


In the
Supreme Court of the United States



TRADING TECHNOLOGIES INTERNATIONAL, INC.,

Petitioner,

v.

IBG LLC and INTERACTIVE BROKERS, LLC,

Respondents.

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

**BRIEF OF *AMICUS CURIAE* US INVENTOR
IN SUPPORT OF PETITIONER**

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TABLE OF CONTENTS

	Page
TABLE OF AUTHORITIES	ii
INTEREST OF <i>AMICUS CURIAE</i>	1
SUMMARY OF ARGUMENT	2
ARGUMENT	5
I. THE THREE BRANCHES OF GOVERNMENT HAVE FUNDAMENTALLY IRRECONCILABLE VIEWS ON PATENT ELIGIBILITY	5
A. Through the Statute, Congress Has Authorized Broad Patent Protection for Computer-Based Inventions.....	5
B. The Judicial Branch Has Reached Conflicting Outcomes.....	8
C. The Patent Office Continues to Grant Patents on Computer-Implemented Inventions But Also Invalidates Them at High Rates Post Grant.....	12
II. THE CURRENT UNCERTAINTY IS HARMING U.S. INNOVATION, WITH PARTICULAR DAMAGE TO INDEPENDENT INVENTORS.....	16
A. Maintaining a Robust Patent System is Critical to Innovation Certainty.....	17
B. American Inventors Need the Protection of the U.S. Patent System to Compete Effectively with an Increasingly Compe- titive International Marketplace	19
CONCLUSION.....	21

TABLE OF AUTHORITIES

	Page
CASES	
<i>Alice Corp. v. CLS Bank International</i> , 573 U.S. 208 (2014)	<i>passim</i>
<i>Athena Diagnostics, Inc. v. Mayo Collaborative Services, LLC</i> , 927 F.3d 1333 (Fed. Cir. 2019)	9
<i>Bilski v. Kappos</i> , 561 U.S. 593 (2010)	<i>passim</i>
<i>Cleveland Clinic Foundation v. True Health Diagnostics LLC</i> , 760 Fed. App'x 1013 (Fed. Cir. 2019)	13, 14
<i>Data Engine Technologies LLC v. Google LLC</i> , 906 F.3d 999 (Fed. Cir. 2018)	10, 11
<i>Diamond v. Chakrabarty</i> , 447 U.S. 303 (1980)	6, 9
<i>Diamond v. Diehr</i> , 450 U.S. 175 (1981)	8
<i>Electric Power Group, LLC v. Alstom S.A.</i> , 830 F.3d 1350 (Fed. Cir. 2016)	10
<i>Enfish, LLC v. Microsoft Corp.</i> , 822 F.3d 1327 (Fed. Cir. 2016)	10, 11
<i>Gust, Inc. v. Alphacap Ventures, LLC</i> , 905 F.3d 1321 (Fed. Cir. 2018)	11
<i>Interval Licensing LLC v. AOL, Inc.</i> , 896 F.3d 1335 (Fed Cir. 2018)	11

TABLE OF AUTHORITIES—Continued

	Page
<i>Mayo Collaborative Services LLC v. Prometheus Laboratories, Inc.</i> , 566 U.S. 66 (2012)	3, 12
<i>Parker v. Flook</i> , 437 U.S. 584 (1978)	8
<i>SAS Institute Inc. v. Iancu</i> , 138 S. Ct. 1348 (2018)	6
<i>United States v. Gonzales</i> , 520 U.S. 1 (1997).....	6

STATUTES

35 U.S.C. § 101.....	<i>passim</i>
35 U.S.C. § 102.....	3
35 U.S.C. § 103.....	3
35 U.S.C. § 112.....	3
35 U.S.C. § 273(a)(3)	7
35 U.S.C. § 273(b)(1)	6, 7
Leahy-Smith America Invents Act (“AIA”), Pub. L. No. 112-29, § 5(a), 125 Stat. 284 (2011).....	7

