

No. 26-198

In the Supreme Court of the United States

KAHOOT! AS,

Petitioner,

v.

INTERSTELLAR INC., ET AL.,

Respondents.

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

**BRIEF FOR TAIWAN SEMICONDUCTOR
MANUFACTURING COMPANY LTD.
AND GLOBALFOUNDRIES U.S. INC.
AS AMICI CURIAE
IN SUPPORT OF PETITIONER**

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TABLE OF CONTENTS

TABLE OF AUTHORITIES	ii
INTEREST OF <i>AMICI CURIAE</i>	1
INTRODUCTION AND SUMMARY OF ARGUMENT	2
ARGUMENT	4
I. The agency’s “settled expectations” rule rewrites the IPR scheme.	4
II. The “settled expectations” rule harms innovative companies by shielding invalid patents from cancellation.....	6
A. IPR protects innovative companies against invalid patents.	6
B. IPR is especially necessary for older patents.....	11
C. The “settled expectations” rule eliminates vital protection against invalid older patents.....	14
III. The “settled expectations” rule upends innovative companies’ own investment- backed expectations.....	16
A. Long-term technological investments leave innovative companies vulnerable to old, dormant patents.....	17
B. The “settled expectations” rule imperils those technological investments.....	24
CONCLUSION	25

TABLE OF AUTHORITIES

Page(s)

Cases

<i>Alidouble Inc. v. Taiwan Semiconductor Mfg. Co., No. 22-cv-00298 (E.D. Tex. Aug. 4, 2022)</i>	10, 14
<i>Cirrus Logic, Inc. v. Greenthread, LLC, No. IPR2024-00001, Paper 113 (P.T.A.B. Oct. 29, 2025)</i>	9
<i>Cirrus Logic, Inc. v. Greenthread, LLC, No. IPR2024-00016, Paper 109 (P.T.A.B. Nov. 7, 2025)</i>	9
<i>Cirrus Logic, Inc. v. Greenthread, LLC, No. IPR2024-00017, Paper 114 (P.T.A.B. Oct. 30, 2025)</i>	9
<i>Cirrus Logic, Inc. v. Greenthread, LLC, No. IPR2024-00018, Paper 113 (P.T.A.B. Oct. 30, 2025)</i>	9
<i>Cirrus Logic, Inc. v. Greenthread, LLC, No. IPR2024-00019, Paper 109 (P.T.A.B. Oct. 30, 2025)</i>	9
<i>Cirrus Logic, Inc. v. Greenthread, LLC, No. IPR2024-00020, Paper 105 (P.T.A.B. Oct. 29, 2025)</i>	9

<i>Cirrus Logic, Inc. v. Greenthread, LLC</i> , No. IPR2024-00021, Paper 107 (P.T.A.B. Oct. 30, 2025)	9
<i>Dabico Airport Sols. Inc. v. AXA Power ApS</i> , No. IPR2025-00408, Paper 21 (U.S.P.T.O. June 18, 2025).....	5
<i>JTEKT Corp. v. GKN Auto. Ltd.</i> , 898 F.3d 1217 (Fed. Cir. 2018)	22
<i>Loper Bright Enters. v. Raimondo</i> , 603 U.S. 369 (2024)	6
<i>Nat’l Fed’n of Indep. Bus. v. Dep’t of Labor</i> , 595 U.S. 109 (2022)	5
<i>Oil States Energy Servs., LLC v. Greene’s Energy Grp., LLC</i> , 584 U.S. 325 (2018)	23
<i>SAS Inst., Inc. v. Iancu</i> , 584 U.S. 357 (2018)	6
<i>Semiconductor Connections LLC v. Taiwan Semiconductor Mfg. Co.</i> , No. 20-cv-00109, Dkt. 1 (W.D. Tex. Feb. 11, 2020).....	8, 13, 14
<i>Taiwan Semiconductor Mfg. Co. v. Advanced Integrated Circuit Process LLC</i> , No. IPR2025-01212, Paper 23 (U.S.P.T.O. Nov. 20, 2025)	15

<i>Taiwan Semiconductor Mfg. Co. v.</i> <i>Alidouble Inc.,</i> No. IPR2023-00369, Paper 7 (P.T.A.B. July 12, 2023).....	10
<i>Taiwan Semiconductor Mfg. Co. v.</i> <i>Alidouble Inc.,</i> No. IPR2023-00372, Paper 7 (P.T.A.B. July 13, 2023).....	10
<i>Taiwan Semiconductor Mfg. Co. v.</i> <i>Alidouble Inc.,</i> No. IPR2023-00373, Paper 7 (P.T.A.B. July 12, 2023).....	10
<i>Taiwan Semiconductor Mfg. Co. v.</i> <i>Alidouble Inc.,</i> No. IPR2023-00374, Paper 7 (P.T.A.B. July 13, 2023).....	10
<i>Taiwan Semiconductor Mfg. Co. v. Fraunhofer-</i> <i>Gesellschaft zur Förderung der</i> <i>Angewandten Forschung eV,</i> No. IPR2020-01669, Paper 2 (P.T.A.B. Sept. 25, 2020)	8, 9
<i>Taiwan Semiconductor Mfg. Co. v. Marlin</i> <i>Semiconductor Ltd.,</i> Nos. IPR2025-00848, IPR2025-00864, IPR2025-00865, IPR2025-00879, Paper 11 (U.S.P.T.O. Sept. 3, 2025).....	24
<i>Thryv, Inc. v. Click-To-Call Techs.,</i> 590 U.S. 45 (2020)	2, 5, 7, 12

Statutes

35 U.S.C. §6(a)	7
35 U.S.C. §282	5
35 U.S.C. §311	4
35 U.S.C. §311(b)	4
35 U.S.C. §311(c)	4
35 U.S.C. §314(a)	15
35 U.S.C. §315(b)	4, 23
35 U.S.C. §315(e)	22
35 U.S.C. §316(a)(11)	7
Pub. L. No. 117-167 (2022)	1
Patent Act of 1790, ch. 7, §5, 1 Stat. 109, 111 (1790)	5
Pub. L. No. 106-113 (1999)	4

