

No. 18-415

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IN THE  
**Supreme Court of the United States**

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HP INC., f/k/a HEWLETT-PACKARD COMPANY,  
*Petitioner,*

v.

STEVEN E. BERKHEIMER,  
*Respondent.*

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

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**BRIEF OF AMICUS CURIAE  
ENGINE ADVOCACY  
IN SUPPORT OF PETITIONER**

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**INTEREST OF AMICUS CURIAE**

Amicus curiae Engine Advocacy (“Engine”) is a nonprofit technology policy, research, and advocacy organization that bridges the gap between policymakers and startups.<sup>1</sup> Engine works with government and a community of high-tech, growth-oriented startups across the nation to support the development of technology entrepreneurship. These startups are among the most innovative and fastest-growing companies in the country; they work to fundamentally alter and challenge entrenched business models, ideas, and institutions across all industries.

Engine has previously submitted amicus briefs to this Court and to the Federal Circuit in patent cases seeking to protect the interests of innovation and the startups that drive it. In this case, Engine and the community of entrepreneurs whose perspective it represents have an interest in protecting the thriving startup ecosystem that flourished after this Court’s *Alice* and *Mayo* subject matter eligibility rulings helped curb meritless patent litigation. Engine is concerned that, by making startups and other innovators vulnerable again to abusive litigation, the

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<sup>1</sup> Pursuant to Rule 37.2(a), counsel for both parties received notice of intent to file this brief at least 10 days before its due date. The parties have consented to the filing of this brief; their written consents are on file with the Clerk. No counsel for a party authored this brief in whole or in part, and no party or counsel for a party made a monetary contribution intended to fund its preparation or submission. No person other than amicus or its counsel made a monetary contribution to the preparation or submission of this brief.

decision below will hamper invention, investment, and entrepreneurship. Amicus submits this brief to bring to the Court's attention *Berkheimer's* harmful effects on American innovation.

### SUMMARY OF ARGUMENT

The Court should grant certiorari because the Federal Circuit's decision below conflicts with this Court's patentable subject matter eligibility jurisprudence and limits the ability of small companies and startups to resolve meritless patent assertions quickly and inexpensively. Review is exceptionally important because the *Berkheimer* decision undermines the protections provided by *Alice Corp. Pty. Ltd. v. CLS Bank International*, 134 S. Ct. 2347 (2014), and this Court's other decisions. If not corrected, the Federal Circuit's disregard of precedent threatens to increase the burdens of abusive patent litigation for startups and the other small businesses that drive economic growth. Ultimately, this will reduce investment in research and development and hamper innovation overall.

Patentable subject matter determinations have long been treated as a matter of law for the court to resolve. This rule protects innovation by allowing companies accused of patent infringement to seek dismissal of meritless infringement suits in early pretrial motions and thus avoid the tremendous costs and burdens of prolonged litigation. Startups rely on *Alice*: without the ability to escape abusive patent assertions early and cheaply, they must choose between wasting valuable resources on legally unnecessary licenses or spending far more on prolonged litigation. These expenses are a wasteful

tax on innovation; every dollar spent is a dollar that would otherwise fund research and development, the creation of new products and services, and the generation of new jobs and economic value.

The Federal Circuit's decision below disregards this Court's rule and upends patent procedure by transforming the second step of the *Alice* subject matter validity test into a question of fact that is no longer capable of resolution on an early motion to dismiss or motion for summary judgment. The decision thwarts the procedural benefits of the *Alice* test. Patent plaintiffs such as non-practicing entities can again force weak or meritless patent cases into prolonged litigation, dramatically increasing their leverage to extract costly settlements or forcing innovative companies to cease operations entirely.

The Court should review the *Berkheimer* decision to ensure that subject matter eligibility remains an effective filter for the weak patents that enable meritless litigation. District courts efficiently apply the preexisting *Alice* test to screen out abusive suits, reducing overall litigation burdens without harming meritorious patent assertions.

Furthermore, the decision below creates legal uncertainty that affects the body of patent law, from claim construction to patent examination. Claim construction has been within the exclusive control of the courts since *Markman v. Westview Instruments, Inc.*, but the Federal Circuit's holding in *Berkheimer* that courts cannot always determine the scope of a patent's claims as a matter of law threatens that rule. 517 U.S. 370 (1996).

Creating additional uncertainty, the United States Patent and Trademark Office, in response to

the decision below, changed its patent examination guidelines. Patent examiners now face a more difficult task in rejecting patent applications that are likely to be found ineligible under *Alice*, increasing the number of weak patents and exacerbating the risk of abusive patent litigation.

The Court should grant certiorari to promptly end these harmful impacts and this uncertainty, before they further burden innovative companies and hinder investment in them. The impact of *Berkheimer* is contrary to the core policy objectives of the patent system to encourage invention, innovation, investment, and entrepreneurship.