JUDICIAL RULES

Sup. Ct. R. 37.3	1
Sup. Ct. R. 37.6	1

TABLE OF AUTHORITIES—Continued

Page

OTHER AUTHORITIES

<p>Adam Mosoff, <i>The State of Patent Eligibility in America: Hearing Before the Subcommittee on Intellectual Property of the Senate Committee on the Judiciary, 116th Cong., Part I (2019)</i>.....</p>	5
<p>Ana Maria Santacreu & Heting Zhu, <i>What Does China’s Rise in Patents Mean? A Look at Quality vs. Quantity, Economic Synopses, No. 14 (2018)</i>.....</p>	20
<p>Andrei Iancu, <i>The Role of the Courts in Shaping Patent Law & Policy, 34 Berkeley Tech. L.J. 333 (2019)</i></p>	13
<p>Christopher A. Moore, <i>Comments of the Software and Information Industry Association on USPTO Revisions to Subject Matter Eligibility Guidance (Mar. 8, 2019)</i>.....</p>	15
<p>Daniel Nazer & Alexandra H. Moss, <i>In the Matter of Request for Comments on 2019 Revised Patent Subject Matter Eligibility Guidance, Comments of the Electronic Frontier Foundation (Mar. 8, 2019)</i></p>	15
<p>David J. Kappos, <i>The State of Patent Eligibility in America: Hearing Before the Subcommittee on</i></p>	

TABLE OF AUTHORITIES—Continued

	Page
<i>Intellectual Property of the Senate Committee on the Judiciary, 116th Cong., Part I (2019)</i>	19
David O. Taylor, <i>Confusing Patent Eligibility,</i> 84 Tenn. L. Rev. 157 (2016)	11
Economics & Statistics Administration and U.S. Patent & Trademark Office, <i>Intellectual Property and the U.S. Economy: 2016 Update</i> (2016)	17
Elizabeth Chien-Hale, <i>A New Era for Software Patents in China,</i> Law360 (May 25, 2017)	20
Jonathan Stroud & Derek M. Kim, <i>Debugging Software Patents After Alice,</i> 69 S.C. L. Rev. 177 (2017)	18
Kevin Madigan & Adam Mossoff, <i>Turning Gold to Lead: How Patent Eligibility Doctrine is Undermining U.S. Leadership in Innovation,</i> 24 Geo. Mason L. Rev. 939 (2017)	17
Paul R. Michel & Matthew J. Dowd, <i>The Need for “Innovation Certainty” at the Crossroads of Patent and Antitrust Law,</i> CPI Antitrust Chronicle (Apr. 2017).....	18
Raymond Millien, <i>Alice Who? Over Half the U.S. Utility Patents Issued Annually are Software Related!,</i> IP Watchdog (May 21, 2017)	12

TABLE OF AUTHORITIES—Continued

	Page
Thomas Jefferson, <i>5 Writings of Thomas Jefferson</i> (H. Washington ed. 1871).....	6
Tony Dutra, <i>Rader Regrets CLS Bank Impasse, Comments on Latest Patent Reform Bill,</i> BNA Pat. Trademark & Copyright L. Daily (Oct. 29, 2013).....	14
United States Patent and Trademark Office, <i>2019 Revised Patent Subject Matter Eligibility Guidance,</i> 84 Fed. Reg. 50 (Jan. 7, 2019).....	12
<i>Webster’s Third New International Dictionary</i> (1976).....	6



INTEREST OF *AMICUS CURIAE* ¹

Amicus Curiae US Inventor, Inc. (“US Inventor” or “*amicus*”) is a non-profit association of inventors devoted to protecting the intellectual property rights of individuals and small companies. US Inventor represents its 13,000 inventors and business members by promoting strong intellectual property rights and a predictable U.S. patent system through education, advocacy, and reform.

US Inventor was founded to support the innovative efforts of the “little guy” inventors, seeking to ensure that strong patent rights are available to support their efforts to invent, commercialize those inventions, create jobs, develop industries, and promote continued innovation.

US Inventor’s members consist of individual inventors and small- to medium-sized enterprises that depend heavily on the value created by meaningful patent rights. Their broad experience with the patent system, new technologies, and building companies gives them a unique perspective on the important issues presented in Trading Technologies International, Inc.’s petition for certiorari.

¹ Pursuant to Supreme Court Rule 37.6, *amicus curiae* states that no counsel for any party authored this brief in whole or in part and that no entity or person, aside from *amicus curiae*, its members, and its counsel, made any monetary contribution toward the preparation or submission of this brief. Pursuant to Supreme Court Rule 37.3, counsel of record for all parties consented to the filing of this brief, with said consents filed concurrently with this brief.