Other Authorities

153 Cong. Rec. H10284 (daily ed. Sept. 7, 2007)	7
157 Cong. Rec. S5429 (daily ed. Sept. 8, 2011)	23
<i>About Us</i> , Longitude Licensing Ltd. (last visited Sept. 13, 2026), https://perma.cc/249C-UN5L	24

<i>Aerospace & Defense</i> , GlobalFoundries (last visited Sept. 15, 2026), https://perma.cc/PV2U-HQEB	18
Alaina Mencinger, <i>\$265 Billion Investment from TSMC Is ‘Vote of Confidence’ in Arizona</i> , Arizona Republic (July 23, 2026)	11
Br. of <i>Amici Curiae</i> 35 Intellectual Property Law Professors, <i>Google LLC v. VirtaMove, Corp.</i> , No. 25-1230	7, 21
Brian J. Love, <i>An Empirical Study of Patent Litigation Timing: Could a Patent Term Reduction Decimate Trolls Without Harming Innovators?</i> , 161 U. Pa. L. Rev. 1309 (2013)	13
<i>CPC Classes</i> , PatentWorld (last visited Sept. 15, 2026), https://patentworld.vercel.app/explore/	22
<i>Future R&D Plans</i> , TSMC (last visited Sept. 13, 2026), https://perma.cc/E7K4-SQ4N	20
<i>GlobalFoundries Announces \$16B U.S. Investment to Reshore Essential Chip Manufacturing and Accelerate AI Growth</i> , GlobalFoundries (June 4, 2025), https://perma.cc/VHW6-VZWQ	19

<i>GlobalFoundries Announces Customer Availability of UX Platform Technologies for Intelligent Edge, Connectivity and Physical AI Applications</i> , GlobalFoundries (Sept. 2, 2026), https://perma.cc/5TT7-K3DW	20
<i>GlobalFoundries Announces New York Advanced Packaging and Photonics Center</i> , GlobalFoundries (Jan. 17, 2025), https://perma.cc/2M6D-TKA6	19
GlobalFoundries Inc., <i>Annual Report on Form 20-F for the Year Ended December 31, 2025</i> (2026), https://perma.cc/TR5W-JWM8	18, 21
H.R. Rep. No. 112-98.....	2, 4, 7
Intell. Prop. Owners Ass'n, <i>Top 300 Organizations Granted U.S. Patents in 2025</i> (June 15, 2026), https://perma.cc/Y7T6-NWS9	21
Jason Rantanen, <i>Utility Patents Granted per Calendar Year, 1840-2022</i> , Patently-O (Aug. 21, 2023), https://perma.cc/PSA5-2F4Z	21
Jonathan DeFosse et al., <i>Data Undermines USPTO's 'Settled Expectations' Doctrine</i> , Law360 (Aug. 29, 2025).....	11, 12
Josh Landau, <i>Inter Partes Review: Five Years, Over \$2 Billion Saved</i> , Patent Progress (Sept. 14, 2017), https://perma.cc/7HPG-Z4DF	7

Lauren Cohen et al., <i>Patent Trolls: Evidence from Targeted Firms</i> , 65 Mgmt. Sci. 5461 (2019).....	13
<i>Logic Technology</i> , TSMC (last visited Sept. 13, 2026), https://perma.cc/S4B3-UUJ5	20
Mark A. Lemley, <i>Rational Ignorance at the Patent Office</i> , 95 Nw. U. L. Rev. 1495 (2001)	20
Maureen K. Ohlhausen, <i>Patent Rights in a Climate of Intellectual Property Rights Skepticism</i> , 30 Harv. J.L. & Tech. 103 (2016)	22
Memorandum from Coke Morgan Stewart to All PTAB Judges, <i>Interim Processes for PTAB Workload Management</i> (Mar. 26, 2025).....	5
PTO, <i>PTAB Trial Statistics FY23 End of Year Outcome Roundup</i> , https://perma.cc/J5L6-7W48	7
PTO, <i>PTAB Trial Statistics FY24 End of Year Outcome Roundup</i> , https://perma.cc/Z3TU-BBSX	6
PTO, <i>PTAB Trial Statistics</i> (July 2026), https://perma.cc/E2PF-2PM5	16
RPX Corp., <i>Acacia Begins Litigating Two Portfolios</i> , Mondaq (Feb. 12, 2021), https://perma.cc/YR76-34MG	13

S. Rep. No. 110-259 (2008).....	23
Stanford Program in Law, Science & Technology, <i>Alidouble Inc.</i> , NPE Litigation Database, https://perma.cc/7VSY-U6LS	14
Ted Sichelman, <i>Commercializing Patents</i> , 62 Stan. L. Rev. 341 (2010).....	12
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<i>TSMC Announces Intention to Build and Operate an Advanced Semiconductor Fab in the United States</i> , TSMC (May 15, 2020), https://perma.cc/DAQ2-B3DD	19
<i>TSMC Arizona</i> , TSMC (last visited Sept. 13, 2026), https://perma.cc/VQ9D-PVAM	17, 19
Unified Patents, <i>Patent Dispute Report: Q1 2026</i> (Apr. 14, 2026)	16

INTEREST OF *AMICI CURIAE*¹

Taiwan Semiconductor Manufacturing Co. Ltd. (“TSMC”) is the world’s largest dedicated chipmaker and the leading supplier of artificial intelligence chips to U.S. technology giants. It is investing an unprecedented \$265 billion in the United States to establish an advanced semiconductor manufacturing ecosystem in Arizona. TSMC’s tens of billions invested in research and development have made it one of the world’s largest patent holders, with 80,000+ granted patents and the second most newly granted U.S. patents among all patentees in each of the last two years.