## ARGUMENT

### **I. This Case Is Exceptionally Important Because the Decision Below Harms Innovation by Enabling Prolonged Litigation of Meritless Patent Assertions**

Because subject matter eligibility has long been considered a question of law, district courts can determine patent invalidity on this basis early in litigation. Accordingly, small defendants, including startups, invoke patentable subject matter to avoid being trapped between two bad options when accused of infringing overbroad and vague patents. Instead of choosing between settling for a legally unnecessary license and spending millions in legal fees, these small, entrepreneurial companies can easily and quickly win cases in court. *Berkheimer* upends that practice by giving patentees a catch-all response to subject matter eligibility challenges: that there are factual issues to be resolved before a patent can be invalidated on such grounds.

**A. The Federal Circuit’s Decision Conflicts with This Court’s *Mayo* and *Alice* Patentable Subject Matter Test**

Not all ideas are patentable. A patent may only be obtained for a “new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof.” 35 U.S.C. § 101. In interpreting this clause, this Court has “long held that . . . [l]aws of nature, natural phenomena, and abstract ideas are not patentable,” *Ass’n for Molecular Pathology v. Myriad Genetics, Inc.*, 569 U.S. 576, 589 (2013) (quoting *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 70 (2012)).

The Court articulated the test for determining whether a patent is subject matter eligible under § 101 in *Mayo*, 566 U.S., and *Alice Corp. Pty. Ltd. v. CLS Bank International*, 134 S. Ct. 2347 (2014). Under the test, a court first considers “whether the claims at issue are directed to a patent-ineligible concept.” *Alice*, 134 S. Ct. at 2355. If they are, the claim elements must provide “an ‘inventive concept’ sufficient to transform [the underlying] abstract idea into a patent-eligible application.” *Id.* (quoting *Mayo*, 566 U.S. at 72-73).

In a radical departure from this Court’s precedents and from established practice, the Federal Circuit’s decision below found for the first time that the second step of the *Alice* patentable subject matter analysis hinged on an underlying matter of fact. 134 S. Ct.; Pet. App. 14 (“The question of whether a claim element or combination of elements is well-understood, routine and conventional to a skilled artisan in the relevant field is a question of fact.”). Until this decision, subject matter eligibility was always resolved by the court as a threshold question of

law. See *Bilski v. Kapos*, 561 U.S. 593, 602 (2010) (“The § 101 patent-eligibility inquiry is a threshold test.”); *see also* Pet. App. 105 (Reyna, J., dissenting from denial of hearing en banc) (noting the decision below “alter[s] the § 101 analysis in a significant and fundamental manner”).

The *Berkheimer* court based its ruling on a misreading of *Mayo*. The *Mayo* Court noted that the patent at issue merely directed the use of “well-understood, routine, and conventional activity” towards the implementation of an abstract ideas. *Mayo*, 566 U.S. at 79. The Federal Circuit reinterpreted “well-understood, routine, and conventional” to be *necessary* for a finding of invalidity rather than being *indicative* of invalidity—as that language was originally used in *Mayo*. Asking “whether the invention describes well-understood, routine, and convention activities,” Pet. App. 18, is a different standard than the inquiry established in *Alice*: whether the claims “transform a patent-ineligible abstract idea into a patent-eligible invention,” *Alice*, 134 S. Ct. at 2358 (internal citation omitted). In short, the Federal Circuit’s decision repurposes a fragment of the Court’s reasoning to fundamentally alter step two of *Alice*’s test.

### **B. Litigation Asserting Subject Matter Ineligible Patents Harms Startups and Innovation**

Defending claims of patent infringement is expensive and burdensome. Abusive litigation based on weak, overbroad patents—many of which are clearly subject matter invalid after *Alice*—can needlessly cripple innovative companies and stifle innovation generally.

An abusive patent assertion with a moderate amount of damages at stake (\$1 million to \$10 million) costs an average of \$2.2 million, a significant proportion of such suits' worth. Lauren H. Cohen et al., *Patent Trolling* 1 (Harvard Bus. Sch. Background Note 218-085, 2018). These meritless suits are often pursued by non-practicing entities (NPEs), typically referred to as patent trolls for the tolls they extract from inventors. NPEs do not produce or use the invention covered by a given patent, but rather only seek to monetize it through licensing demands and litigation. NPEs enjoy a significant bargaining advantage based on the disparity in risk, time, and operational focus between themselves and their targets: practicing companies who typically do produce or use innovative goods and services. While litigation leeches considerable time, attention, and money from the core businesses of practicing entities, it is the sole focus of an NPE.

NPEs rely on vague and broad patents with unclear scopes that may plausibly be asserted against entire business sectors. For example, one NPE, Ultramercial, sued numerous internet companies for violating a patent that claimed to cover the idea of having internet users watching an ad before viewing copyrighted content. Daniel Nazer, *Victory! Court Finally Throws Out Ultramercial's Infamous Patent on Advertising on the Internet*, Electronic Frontier Found. (Nov. 14, 2014), <https://perma.cc/F44M-LCJ4>.

NPEs disproportionately target small, entrepreneurial businesses: 82% of abusive patent assertions are against small- and medium-sized businesses, with 55% of lawsuits filed against companies with revenues of less than \$10 million.