SUMMARY OF ARGUMENT

Much has been written about patent eligibility under 35 U.S.C. § 101, particularly over the last ten years. This Court, the Federal Circuit, and the United States Patent and Trademark Office (“PTO”) have written myriad decisions and guidance documents on what can be patented. Yet the business and innovation community is no closer to understanding the boundaries of patent eligible subject matter, particularly for computer-based inventions.

Every stakeholder is clamoring for a change in course of this Court’s patent eligibility precedents. And many have reported on how the current landscape is harming the Nation’s cherished role as a global leader in innovation. What more can be said that has not been said already? What can be said to convince this Court that something remains amiss with the current state of § 101? This is the conundrum facing inventors and small businesses.

All efforts to date have failed to provide a reliable framework to assess patent eligibility in important areas such as computer-implemented inventions, software, and diagnostic and treatment methods. The rest of the world has surpassed the United States in granting patents in these areas, and this situation is detrimentally affecting investment and development. Individual inventors, startups, and small businesses bear a disproportional share of this burden.

Supreme Court and Federal Circuit decisions have fundamentally overlooked the textual scope of § 101

by creating three non-textual exceptions to patentable subject matter: abstract ideas, natural phenomena, and laws of nature. These exceptions have no basis in statutory law; nor did Congress intend those undefined and fuzzy categories to restrict § 101's precise categories of invention. Section 101 was included in the Patent Act of 1952 to limit similar court-created exceptions from earlier years, and it was never intended to be a primary test for patentability. The subsequent framework set forth by this Court beginning with *Bilski v. Kappos*, 561 U.S. 593 (2010), followed by *Mayo Collaborative Services LLC v. Prometheus Labs., Inc.*, 566 U.S. 66 (2012), and culminating in *Alice Corp. v. CLS Bank International*, 573 U.S. 208 (2014) (often referred to as the “*Alice-Mayo* framework”) has thrown § 101 jurisprudence into chaos by failing to define what is, or is not, an abstract idea, and by conflating considerations intended for §§ 102, 103, and 112 with the § 101 analysis. Today, patent eligibility rests in the eye of the beholder, and the different branches of Government are increasingly seeing an ugly duckling and a beautiful swan at the same time. The incongruent conclusions about what might be patent eligible is not a system that reliably advances the progress of the useful arts.

The Legislative Branch recognizes the importance of broad patent eligibility. This is reflected in the literal language of the Patent Statute, as amended over the last 75 or more years. Congress also appreciates the importance of small business and inventors and how certainty in the patent system is critical to their livelihoods.

The Judicial Branch has embarked on a crusade against certainty and breadth of eligibility stemming from a lack of perceived guidance from this Court. There are numerous conflicting decisions in the computer-implemented patent area that cannot be reconciled. Most decisions focus on the “abstract idea” exception. The result is less certainty and less investment in the United States.

The Executive Branch, through the PTO, acts in a somewhat schizophrenic manner. The PTO continues to issue software-related patents and has issued guidance for patent examiners to assist with the § 101 analysis during the examination process. Simultaneously, however, the agency’s internal review board, the Patent Trial and Appeal Board (“PTAB”), invalidates a highly disproportionate number of patents covering computer-implemented inventions. The PTO’s conflicting actions are sending a mixed message, at best.

The time is now for this Court to address the continuing confusion associated with the *Alice-Mayo* framework, in particular the abstract idea concept as applied to computer-implemented inventions. Bringing clarity and certainty to all stakeholders in the U.S. patent system is imperative to right the course of American ingenuity and innovation.



ARGUMENT

I. THE THREE BRANCHES OF GOVERNMENT HAVE FUNDAMENTALLY IRRECONCILABLE VIEWS ON PATENT ELIGIBILITY

This Court should grant the petition to reconcile competing and conflicting views on what types of computer-implemented inventions are patent eligible. The current application of § 101 highlights the confusion in this area, and it is impacting U.S. innovation.