GlobalFoundries U.S. Inc. (“GFUS”) is a Delaware corporation headquartered in Malta, New York, and a wholly owned U.S. subsidiary of GlobalFoundries Inc. GlobalFoundries Inc. and its subsidiaries are referred to collectively as “GlobalFoundries” or “GF.” GFUS conducts substantial semiconductor manufacturing and research and development activities in New York and Vermont and owns U.S. patents arising from investments in semiconductor technology. GF’s U.S. facilities participate in the Department of Defense Trusted Foundry program, and GF has received funding under the CHIPS and Science Act, Pub. L. No. 117-167 (2022), to expand U.S. semiconductor manufacturing.

¹ No counsel for a party authored this brief in whole or in part and no counsel, party, or person other than *amici curiae* and their counsel made a monetary contribution intended to fund the preparation or submission of the brief. Notice of the intent to file this brief was provided to all parties’ counsel at least ten days prior to filing.

Amici are among the world’s most innovative companies. As both substantial patent owners and frequent participants in patent disputes, *amici* have a strong interest in a patent system that protects valid patent rights while preserving the mechanisms Congress created for challenging patents that should not have issued. *Amici* therefore seek to ensure that the U.S. Patent and Trademark Office (“PTO”) administers *inter partes* review (“IPR”) faithfully to the congressional design.

INTRODUCTION AND SUMMARY OF ARGUMENT

The “settled expectations” rule has destructive consequences for innovative companies and warrants this Court’s review. As *amici*’s own experience demonstrates, IPR protects productive economic activity against invalid patents, and the “settled expectations” rule dismantles those vital protections.

Congress designed IPR to have significant economic impact: Congress was “concerned about overpatenting and its diminishment of competition.” *Thryv, Inc. v. Click-To-Call Techs.*, 590 U.S. 45, 54 (2020). It therefore “establish[ed] a more efficient and streamlined patent system that will improve patent quality and limit unnecessary and counterproductive litigation costs.” H.R. Rep. No. 112-98, pt. 1, at 40 (2011).

Congress made IPR available broadly, with no maximum patent age. After all, older invalid patents burden innovation and competition just as much—if not more—as younger ones. Yet the PTO has now unilaterally rewritten that scheme. With its “settled expectations”

rule, the PTO has added a restriction—found nowhere in any statute—on IPR for patents more than six years old.

That rule reverses the economic benefits Congress created IPR to achieve. Before, IPR was a success. It alleviated the burdens of overpatenting for innovative companies like *amici*, which are targets for infringement claims built on weak patents. IPR provided an efficient, effective solution. For years, *amicus* TSMC used IPR with a virtually perfect success rate to clear away invalid patents, end baseless patent assertions, and minimize litigation. IPR has been particularly useful for *amici* against older patents, which are more likely to be asserted abusively. But now, the “settled expectations” rule saves some invalid patents from cancellation simply because of their age. Meritless patent assertions and wasteful litigation that IPR once avoided will now proceed.

The “settled expectations” rule also harms innovative companies in a second way: It impairs long-term technological investments by magnifying the dangers of long-dormant patents. Companies like *amici* commit billions of dollars to technologies many years in advance. They cannot anticipate at the outset every patent that might someday be asserted against those technologies. Nor did Congress expect them to: It made IPR available for challenging old, previously dormant patents *after* being asserted. The “settled expectations” rule strips that protection—upsetting innovative companies’ own investment-backed expectations.

A disruption to the patent system of this magnitude should not proceed without this Court’s review. The petition should be granted.

ARGUMENT

I. The agency's "settled expectations" rule rewrites the IPR scheme.

The PTO has unilaterally restructured IPR with its "settled expectations" rule. Congress never limited IPR to a patent's early years, yet the PTO now has. This agency rewrite of an important statutory scheme warrants this Court's review.

Congress designed IPR with no maximum patent age. It made IPR broadly available "to cancel as unpatentable," on specified grounds of invalidity, any "claims of a patent." 35 U.S.C. §311(b). A petition may be filed beginning nine months after patent issuance, with no end date. §311(c). And Congress specifically provided for IPR petitions to be filed up to one year after the filing of infringement litigation—where there is no rule against litigating old patents. §315(b). Nothing in any statute makes any patent too old for IPR.

To the contrary, Congress created IPR to replace a scheme with a patent-age cap. Previously, *inter partes* reexamination was unavailable for patents issued before 1999. Pub. L. No. 106-113, §§4604, 4608(a), 113 Stat. 1501, 1501A-567 to 1501A-572 (Nov. 29, 1999). But in establishing IPR, Congress chose to "[r]epeal . . . the 1999 limit": "The limit on challenging patents issued before 1999 in *inter partes* reexamination is eliminated; *all patents can be challenged in inter partes review*." H.R. Rep. No. 112-98, at 47 (emphasis added); see 35 U.S.C. §311.

Congress thus provided no expectation that patents would become shielded from challenge after a certain age. After all, patents have always been subject to invalidation regardless of age. See Patent Act of 1790, ch. 7, §5, 1 Stat. 109, 111 (1790); 35 U.S.C. §282. Against that backdrop, Congress added IPR to *expand* the avenues for canceling bad patents: Congress established IPR “to weed out bad patent claims efficiently.” *Thryv*, 590 U.S. at 54. The object was to invalidate more bad patents—regardless of age.

The PTO now defies that congressional design. Its “settled expectations” rule restricts IPR for patents of a certain age, even though Congress never did. The PTO devised this rule unilaterally—without statutory support, public input, or judicial review. The agency simply declared it. See Memorandum from Coke Morgan Stewart to All PTAB Judges, *Interim Processes for PTAB Workload Management* (Mar. 26, 2025);² *Dabico Airport Sols. Inc. v. AXA Power ApS*, No. IPR2025-00408, Paper 21, at 2 (U.S.P.T.O. June 18, 2025). And because the Federal Circuit has refused judicial review over statutory challenges to the PTO’s institution criteria, no court has examined whether the agency has power to impose this rule.