Colleen V. Chien, *Patent Assertion Entities*, Presentation to the DOJ/FTC Hearing on PAEs (Dec. 10, 2012). Over time, NPEs have shifted more of their focus to even smaller companies. See *RPX Data Update: Patent Litigation Volatility Persists as Strategies Shift*, RPX (Jan. 3, 2017), <https://bit.ly/2QDMuRU> (reporting two-thirds of abusive patent assertions were against companies with revenues under \$100 million in 2016). Even the smallest of companies are vulnerable: 62% of surveyed companies with revenues of less than \$100,000 reported that an NPE had adversely impacted their business. Colleen Chien, *Startups and Patent Trolls*, 17 Stan. Tech. L. Rev. 461, 476 (2014).

Any patent assertion is a threat for an emerging company. It can cost up to \$50,000 merely to evaluate claims in a demand letter. *The Impact of Bad Patents on American Businesses: Hearing Before the H. Subcomm. On Courts, Intellectual Prop. & the Internet*, 115th Cong. 4 (2017) [hereinafter *Hearing*] (statement of Julie P. Samuels, President of the Board, Engine). Patent assertions are especially threatening relative to other legal claims because patent litigation offers few procedural opportunities to resolve a dispute before plunging into expensive, expert-intensive, and prolonged discovery. Invalidity motions under *Alice* are a critical exception. Without such motions, settlement is often the only option for startups that need to focus on growth, rather than lengthy litigation.

Moreover, every time an NPE extracts a settlement in a meritless patent assertion, the patent appears stronger in future assertions. This increases the NPE's leverage in future hold-ups, producing a



domino effect that makes successive settlement agreements easier to obtain.

Patent abuse directly harms economic growth: every dollar spent by emerging companies defending against frivolous NPE lawsuits is a dollar stolen from innovation that would benefit society. Between 1990 and 2010 alone, abusive patent litigation cost defendants half a trillion dollars. James Bessen et al. *The Private and Social Costs of the Patent Trolls, Regulation*, Winter 2011-2012, at 26, 26.

The small companies NPEs prefer to target are the powerhouses of economic growth, accounting for nearly 50% of GDP and well over half of new job creation. U.S. Small Bus. Admin., *Frequently Asked Questions About Small Businesses* (2018), <https://www.sba.gov/sites/default/files/advocacy/Frequently-Asked-Questions-Small-Business-2018.pdf>; Kathryn Kobe, U.S. Small Bus. Admin., *Small Business GDP Update 2002-2010* (2012), [https://www.sba.gov/sites/default/files/rs390tot\\_1.pdf](https://www.sba.gov/sites/default/files/rs390tot_1.pdf). New startup companies are responsible for all net job growth in this country. Tim Kane, Kauffman Found., *The Importance of Startups in Job Creation and Job Destruction 2* (2010), <https://perma.cc/ZXW2-MH24>. High-tech startups are especially critical for job growth. Ian Hathaway, Kauffman Found., *Tech Starts: High-Technology Business Foundation and Job Creation in the United States 2* (2013), <https://perma.cc/P7GX-5Y6D>. Moreover, every new high-tech job creates 4.3 additional jobs in the surrounding community. Bay Area Econ. Council Econ. Inst., *Technology Works: High-Tech Employment and Wages in the United States* (2012), <http://documents.bayareacouncil.org/TechReport.pdf>

Meanwhile, venture capitalists reduced investment by \$22 billion between 2009 and 2014 because of abusive patent litigation. Stephan Kiebzak et al., *The Effect of Patent Litigation and Patent Assertion Entities on Entrepreneurial Activity* 45 *Research Policy* 218, 229 (2016), <https://ssrn.com/abstract=2457611>. In a survey of over 200 venture capitalists, there was 100% agreement that the mere presence of a patent demand letter would be a major deterrent when deciding whether to invest. Robin Feldman, *Patent Demands & Startup Companies: The View from the Venture Capital Community*, 16 *Yale J.L. & Tech.* 236, 243 (2014).

After surviving a lawsuit, startups and other small companies become less innovative; they reduce research expenditures by at least 19% for several years when targeted by NPE suits. Roger Smeets, *Does Patent Litigation Reduce Corporate R&D? An Analysis of US Public Firms* 18 (2014), <https://ssrn.com/abstract=2443048> (reporting a drop of 3-5% in R&D operating budgets, which translates into a 19% relative reduction in spending). Patent trolls extract \$29 billion from the economy annually, not including the indirect harms caused by discouraging innovation. James E. Bessen & Michael J. Meurer, *The Direct Costs from NPE Disputes*, 99 *Cornell L. Rev.* 387, 389 (2014).

The impact of NPEs goes far beyond easily measured spending. A very high percentage of startups report enduring “significant operational impact[s]” in response to patent demand letters, including delayed hiring, an inability to raise financing, eschewing new initiatives, and shutting down whole business divisions—or even the entire

business. Chien, *Startups, supra*, at 465 (reporting that “[t]he smaller the company the more likely it was to report operational impact”). Even the process of litigation taxes engineers and entrepreneurs emotionally and occupies their waking hours—depriving them of time which they would otherwise use to innovate further.

