

No. 19-

IN THE
Supreme Court of the United States

CHARGEPOINT, INC.,
Petitioner,

v.

SEMACONNECT, INC.,
Respondent.

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

PETITION FOR A WRIT OF CERTIORARI

CARTER G. PHILLIPS*
RYAN C. MORRIS
LUCAS W.E. CROSLAW
SIDLEY AUSTIN LLP
1501 K Street, N.W.
Washington, D.C. 20005
(202) 736-8000
cphillips@sidley.com

Counsel for Petitioner

October 21, 2019

* Counsel of Record

QUESTIONS PRESENTED

Section 101 of the Patent Act provides that “[w]hoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.” This Court has long maintained an implicit exception to Section 101: “Laws of nature, natural phenomena, and abstract ideas are not patentable.” *Alice Corp. Pty. Ltd. v. CLS Bank Int’l*, 134 S. Ct. 2347, 2354 (2014). However, the Court has consistently held that incorporation of an abstract idea into an invention remains patent eligible. *Diamond v. Diehr*, 450 U.S. 175 (1981).

The questions presented are:

1. Whether a patent claim to a new and useful improvement to a machine or process may be patent eligible even when it “involves” or incorporates an abstract idea.
2. Whether the Court should reevaluate the atextual exception to Section 101.

PARTIES TO THE PROCEEDING

Petitioner (plaintiff-appellant below) is ChargePoint, Inc. Respondent (defendant-appellee below) is SemaConnect, Inc.

RULE 29.6 STATEMENT

Petitioner ChargePoint, Inc. has no parent corporation, and no publicly held corporation owns 10% or more of its stock.

LISTING OF DIRECTLY RELATED PROCEEDINGS

The listing of all directly related proceedings is:

ChargePoint, Inc. v. SemaConnect, Inc., No. 18-1739, U.S. Court of Appeals for the Federal Circuit, judgment entered March 28, 2019 (opinion below).

ChargePoint, Inc. v. SemaConnect, Inc., No. 8:17-cv-03717-MJG, U.S. District Court for the District of Maryland, judgment entered March 23, 2018 (opinion below).

Counsel are unaware of any additional proceedings in any court that are directly related to this case.

TABLE OF CONTENTS

	Page
QUESTIONS PRESENTED.....	i
PARTIES TO THE PROCEEDING	ii
RULE 29.6 STATEMENT	ii
LISTING OF DIRECTLY RELATED PROCEEDINGS	ii
TABLE OF AUTHORITIES	v
OPINIONS BELOW	1
JURISDICTION.....	1
STATUTES AND RULES INVOLVED	1
INTRODUCTION	1
STATEMENT OF THE CASE.....	4
I. LEGAL BACKGROUND.....	4
A. Origins of the Abstract-Idea Exception ..	5
B. The Modern Abstract-Idea Exception	7
II. PROCEEDINGS BELOW	12
A. The Invention.....	12
B. Procedural Background	13
REASONS FOR GRANTING THE PETITION...	17
I. CERTIORARI IS WARRANTED BECAUSE THE FEDERAL CIRCUIT'S DECISION IN THIS CASE CONFLICTS WITH <i>DIEHR</i>	17
II. CERTIORARI IS WARRANTED TO RECONSIDER THE IMPLICIT NON- STATUTORY EXCEPTION TO SECTION 101.....	23

TABLE OF CONTENTS—continued

	Page
III. THE DECISION BELOW WILL DEEPEN THE POST- <i>ALICE</i> CONFUSION THAT HARMS INNOVATION AND SAPS JUDICIAL RESOURCES	24
CONCLUSION	30
APPENDICES	
APPENDIX A: Opinion, <i>ChargePoint, Inc. v. SemaConnect, Inc.</i> , No. 2018-1739 (Fed. Cir. Mar. 28, 2019).....	1a
APPENDIX B: Mem. & Order: Mot. to Dismiss, <i>ChargePoint, Inc. v. SemaConnect, Inc.</i> , No. MJG-17-3717 (D. Md. Mar. 23, 2018).....	31a
APPENDIX C: Judgment, <i>ChargePoint, Inc. v. SemaConnect, Inc.</i> , No. 2018-1739 (Fed. Cir. Mar. 28, 2019).....	87a
APPENDIX D: Order, <i>ChargePoint, Inc. v. SemaConnect, Inc.</i> , No. 2018-1739 (Fed. Cir. July 23, 2019) (per curiam)	88a

TABLE OF AUTHORITIES

CASES	Page
<i>Alice Corp. Pty. Ltd. v. CLS Bank Int’l</i> , 134 S. Ct. 2347 (2014).....	<i>passim</i>
<i>Athena Diagnostics, Inc. v. Mayo Collaborative Servs., LLC</i> , 927 F.3d 1333 (Fed. Cir. 2019)	7, 8, 23, 24, 26
<i>Bilski v. Kappos</i> , 561 U.S. 593 (2010).....	5, 10, 23, 27, 28
<i>Chamberlain Grp., Inc. v. Techtronic Indus. Co.</i> , 315 F. Supp. 3d 977 (N.D. Ill. 2018), <i>aff’d in part, vacated in part, rev’d in part</i> , 935 F.3d 1341 (Fed. Cir. 2019)	21
<i>Chamberlain Grp., Inc. v. Techtronic Indus. Co.</i> , 935 F.3d 1341 (Fed. Cir. 2019).....	21, 22
<i>Cleveland Clinic Found. v. True Health Diagnostics LLC</i> , 760 F. App’x 1013 (Fed. Cir. 2019).....	28
<i>Corning v. Burden</i> , 56 U.S. (15 How.) 252 (1853).....	6
<i>Diamond v. Chakrabarty</i> , 447 U.S. 303 (1980).....	5
<i>Diamond v. Diehr</i> , 450 U.S. 175 (1981)....	<i>passim</i>
<i>Dolbear v. Am. Bell Tel. Co. (The Telephone Cases)</i> , 126 U.S. 1 (1888)	7, 19
<i>Gottschalk v. Benson</i> , 409 U.S. 63 (1972).....	8, 9
<i>Jungersen v. Ostby & Barton Co.</i> , 335 U.S. 560 (1949).....	24
<i>Le Roy v. Tatham</i> , 55 U.S. (14 How.) 156 (1853).....	3, 5, 6, 19
<i>Mackay Radio & Tel. Co. v. Radio Corp. of Am.</i> , 306 U.S. 86 (1939)	7, 19
<i>Mayo Collaborative Servs. v. Prometheus Labs., Inc.</i> , 566 U.S. 66 (2012).....	10, 11
<i>O’Reilly v. Morse</i> , 56 U.S. (15 How.) 62 (1853).....	6, 19

TABLE OF AUTHORITIES—continued

	Page
<i>Parker v. Flook</i> , 437 U.S. 584 (1978)	9
<i>Pfaff v. Wells Elecs., Inc.</i> , 525 U.S. 55 (1998)	29
<i>Synopsys, Inc. v. Mentor Graphics Corp.</i> , 839 F.3d 1138 (Fed. Cir. 2016)	25