As noted by Professor Adam Mossoff in recent testimony before Congress on the state of patent eligibility in the United States, the U.S. patent system is “under an extensive amount of stress from all branches of the federal government.” *The State of Patent Eligibility in America: Hearing Before the Subcommittee on Intellectual Property of the Senate Committee on the Judiciary*, 116th Cong., Part I, at 1 (2019) (statement of Professor Adam Mossoff, Antonin Scalia Law School) (“Mossoff Testimony”). This includes the PTO, Congress, and the Federal Courts. Each branch, however, has differing views on patent eligibility, and this heightens the confusion for inventors and small businesses that desperately need certainty in the patent laws to drive investment.

A. Through the Statute, Congress Has Authorized Broad Patent Protection for Computer-Based Inventions

Congress has never endorsed the preclusion of patent rights for computer-implemented inventions

that are now routinely under siege. Rather, Congress specified four broad, independent categories of invention that are eligible for patent protection: “any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof.” 35 U.S.C. § 101.

With the statute’s express language, Congress chose to use the expansive adjective “any.” *SAS Institute Inc. v. Iancu*, 138 S. Ct. 1348, 1351 (2018) (“[T]he word ‘any’ ordinarily implies every member of a group.”); *accord United States v. Gonzales*, 520 U.S. 1, 5 (1997) (“Read naturally, the word ‘any’ has an expansive meaning, that is, ‘one or some indiscriminately of whatever kind.’” (quoting *Webster’s Third New International Dictionary* 97 (1976))).

This Court itself has recognized the encompassing nature of the statute. “In choosing such expansive terms . . . modified by the comprehensive ‘any,’ Congress plainly contemplated that the patent laws would be given wide scope.” *Diamond v. Chakrabarty*, 447 U.S. 303, 308 (1980). “Congress took this approach to patent eligibility to ensure that ‘ingenuity should receive a liberal encouragement.’” *Bilski*, 561 U.S. at 601 (quoting *5 Writings of Thomas Jefferson* 75–76 (H. Washington ed. 1871)).

Beyond the express language of § 101, the Patent Statute explicitly acknowledges, and therefore implicitly authorizes, patents directed to business methods. Section 273(b)(1), prior to revision by the America Invents Act (“AIA”) in 2011, provided for a prior use exception to patents covering business methods.

It shall be a defense to an action for infringement under section 271 of this title with

respect to any subject matter that would otherwise infringe one or more claims for a method in the patent being asserted against a person, if such person had, acting in good faith, actually reduced the subject matter to practice at least 1 year before the effective filing date of such patent, and commercially used the subject matter before the effective filing date of such patent.

35 U.S.C. § 273(b)(1) (2006). “Method” was defined as “a method of doing or conducting business.” *Id.* § 273 (a)(3).

Indeed, in *Bilski*, this Court recognized just that position. “The argument that business methods are categorically outside of § 101’s scope is further undermined by the fact that federal law explicitly contemplates the existence of at least some business method patents.” 561 U.S. at 607.

Congress later amended the Patent Statute in 2011—its most substantial revision since 1952. *See Leahy-Smith America Invents Act* (“AIA”), Pub. L. No. 112-29, § 5(a), 125 Stat. 284, 297 (2011). Congress did not, however, eliminate the prior use defense to business methods. Rather, it broadened the defense to include the other categories of patent eligible inventions. *See* 35 U.S.C. § 273(a) (2018) (establishing prior-use defense “with respect to subject matter consisting of a process, or consisting of a machine, manufacture, or composition of matter used in a manufacturing or other commercial process”).

Congress has thus statutorily manifested its intent for § 101 to include computer-implemented methods. That intent is contrary to this Court’s inad-

ministrable abstract idea prohibition that forms the heart of the *Alice-Mayo* framework.

Overall, the patent statutes enacted by Congress all—either expressly or implicitly—authorize a broad scope of patent eligibility. The clear text of the Patent Act should be the primary focus on assessing patent eligibility.

B. The Judicial Branch Has Reached Conflicting Outcomes

Starting with *Bilski* and culminating in *Alice*, this Court revisited the application of § 101 and created the two-factor eligibility framework routinely applied but rarely with consistency. The framework has unleashed mass confusion in the areas of computer-implemented inventions, business methods, and software inventions. This confusion continues to disproportionately affect small businesses and independent inventors in favor of established technology companies.