For example, Ditto, a virtual eyewear startup, was one of the many small companies targeted by NPE activity. Even though the suit was ultimately dismissed, Ditto’s valuation dropped by \$4 million and the company had to lay off over 25% of its staff. See Joe Mullin, *New Study Suggests Patent Trolls Really Are Killing Startups*, ArsTechnica (June 11, 2014, 5:55 PM), <https://arstechnica.com/tech-policy/2014/06/new-study-suggests-patent-trolls-really-are-killing-startups/>.

Abusive patent litigation exploits the expense and burden of litigation to force productive companies to choose between paying for legally unnecessary licenses and potentially spending millions in legal fees. Either way, these expenses impose a wasteful tax on innovation and detract from investments in the technology of the future, dampening America’s continued economic growth and prosperity.

### **C. *Alice* and *Mayo* Enable Startups and Other Innovators to Escape Abusive Litigation Quickly and More Cheaply**

This Court’s holdings in *Mayo* and *Alice* provide an important mechanism for invalidating the vague and overbroad patents that enable so much abusive patent litigation. *Alice*, 134 S. Ct.; *Mayo*, 566 U.S. Because subject matter eligibility is decided as a matter of law, the *Alice* framework protects innovators

by allowing defendants to dismiss abusive lawsuits involving invalid patents with early motions on the pleadings or a limited hearing. *See* Paul Gugliuzza, *The Procedure of Patent Eligibility*, 97 Tex. L. Rev. (forthcoming) (manuscript at 17), <https://ssrn.com/abstract=3161621> (“Because courts frequently treat eligibility as a question of law lacking factual considerations, they often invalidate patents on eligibility grounds at the pleading stage.”). *Alice* gives startups and other companies accused of patent infringement an efficient way to end meritless assertions of overbroad patents earlier and at far lower expense.

The Federal Circuit itself, prior to its *Berkheimer* decision, repeatedly affirmed judicial determinations of patent invalidity under § 101 on the pleadings. *See, e.g., Intellectual Ventures I LLC v. Capital One Fin. Corp.*, 850 F.3d 1332, 1341-42 (Fed. Cir. 2017) (conducting an *Alice* analysis as a threshold legal analysis on the patent claims at summary judgement); *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1336-39 (Fed. Cir. 2016) (same); *Content Extraction & Transmission LLC v. Wells Fargo Bank, N.A.*, 776 F.3d, 1343, 1349 (Fed. Cir. 2014) (same but reviewing a 12(b)(6) motion to dismiss).

The ability afforded by *Alice* for courts to end abusive suits—a pretrial motion early in litigation—greatly diminishes NPEs’ capacity to force meritless settlements. No longer can NPEs hold defendants hostage through the threat of expensive, expert-intensive, protracted litigation and perhaps trial.

The positive impacts of the *Alice* decision extend well beyond providing individual companies a choice other than expensive settlement or ruinously

expensive litigation. When a company accused of infringement relies on *Alice* to defend itself and to invalidate an asserted patent on subject matter eligibility grounds instead of settling, that invalidity determination disarms the NPE and eliminates its future ability to assert a bad patent. This socially beneficial outcome reduces the harms of meritless patent litigation for all inventors.

After *Alice*, counsel to startups across the country began to recommend actively defending against abusive litigation rather than settling. For example, CooperCode, which developed a mobile scavenger hunt app, was sued by Locality Leap LLC for infringing a patent that supposedly covered GPS use in treasure hunting. CooperCode relied on *Alice* to dispute the validity of the asserted patent, and Locality Leap promptly withdrew its suit. *Hearing, supra*, at 16-17 (statement of Julie P. Samuels). In another example, following *Alice*, the Federal Circuit invalidated Ultramercial's aforementioned patent on internet advertising after upholding it twice, finally ending their abusive assertions. *Ultramercial, Inc v. Hulu, LLC*, 772 F.3d 709, 722 (Fed. Cir. 2014).

Yet another example is the experience of a startup called Nutrionix, which sells nutrition calculators and databases for consumers and restaurants. The emerging company faced a potential infringement claim by the patent troll DietGoal, which held a patent for the abstract idea of having a picture of a menu on a computer. Because of this baseless threat, Nutrionix decided to withhold sales of its nutrition calculator. Immediately after *Alice*, DietGoal's patent was ruled invalid and Nutrionix was able to reenter the market.

It could then hire eight new employees. *Hearing, supra*, at 17 (statement of Julie P. Samuels).

Section 101 has played an essential role in curbing meritless patent litigation—a role that it can serve only so long as patentable subject matter is accorded its proper treatment as a question of law that is decided by the court.

#### **D. The Decision Below Undermines *Alice*'s Role in Reducing Meritless Litigation**

The Federal Circuit's decision in *Berkheimer* undermines the important limits that the *Alice* decision placed on assertions of weak and vague patents. *Berkheimer* threatens to once again force small companies, researchers, and innovators to choose between draining settlements and crippling expensive litigation from unwarranted patent assertions.