CONSTITUTION AND STATUTES

U.S. Const. art. I, § 8, cl. 8	22
35 U.S.C. § 100(b)	5
35 U.S.C. § 101	1, 3, 5, 21, 23

LEGISLATIVE MATERIALS

<i>The State of Patent Eligibility in America: Part III: Hearing Before the Subcomm. on Intellectual Prop. of the S. Comm. on the Judiciary</i> , 116th Cong. (2019) (prepared testimony of Manny Schecter, Chief Patent Counsel, IBM), https://www. judiciary.senate.gov/imo/media/doc/Schecter %20Testimony.pdf	28
<i>The State of Patent Eligibility in America: Part III: Hearing Before the Subcomm. on Intellectual Prop. of the S. Comm. on the Judiciary</i> , 116th Cong. (2019) (responses to questions for the record of Manny Schecter, Chief Patent Counsel, IBM), https://www.judiciary.senate.gov/download/ schecter-responses-to-questions-for-the- record	27

TABLE OF AUTHORITIES—continued

SCHOLARLY AUTHORITIES	Page
Kevin Madigan & Adam Mossoff, <i>Turning Gold into Lead: How Patent Eligibility Doctrine Is Undermining U.S. Leadership in Innovation</i> , 24 Geo. Mason L. Rev. 939 (2017).....	17
Giles S. Rich, <i>The Vague Concept of “Invention” as Replaced by Sec. 103 of the 1952 Patent Act</i> , 46 J. Pat. Off. Soc’y 855 (1964).....	5
OTHER AUTHORITIES	
Gene Quinn, <i>Alice Five Years Later: Hope Wanes as 101 Legislative Discussions Dominated by Big Tech</i> , IPWatchdog.com (May 5, 2019), https://ipwatchdog.com/2019/05/05/alice-five-years-later-gearing-up-to-commemorate-the-death-of-101/id=108926/	2
Robert Sachs, <i>Alice: Benevolent Despot or Tyrant? Analyzing Five Years of Case Law Since Alice v. CLS Bank: Part I</i> , IPWatchdog.com (Aug. 29, 2019), https://www.ipwatchdog.com/2019/08/29/alice-benevolent-despot-or-tyrant-analyzing-five-years-of-case-law-since-alice-v-cls-bank-part-i/id=112722/	4, 25, 28, 29, 30
Joseph Saltiel, <i>Five Years After Alice: Five Lessons Learned from the Treatment of Software Patents in Litigation</i> , WIPO Mag. (Aug. 2019), https://www.wipo.int/wipo_magazine/en/2019/04/article_0006.html	2

TABLE OF AUTHORITIES—continued

	Page
Russell Slifer, <i>The Federal Circuit Just ‘Swallowed All of Patent Law’ in ChargePoint v. SemaConnect</i> , IPWatchdog.com (Apr. 2, 2019), https://www.ipwatchdog.com/2019/04/02/federal-circuit-just-swallowed-patent-law-charge-point-v-semaconnect/id=107917/	4, 26

PETITION FOR A WRIT OF CERTIORARI

ChargePoint, Inc. respectfully petitions for a writ of certiorari to review the judgment of the United States Court of Appeals for the Federal Circuit.

OPINIONS BELOW

The Federal Circuit’s opinion is reported at 920 F.3d 759 and reproduced at Pet. App. 1a–30a. The district court’s decision granting respondent’s motion to dismiss is unpublished but available at 2018 WL 1471685 and reproduced at Pet. App. 31a–86a.

JURISDICTION

The Federal Circuit entered judgment on March 28, 2019. Pet. App. 87a. It denied ChargePoint’s petition for panel rehearing and rehearing en banc on July 23, 2019. *Id.* at 88a–89a. This Court has jurisdiction under 28 U.S.C. § 1254(1).

STATUTES AND RULES INVOLVED

Section 101 of the Patent Act provides: “Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.” 35 U.S.C. § 101.

INTRODUCTION

In the aftermath of *Alice Corp. Pty. Ltd. v. CLS Bank International*, 134 S. Ct. 2347 (2014), the Federal Circuit has once again created massive confusion on patent eligibility under Section 101 of the Patent Act. Now, without intervention by this Court in this case, the Federal Circuit will upend long-standing and well-

settled principles of eligibility and impose a test under which even actual improvements to machines can be deemed “abstract” and thus patent ineligible.

In *Alice*, this Court attempted to clarify patent eligibility, reaffirming a two-part test: (1) patent claims must not be drawn to a patent-ineligible concept—such as a law of nature, natural phenomenon, or abstract idea—but (2) if they are, they must contain an “inventive concept sufficient to transform the claimed abstract idea into a patent-eligible application.” *Id.* at 2357. In doing so, this Court, however, did not elucidate what qualifies as an “abstract idea” or precisely how to determine an “inventive concept.” As a result, the Federal Circuit has been left without a legal anchor and has floundered, issuing conflicting decisions and undermining any hope of consistency or predictability.¹ As one commentator has noted, after *Alice*, “great uncertainty remains with respect to what is patent eligible in America.”²

In this case, the Federal Circuit used the confused state of the law after *Alice* to contravene long-standing precedent from this Court on patent eligibility. The

¹ Joseph Saltiel, *Five Years After Alice: Five Lessons Learned from the Treatment of Software Patents in Litigation*, WIPO Mag. (Aug. 2019), https://www.wipo.int/wipo_magazine/en/2019/04/article_0006.html (“While courts have consistently applied the two-part test set forth in *Alice*, the results of that application are unpredictable.”).

² See, e.g., Gene Quinn, *Alice Five Years Later: Hope Wanes as 101 Legislative Discussions Dominated by Big Tech*, IPWatchdog.com (May 5, 2019), <https://ipwatchdog.com/2019/05/05/alice-five-years-later-gearing-up-to-commemorate-the-death-of-101/id=108926/> (“As the fifth anniversary of the *Alice* decision approaches, great uncertainty remains with respect to what is patent eligible in America.”).

ChargePoint patents at issue relate to charging stations for electric vehicles, and in particular, electric-vehicle charging stations capable of being controlled over a network. The inventions described in those patents easily qualify as “new and useful ... machines” or “new and useful improvement[s]” to machines that Congress intended to be eligible under the plain terms of Section 101. 35 U.S.C. § 101. The Federal Circuit recognized that ChargePoint’s invention “build[s] a better machine,” Pet. App. 16a (alteration in original), but still said that the claims on their face “involve[] an abstract idea”—namely, communication over a network. *Id.* at 9a. Because this supposed abstract idea was the sole purportedly new aspect of the claims, the court held that they are ineligible for patenting under Section 101. *Id.* at 12a–16a.

This conflicts directly with *Diamond v. Diehr*, 450 U.S. 175 (1981), and the long-standing principle that mere incorporation of an abstract idea into an invention, particularly a machine, does not render a claim patent ineligible. See *Le Roy v. Tatham*, 55 U.S. (14 How.) 156, 175 (1853). And it further conflicts with *Diehr*’s instruction that “[i]t is inappropriate to dissect the claims into old and new elements and then to ignore the presence of the old elements in the analysis.” 450 U.S. at 188. This infidelity to *Diehr* alone warrants certiorari.