In *Bilski*, the Court recognized that the correct application of § 101 does not mean that “unforeseen innovations such as computer programs are always unpatentable.” *Bilski*, 561 U.S. at 604. The Court also recognized that § 101 was “only a threshold test.” 561 U.S. at 602. This threshold should necessarily be low. *See Diamond v. Diehr*, 450 U.S. 175, 188 (1981) (stating that the claimed process employing the Arrhenius equation was “at the very least not barred at the threshold by § 101”). And the threshold test should be a separate assessment from whether a patent meets the substantive requirements for patentability. *See Parker v. Flook*, 437 U.S. 584, 593 (1978) (“The obligation to

determine what type of discovery is sought to be patented must precede the determination of whether that discovery is, in fact, new or obvious.”). The application of the threshold conforms with Congress’s intent as evinced by the statutory language and legislative history. *See Chakrabarty*, 447 U.S. at 307–08.

This Court’s § 101 decisions since *Bilski*, however, have elevated this threshold assessment—to the point where it now presents a nearly insurmountable obstacle for many inventors and small businesses seeking to protect valuable computer-implemented improvements with constitutionally-authorized patent exclusivity. With *Bilski*, the Court acknowledged the tension in this area, referencing the Federal Circuit’s five separate opinions and that “[s]tudents of patent would be well advised to study these scholarly opinions.” 561 U.S. at 600. Now, after nine years of this Court’s views, the Federal Circuit and the PTO appear even less certain of the status of patent eligibility under § 101. Nowhere is this more apparent than the recent *Athena Diagnostics, Inc. v. Mayo Collaborative Services, LLC*, 927 F.3d 1333 (Fed. Cir. 2019) (order and opinions denying en banc), where a fractured Federal Circuit produced eight separate opinions in denying en banc review—even though a majority of the court deemed the invention patent eligible. If there was a need to address § 101 when *Bilski* was decided, that need has only grown. Those in the various fields of endeavor impacted are right to sound the alarm bells.

The need is evident in the lower courts’ difficulties in applying this Court’s precedents. The number of conflicting decisions from the Federal Circuit itself has been highlighted on many occasions, including in

dozens of petitions for certiorari. Focusing only on the field of computer-implemented inventions, the Federal Circuit has issued numerous conflicting and irreconcilable decisions.

For example, in *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335 (Fed. Cir. 2016) the Federal Circuit stated that “improvements in computer-related technology” and “claims directed to software” are “not inherently abstract.” The Federal Circuit held that the claims (directed to a new kind of “self-referential” database) were not abstract and were patent eligible. *Id.* The court’s primary reasoning was that the claims were directed to “an improvement to computer-technology itself,” as opposed to a mere use of the computer to provide functionality to users. *Id.* at 1335.

Subsequent cases have seized on *Enfish* as the bellwether for patent eligibility for computer-implemented inventions. See *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1354 (Fed. Cir. 2016) (“The present case is different [from *Enfish*]: the focus of the claims is not on such an improvement in computers as tools, but on certain independently abstract ideas that use computers as tools.”). In *Electric Power*, the court used the *Enfish* “computer-technology” improvement distinction as the basis to reject the claims under step one of the *Alice-Mayo* framework. *Id.*

On the other hand, a different line of cases upholds eligibility when the invention improves a software application running on the computer, irrespective of whether it improved the underlying computer itself. The most obvious example is *Data Engine Technologies LLC v. Google LLC*, 906 F.3d 999 (Fed. Cir. 2018). In

Data Engine, the Federal Circuit determined that patent claims directed to improvements in the graphical interface of a spreadsheet program were non-abstract. *Id.* at 1003–04. The Federal Circuit acknowledged that the improvement was directed to “a highly intuitive user-interface” superior to “existing prior art spreadsheets.” *Id.* Considering that this improvement was not directed to improved computer functionality, it is virtually impossible to square with *Enfish*.