The PTO’s impairment of access to IPR should not go forward without this Court’s review. “Administrative agencies are creatures of statute” that “possess only the authority that Congress has provided.” *Nat’l Fed’n of Indep. Bus. v. Dep’t of Labor*, 595 U.S. 109, 117 (2022) (per curiam). And it is the “traditional” office of the courts to

² <https://perma.cc/J353-H33U>.

“fix[] the boundaries of [that] delegated authority.” *Loper Bright Enters. v. Raimondo*, 603 U.S. 369, 395-96 (2024) (citation omitted). Yet unless this Court intervenes, the PTO will have overwritten Congress’s scheme without any judicial oversight.

II. The “settled expectations” rule harms innovative companies by shielding invalid patents from cancellation.

IPR protects innovative companies like *amici* from bad patents. The “settled expectations” rule undoes that protection with respect to older patents, leaving invalid patents intact. This is a serious threat to innovation and the patent system’s integrity.

A. IPR protects innovative companies against invalid patents.

IPR is a critical mechanism for canceling patents that never should have issued. *Amici*’s own experience demonstrates IPR’s value to innovative companies.

Invalid patents often issue, and IPR is a crucial tool for correcting those errors. In establishing IPR, Congress recognized that “bad patents slip through.” *SAS Inst., Inc. v. Iancu*, 584 U.S. 357, 360 (2018). Indeed, historically about a third of issued patents challenged in IPR or post grant review were fully or partially invalidated. See PTO, *PTAB Trial Statistics FY24 End of Year Outcome*

Roundup 11;³ PTO, *PTAB Trial Statistics FY23 End of Year Outcome Roundup 11*.⁴

And while challenging patent validity in court is costly and burdensome, Congress designed IPR as a superior “alternative[] to litigation.” H.R. Rep. No. 112-98, at 48. IPR is faster: Proceedings take months, not years. See 35 U.S.C. §316(a)(11) (requiring IPR final written decision within twelve months, extendable by six months only for good cause). IPR is cheaper: “less than 10% of the cost of litigation.” Br. of *Amici Curiae* 35 Intellectual Property Law Professors 8, *Google LLC v. VirtaMove, Corp.*, No. 25-1230. And IPR decisions are made with technical expertise that lay judges and juries generally lack. See 35 U.S.C. §6(a) (“The administrative patent judges shall be persons of competent legal knowledge and scientific ability . . .”).

IPR’s role in canceling bad patents has tremendous economic impact—by congressional design. Bad patents stifle useful economic activity, preventing competitors from operating in the patented space and generating wasteful infringement disputes. Congress created IPR precisely to address “overpatenting and its diminishment of competition.” *Thryv*, 590 U.S. at 54; see also, *e.g.*, 153 Cong. Rec. H10284 (daily ed. Sept. 7, 2007) (statement of Rep. Eshoo) (addressing “baseless claims of infringement . . . sapping billions from economic growth”). In litigation costs alone, IPR has saved billions of dollars. Josh

³ <https://perma.cc/Z3TU-BBSX>.

⁴ <https://perma.cc/J5L6-7W48>.

Landau, *Inter Partes Review: Five Years, Over \$2 Billion Saved*, Patent Progress (Sept. 14, 2017).⁵

Amici's experience bears out these benefits. As some of the world's most innovative companies, *amici* are not just substantial patent holders, but also frequent targets for unfounded infringement accusations. *Amicus* TSMC has successfully used IPR to cancel scores of bad patent claims asserted against it. Before 2025 (when the PTO invented the "settled expectations" rule and other new IPR obstacles), TSMC secured IPR institution on 94% of challenged patents and succeeded in canceling at least one claim in 100% of proceedings that reached a final written decision. As that success rate over dozens of petitions reflects, IPR has been an effective tool for alleviating the burdens imposed by weak patents.

In 2020, for example, TSMC faced infringement allegations on a patent that never should have issued—as TSMC successfully showed in IPR. The plaintiff sought damages from TSMC on a sweeping theory reaching "all TSMC semiconductor devices, integrated circuits, and products manufactured at the 28nm technology nodes." Compl. 7, *Semiconductor Connections LLC v. Taiwan Semiconductor Mfg. Co.*, No. 20-cv-00109, Dkt. 1 (W.D. Tex. Feb. 11, 2020). TSMC challenged the patent in IPR, identifying prior art that the original patent examiner never addressed. Pet. 2-3, *Taiwan Semiconductor Mfg. Co. v. Fraunhofer-Gesellschaft zur Förderung der Angewandten Forschung eV*, No. IPR2020-01669, Paper 2 (P.T.A.B. Sept. 25, 2020). This prior art showed—as the expert IPR panel unanimously agreed—

⁵ <https://perma.cc/7HPG-Z4DF>.

that the patent claims asserted against TSMC should never have been granted, because they would have been obvious to a skilled artisan at the time of the supposed invention. Final Written Decision, *id.*, Paper 35 (P.T.A.B. Apr. 8, 2022). The invalid claims were canceled—freeing not only TSMC, but the entire public, from that invalid monopoly.

IPR has been similarly pivotal for GF in protecting against invalid patents. In 2023, for example, GF’s customer faced baseless infringement allegations on six patents related to transistor designs. Rather than paying to license clearly invalid patents, GF protected its customer by filing IPRs, working with a group of defendants targeted by the same patent owner. Those IPRs successfully invalidated the asserted patents, freeing GF’s customer—and the industry more broadly—from these patents that should never have issued. *Cirrus Logic, Inc. v. Greenthread, LLC*, No. IPR2024-00001, Paper 113 (P.T.A.B. Oct. 29, 2025); *Cirrus Logic, Inc. v. Greenthread, LLC*, No. IPR2024-00016, Paper 109 (P.T.A.B. Nov. 7, 2025); *Cirrus Logic, Inc. v. Greenthread, LLC*, No. IPR2024-00017, Paper 114 (P.T.A.B. Oct. 30, 2025); *Cirrus Logic, Inc. v. Greenthread, LLC*, No. IPR2024-00018, Paper 113 (P.T.A.B. Oct. 30, 2025); *Cirrus Logic, Inc. v. Greenthread, LLC*, No. IPR2024-00019, Paper 109 (P.T.A.B. Oct. 30, 2025); *Cirrus Logic, Inc. v. Greenthread, LLC*, No. IPR2024-00020, Paper 105 (P.T.A.B. Oct. 29, 2025); *Cirrus Logic, Inc. v. Greenthread, LLC*, No. IPR2024-00021, Paper 107 (P.T.A.B. Oct. 30, 2025) (appeals pending, No. 26-1634 (Fed. Cir.)).