The abstract-idea exception to Section 101 in the Federal Circuit’s hands, however, is swiftly becoming a failed experiment. *Alice* did not provide the clarity the Court envisioned. Instead, the Federal Circuit and various parties have used the chaos that has trailed the Court’s decision to eliminate numerous patents. Indeed, the period following *Alice* has seen, by one estimate, a 914% increase in the number of patents

invalidated under Section 101.³ *Alice*'s warning to “tread carefully in construing [the Section 101] exclusionary principle lest it swallow all of patent law,” 134 S. Ct. at 2354, has largely been realized.⁴

The time has come for this Court to reevaluate the abstract idea exception to Section 101. This exception is entirely a judicial creation, having no basis in the text of the statute. The Court should undertake to implement Section 101's broad and explicit language. Thus, where, as here, the patents claim a “new or useful machine” or a new and useful improvement to a machine, the inventions should be eligible under Section 101 as Congress plainly intended based on the language of that provision.

The petition should be granted to resolve the conflict with this Court's precedent, to bring clarity to patent eligibility, and to tie that eligibility to the text of Section 101.

STATEMENT OF THE CASE

I. LEGAL BACKGROUND

Section 101 declares that “[w]hoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and

³ See Robert Sachs, *Alice: Benevolent Despot or Tyrant? Analyzing Five Years of Case Law Since Alice v. CLS Bank: Part I*, IPWatchdog.com (Aug. 29, 2019), <https://www.ipwatchdog.com/2019/08/29/alice-benevolent-despot-or-tyrant-analyzing-five-years-of-case-law-since-alice-v-cls-bank-part-i/id=112722/>.

⁴ Russell Slifer, *The Federal Circuit Just ‘Swallowed All of Patent Law’ in ChargePoint v. SemaConnect*, IPWatchdog.com (Apr. 2, 2019), <https://www.ipwatchdog.com/2019/04/02/federal-circuit-just-swallowed-patent-law-chargepoint-v-semaconnect/id=107917/>.

useful improvement thereof” may obtain a patent. 35 U.S.C. § 101.⁵ The “expansive terms” of Section 101 were intended to give “the patent laws ... wide scope.” *Diamond v. Chakrabarty*, 447 U.S. 303, 308 (1980). This was intentional because Congress expected Sections 102, 103, and 112 would do the heavy lifting in weeding out invalid patents. *Id.* at 309 (“Congress intended statutory subject matter to ‘include anything under the sun that is made by man.’” (quoting S. Rep. No. 82-1979, at 5 (1952); H.R. Rep. No. 82-1923, at 6 (1952))); Giles S. Rich, *The Vague Concept of “Invention” as Replaced by Sec. 103 of the 1952 Patent Act*, 46 J. Pat. Off. Soc’y 855, 865 (1964) (but “[i]n section 103 Congress made such a policy declaration” “to take the place of” the judge-made “invention” test)

Despite the broad scope of Section 101, this Court crafted an “implicit exception” to this provision: “Laws of nature, natural phenomena, and abstract ideas are not patentable.” *Alice*, 132 S. Ct. at 2354. According to the Court, this so-called abstract-idea exception creates a “threshold test” for patent eligibility. *Bilski v. Kappos*, 561 U.S. 593, 602 (2010).

A. Origins of the Abstract-Idea Exception

In *Le Roy v. Tatham*, the Court first articulated the principle that, under a predecessor to the current Patent Act, an abstract idea cannot be patented. The Court explained that a “principle, in the abstract, is a fundamental truth; an original cause; a motive; these cannot be patented, as no one can claim in either of them an exclusive right.” 55 U.S. at 175. At the same time, the Court noted an important distinction between laying claim to the principle, truth, or motive,

⁵ The term “process” is defined as a “process, art or method, and includes a new use of a known process, machine, manufacture, composition of matter, or material.” 35 U.S.C § 100(b).

and incorporating them into an invention. According to the *Le Roy* Court, “the processes used to extract, modify, and concentrate natural agencies, [may] constitute the invention.” *Id.* For instance, “[a] new property discovered in matter, when practically applied, in the construction of a useful article of commerce or manufacture, is patentable.” *Id.*

In the following Term, the Court applied the principle laid down in *Le Roy* to invalidate part of Samuel Morse’s patent for the telegraph. See *O’Reilly v. Morse*, 56 U.S. (15 How.) 62, 112 (1853). Morse’s patent had broadly claimed “the use of the motive power of the electric or galvanic current, which I call electro-magnetism, however developed for marking or printing intelligible characters, signs, or letters, at any distances, being a new application of that power of which I claim to be the first inventor or discoverer.” *Id.* According to the Court, this went too far. The Court reiterated the distinction between “a patent for a principle” and “a machine, embodying a principle”—that is, patents laying claim to a principle versus those incorporating or applying that principle. *Id.* at 115. Morse’s first claim, the Court concluded, was “a patent for a principle” because it sought to cover electro-magnetism itself. *Id.* at 117.⁶

The Court reiterated the distinction between claiming a scientific principle and claiming an application of it in *The Telephone Cases*, which resolved nearly two decades of litigation over who first patented the telephone in favor of Alexander Graham

⁶ The Court applied the dividing line established in *Le Roy* and *Morse* to process patents as well. See, e.g., *Corning v. Burden*, 56 U.S. (15 How.) 252, 267–68 (1853) (“It is for the discovery or invention of some practicable method or means of producing a beneficial result or effect, that a patent is granted, and not for the result or effect itself.”).

Bell. See *Dolbear v. Am. Bell Tel. Co. (The Telephone Cases)*, 126 U.S. 1, 534 (1888). In the course of its decision, the Court restated the key holding of *Morse* “that the use of magnetism as a motive power, without regard to the particular process with which it was connected in the patent, could not be claimed,” but the “use [of that power] in that connection could.” *Id.* Bell, unlike *Morse*, had incorporated electricity into his particular invention, rather than having laid claim to electricity itself. And the possibility “that electricity cannot be used at all for the transmission of speech, except in the way Bell has discovered” would, “if true, show more clearly the great importance of his discovery, but it will not invalidate his patent.” *Id.* at 535.