The Federal Circuit’s difficulty with applying the abstract idea exception is no secret. The court repeatedly notes the confusion. *See, e.g., Gust, Inc. v. Alphacap Ventures, LLC*, 905 F.3d 1321, 1330 (Fed. Cir. 2018) (“[M]uch of the confusion in abstract idea law after *Alice* is in the proper categorization of what a claim is directed to.”); *Interval Licensing LLC v. AOL, Inc.*, 896 F.3d 1335, 1348 (Fed. Cir. 2018) (Plager, J., concurring in part and dissenting in part) (“The law, as I shall explain, renders it near impossible to know with any certainty whether the invention is or is not patent eligible.”). Academic commentators make similar observations. *See, e.g.,* David O. Taylor, *Confusing Patent Eligibility*, 84 *Tenn. L. Rev.* 157, 227 (2016) (“Beyond confusing relevant policies and doctrines, the current approach to determining patent eligibility lacks administrability.”). The confusion only serves to heighten uncertainty in overall patentability.

Ultimately, § 101 caselaw has become a menagerie of irreconcilable, panel-dependent decisions. The inventor community deserves more coherent guidance from the judiciary.

C. The Patent Office Continues to Grant Patents on Computer-Implemented Inventions But Also Invalidates Them at High Rates Post Grant

The PTO is similarly struggling with patent eligibility, particularly as it pertains to computer-implemented inventions. Like the Roman god Janus, the agency seemingly acts with two minds—issuing software-related patents, particularly to corporate tech giants, while simultaneously cancelling nearly identical patents through its internal adjudicatory process. This inconsistent, schizophrenic action highlights the need for this Court’s intervention.

On the one hand, the PTO continues to review and grant a record number of software patents. One recent report concluded that, from 2006 through 2016, the percentage of U.S. patents issued each year that were “software patents” ranged between 44.7% to a high of 51.7% in 2016, which was after this Court’s *Bilski*, *Mayo*, and *Alice* decisions. Raymond Millien, *Alice Who? Over Half the U.S. Utility Patents Issued Annually are Software Related!*, IP Watchdog (May 21, 2017).²

Earlier this year, PTO Director Iancu issued new guidelines aimed to “improve certainty and reliability in how examiners apply § 101.” United States Patent and Trademark Office, *2019 Revised Patent Subject Matter Eligibility Guidance*, 84 Fed. Reg. 50, 52 (Jan. 7, 2019). In undertaking this effort, the PTO acknowledged the difficulties of trying to establish reliable

² <https://www.ipwatchdog.com/2017/05/21/alice-over-half-u-s-utility-patents-issued-annually-software/id=83367/>

guidelines in view of opaque Supreme Court precedent and conflicting Federal Circuit decisions. The PTO guidance provided a summary of cases in which the Federal Circuit appears to have described similar inventions both as abstract and not abstract, depending on the case and the panel of judges. *Id.* at 51 (reviewing and comparing various Federal Circuit decisions and their inconsistencies).

The new PTO guidance attempts to add context to the abstract idea judicial exception by grouping “abstract ideas” to enable examiners “to more readily determine whether a claim recites subject matter that is an abstract idea.” *Id.* The PTO’s groupings include: (1) mathematical concepts; (2) certain methods of organizing human activity; and (3) mental processes. *Id.* at 52; *see also* Andrei Iancu, *The Role of the Courts in Shaping Patent Law & Policy*, 34 *Berkeley Tech. L.J.* 333, 340–41 (2019) (discussing guidance).

Despite the agency’s effort to establish reasonable guidance for § 101, the Federal Circuit is unswayed by the PTO’s guidelines. *See Cleveland Clinic Found. v. True Health Diagnostics LLC*, 760 Fed. App’x 1013, 1020 (Fed. Cir. 2019) (non-precedential). In particular, the Federal Circuit responded with a “thanks but no thanks”:

While we greatly respect the PTO’s expertise on all matters relating to patentability, including patent eligibility, we are not bound by its guidance. And, especially regarding the issue of patent eligibility and the efforts of the courts to determine the distinction between claims directed to natural laws and those directed to patent-eligible applications of those

laws, we are mindful of the need for consistent application of our case law.

Id. Although *Cleveland Clinic* may be legally correct in that the court is not bound by the PTO's guidance, the innovation community is disserved when the Federal Circuit—created with the congressional mandate to bring uniformity to patent law—completely disregards the careful and reasoned guidance of the federal agency charged with granting exclusive rights to inventors.