Indeed, by making patentable subject matter a factual question, the opinion conflicts not only with this Court's precedents but also with the previously undisputed conclusion of the Federal Circuit itself: “[p]atent eligibility under 35 U.S.C. § 101 is an issue of law . . . .” *OIP Technologies, Inv. v. Amazon.com, Inc.*, 788 F.3d 1359, 1362 (2012) (citing *Accenture Global Servs. v. Guidewire Software, Inc.*, 728 F.3d 1336, 1340-41 (Fed. Cir. 2013)); *Intellectual Ventures I*, 850 F.3d at 1338 (“Patent eligibility under § 101 is an issue of law.”). The Federal Circuit's decision circumvents this Court's clear § 101 precedents and impedes defendants' ability to successfully mount a subject matter ineligibility defense.

The Federal Circuit compounded the impact of its legal error by subsequently applying the same

reasoning to a motion to dismiss, *see Aatrix Software, Inc. v. Green Shades Software, Inc.*, 882 F.3d 1121, 1130 (Fed. Cir. 2018) and a motion for judgment as a matter of law, *Exergen Corp. v. Kaz USA, Inc.*, 725 Fed. App'x. 959, 965-68 (Fed. Cir. 2018) (applying *Berkheimer's* reasoning to judgment as a matter of law in a non-precedential decision).

Taken together, these decisions will permit NPEs to prolong the time, expense, and burden of litigation in cases that previously could have been dismissed by the court on earlier and less expensive pretrial motions that raised subject matter invalidity challenges. Now, patent plaintiffs can avoid a motion to dismiss or for summary judgment by simply asserting in their complaint that the patent specification indicates the invention involves improvements that go beyond the “well-understood, routine, or conventional,” even in cases where the patent asserted would previously have been easily declared invalid under *Alice* at the motions stage. *Aatrix Software*, 882 F.3d at 1128; *see also, e.g., Kroy IP Holdings, LLC, v. Groupon, Inc.*, No. 17-1405-MN-SRF, 2018 WL 4905595 (D. Del. Oct. 9, 2018).

By ignoring this Court's precedents and requiring subject matter eligibility determinations to be made by juries at trial, *Berkheimer* will once again force startups and other patent defendants to waste valuable resources to settle meritless suits, so as to avoid prolonged litigation that few, if any, can afford. Money will be spent settling or litigating weak cases rather than on conducting research and development and building better products and services. Innovation will suffer.

The problem will only worsen as patent prosecutors inevitably take advantage of *Berkheimer* by working assertions of improvement or otherwise non-conventional conduct into patent specifications, directly contrary to this Court's admonition that subject matter eligibility should not turn on the "draftsman's art." See *Mayo*, 566 U.S. at 72 (quoting *Parker v. Flook*, 437 U.S. 584, 593 (1978)). NPEs will again be unrestrained and able to extract more settlements without invalidity determinations, and they will increase their extortionate filings and grow their share of total patent litigation suits from an already high proportion (64%) in 2015. Lauren Cohen et al., *The Growing Problem Of Patent Trolling*, 352 Sci. 521, Data File S1 (2016). The Federal Circuit's *Berkheimer* decision risks not only limiting recent efficiency gains made after *Alice*, but also reversing them entirely.

The *Alice* test's procedural benefits for curbing abusive patent assertions is illustrated by Bytephoto, a website that allows users to enter weekly photo contests. Bytephoto was sued by Garfum.com for infringing a patent which allegedly covered a "method of sharing multi-media content among users in a global computer network." Garfum initially demanded a settlement of \$50,000 but withdrew the suit when Bytephoto relied upon *Alice* to make an invalidity challenge.

Garfum's patent was plainly invalid on multiple grounds, yet without the ability to dismiss the lawsuit as a matter of law early in litigation, Bytephoto would not have been able to fight the infringement claim. Settlement or extended litigation, even with the merits strongly in Bytephoto's favor, could have easily



forced Bytephoto to shut its site down. *Hearing, supra*, at 16 (statement of Julie P. Samuels).

Compare this to the costs of fighting an abusive patent lawsuit. Life360, a startup helping to keep families safe and connected through messaging and location sharing, decided to fight back against a patent that supposedly covered any technology that marks the location of a person on a map and calls them. Life360 won their jury trial, but only after spending \$1.5 million, an amount that is quite inexpensive for a patent trial. That \$1.5 million could have been spent on new jobs and developing the company's technology. *Id.* at 11.