IPR has been particularly effective for *amici* in eliminating burdensome litigation. When sued on baseless infringement allegations, *amici* have regularly used IPR to cancel asserted patent claims that were invalid in the first place. Notably, TSMC has sometimes resolved litigation just by obtaining IPR *institution*. The mere prospect of IPR scrutiny was enough to expose the weakness of the patent and end the dispute—without needing to complete the IPR, let alone full-blown litigation.

For example, several years ago TSMC used IPR to quickly resolve baseless litigation over four patents relating to semiconductor design and manufacture. See Compl., *Alidouble Inc. v. Taiwan Semiconductor Mfg. Co.*, No. 22-cv-00298, Dkt. 1 (E.D. Tex. Aug. 4, 2022). After being sued, TSMC promptly petitioned for IPR of the asserted patents—identifying prior art that the initial examiner had not considered—and the PTO granted institution. See *Taiwan Semiconductor Mfg. Co. v. Alidouble Inc.*, No. IPR2023-00369, Paper 7 (P.T.A.B. July 12, 2023); *Taiwan Semiconductor Mfg. Co. v. Alidouble Inc.*, No. IPR2023-00372, Paper 7 (P.T.A.B. July 13, 2023); *Taiwan Semiconductor Mfg. Co. v. Alidouble Inc.*, No. IPR2023-00373, Paper 7 (P.T.A.B. July 12, 2023); *Taiwan Semiconductor Mfg. Co. v. Alidouble Inc.*, No. IPR2023-00374, Paper 7 (P.T.A.B. July 13, 2023). Shortly after IPR institution, the plaintiff agreed to stay the litigation for settlement discussions; several months later it voluntarily dismissed the suit. See Joint Mot. to Stay, *Alidouble, supra*, Dkt. 93 (E.D. Tex. Sept. 8, 2023); Order Granting Motion to Dismiss, *id.*, Dkt. 104 (E.D. Tex. Jan. 16, 2024). With just institution-

stage proceedings, IPR quickly relieved both TSMC and the district court of the burdens of this suit.

By defeating unfounded infringement claims and ending litigation, IPR has saved *amici* millions of dollars. Those are dollars *amici* can put toward developing new technologies, building new manufacturing capacity, and creating new jobs, instead of fighting meritless patent disputes. See, *e.g.*, Alaina Mencinger, *\$265 Billion Investment from TSMC Is ‘Vote of Confidence’ in Arizona*, Arizona Republic (July 23, 2026).⁶ This is exactly what Congress intended. IPR rids the patent system of bad patents. It minimizes baseless infringement litigation. And it frees productive companies like *amici* from the burdens of invalid patent assertions, allowing them to focus on innovation and growth.

B. IPR is especially necessary for older patents.

The PTO has now choked off IPR for older patents with the “settled expectations” rule. But IPR’s importance does not diminish as a patent ages. If anything, to innovative companies, IPR is even more essential for older patents.

Patent age is not a proxy for patent quality. Instead, older patents were frequently found invalid in IPR before the “settled expectations” rule. Over 80% of the time, IPR final decisions on patents over six years old canceled at least one patent claim. Jonathan DeFosse et al., *Data*

⁶ <https://www.azcentral.com/story/money/business/tech/2026/07/23/tsmc-announced-265b-investment-what-could-it-buy/91014980007/>.

Undermines USPTO's 'Settled Expectations' Doctrine, Law360 (Aug. 29, 2025).⁷ And IPR success rate did not depend on patent age. *Ibid.* Moreover, before the rule, the average age of patents challenged in IPR was over six years, *ibid.*—the age that now shields patents from IPR. See Pet. App. 1a.

Amici often—and successfully—used IPR to invalidate older patents. Before the “settled expectations” rule, *amicus* TSMC challenged fifteen patents that were older than six years. Every one of those challenges resulted in cancellation of a challenged claim—a 100% success rate. In each instance, IPR “weed[ed] out bad patent claims efficiently”—claims that would now be shielded from IPR under the “settled expectations” rule. *Thryv*, 590 U.S. at 54.

If anything, IPR is even more vital for older patents because they are more likely to be asserted abusively. This follows directly from abusive patent litigants’ typical business model. Rather than innovating on their own, these entities buy patents from others. Those patents tend to be older. For one, they are often sold by the original inventors after the patents proved over time to be commercially useless or not worth the PTO-imposed patent-maintenance fees. For another, as time passes, emerging technologies grow into successful industries, creating richer targets for infringement claims. The purchasing entity then opportunistically asserts the older patent against productive companies to extract licensing fees or litigation settlements. See generally Ted

⁷ <https://www.law360.com/articles/2381350/data-undermines-uspto-s-settled-expectations-doctrine>.

Sichelman, *Commercializing Patents*, 62 Stan. L. Rev. 341, 368-69, 382 (2010).