The Court carried the same eligibility dividing line into the early 20th Century in *Mackay Radio & Telegraph Co. v. Radio Corp. of America*, 306 U.S. 86, 94 (1939). There, the patent incorporated a “mathematical formula by which [a particular] desired relationship is secured,” which the patent holder “did not invent,” but rather was “published in a scientific journal thirty years before.” *Id.* at 92–93. The Court assumed, without holding, that the claimed invention was patentable, because it was “apparent that if this assumption is correct the invention was a narrow one.” *Id.* at 94. In the course of decision, the Court reaffirmed that, “[w]hile a scientific truth, or the mathematical expression of it, is not patentable invention, a novel and useful structure created with the aid of knowledge of scientific truth may be.” *Id.*

B. The Modern Abstract-Idea Exception

After World War II, federal courts invalidated patents at an alarming rate, due in large part to the judicially created “invention” requirement—that is, whether the patent evidenced “invention.” See *Athena*

Diagnostics, Inc. v. Mayo Collaborative Servs., LLC, 927 F.3d 1333, 1371 (Fed. Cir. 2019) (O'Malley, J., dissenting from denial of rehearing en banc). In response, “Congress attempted to address” the “criticisms” of this requirement “by amending the Patent Act to replace the ill-defined and judicially-created invention requirement with the more workable anticipation and obviousness tests codified in Sections 102 and 103.” *Id.* at 1372. Despite Congress’ amendment of the Patent Act, including Section 101, however, this Court continued to look to its earlier case law in developing the current abstract-idea exception to Section 101. *Id.*

One example of this is *Gottschalk v. Benson*, 409 U.S. 63 (1972). There, the patent application claimed a method of programming a computer to “convert[] binary coded decimal number representations into binary number representations.” *Id.* at 73–74. The program consisted of a straightforward application of an algorithm, “[a] procedure for solving a given type of mathematical problem,” *id.* at 65, which consisted of a series of “mathematical procedures” that could “be carried out in existing computers long in use, no new machinery being necessary,” *id.* at 67. The algorithmic steps could “also be performed without a computer.” *Id.* The Court reviewed its prior decisions in *Le Roy*, *Morse*, *Mackay*, and *The Telephone Cases*, among others, and synthesized them into the rule that, under Section 101, “one may not patent an idea.” *Id.* at 71. The invention at issue was so closely related to the underlying algorithm that that patent “in practical effect would be a patent on the algorithm itself.” *Id.* at 72. Accordingly, the supposed invention was

unpatentable because it fell within an implicit exception to Section 101.⁷

In *Parker v. Flook*, 437 U.S. 584, 588 (1978), the Court invalidated an application for “a method of updating alarm limits” in a catalytic converter. *Id.* at 585. The Court acknowledged that “[t]he line between a patentable ‘process’ and an unpatentable ‘principle’ is not always clear,” *id.* at 589, that “[t]he plain language of § 101 does not answer the question,” and that “[i]t is true, as respondent argues, that his method is a ‘process’ in the ordinary sense of the word,” *id.* at 588. But *Benson*, the Court concluded, “forecloses a purely literal reading of § 101.” *Id.* at 589.

In *Diamond v. Diehr*, by contrast, the Court explained that “in dealing with the patent laws, we have more than once cautioned that ‘courts “should not read into the patent laws limitations and conditions which the legislature has not expressed.”’” 450 U.S. at 182 (quoting *Diamond v. Chakrabarty*, 447 U.S. 303, 308 (1980)). Nonetheless, the Court picked up the thread from its earlier case law to distinguish between patents claiming a principle itself and those that merely incorporate an idea or principle into the invention.

In *Diehr*, the patentee claimed an improved rubber curing process, and one of the steps included a mathematical algorithm. *Id.* at 177–78. The Court

⁷ The Court in *Gottschalk* warned that “[i]t may be that the patent laws should be extended to cover these [computer] programs, a policy matter to which we are not competent to speak.” *Id.* The question ultimately posed “technological problems” that called for “considered action by the Congress.” *Id.* at 73. Of course, by declaring the patent invalid without a textual hook, the Court resolved a whole set of policy issues that the Court was no more institutionally competent to decide.

found the invention patent eligible under Section 101 even though “in several steps of the process a mathematical equation and a programmed digital computer are used,” because the patent holder sought “only to foreclose from others the use of that equation in conjunction with all of the other steps in their claimed process.” *Id.* at 185, 187. “Obviously,” the Court observed, “one does not need a ‘computer’ to cure natural or synthetic rubber, but if the computer use *incorporated in* the process patent significantly lessens the possibility of ‘overcuring’ or ‘undercuring,’ *the process as a whole* does not thereby become unpatentable subject matter.” *Id.* at 187 (emphases added). The Court warned that “[i]t is inappropriate to dissect the claims into old and new elements and then to ignore the presence of the old elements in the analysis.” *Id.* at 188. The “claims must be considered as a whole.” *Id.* And as a whole, the claims at issue were patent eligible.

After *Diehr*, the Court did not address the “abstract idea” exception to Section 101 for 30 years. To be sure, the patent system had become bloated by an explosion of so-called “business-method” patents, which bore no resemblance to the machines and processes most commonly associated with patents. These patents generated an enormous increase in patent litigation with corresponding consumption of litigant and court resources. Thus, in *Bilski*, 561 U.S. 593, the Court revisited Section 101. There, the Court held that a “business method” patent “that explains how buyers and sellers of commodities in the energy market can protect, or hedge, against the risk of price changes” fell “outside of § 101 because it claims an abstract idea.” *Id.* at 599, 609

The Court returned to the Section 101 exception two years later in *Mayo Collaborative Services v.*

Prometheus Laboratories, Inc., 566 U.S. 66 (2012). The claims in *Mayo* “purport[ed] to apply natural laws describing the relationships between the concentration in the blood of certain thiopurine metabolites and the likelihood that the drug dosage will be ineffective or induce harmful side-effects.” *Id.* at 72. These claims fell short of patentability. The claims simply “inform[ed] a relevant audience about certain laws of nature; any additional steps consist of well-understood, routine, conventional activity already engaged in by the scientific community; and those steps, when viewed as a whole, add nothing significant beyond the sum of their parts taken separately.” *Id.* at 79–80.

Most recently, the Court in *Alice* distilled *Mayo* into “a framework for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts.” 134 S. Ct. at 2355. The Court explained that “[f]irst, we determine whether the claims at issue are directed to one of those patent-ineligible concepts”—i.e., laws of nature, natural phenomena, or abstract ideas. *Id.* Second, “[i]f so, we then ask, ‘[w]hat else is there in the claims before us?’” *Id.* (quoting *Mayo*, 566 U.S. at 78). This second step is effectively “a search for an ‘inventive concept’—i.e., an element or combination of elements that is ‘sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself.’” *Id.* (quoting *Mayo*, 566 U.S. at 72–73).

The claimed invention in *Alice* involved “a computer-implemented scheme for mitigating ‘settlement risk’ (i.e., the risk that only one party to a financial transaction will pay what it owes) by using a third-party intermediary.” *Id.* at 2351–52. Applying “*Mayo*’s framework,” *id.* at 2357, the Court unanimously

invalidated the patents, holding that the claims were “drawn to the abstract idea of intermediated settlement, and that merely requiring generic computer implementation fails to transform that abstract idea into a patent-eligible invention,” *id.* at 2352.

In the course of discussion, the Court reaffirmed *Diehr* and its dividing line between claims incorporating abstract ideas and claims of abstract ideas themselves. The Court recognized that “[a]t some level, ‘all inventions ... embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas.’” *Id.* at 2354 (quoting *Mayo*, 566 U.S. at 71). It explained that “an invention is not rendered ineligible for patent simply because it involves an abstract concept.” *Id.* And the Court further explained that there is a distinction between “patents that claim the ‘buildin[g] block[s]’ of human ingenuity,” i.e., those claiming an abstract idea, which are not patent eligible, “and those that integrate the building blocks into something more.” *Id.* (alterations in original) (quoting *Mayo*, 566 U.S. at 89). Of course, none of this comes from Section 101 itself.