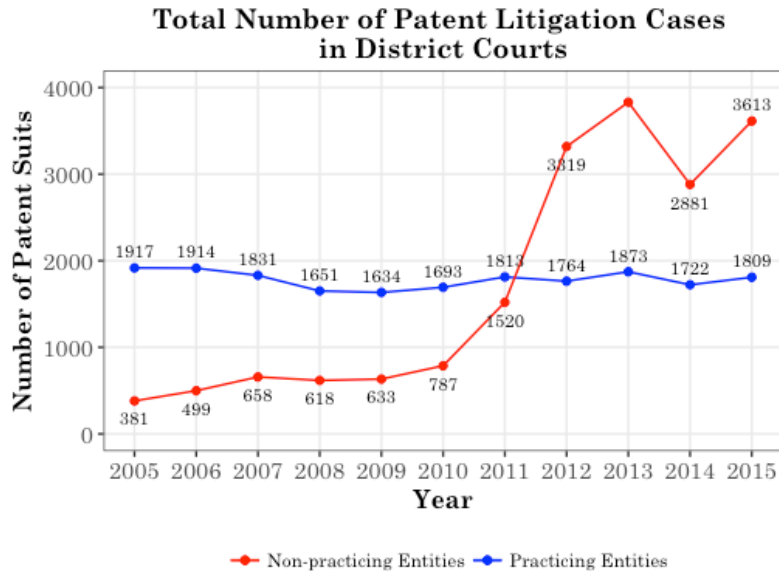
If the Court does not review and correct the decision below, abusive litigation will once again divert countless hours of employees' time from research, development, and innovation. Many millions of dollars will be wasted on unwarranted settlements or on prolonged litigation and accompanying distractions. *Id.* at 3-4.

### **E. District Courts Properly Apply the *Alice* Test to Curb Abusive Litigation Without Hindering Meritorious Lawsuits**

*Alice* effectively checks abusive patent cases while preserving the incentive for and ability of practicing entities to litigate meritorious suits. District court judges regularly and effectively apply *Alice* to dismiss frivolous lawsuits asserting invalid patents on § 101 grounds without impacting meritorious litigation.

*Alice* has not deterred patent assertions by practicing entities: the number of patent infringement claims filed by practicing entities is roughly the same

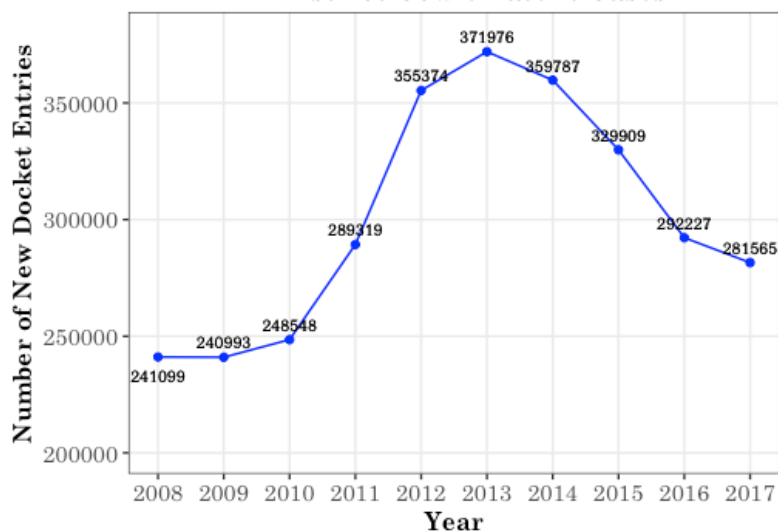
today as it was in 2010. See chart, “Total Number of Patent Litigation Cases in District Courts,” below.



Moreover, *Alice* is not a source of confusion for judges and attorneys. District courts are able to consistently and correctly apply the *Alice* test. For example, in the 2016-17 term, the Federal Circuit affirmed 69% of § 101 determinations, compared to affirming 59% of cases overall. Gibson Dunn, *Federal Circuit Year in Review 2016/2017*, <https://perma.cc/6PYL-PNRJ>. Similarly, in a recent study, patent attorneys were able to quickly and correctly assess the subject matter eligibility of a patent claim under *Alice* around two-thirds of the time, without the aid of the patent specification, priority date, or any background information. Jason D. Reinecke, *Is the Supreme Court’s Patentable Subject Matter Test Overly Ambiguous? An Empirical Test*, Utah L. Rev. (forthcoming 2019) (manuscript at 24), <https://ssrn.com/abstract=3123524>.