Empirical evidence confirms this dynamic. Non-practicing entities (“NPEs”) “do not obtain patents until the [twenty-year] patent term is half-spent and hold their patents for several years more before filing suit, perhaps while waiting for emerging industries to mature.” Brian J. Love, *An Empirical Study of Patent Litigation Timing: Could a Patent Term Reduction Decimate Trolls Without Harming Innovators?*, 161 U. Pa. L. Rev. 1309, 1334 (2013); see Lauren Cohen et al., *Patent Trolls: Evidence from Targeted Firms*, 65 Mgmt. Sci. 5461, 5470 (2019) (“NPE-asserted patents are significantly older than [practicing entity]-asserted patents.”). That is, the typical patent asserted by a non-practicing entity is past the six-year mark that now triggers “settled expectations” protection.

The “settled expectations” rule thus shields the patents that most threaten productive economic activity. *Amici* have regularly faced exactly this kind of patent assertion, using patents acquired many years post-issuance by rent-seeking entities. And IPR served as a critical defense mechanism.

For example, in *Semiconductor Connections*, see *supra* 8-9, the patent was seventeen years old when asserted against *amicus* TSMC. See Compl., *Semiconductor Connections*, *supra*, at 4. Its rights had been acquired by a corporation that had “amass[ed] a sizeable stockpile of patents” to “launch . . . new litigation campaigns” against industry leaders like TSMC. RPX Corp., *Acacia Begins Litigating Two Portfolios*, Mondaq

(Feb. 12, 2021).⁸ That corporation formed a limited liability company less than a month before the complaint was filed, just to sue TSMC. See Ex. 1 to Mot. for Transfer of Venue, *Semiconductor Connections*, *supra*, Dkt. 31-4 (W.D. Tex. Aug. 21, 2020).

And in *Alidouble*, see *supra* 10-11, the patents were so old that two had already expired before the complaint was filed. Compl., *Alidouble*, *supra*, at 21, 23. The rest were also at least six years old. *Id.* at 3-11. Each had changed hands several times before being acquired by the plaintiff, which then asserted the patents against TSMC. See *ibid.*; Stanford Program in Law, Science & Technology, *Alidouble Inc.*, NPE Litigation Database (last visited Sept. 13, 2026).⁹

Today, the “settled expectations” rule would thwart IPR challenges to those old patents. Without IPR, TSMC would have had to spend millions litigating those disputes and endure years under the threat of potential litigation damages. Yet it did not have to because Congress established IPR to avoid those very burdens.

C. The “settled expectations” rule eliminates vital protection against invalid older patents.

The “settled expectations” rule thus undermines IPR’s crucial role in the patent system. It strips companies of the defense that Congress provided against weak patents regardless of age.

⁸ <https://perma.cc/YR76-34MG>.

⁹ <https://perma.cc/7VSY-U6LS>.

The “settled expectations” rule necessarily operates to save weak patents from cancellation. Strong patents are already protected against IPR institution: The PTO may not institute IPR unless there is “a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged.” 35 U.S.C. §314(a). The “settled expectations” rule makes a difference only where patent claims are weak enough to satisfy that merits threshold—only to be rescued by the “settled expectations” rule. The rule thus bars meritorious IPR challenges, leaving invalid patents on the books.

Amici are suffering from just this effect. As noted, TSMC previously had a 94% success rate in obtaining IPR institution—demonstrating TSMC’s selectiveness in bringing only meritorious challenges in IPR. *Supra* 8. But now, many of TSMC’s IPR petitions have been denied without regard to their merit. Since early 2025, when the PTO began deploying new IPR restrictions like the “settled expectations” rule, 19 of TSMC’s 31 IPR petitions have been denied on “discretionary” considerations—that is, regardless of their strength on the merits. See, e.g., *Taiwan Semiconductor Mfg. Co. v. Advanced Integrated Circuit Process LLC*, No. IPR2025-01212, Paper 23 (U.S.P.T.O. Nov. 20, 2025) (denying institution “after review of discretionary considerations”). In every one of those cases, the patent owner invoked the “settled expectations” rule to oppose IPR. TSMC has remained as judicious—indeed, even more so—in bringing only the strongest IPR cases since the PTO’s new IPR restrictions. Yet TSMC’s institution rate has plummeted. Patents that TSMC could have challenged in IPR before are now being saved from invalidation by the PTO’s new rules.

TSMC is not alone. The overall institution rate has collapsed from 68% to 39% in the past two years. See PTO, *PTAB Trial Statistics* 7 (July 2026).¹⁰ And most parties are forgoing IPR entirely, with IPR petition filings hitting record lows. Unified Patents, *Patent Dispute Report: Q1 2026* (Apr. 14, 2026);¹¹ Theresa Schliep, *PTAB Filings Crashed After Squires And Stewart's Shake-Ups*, Law360 (Aug. 5, 2026) (“The number of [IPR filings] cratered at the end of 2025 after the U.S. Patent and Trademark Office enacted policies that made the petitions a disfavored route for challenging patents . . .”).¹²

The “settled expectations” rule has gutted IPR. It has taken from *amici* and other productive companies a crucial defense against invalid patents. And it singles out for protection the patents that are most likely to be deployed abusively—invalid patents asserted for the first time long after issuance. Congress built IPR to protect the patent system and the economy from invalid patents, and the “settled expectations” rule does the opposite.

III. The “settled expectations” rule upends innovative companies’ own investment-backed expectations.

The “settled expectations” rule has even broader economic stakes. Beyond its protection for weak patents in individual cases, the rule also increases the cost and risk of long-term technological investment. Innovative companies make enormous investments over long time

¹⁰ <https://perma.cc/E2PF-2PM5>.

¹¹ <https://perma.cc/SX8X-P2YF>.

¹² <https://www.law360.com/articles/2507866/ptab-filings-crashed-after-squires-and-stewart-s-shake-ups>.

horizons. They must be able to defend efficiently against late-arising assertions of old patents. Yet the “settled expectations” rule protects exactly those patents.

The rule thus ignores both the statute and real-world dynamics. While nominally attentive to the expectations of patent owners, the rule destroys innovative companies’ expectation that long-dormant patents can (as Congress intended) be defeated just as efficiently as any other patent.

