competitive products into new markets.¹⁰

B. *Inter Partes* Review Provides the PTO and the Public with an Efficient Means of Correcting Erroneous Patent Grants

The costs of invalid patents make effective post-grant error-correction a vital component of a well-functioning patent system. Congress recognized as much in 1981 when, in enacting *ex parte* reexamination, it created a means by which the agency responsible for rendering patentability determinations in the first place could correct its errors, focusing solely on

¹⁰ In addition, in industries in which successive product generations improve incrementally, such as the microprocessor industry, invalid patents are particularly harmful. Competitors generate numerous overlapping patents, with companies needing to agglomerate patents from multiple holders to bring a product to market. Peter Detkin, then Assistant General Counsel at Intel, characterized this phenomenon as a “patent thicket” “that a company must hack its way through in order to actually commercialize new technology.” FTC Report at 6. In these patent thickets, where a single patent claiming a single minor feature in a complex product can halt its launch altogether, “questionable patents” are particularly costly. *See id.* at 7.

those patents that are commercially significant enough to draw a third-party reexamination request. *Inter partes* review is simply a more effective incarnation of that process.

If administrative patent cancellation is declared unconstitutional, its benefits cannot be fully replaced by improvements in the current examination process. Examination is an *ex parte* process initiated by an applicant who owes no duty to search the prior art or demonstrate patentability over that art. Giving examiners additional time and resources—likely funded through controversial fee increases—would be an insufficient solution that would entail significant social waste. For one thing, the benefits of increasing pre-issuance scrutiny would be relatively minimal because the large majority of patents (perhaps as many as 95 percent) are never commercialized or asserted. Mark A. Lemley, *Rational Ignorance at the Patent Office*, 95 Nw. L. Rev. 1495, 1501 (2001). Most patents, therefore, do not merit deeper attention by the PTO than they already receive. At the same time, meaningfully increasing the rigor of the examination process would require significant additional resources, including hiring many more patent examiners. Alternatively, instituting pre-issuance appellate review for all patents would require numerous additional judges on the PTAB.

As a means of weeding out bad patents, then, post-grant review has significant efficiency advantages over devoting more resources to examining all original applications. Unlike efforts to make global improvements to the examination of all patent applications, *inter partes* review is a form of targeted error-correction; it affects only those patents for which there is a challeng-

er sufficiently interested in the patent's invalidity to pursue review. No matter how skilled the examiner, third parties in the same field as the patent holder are likely to have superior knowledge of the relevant prior art. The third-party challenger therefore can aid the PTO in evaluating the correctness of its original decision. For similar reasons, *ex parte* reexamination, in which only the interested applicant or its successor could communicate with the PTO, relying on the same limited agency resources available in the first instance, did not advance the public policy interest of clearing erroneous patents.

C. *Inter Partes* Review Is Effective

Not all IPR petitions result in IPR proceedings; the current institution rate is approximately 63 percent. See U.S. Patent & Trademark Office, *Trial Statistics: IPR, PGR, CBM 7* (2017).¹¹ But when review is instituted, *inter partes* review is an efficient error-correction mechanism for bad patents. *Inter partes* review proceedings are much cheaper and faster than litigation. See AIPLA Survey at 43; 35 U.S.C. § 316(a)(11) (once initiated, proceedings must conclude within 18 months at most). As a result, *inter partes* review has become an important mechanism for invalidating improperly granted patents. See Andrew J. Lagatta & George C. Lewis, *How Inter Partes Review*

¹¹ https://www.uspto.gov/sites/default/files/documents/Trial_Stats_2017-09-30.pdf.

Became a Valuable Tool So Quickly, Law 360, Aug. 16, 2013.¹²

Amici have firsthand experience with the advantages of *inter partes* review. As frequent targets of infringement lawsuits, particularly by non-practicing entities, they have used the *inter partes* review process to preserve resources and efficiently resolve patent-validity disputes, particularly when the patents being asserted against them appear weak or overbroad. For instance, *amicus* Intel successfully used *inter partes* review to invalidate patents that had been asserted against it and many other major participants in the computer-graphics field, on the ground that they were anticipated by standard texts published in 1990. See *Intel Corp. v. FuzzySharp Techs., Inc.*, No. IPR2014-00001 (PTAB Jan. 13, 2015) (Paper 23). Similarly, *amicus* Cisco used *inter partes* review to invalidate patents asserted against network- and data-storage products on obviousness grounds. Those *inter partes* review proceedings allowed Cisco and others to avoid costly, drawn-out litigation in district court. See *Crossroads Sys., Inc. v. Cisco Sys., Inc.*, 694 F. App'x 780 (Fed. Cir. 2017).

Patent infringement suits brought by nonpracticing entities grew steadily after 2005, peaking in 2011. See RPX Blog, *Q3 Data Update* (Oct. 2, 2017).¹³ Since 2015, however, the numbers have declined. *Id.* That decline

¹² <https://www.law360.com/articles/463372/how-inter-partes-review-became-a-valuable-tool-so-quickly>.

¹³ <https://www.rpxcorp.com/2017/10/02/q3-data-update-patent-litigants-and-courts-adjust-to-recent-rulings-with-further-changes-brewing/>.

appears related to the growing popularity of *inter partes* review. See Claire Bushey, *Why This Lawyer Is Rethinking Patent Lawsuits*, Crain's Chi. Bus., June 6, 2015.¹⁴ As Congress intended, *inter partes* review has made the business model of many nonpracticing entities—asserting an erroneously granted patent to extract a settlement based on the high cost of district court litigation—less attractive.

CONCLUSION

The judgment of the court of appeals should be affirmed.

¹⁴ <http://www.chicagobusiness.com/article/20150606/ISSUE01/306069991/why-this-lawyer-is-rethinking-patent-lawsuits>.

Respectfully submitted,

MATTHEW J. HULT
INTEL CORPORATION
2200 Mission College Blvd.
Santa Clara, California 95054
(408) 765-8080

KEITH R. WEED
APPLIED MATERIALS, INC.
P.O. Box 58039
Santa Clara, California 95054
(408) 727-5555

DAN LANG
BRYAN SINCLAIR
CISCO SYSTEMS, INC.
170 W. Tasman Dr.
San Jose, California 95134
(408) 526-4000

MICHELLE WAITES
XEROX CORPORATION
201 Merritt 7
XWHQ 6NW113
Norwalk, Connecticut 06851
(213) 968-3000

JAMES SUH
LG ELECTRONICS INC.
Intellectual Property Center
19, Yangjae-daero 11gil,
Seocho-gu
Seoul, Rep. of Korea 06772
+82-(0)2-3777-1114

OCTOBER 30, 2017

DONALD B. VERRILLI, JR.
Counsel of Record

GINGER D. ANDERS
MUNGER, TOLLES & OLSON LLP
1155 F. Street, NW, 7th Floor
Washington, D.C. 20004
donald.verrilli@mto.com
(202) 220-1100

JORDAN D. SEGALL
MUNGER, TOLLES & OLSON LLP
355 S. Grand Ave., 35th Floor
Los Angeles, California 90071
(213) 683-9208

ROBERT M. TUTTLE
ON SEMICONDUCTOR CORP.
5005 East McDowell Road
Phoenix, Arizona
602-244-3419

ADDENDUM

Amici Curiae

Intel Corporation

Applied Materials, Inc.

Cisco Systems, Inc.

Google LLC

LG Electronics Inc.

ON Semiconductor Corporation

Samsung Electronics Co., Ltd.

Xerox Corporation