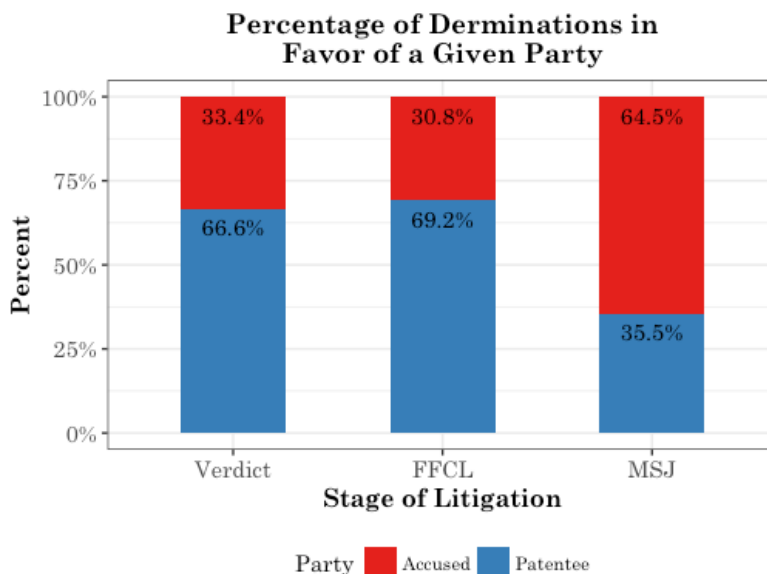
While not significantly impacting meritorious litigation, *Alice* reduced the burden low-quality patent cases place on courts. As one indication of this effect, the number of docket entries in patent litigation suits has dropped annually since the America Invents Act (“AIA”) and *Alice* went into effect, from 371,976 in 2013 to 281,565 in 2017. DocketNavigator, *Patent Litigation Special Report: 2017 Retrospective* 7 (2018). Docket entries are a proxy for the litigation burden borne by all parties, including the court itself. See Christopher A. Cotropia et al., *Endogenous Litigation Costs: An Empirical Analysis of Patent Disputes* 15 (Nw. Law & Econ., Research Paper No. 17-01, Univ. of Ill. Coll. of Law, Legal Studies Research Paper No. 17-14 2017), <https://ssrn.com/abstract=2893503> (using docket entries as a measure of litigation burden). Docket entries began declining after the implementation of the AIA in 2013, but after *Alice* the rate of decline in the number of new docket entries doubled—even as the total number of patent litigation cases filed that year continued its long-term upward trajectory. See chart, “Total Number of New Docket Entries in District Court Patent Cases,” below.

**Total Number Of New Docket Entries  
In District Court Patent Cases**



*Alice* empowered judges to use summary judgment and pretrial motions to eliminate weak patent assertions, short-circuiting NPEs’ tactic of forcing settlements through the threat of prolonged discovery or trial. *See, supra*, Part I.B. Sixty-five percent of motions for summary judgement in patent litigation cases in 2017 were decided in favor of the defendant. But patentees who survive pre-trial motions have little cause for concern—they ultimately win more than two-thirds of the time at trial, whether the ultimate fact-finder is a judge or jury. *See* chart, “Percentage of Determinations in Favor of a Given Party,” below (“FFCL” refers to findings of fact and

conclusions of law, and “MSJ” refers to motions for summary judgment).



The Federal Circuit’s decision conflicts with this Court’s ruling in *Alice* and undermines the efficient functioning of the nation’s patent system. The ruling, by reducing the risk of an early dismissal of litigation and a finding of invalidity, is already emboldening the holders of weak, vague patents to broadly assert them and to try to force settlements. Resolving patent eligibility early in litigation is essential to avoid unnecessary, costly, and protracted litigation in cases of subject matter ineligible patents. The decision below disregards the fundamental importance of early resolution by courts.

The Federal Circuit should be well aware of the harm its decision will cause. As a concurrence in an earlier case recognized, “[a]ddressing 35 U.S.C. § 101 at the outset not only conserves scarce judicial

resources and spares litigants the staggering costs associated with discovery and protracted claim construction litigation, it also works to stem the tide of vexatious suits brought by the owners of vague and overbroad . . . patents.” *OIP Technologies*, 788 F.3d at 1364 (Mayer, J. Concurring). Yet the Circuit declined to reconsider its *Berkheimer* rule, in spite of Judge Reyna’s admonition that the “consequences of this decision are staggering” and “wholly unmoored” from Federal Circuit precedent. Pet. App. 112 (Reyna, J., dissenting from denial of rehearing en banc). Accordingly, this Court should grant certiorari to review the decision and correct the Circuit’s damaging departure from *Alice* and *Mayo*.

## **II. *Berkheimer*’s Conflict with This Court’s Prior Rulings Is Causing Broad Uncertainty that Requires Correction**

For patent law to fulfil its intended purpose of promoting innovation, it must provide clarity for inventors and their investors. Instead, the decision below is creating new legal uncertainty that will deter investment in research and development.

The decision has caused uncertainty among district courts around how to apply its rule in determining patent eligibility. But *Berkheimer* implicates more than § 101: it calls into question the authority of courts more generally to construe patents. Meanwhile, the PTO has changed its examiner guidelines in response to *Berkheimer* in a fashion that is likely to lead to the issuance of patents that are invalid under *Alice*.

**A. The Federal Circuit’s Decision  
Undermines Courts’ Proper Role in  
Construing Patents Under *Markman***

This Court has held that “the construction of a patent . . . is exclusively within the province of the court.” *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 372 (1996). Because the subject matter of a patent is strictly a function of the patent’s claims, the issue of whether a patent satisfies the requirements of § 101 is properly reserved for the court. Even if subsidiary factual disputes exist in the construction of a patent, that subsidiary fact-finding is likewise a matter for the court. *Teva Pharmaceuticals USA, Inc. v. Sandoz, Inc.*, 135 S. Ct. 831, 838 (2015) (“[C]ourts may have to resolve subsidiary factual disputes”).