II. PROCEEDINGS BELOW

A. The Invention

The recent proliferation of electric vehicles has required, and has been made possible by, the development and widespread installation of electric-vehicle charging stations. Charging stations connect electric vehicles to the electrical grid and supply the power needed to recharge electric-vehicle batteries.

The inventions claimed in the patents at issue relate to electric-vehicle charging stations capable of being controlled over a network, not to the concept of networking itself. Pet. App. 4a. For instance, one of the

patents at issue claims an “apparatus, comprising: a control device” for enabling and disabling an electric charge for electric vehicles, “a transceiver” for communicating charge requests to a remote server over a wide area network, and a “controller” that turns electric supply on and off based on communication from the remote server. *Id.* at 9a. Other claims add features to these network-enabled, electric-vehicle charging stations, including a demand-response capability—for instance, the ability to increase or decrease the flow of electricity based on demand-response instructions. *Id.* at 17a–18a. The result of ChargePoint’s inventions is electric-vehicle charging stations with new configurations of hardware, transforming stations from stand-alone outlets to “smart” devices capable of remote, real-time communication among drivers, site hosts, and utilities.

These inventions have helped usher in the proliferation of electric vehicles nationwide. They have allowed individual charging stations to be located miles apart, but managed from a central location, making electric-vehicle recharging infrastructure dramatically more cost-efficient than the refueling infrastructure for gasoline vehicles.

B. Procedural Background

In 2017, SemaConnect announced that it would be entering into contracts to deploy, for free, at least \$16 million in charging stations that infringe ChargePoint’s patents.⁸ In response, ChargePoint filed this patent infringement suit. SemaConnect responded by asserting that, among other things, the

⁸ SemaConnect’s announced plans were part of a program that was funded by Volkswagen as punishment for Volkswagen’s emissions-rigging scandal. Fed. Cir. Appx. 81–82.

asserted patents are unpatentable under Section 101. Pet. App. 5a.

1. After ordering expedited briefing on SemaConnect’s Section 101 motion to dismiss, the district court found the asserted patent claims unpatentable under Section 101. It first concluded that “each of the eight Asserted Claims are [sic] ... directed to an abstract idea.” Pet. App. 71a. For instance, the court found that one claim was “directed to receiving a command and executing the command to operate a device over a network to modify electric supply in an expected way.” *Id.* at 59a. Further, in the court’s view, “[s]ending and receiving communications over a server and executing the command in an expected way is an abstract idea.” *Id.* at 63a.

At step two of the *Alice* inquiry—the “inventive concept test”—the court concluded:

Connecting the Internet to a device to send and receive communications to operate that device in an expected way, without describing a specific process for how the communications provide a technological improvement (other than by virtue of being able to send and receive communications), is an abstract idea that is not eligible for patent protection under § 101.

Pet. App. 86a. Because the court concluded that each claim was directed to an abstract idea, and further that there was no inventive concept to render the claims patent-eligible, the court invalidated the patents and granted SemaConnect’s motion to dismiss. *Id.*

2. The Federal Circuit affirmed. The court of appeals employed “various tools to analyze whether a claim is ‘directed to’ ineligible subject matter,” including “the specification,” which the Federal Circuit has “found ...

helpful in illuminating what a claim is ‘directed to.’” Pet. App. 7a. This came as part of the court’s effort to “consider whether a claim is truly focused on an abstract idea (or other ineligible matter), whose use the patent law does not authorize anyone to preempt.” *Id.* at 8a.

At step one of the *Alice* framework, the Federal Circuit acknowledged that “[i]t is clear from the language of claim 1 [of the ’715 patent] that the claim *involves* an abstract idea—namely, the abstract idea of communicating requests to a remote server and receiving communications from that server, i.e., communication over a network.” Pet. App. 9a. But since “it is not enough to merely identify a patent-ineligible concept underlying the claim,” the court went on to “determine whether the focus of claim 1, as a whole, is the abstract idea.” *Id.*

To do this, the panel turned to the specification, “to understand ‘the problem facing the inventor’ and, ultimately, what the patent describes as the invention.” Pet. App. 10a (quoting *In re TLI Commc’ns LLC Patent Litig.*, 823 F.3d 607, 612 (Fed. Cir. 2016)). Here, the panel found that “the specification suggests that claim 1 is directed to the abstract idea of communication over a network to interact with a device connected to the network.” *Id.* at 11a. It reached this conclusion because “[t]he problem identified by the patentee, as stated in the specification, was the lack of a communication network that would allow drivers, businesses, and utility companies to interact efficiently with the charging stations.” *Id.*

The panel believed that “[t]he specification also makes clear—by what it states and what it does not—that the invention of the ’715 patent is the idea of *network-controlled* charging stations.” Pet. App. 12a. Based on “the problem identified in the patent” and

“the way the patent describes the invention,” the court determined that “the specification suggests that the invention of the patent is nothing more than the abstract idea of communication over a network for interacting with a device, applied to the context of electric vehicle charging stations.” *Id.* at 13a. And having determined from the specification that the invention was “nothing more than” an “abstract idea,” the panel “return[ed] to the claim language itself,” and unsurprisingly concluded that “based on the claim language, claim 1 would preempt the use of any networked charging stations.” *Id.* at 13a–14a.

Finally, the panel rejected ChargePoint’s argument that its claimed invention was patent eligible because it “build[s] a better machine.” Pet. App. 16a (alteration in original). Although “[c]laim 1 indicates that the abstract idea is associated with a physical machine that is quite tangible—an electric vehicle charging station,” the panel concluded from *Alice* that “whether a device is ‘a tangible system (in § 101 terms, a ‘machine’)’ is not dispositive.” *Id.* (quoting *Alice*, 134 S. Ct. at 2359). “[T]he claim language and the specification indicate that the focus of the claim is on the abstract idea of network communication for device interaction,” and so, even though “the inventors here had the good idea to add networking capabilities to existing charging stations,” “that is where they stopped, and that is all they patented.” *Id.* at 16a–17a. Thus, claim 1 was “directed to” an abstract idea. *Id.* at 17a.⁹

At the second step of the *Alice* framework, the Federal Circuit undertook “the search for an inventive concept,” Pet. App. 22a, because “[w]here a claim is

⁹ The Federal Circuit essentially incorporated this analysis for all of the asserted claims. *See* Pet. App. 17a–22a.

directed to an abstract idea, the claim must include ‘additional features’” to make it patentable. *Id.* at 23a. The panel determined that “[i]n essence, the alleged ‘inventive concept’ that solves problems identified in the field is that the charging stations are network-controlled. But network control is the abstract idea itself,” and therefore could not “supply the inventive concept that renders the invention ‘significantly more’ than that ineligible concept.” *Id.* at 25a (quoting *BSG Tech LLC v. BuySeasons, Inc.*, 899 F.3d 1281, 1290 (Fed. Cir. 2018)).