While the PTO Director is trying to provide better guidance based on court precedent, a distinct section of the agency is doing the opposite. The PTAB invalidates granted patents under § 101 at a surprisingly high rate through PGRs and CBM reviews. Indeed, the administrative patent judges at the PTAB have been described by former Chief Judge Randall Rader as “acting as death squads, killing property rights.” Tony Dutra, *Rader Regrets CLS Bank Impasse, Comments on Latest Patent Reform Bill*, BNA Pat. Trademark & Copyright L. Daily (Oct. 29, 2013).

While current overall invalidation rates may not be as high as they were during the PTAB's nascent days, the PTAB continues to invalidate computer-implemented patents at an extraordinarily high rate. See Mossoff Testimony 4–5. Empirical data reveal business method patents are invalidated 97.9% of the time in PTAB CBM decisions. *Id.* This high invalidation rate of computer-implemented inventions has been roundly criticized.

Echoing the PTAB's apparent proclivity to strike down software patents, certain interest groups have criticized the recent PTO guidance as conflicting

with Supreme Court precedents. Entities such as the Electronic Frontier Foundation claim that the new guidance seeks to subvert *Alice*. Daniel Nazer & Alexandra H. Moss, *In the Matter of Request for Comments on 2019 Revised Patent Subject Matter Eligibility Guidance, Comments of the Electronic Frontier Foundation* (Mar. 8, 2019) (arguing that “[t]he Revised Guidance effectively instructs examiners on how to narrow the *Alice v. CLS Bank* decision instead of how to apply it correctly.”).³ Other associations including the Software Information and Industry Association and the Internet Association criticized the guidance as too lenient, and contrary to established case law from this Court and the Federal Circuit. See Christopher A. Moore, *Comments of the Software and Information Industry Association on USPTO Revisions to Subject Matter Eligibility Guidance* (Mar. 8, 2019).⁴

While US Inventor firmly disagrees with those who roundly criticize the PTO guidance, the more important point here is that a fundamental dispute exists about patent eligibility. The PTO issued guidance based on its agency expertise and input from the inventory community. The Federal Circuit chose not to apply that guidance. This inter-branch disagreement is another reason for this Court to grant the petition.

³ https://www.uspto.gov/sites/default/files/documents/eligibility_2019comments_a_eff_2019mar08.pdf

⁴ https://www.uspto.gov/sites/default/files/documents/eligibility_2019comments_e_siia_2019mar08.pdf

II. THE CURRENT UNCERTAINTY IS HARMING U.S. INNOVATION, WITH PARTICULAR DAMAGE TO INDEPENDENT INVENTORS

A commercial business environment with reasonable certainty is vital to American new job creation. For inventors and startups—those who create the majority of new American jobs—commercial certainty is an outright requirement to commercialize new technology, thus creating new jobs.

The extreme commercial uncertainty created by the “abstract idea” exception denies fairness to inventors, startups, and their investors by denying capital necessary to access the courts. If the validity of a patent is too risky to assess, as is the case today, the patent becomes an asset incapable of attracting investment. It becomes a worthless piece of paper—after an inventor has spent tens of thousands of dollars to obtain the patent. With no investment, inventors cannot fund companies that commercialize our next generation of technology. They cannot defend their private property from theft. This destroys the incentive to invent, and many small inventors in the United States have stopped filing patent applications for this reason.

In short, the *Alice-Mayo* framework “is undermining the longstanding comparative advantage by the U.S. in the world in securing reliable and effective patent rights for all innovators.” Mossoff Testimony 2–3. The framework “has called into question the longstanding U.S. claim to a ‘gold standard’ patent system as compared to the rest of the world.” *Id.* In his testimony before Congress, Professor Mossoff

presented detailed data regarding PTO allowance rates under the *Alice-Mayo* framework and concluded:

These high rates of rejections of patent applications are not merely a departure from historical U.S. practices. They also signal that the U.S. has closed its patent system as compared to China and Europe.

Id.

Again, empirical evidence shows that China and Europe have opened their patent systems, as opposed to the United States, which has tightened its system. Inventions that are being protected with patents in Europe and China are being abandoned in the U.S. system. According to one study, between August 2014 and September 2017, 1,694 U.S. patent applications (out of a larger set of applications) were abandoned after the PTO rejected the claims for lack of patent eligibility under the *Alice-Mayo* framework. See Mossoff Testimony 6–7; Kevin Madigan & Adam Mossoff, *Turning Gold to Lead: How Patent Eligibility Doctrine is Undermining U.S. Leadership in Innovation*, 24 Geo. Mason L. Rev. 939, 956 (2017). Those same 1,694 applications successfully obtained patent protection in China, Europe, or both jurisdictions. Mossoff Testimony 6–7. This is, indeed, a concerning trend.