The decision below conflicts with this clear teaching: it transforms patentable subject matter determinations from a matter of law into a matter of fact for juries to determine. In reversing the district court’s finding of subject matter invalidity at the summary judgement stage, the Federal Circuit held that because the patent specification purported to improve computer functionality there was a genuine issue of material fact over whether “a claim element or combination of elements is well-understood, routine and conventional to a skilled artisan in the relevant field.” Pet. App. 14. In short, the Circuit disregarded *Teva’s* clear mandate that underlying factual questions made as part of patent interpretation are matters for the court.

By reconfiguring the relationship between the judge and jury, the decision below threatens more than § 101 jurisprudence. *Berkheimer’s* conclusion that the construction of patents may involve questions

of fact unresolvable by the court undermines the central holding in *Markman* and jeopardizes the validity of claim construction by courts. After *Berkheimer*, it is no longer clear whether the construction of patent specifications in other contexts, including enablement and written description determinations, is a matter for the court or for a jury. This problem is extremely significant as it implicates all stages of patent litigation; it needs to be corrected.

**B. Changes to Patent Examination  
Procedure in Response to *Berkheimer*  
Allow the Issuance of Patents that Are  
Ineligible under *Alice***

In direct response to the decision below, the PTO revised its guidelines for patent examiners, creating a new standard for patent eligibility that conforms with *Berkheimer* but conflicts with this Court's precedents. The PTO now requires patent examiners to cite specific evidence to demonstrate that additional elements of a patent are "well-understood, routine, or conventional" when rejecting a patent under § 101. Robert W. Bahr, Changes in Examination Procedure Pertaining to Subject Matter Eligibility, Recent Subject Matter Eligibility Decision (*Berkheimer v. HP, Inc.*), USPTO 3-4 (Apr. 19), 2018, <https://www.uspto.gov/sites/default/files/documents/memo-berkheimer-20180419.pdf>.

This new requirement is a substantive change in the guidelines for rejecting a patent application, requiring prior art citations where none were needed before. The looser standard for issuing patents will create uncertainty not only for current patent applicants but also for owners of recently issued patents, since their patents will now be subject to post



grant review under the new standard. *See* 35 U.S.C. § 321.

Restricting the PTO's ability to reject patent applications directed at abstract ideas is likely to result in weaker patents that the PTO would have previously denied on § 101 grounds. When newly required evidence concerning well understood or routine practice in a field is insufficient, patent examiners will instead grant applications—even if those applications should be considered invalid under this Court's § 101 holdings—generating more weak patents that provide fresh opportunities for abusive litigation.

### **C. District Courts Are Applying Berkheimer Inconsistently and Creating Uncertainty**

The range of outcomes to date in subject matter eligibility challenges in decisions relying upon *Berkheimer* is highly divergent. For example, compare *iSentium, LLC v. Bloomberg Fin. L.P.*, No. 17-cv-7601 (PKC), 2018 WL 5447503, at \*10 (S.D.N.Y. Oct. 29, 2018), and *CardioNet, LLC v. InfoBionic, Inc.*, No. 17-cv-10445-IT, 2018 WL 5017913, at \*4 (D. Mass. Oct. 16, 2018), *appeal filed* No. 19-1149 (Fed. Cir. Nov. 2, 2018), in which the district courts referred to *Berkheimer* in a § 101 challenge but decided against the patentee on entirely different grounds. In the former, the court relied upon *Berkheimer*'s language to claim that it had the discretion to decide for itself whether there was a matter of fact at issue. In the latter, the court allowed a 12(b)(6) motion to dismiss and invalidated a patent based on the absence of non-conclusory factual statements that would have otherwise raised a matter of fact.

In contrast to these two cases, the court in *Kroy IP Holdings, LLC, v. Groupon, Inc.* sided with the plaintiff because of precisely the kind of reasoning *Berkheimer* facilitates: the court denied a motion to dismiss on a Section 101 challenge “pending consideration of additional evidence outside the scope of the pleadings.” 2018 WL 4905595, at \*41. And *Berkheimer* has an extensive reach; in the months since it was decided, at least fifty-five district court opinions have already cited it. Litigants and courts are struggling to navigate the confusing morass that *Berkheimer* has created in patent law jurisprudence.

The Federal Circuit is aware of uncertainty around § 101, and various judges on the court have themselves recognized the need for clarification. The court below acknowledged that patentable subject matter jurisdiction “needs clarification, by higher authority,” Pet. App. 99 (Lourie and Newman, J.J., concurring in denial of rehearing en banc), and that this body of law is “incoherent” and a “conundrum” in need of clarification, *Interval Licensing, LLC v. AOL, Inc.*, 896 F.3d 1335, 1348, 1356 (Fed. Cir. 2018) (Plager, J., concurring in part and dissenting in part). This Court should heed the Federal Circuit’s pleas and grant certiorari to resolve any confusion and to undo the harmful effects of the *Berkheimer* decision.

## CONCLUSION

Because the decision below conflicts with this Court’s decision in *Alice*; exposes startups and other innovators that drive economic growth to costly, burdensome, and prolonged litigation in meritless cases; and creates confusion and uncertainty about the

scope of judicial determinations in patent litigation,  
the Court should grant certiorari.

Respectfully submitted,

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