REASONS FOR GRANTING THE PETITION

I. CERTIORARI IS WARRANTED BECAUSE THE FEDERAL CIRCUIT’S DECISION IN THIS CASE CONFLICTS WITH *DIEHR*.

The law of patent eligibility after *Alice* is a shambles.¹⁰ And relying on the confused state of the law, the Federal Circuit’s decision in this case now creates a conflict with this Court’s decision in *Diehr* and the long-standing patent-eligibility principle it embodies. Only this Court can dispel this conflict, the confusion and unpredictability it has created, and the chaos that exists.

¹⁰ See, e.g., Kevin Madigan & Adam Mossoff, *Turning Gold into Lead: How Patent Eligibility Doctrine Is Undermining U.S. Leadership in Innovation*, 24 Geo. Mason L. Rev. 939, 952 (2017) (“The generality and vagueness in the *Mayo-Alice* test has produced the seemingly perverse effect of it being both indeterminate, as no one is certain how it will be applied in any particular case, and overly restrictive, as it has been applied to invalidate patents covering ‘everything from computer animation to database architecture to digital photograph management and even to safety systems for automobiles.’” (quoting Robert Sachs, *The One Year Anniversary: The Aftermath of #AliceStorm*, Bilski Blog (June 20, 2015), <http://www.bilskiblog.com/blog/2015/06/the-one-year-anniversary-the-aftermath-of-alicestorm.html>)).

a. In the decision below, the Federal Circuit observed that although ChargePoint’s patents claim particular machines—electric-vehicle charging stations—the claims also “*involve*[] an abstract idea—namely, ... communication over a network.” Pet. App. 9a. (“It is clear from the language of claim 1 that the claim *involves* an abstract idea—namely, the abstract idea of communicating requests to a remote server and receiving communications from that server, i.e., communication over a network.”). This involvement of an abstract idea, according to the court, rendered the claims patent ineligible under Section 101. *Id.* at 17a, 22a, 26a–27a. This holding conflicts directly with the Court’s decision in *Diamond v. Diehr* and the long-standing principle it embodies.

In *Diehr*, this Court held that “when a claim containing [an abstract idea] implements or applies that [idea] in a structure or process” to produce a new machine or process, “then the claim satisfies the requirements of § 101.” 450 U.S. at 192. The patentee in *Diehr* claimed an improved rubber curing process, and one of the steps included a mathematical algorithm—the quintessential abstract idea. The Court nonetheless found the claims patent eligible. According to the Court, the claims as a whole claimed an improved process for molding rubber products that incorporated an abstract idea—a mathematical formula—and that were not aimed at patenting the mathematical formula itself. *Id.* at 191. The Court in *Alice* reaffirmed *Diehr* and its dividing line between claims incorporating abstract ideas and claims of abstract ideas themselves. See 134 S. Ct. at 2354.

The Federal Circuit’s decision in this case contravenes this fundamental divide embodied in this Court’s Section 101 cases. According to the court below, ChargePoint’s patents were not valid because

the face of the claims “involve” an abstract idea. As a whole, however, the claims address charging stations for electric vehicles that have particular networking functionality. Network-capable electric-vehicle charging stations are not “[l]aws of nature,” “natural phenomena,” or “abstract ideas.” *Alice*, 134 S. Ct. at 2354. At most, they may incorporate certain principles or ideas, but such incorporation has long been patent eligible. See *Le Roy*, 55 U.S. at 175 (“[T]he processes used to extract, modify, and concentrate natural agencies, constitute the invention.”).

Indeed, *Diehr* (and *Alice* after it) merely carried forward the well-established principle distinguishing an ineligible “patent for a principle” and “a machine, embodying a principle.” *Morse*, 56 U.S. at 115. As the Court explained in *Le Roy*, “[t]hrough the agency of machinery a new steam power may be said to have been generated,” but “no one can appropriate this power exclusively to himself.” 55 U.S. at 175. “The same may be said of electricity, and of any other power in nature....” *Id.* However, “the processes used to extract, modify, and concentrate natural agencies, constitute the invention.” *Id.* “The elements of the power exist,” according to the Court, and “the invention is not in discovering them, but in applying them to useful objects.” *Id.* This distinction explains why the telegraph patent in *Morse* was invalid, 56 U.S. at 112, but the telephone patent in the *Telephone Cases* survived, 126 U.S. at 534. It accounts for *Mackay*’s approval of a narrowly drawn claim to a novel mechanism for harnessing standing electromagnetic waves. 306 U.S. at 94. And it distinguishes *Benson*’s holding that an algorithm is unpatentable from *Diehr*’s holding that an algorithm *incorporated into a manufacturing process* is eligible.

The Federal Circuit's holding cannot be reconciled with *Diehr* or the cases that preceded it.

b. The Federal Circuit nonetheless justified its decision by using the specification to isolate the supposedly “new” aspects of ChargePoint's inventions, dismissing the old aspects, and then deeming the new parts abstract ideas that are ineligible for patenting. Pet. App. 9a–13a. But this too conflicts with *Diehr*. There, this Court held that “[i]t is inappropriate to dissect the claims into old and new elements and then to ignore the presence of the old elements in the analysis.” 450 U.S. at 188. The “claims must be considered as a whole.” *Id.* Indeed, this was one of the principal bases on which the majority in *Diehr* disagreed with the dissenters. The Court explained that “[i]n order for the dissent to reach its conclusion it is necessary for it to read out of respondents' patent application all the steps in the claimed process which it determined were not novel or ‘inventive.’” *Id.* at 193 n.15. “That is not the purpose of the § 101 inquiry,” according to this Court, “and conflicts with the proposition ... that a claimed invention may be entitled to patent protection even though some or all of its elements are not ‘novel.’” *Id.* Moreover, the Court in *Alice* reaffirmed this principle from *Diehr* “that patent claims ‘must be considered as a whole.’” 134 S. Ct. at 2355 n.3 (quoting *Diehr*, 450 U.S. at 188).

Relying on its own precedent, however, the Federal Circuit in this case essentially adopted the dissenters' approach in *Diehr*. The court used the specification to isolate what was supposedly new and old in ChargePoint's claims, and then assessed whether the new elements were patent eligible. It explained that, based on the specification, “it is clear that the problem perceived by the patentee was a lack of a communication network for these charging stations,

which limited the ability to efficiently operate them from a business perspective.” Pet. App. 12a. And according to the court, “the specification suggests that the invention of the patent is nothing more than the abstract idea of communication over a network for interacting with a device.” *Id.* at 13a. The court further rejected looking at the machines as a whole because “the specification never suggests that the charging station itself is improved from a technical perspective, or that it would operate differently than it otherwise could.” *Id.* In other words, the Federal Circuit ignored older elements of the claims to focus on the new, overlooked that the new elements were expressly claimed as improvements to the old, and then deemed the new aspects patent ineligible.

This approach not only conflicts with *Diehr*—and the majority’s explicit repudiation of this approach—but also conflicts with the text of Section 101. According to Section 101, a person may obtain a patent for “any new and useful ... machine ... or any new and useful improvement thereof.” 35 U.S.C. § 101. The Federal Circuit recognized that ChargePoint’s inventions “build[] a better machine,” Pet. App. 16a, which under the plain terms of Section 101 should be enough. Yet, the lower court rejected this.