A. Maintaining a Robust Patent System is Critical to Innovation Certainty

Innovation has long been the driving force of the U.S. economy. See, e.g., Economics & Statistics Administration and U.S. Patent & Trademark Office, *Intellectual Property and the U.S. Economy: 2016 Update* (2016) (“Innovation and creative endeavors are indis-

pensable elements that drive economic growth and sustain the competitive edge of the U.S. economy.”).⁵ Patents are “one of the leading tools with which such advances were promoted and realized . . . to generate tangible economic benefits to [patent owners].” *Id.* And many recognize that patent protection for computer-implemented inventions is an important part of promoting innovation. *See, e.g.,* Jonathan Stroud & Derek M. Kim, *Debugging Software Patents After Alice*, 69 S.C. L. Rev. 177, 181 (2017) (recognizing that “software patents can still be a valuable tool to promote public information and innovation, facilitate American businesses through limited monopolies, and for a plethora of other economic reasons”).

Successful innovation, however, requires the proper environment “innovation certainty.” Innovators need intellectual capital, an educated workforce, and access to financial capital. Paul R. Michel & Matthew J. Dowd, *The Need for “Innovation Certainty” at the Crossroads of Patent and Antitrust Law*, CPI Antitrust Chronicle, at 1 (Apr. 2017).⁶ These resources enable innovators to conduct the research and development and to optimize products for the commercial marketplace.

Innovation certainty is an equally critical factor vital for the continued economic success of the United States. *Id.* And a robust patent system, in which innovators can obtain patent protection for their

⁵ <https://www.uspto.gov/sites/default/files/documents/IPandtheUSEconomySept2016.pdf>

⁶ <https://www.competitionpolicyinternational.com/wp-content/uploads/2017/04/CPI-Michel-Dowd.pdf>

valuable contributions, is a core aspect of that certainty. That certainty, in turn, provides assurance for investment in growing technology areas.

The current state of the law for computer-implemented inventions and software has a significant deterrent effect on investment. Providing innovation certainty by revisiting patent eligibility will counter that deterrent effect.

B. American Inventors Need the Protection of the U.S. Patent System to Compete Effectively with an Increasingly Competitive International Marketplace

The uncertainty around patent eligibility in the United States now stands in contrast to patent offices in China and Europe. Scholars and former PTO officials alike are noting that it is now easier to obtain patents on computer-implemented inventions, diagnostic methods, and the like overseas. *The State of Patent Eligibility in America: Hearing Before the Subcommittee on Intellectual Property of the Senate Committee on the Judiciary*, 116th Cong., Part I, at 2 (2019) (statement of David J. Kappos, Former Under-Secretary of Commerce for Intellectual Property and Director of United States Patent and Trademark Office) (“[I]t is easier to secure patent protection for critical life sciences and IT inventions in China and Europe than in the United States.”).

While the state of the law has undermined commercial certainty of U.S. patents, commercial certainty of Chinese patents has blossomed. China now leads the world in patent filings and has moved into second position in international patent filings

behind the United States. Ana Maria Santacreu & Heting Zhu, *What Does China's Rise in Patents Mean? A Look at Quality vs. Quantity*, *Economic Synopses*, No. 14, at 1 (2018).⁷ China's expansion of its patent system welcoming new high-tech innovation, including software and artificial intelligence, contrasts with U.S. policy to exclude business methods and software from the patent system. Elizabeth Chien-Hale, *A New Era for Software Patents in China*, *Law360* (May 25, 2017).⁸

The United States is losing its greatest economic engine, due in large part to the confusion surrounding patent eligibility. This Court's intervention is needed to ensure that the U.S. patent system remains a driver of the U.S. economy.

⁷ <https://doi.org/10.20955/es.2018.14>

⁸ <https://www.law360.com/articles/924934/a-new-era-for-software-patents-in-china>



CONCLUSION

For the foregoing reasons, the petition for a writ of certiorari should be granted.

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