A. Long-term technological investments leave innovative companies vulnerable to old, dormant patents.

Developing cutting-edge technology and bringing it to market requires irreversible investments over many years. When making these investments at the outset, companies cannot anticipate what patents might be asserted against them decades down the line. To protect those investments—and to make them worthwhile in the first place—companies need effective defenses against patents that lie dormant for years after issuance.

Amici’s semiconductor manufacturing processes illustrate the scale and duration of these technological investments. *Amici*’s chips power much of modern life: Thousands of products—from smartphones and electric vehicles, to AI systems and aerospace technologies—rely on semiconductor technologies manufactured by TSMC, GFUS, and other companies within the GlobalFoundries group. See *TSMC Arizona*, TSMC (last visited Sept. 13,

2026);¹³ GlobalFoundries Inc., *Annual Report on Form 20-F for the Year Ended December 31, 2025*, at 38-39 (2026);¹⁴ *Aerospace & Defense*, GlobalFoundries (last visited Sept. 15, 2026).¹⁵ Foundry technologies enabling these products require many years of fundamental research, followed by many more years of development and experimentation before they are ready for commercialization. Once on the market, a foundry technology will serve customers for well over a decade. At each stage, *amici* make irreversible commitments—hiring and training engineers, purchasing specialized semiconductor manufacturing equipment, building advanced factories and packaging facilities, creating supply chains, and securing customer commitments—at a cost of billions of dollars.

Amici's investments in U.S. manufacturing exemplify these long-term commitments. TSMC recently committed to investing \$265 billion in manufacturing and packaging facilities in Arizona. TSMC is building at least ten semiconductor fabrication plants ("fabs"), two advanced packaging facilities, and a research and development center. This investment is a major economic engine: Just the first fab alone can produce 20,000 semiconductor wafers per month, has created over 1,600 high-tech professional jobs directly, and will generate thousands more jobs in the semiconductor ecosystem. That first fab was announced in 2020, and volume production began four years later. Two more years later, TSMC has begun construction on the fourth fab and first advanced packaging facility. And

¹³ <https://perma.cc/VQ9D-PVAM>.

¹⁴ <https://perma.cc/TR5W-JWM8>.

¹⁵ <https://perma.cc/PV2U-HQEB>.

these years-long steps are only part of a much longer process of research, development, planning, and commercialization. See *TSMC Announces Intention to Build and Operate an Advanced Semiconductor Fab in the United States*, TSMC (May 15, 2020);¹⁶ *TSMC Arizona*, *supra*.

GFUS's U.S. manufacturing operations likewise are the subject of billions of dollars in long-term investment by GlobalFoundries. In June 2025, GlobalFoundries announced plans for an aggregate \$16 billion of U.S. investment to expand semiconductor manufacturing and advanced-packaging capabilities across its facilities in New York and Vermont. See *GlobalFoundries Announces \$16B U.S. Investment to Reshore Essential Chip Manufacturing and Accelerate AI Growth*, GlobalFoundries (June 4, 2025).¹⁷ GlobalFoundries also has announced plans to create an Advanced Packaging and Photonics Center within its Malta manufacturing facility, including hundreds of millions of dollars committed over the next ten-plus years. See *GlobalFoundries Announces New York Advanced Packaging and Photonics Center*, GlobalFoundries (Jan. 17, 2025).¹⁸

TSMC's and GlobalFoundries' technology roadmaps likewise operate over extended periods. Both companies recently announced new cutting-edge technologies, years before they will be on the market. TSMC's A12 process technology, a second-generation innovative backside power rail solution, is scheduled for volume production

¹⁶ <https://perma.cc/DAQ2-B3DD>.

¹⁷ <https://perma.cc/VHW6-VZWQ>.

¹⁸ <https://perma.cc/2M6D-TKA6>.

in 2029. That innovation builds on decades of prior advancements dating back to TSMC’s founding in 1987. See *Logic Technology*, TSMC (last visited Sept. 13, 2026);¹⁹ see generally *Future R&D Plans*, TSMC (last visited Sept. 13, 2026).²⁰ And GlobalFoundries’ new 40UX technology, optimized to support long battery life, high reliability, and compact form factors, was first announced last year and is set to ramp to volume production by 2027. See *GlobalFoundries Announces Customer Availability of UX Platform Technologies for Intelligent Edge, Connectivity and Physical AI Applications*, GlobalFoundries (Sept. 2, 2026).²¹

In light of these extended investments, long-dormant patents—the old patents protected by the “settled expectations” rule—pose a particular risk. When patents lie dormant, companies lack notice that they could one day be accused of infringement.

Companies often have no practical reason to challenge a weak patent until it is actually asserted or otherwise brought to their attention. That is the reality of the patent system: Most patents are never asserted at all. “[O]nly about two percent of all patents are ever litigated,” and “significantly more than half of all issued patents are never used for any purpose whatsoever.” Mark A. Lemley, *Rational Ignorance at the Patent Office*, 95 Nw. U. L. Rev. 1495, 1501, 1514 (2001).

¹⁹ <https://perma.cc/S4B3-UUJ5>.

²⁰ <https://perma.cc/E7K4-SQ4N>.

²¹ <https://perma.cc/5TT7-K3DW>.

And it would be unrealistic for companies to widely launch pre-emptive challenges against dormant patents early in their lifespans. “[The notion] that competitors are regularly searching patent databases to make sure they are not infringing a patent that no one has brought to their attention . . . is simply not the way businesses operate.” *Id.* at 1516. That is for good reason: It would be impossible to challenge all questionable patents potentially relevant to a product. There are simply too many patents. Hundreds of thousands of new patents issue each year—over 325,000 last year alone. See Intell. Prop. Owners Ass’n, *Top 300 Organizations Granted U.S. Patents in 2025* (June 15, 2026);²² Jason Rantanen, *Utility Patents Granted per Calendar Year, 1840-2022*, Patently-O (Aug. 21, 2023).²³ Moreover, early in the development process, it is often uncertain what patents could be implicated by the eventual final product. And abusive patent litigants often base infringement accusations on patents outside the relevant field.