Nor is this case an isolated incident. The Federal Circuit recently rejected a similar claimed improvement to a machine in *Chamberlain Group, Inc. v. Techtronic Industries Co.*, 935 F.3d 1341, 1349 (Fed. Cir. 2019). There, the patentee claimed a type of wireless garage door opener. The district court had held that the claims were patent eligible because they recited “particular and unconventional improvements,” rather than the “abstract idea” of “wireless transmission of content.” *Chamberlain Grp., Inc. v. Techtronic Indus. Co.*, 315 F. Supp. 3d 977, 987–

89 (N.D. Ill. 2018), *aff'd in part, vacated in part, rev'd in part*, 935 F.3d 1341 (Fed. Cir. 2019). The Federal Circuit reversed, holding that the claims are “drawn to the abstract idea of wirelessly communicating status information about a system” and that the patentee asserted “no inventive concept ... sufficient to transform the abstract idea of communicating status information about a system into a patent-eligible application of that idea.” 935 F.3d at 1348, 1349.

At base, the Federal Circuit in this case has deepened the profound confusion and uncertainty surrounding Section 101 by erasing the patent-eligibility line that has existed since patent law was created, imperiling new and useful improvements to machines and processes. According to the Federal Circuit, abstract ideas, however concretely incorporated, are unpatentable. Indeed, under the Federal Circuit’s rule in this case, Doc Brown’s DeLorean (in *Back to the Future*) would not be patentable because it incorporates the idea of time travel into a vehicle. Such a rule impedes, rather than promotes, “the progress of science and the useful arts.” U.S. Const. art. I, § 8, cl. 8.

From the earliest cases on what has become the exception to Section 101, this Court has confirmed that incorporation or involvement of an abstract idea in an invention does not render that invention patent ineligible. The Federal Circuit’s decision endangers numerous patents that patent owners have long considered eligible under Section 101—that is, unless this Court steps in to correct the Federal Circuit’s error.

II. CERTIORARI IS WARRANTED TO RECONSIDER THE IMPLICIT NON-STATUTORY EXCEPTION TO SECTION 101.

This Court’s patent eligibility doctrine has never been about the text of the Patent Act. *Diehr* is exceptional in its treatment of Section 101 as a “case[] of statutory construction.” *Diehr*, 450 U.S. at 182. *Bilski* is closer to the truth that the Section 101 patentability “exceptions are not required by the statutory text,” although they “have defined the reach of the statute as a matter of statutory *stare decisis* going back 150 years.” *Bilski*, 561 U.S. at 601–02.

ChargePoint “invent[ed] ... [a] new and useful improvement” of a “machine,” see 35 U.S.C. § 101. The Federal Circuit acknowledged as much: “the inventors here had the good idea to add networking capabilities to existing charging stations to facilitate various business interactions.” Pet. App. 16a–17a. The Patent Act, by its plain terms, entitles ChargePoint to “a patent therefor, subject to the conditions and requirements of” the Patent Act. 35 U.S.C. § 101. There is no warrant in the statutory text to deny this right afforded by Congress. Congress chose to subject inventors to different tests—such as anticipation under Section 102 or obviousness under Section 103. It is time this Court refocused the law of patentability on the statutory text.

In her dissent from denial of rehearing in *Athena v. Mayo*, Judge O’Malley explained “that confusion and disagreements over patent eligibility have been engendered by the fact that the Supreme Court has ignored Congress’s direction to the courts to apply [the Patent Act] as written.” *Athena*, 927 F.3d at 1371 (O’Malley, J., dissenting from denial of rehearing *en banc*). She observed that, “[a]fter World War II, federal courts were invalidating patents at break-neck speed,”

prompting Congress to amend the Patent Act “to replace the ill-defined and judicially-created invention requirement with the more workable anticipation and obviousness tests codified in Sections 102 and 103.” *Id.* at 1371–72. Yet this Court never implemented the amendment, and continued to apply the discredited, judge-made “invention requirement” under the new name of “inventive concept.” *Id.* at 1372. Thus “the search for an inventive concept—now enshrined in the § 101 inquiry via *Mayo*—calls back to the invention requirement that Congress quite deliberately abrogated through the Patent Act of 1952.” *Id.* at 1373.

Today, with federal courts again “invalidating patents at break-neck speed,” *id.* at 1371, this Court has an opportunity to restore the predictability of the patent system, so that patentees may rely upon a “patent [that] meets the patent statute’s every requirement,” *Jungersen v. Ostby & Barton Co.*, 335 U.S. 560, 571 (1949) (Jackson, J., dissenting). The alternative—the status quo—is that “that the only patent that is valid is one which this Court,” or any other federal court, “has not been able to get its hands on.” *Id.* at 572. The Court should grant the petition to reconcile its implicit exception to Section 101 with the textual command of that statute enacted by Congress.

III. THE DECISION BELOW WILL DEEPEN THE POST-ALICE CONFUSION THAT HARMS INNOVATION AND SAPS JUDICIAL RESOURCES.

Certiorari is warranted to eliminate the harms caused by the confusion that has arisen in the wake of *Alice*, the deepening confusion that will be caused by the decision in this case, and the waste of judicial resources caused by this entire abstract-idea exception.

a. This Court in *Alice* warned that courts must “tread carefully in construing” the “exclusionary principle” that “laws of nature, natural phenomena, and abstract ideas are not patentable,” because otherwise the principal might “swallow all of patent law.” 134 S. Ct. at 2354.

Five years later, that warning has become reality. The federal courts and the Patent Trial and Appeal Board have invalidated 914% more patents in the five years since *Alice* than they did in the five years prior.¹¹ On the day *Alice* was decided, the Federal Circuit’s Section 101 jurisprudence comprised 19 cases—today, the number is 156. *Id.* Section 101 challenges have succeeded in federal courts 62% of the time; the Federal Circuit has found that a challenged patent involved eligible subject matter in just 15% of appeals. *Id.*

The Federal Circuit’s post-*Alice* decisions obliterate any predictability or consistency.¹² The cases vary widely in their methodologies and applications of *Alice*. In *Synopsys, Inc. v. Mentor Graphics Corp.*, 839 F.3d 1138, 1149 (Fed. Cir. 2016), for instance, the Federal Circuit refused to read the claim language in three challenged patents in light of the specification, which made clear that the claims were limited to implementation on a computer. “On their face,” the court reasoned, “the claims do not call for any form of computer implementation of the claimed methods,” and thus they were invalidated under Section 101 as overbroad—even though the specification went so far as to incorporate 200 pages of computer code that implemented the claims. *Id.* at 1149. In this case, by contrast, the Federal Circuit looked beyond the claim

¹¹ See Sachs, *supra* note 3.

¹² See *supra* nn.1–2.

language—from which it concluded merely that the claims “involve[] an abstract idea”—to the specification, which informed the court’s conclusion that the claims were “directed to [an] abstract idea.” Pet. App. 9a, 11a. Thus, how the Federal Circuit will treat the claims and specification is completely at that court’s whim (except for the possible view that heads: the challenger wins; tails: the patentee loses).