Even if it were possible to identify all potentially relevant patents, pre-emptive challenges would still not be sensible. It would be cost-prohibitive: IPR, while more efficient than litigation, still costs hundreds of thousands of dollars per proceeding. See Br. of *Amici Curiae* 35 Intellectual Property Law Professors 8, *Google, supra* (No. 25-1230) (citing AIPLA, *2025 Report of the Economic Survey* (2026)). And pre-emptive challenges carry significant legal downsides: Before a potentially infringing product is on the market, a patent challenger

²² <https://perma.cc/Y7T6-NWS9>.

²³ <https://perma.cc/PSA5-2F4Z>.

may lack Article III standing to appeal an erroneous IPR decision. See *JTEKT Corp. v. GKN Auto. Ltd.*, 898 F.3d 1217, 1219-21 (Fed. Cir. 2018). At the same time, the challenger would still face estoppel in future litigation based on the IPR. *Ibid.*; see §315(e).

For *amici*, pre-emptively challenging patents would take astronomical effort and expense. “Even one semiconductor chip may implicate thousands of patents.” Maureen K. Ohlhausen, *Patent Rights in a Climate of Intellectual Property Rights Skepticism*, 30 Harv. J.L. & Tech. 103, 113 (2016). And *amici* would have to hunt through hundreds of thousands more to identify the potentially relevant ones. In just one class of patents related to *amici*’s semiconductor processing technologies (“Semiconductor Devices; Electric Solid-State Devices”), there are 242,000 patents. See *CPC Classes*, PatentWorld (last visited Sept. 15, 2026)²⁴ (CPC class H10). No rational semiconductor company would pre-emptively identify and challenge every potentially problematic patent.

Congress was aware of these dynamics:

[G]iven (i) the large number of potentially patented components that could make up any one product (e.g., a computer), (ii) the cost required to challenge every one, and (iii) the uncertainty as to what any one patent may cover (due to the uncertain doctrine of claim construction), it would be impractical or impossible to challenge every questionable patent [within a short amount of time].

²⁴ <https://patentworld.vercel.app/explore/>.

S. Rep. No. 110-259, at 21 n.98 (2008). This is why Congress concluded that “[n]o patent holder has a right to an invalid patent, however long that patent holder may have enjoyed that right inappropriately.” *Id.* at 21.

Companies have therefore relied on the ability to challenge patents after they are asserted—regardless of the patent’s age. That is part of the patent bargain. As this Court has explained, patent rights have always been “subject to the qualification that the [PTO] has the authority to reexamine—and perhaps cancel—a patent claim.” *Oil States Energy Servs., LLC v. Greene’s Energy Grp., LLC*, 584 U.S. 325, 337 (2018) (citation omitted). And Congress confirmed that expectation for IPR specifically. It did not impose a patent-age cap, and it also tied the only IPR filing deadline to when the patent is *asserted* in litigation, not when it is *issued*. See 35 U.S.C. §315(b) (requiring IPR petition to be filed within one year of service of patent-infringement complaint). By running that deadline from the time of assertion, Congress recognized that companies would use IPR in reaction to patent assertions, rather than pre-emptively. And it rejected a shorter deadline after patent assertion in favor of a one-year window to give infringement defendants more time to react. 157 Cong. Rec. S5429 (daily ed. Sept. 8, 2011) (statement of Sen. Kyl) (“appropriate to extend the section 315(b) deadline to one year” in order to “afford defendants a reasonable opportunity to identify and understand the patent claims that are relevant to the litigation”).

B. The “settled expectations” rule imperils those technological investments.

The “settled expectations” rule strips away IPR’s protections against old, dormant patents. Now it is too late to challenge patents more than six years old—even if companies committed to product-development plans long before they had any reason to challenge the patent. This magnifies the risk of technological investment.

Amicus TSMC’s experience illustrates those effects. In 2025, a patent assertion entity, Marlin Semiconductor Limited, asserted patents more than a decade old against TSMC at the U.S. International Trade Commission. Marlin had “acquired over 800 worldwide patents and pending applications from United Microelectronics Corporation (UMC).” *About Us*, Longitude Licensing Ltd. (last visited Sept. 13, 2026).²⁵ UMC, the patents’ original owner, was one of TSMC’s key competitors while it held the patents—yet UMC never once indicated that it believed its rival’s technology potentially infringed. Only after Marlin bought the old, dormant patents did any infringement accusation arise.

TSMC sought IPR. But by then, the “settled expectations” rule was in place and the PTO denied institution. *Taiwan Semiconductor Mfg. Co. v. Marlin Semiconductor Ltd.*, Nos. IPR2025-00848, IPR2025-00864, IPR2025-00865, IPR2025-00879, Paper 11 (U.S.P.T.O. Sept. 3, 2025) (denying IPR based on “strong settled expectations for Patent Owner”). Marlin had no “settled” expectations of its own—the

²⁵ <https://perma.cc/249C-UN5L>.

patents were held for most of their lives by UMC. Yet the “settled expectations” rule favored the patent assertion entity against the innovative company, shielding the patents from challenge precisely because they had lain dormant so long.

The “settled expectations” rule is especially harmful in that context—where the entity asserting the patent is not the original owner, but a late-arriving patent assertion entity. Such an entity lacks any “settled expectations” that a patent it just acquired will not be challenged. It did not invest in developing the patented technology or build products around the patent. It simply purchased a litigation asset.

The “settled expectations” rule thus amplifies the harm of dormant patents. It rewards opportunistic plaintiffs who acquire old, unwanted patents. And it tilts the scales against productive companies at a moment of heightened vulnerability, after they have already committed to long-term technological investments.

That has profound implications for the patent system and the economy. An agency-devised rule of this significance warrants this Court’s review.

CONCLUSION

The petition for a writ of certiorari should be granted.

Respectfully submitted.

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