There is no prospect that this situation will improve without this Court’s intervention. In July of this year, the Federal Circuit denied rehearing en banc of a different Section 101 case, and that court’s twelve judges issued a remarkable eight opinions concurring in or dissenting from the denial. *Athena*, 927 F.3d at 1335. The pending petition for certiorari in that case rightly describes the Federal Circuit as having “issued an unprecedented cry for help from this Court.” Petition for a Writ of Certiorari at 1, *Athena Diagnostics, Inc. v. Mayo Collaborative Servs., LLC* No. 19-430 (U.S. Oct. 1, 2019).

b. The decision below will only worsen the uncertainty surrounding Section 101 after *Alice*, which will harm innovation. Moreover, because the rule of *Alice* has proved impossible to apply consistently, the tremendous judicial resources expended on Section 101 cases will only grow.

i. As former PTO Deputy Director Russell Slifer observed, if ChargePoint’s claimed network-capable charging station “is not a machine” within the meaning of Section 101, “I don’t know what is.”¹³ Yet, the Federal Circuit contorted Section 101 law to conclude that ChargePoint’s inventions are mere abstract ideas. In the process, that court—charged

¹³ Slifer, *supra* note 4.

with overseeing all patent cases in the Nation—creates utter chaos by disregarding *Diehr* and the principle that has governed this area for approximately 150 years.

The Federal Circuit’s characterization of ChargePoint’s invention as an abstract idea, rather than a patentable *incorporation* of an abstract idea into an improved machine, will disrupt “the tension, ever present in patent law, between stimulating innovation by protecting inventors and impeding progress by granting patents when not justified by the statutory design.” *Bilski*, 561 U.S. at 609 (plurality opinion).

At a June Senate hearing on “The State of Patent Eligibility in America,” IBM’s chief patent counsel, Manny Schecter, called the Federal Circuit’s decision in this case an “example of the confusion in the courts and the unworkability of the Supreme Court’s test” for patent eligibility.¹⁴ Mr. Schecter explained that ChargePoint “was forced to spend time and money litigating (unsuccessfully) the eligibility of claims that most observers considered to be statutory subject matter.” *Id.*

ChargePoint is far from the only patentee in this position. The lack of a clear *ex ante* rule for patent eligibility makes it impossible for inventors and investors to know whether their patent is valid until a court has said so—and, as shown by the statistics on

¹⁴ *The State of Patent Eligibility in America: Part III: Hearing Before the Subcomm. on Intellectual Prop. of the S. Comm. on the Judiciary*, 116th Cong. (2019) (responses to questions for the record of Manny Schecter, Chief Patent Counsel, IBM), <https://www.judiciary.senate.gov/download/schecter-responses-to-questions-for-the-record>.

post-*Alice* judicial review of patent eligibility, most patents are now found *ineligible* when judicially reviewed.¹⁵ As the sheer number of invalidations suggests, even the Patent and Trademark Office has been unable to predict the Federal Circuit’s decisions on patent eligibility, and the Federal Circuit does not defer to the PTO’s eligibility guidance. See *Cleveland Clinic Found. v. True Health Diagnostics LLC*, 760 F. App’x 1013, 1020 (Fed. Cir. 2019) (“While we greatly respect the PTO’s expertise on all matters relating to patentability, including patent eligibility, we are not bound by its guidance.”). Thus, although “[i]n the area of patents, it is especially important that the law remain stable and clear,” *Bilski*, 561 U.S. at 613 (Stevens, J., concurring), the abstract-idea test developed by this Court is “[i]nherently [a]mbiguous” and “calls for a number of inquiries that give the appearance of reasoned analysis, but ... are so amorphous that the outcome is inherently subjective.”¹⁶ As a result, and in view of the outcomes in cases like this one, companies like IBM are “concerned about the ripple effect throughout the broader economy, as artificial intelligence and other advanced software innovations are increasingly infused across all industries, such as automotive, healthcare, and manufacturing.”¹⁷ If these technologies are not eligible for patent protection, even

¹⁵ See Sachs, *supra* note 3 (62% of post-*Alice* Section 101 challenges have succeeded either in district court or on appeal to the Federal Circuit).

¹⁶ *The State of Patent Eligibility in America: Part III: Hearing Before the Subcomm. on Intellectual Prop. of the S. Comm. on the Judiciary*, 116th Cong. (2019) (prepared testimony of Manny Schechter, Chief Patent Counsel, IBM), <https://www.judiciary.senate.gov/imo/media/doc/Schechter%20Testimony.pdf>, at 4.

¹⁷ *Id.* at 6.

in concrete applications like ChargePoint’s, then the incentive to innovate will be severely dampened.

The decision below, and others like it, will also disrupt the “carefully crafted bargain that encourages both the creation and the public disclosure of new and useful advances in technology, in return for an exclusive monopoly for a limited period of time.” *Pfaff v. Wells Elecs., Inc.*, 525 U.S. 55, 63 (1998). Without the monopoly incentive of a patent, inventors will have no reason to disclose their innovations, which will instead remain proprietary, further inhibiting progress. The value of an invention increasingly will be in its status as a trade secret, rather than as a patented, time-limited monopoly.

Among other pernicious effects, this will tend to favor large companies with multi-billion-dollar research and development budgets, not to mention legal departments to prosecute trade-secrets cases. Small-time inventors—like the founders of Apple, Microsoft, and Google once were, and like their would-be competitors are today—will face a much steeper climb.

ii. Even if the post-*Alice* law of patent eligibility were not damaging the incentive to innovate, it would still merit this Court’s attention because it is consuming an inordinate share of lower court resources. One study described an “explosion” in Section 101 challenges after *Alice*, with Section 101 decisions increasing by 730% and the number of litigated patents increasing by 659%.¹⁸ While the overall numbers of intellectual property complaints and appeals have remained constant since before *Alice*, the number of Section 101

¹⁸ See Sachs, *supra* note 3 (62% of post-*Alice* Section 101 challenges have succeeded either in district court or on appeal to the Federal Circuit).

decisions and litigated patents has skyrocketed. In the five years prior to *Alice*, there were 101 decisions under Section 101 in all federal courts. *Id.* In the five years after *Alice*, there have been 838. *Id.* Similarly, in the five years before *Alice* there were 188 patents litigated in the federal courts, versus 1,427 in the five years following. *Id.*

The pernicious results of these decisions are rivaled by their sheer quantity as a symptom of the post-*Alice* confusion in the law. The lower courts will continue to wrestle with the “know it when you see it” standard following *Alice*. Additional case-by-case adjudications in the lower courts will not clarify the rule; only this Court can do that. The status quo will merely result in a proliferation of contradictory decisions from the lower courts that will only worsen the chaos in the law of patent-eligibility.

CONCLUSION

For the foregoing reasons, the petition should be granted.

Respectfully submitted,

CARTER G. PHILLIPS*
RYAN C. MORRIS
LUCAS W.E. CROSLAW
SIDLEY AUSTIN LLP
1501 K Street, N.W.
Washington, D.C. 20005
(202) 736-8000
cphillips@sidley.com

Counsel for Petitioner

October 21, 2019

* Counsel of Record