

No. 13-298

Supreme Court, U.S.  
FILED

JAN 28 2014

IN THE

**Supreme Court of the United States**

OFFICE OF THE CLERK

ALICE CORPORATION PTY. LTD.,

*Petitioner,*

v.

CLS BANK INTERNATIONAL AND CLS SERVICES LTD.,

*Respondents.*

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

**BRIEF OF THE INTELLECTUAL PROPERTY LAW  
ASSOCIATION OF CHICAGO AS AMICUS CURIAE  
IN SUPPORT OF NEITHER PARTY**

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## TABLE OF CONTENTS

	<b>Page</b>
TABLE OF AUTHORITIES .....	iii
INTEREST OF AMICUS CURIAE .....	1
SUMMARY OF ARGUMENT .....	2
PROCEEDINGS BEFORE THE FEDERAL CIRCUIT .....	3
ARGUMENT .....	6
I. PATENT CLAIMS SATISFY 35 U.S.C. § 101 WHEN THEY DO NOT PREEMPT THEIR UNDERLYING ABSTRACT IDEAS.....	6
A. This Court Has Fulfilled Congress' Intent In Construing § 101 Broadly and Flexibly.....	6
B. Patent Claims To Computer- Implemented Inventions Recite Patent-Eligible Subject Matter When They Do Not Remove Their Underlying Abstract Ideas From The Public Domain .....	10
C. Congress And The Court's Precedent Do Not Permit Wholly New § 101 Tests For Different Types Of Claims.....	13

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II. CONGRESS AND THIS COURT'S PRECEDENT DO NOT INTEND § 101 PATENT ELIGIBILITY TO BE JUDGED BY "INVENTIVE CONCEPT" .....	15
III. SECTION 101 ELIGIBILITY IS SIMPLE – ALBEIT UNSATISFYING TO THOSE WHO DESIRE A BRIGHT LINE TEST.....	19
A. <i>Mayo</i> Is Instructive But Not Directly On Point .....	19
B. Applying § 101 Means Asking Two Questions .....	20
C. Although Simple In Exposition And Difficult In Practice, The Simple Test Is Nevertheless The Correct Test .....	23
CONCLUSION.....	23

## TABLE OF AUTHORITIES

Cases	Page
<i>In re Bergy</i> , 596 F.2d 952 (CCPA 1979).....	15, 16
<i>Bilski v. Kappos</i> , ___ U.S. ___; 130 S. Ct. 3218 (2010).....	<i>passim</i>
<i>Bros. Inc. v. Browning Mfg. Co.</i> , 317 F.2d 413 (8th Cir. 1963).....	16
<i>CLS Bank International v. Alice Corp.</i> <i>Pty. Ltd.</i> , 685 F.3d 1341 (Fed. Cir. 2012).....	2, 3, 4
<i>CLS Bank International v. Alice Corp.</i> <i>Pty. Ltd.</i> , 717 F.3d 1269 (Fed. Cir. 2013).....	5
<i>Diamond v. Chakrabarty</i> , 447 U.S. 303 (1980).....	6, 15
<i>Diamond v. Diehr</i> , 450 U.S. 175 (1981).....	<i>passim</i>
<i>Eimco Corp. v. Peterson Filters &amp;</i> <i>Eng'g Co.</i> , 406 F.2d 431 (10th Cir. 1968) .....	16
<i>Funk Bros. Seed Co. v. Kalo Inoculant Co.</i> , 333 U.S. 127 (1948).....	11
<i>Gottschalk v. Benson</i> , 409 U.S. 63 (1972).....	8, 11, 12, 17, 20
<i>Graham v. John Deere &amp; Co.</i> , 383 U.S. 1 (1966).....	4, 18
<i>Mackay Radio &amp; Telegraph Co. v. Radio Corp.</i> <i>of America</i> , 306 U.S. 86, 59 S.Ct. 427 (1939) ..	8, 13
<i>Mayo Collaborative Servs. v. Prometheus Labs., Inc.</i> , ___ U.S. ___, 132 S.Ct. 1289 (2012).....	<i>passim</i>

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<i>Nat'l Dairy Prods. Corp. v. Borden Co.</i> , 261 F. Supp. 771 (E.D. Wis. 1966).....	16
<i>O'Reilly v. Morse</i> , 56 U.S. (15 How.) 62 (1854) ..	11, 17
<i>Parker v. Flook</i> , 437 U.S. 584, 98 S.Ct. 2522 (1978).....	8, 11, 12, 17, 20
<i>Vincent v. Suni-Citrus Prods. Co.</i> , 215 F.2d 305 (5 <sup>th</sup> Cir. 1954).....	16

### Statutes

35 U.S.C. § 101 .....	<i>passim</i>
35 U.S.C. § 102 .....	<i>passim</i>
35 U.S.C. § 103 .....	<i>passim</i>
35 U.S.C. § 112 .....	15, 16, 17

### Other Authorities

M. Lemley, et al., <i>Life after Bilski</i> , 63 Stan. L. Rev. 1315 (2011).....	2
S. Rep. No. 82-1979, 82d Cong., 2d Sess., at 5 (1952), reprinted in 1952 U.S.C.C.A.N. 2399.....	16
<i>The Supreme Court Engages in Judicial Activism in Interpreting the Patent Law in eBay, Inc. v. MercExchange, L.L.C.</i> , 10 Tul. J. Tech. & Intell. Prop. 165, 199-200 (2007).....	17

## INTEREST OF AMICUS CURIAE

The Intellectual Property Law Association of Chicago ("IPLAC") submits this brief as amicus curiae, but in support of neither party on the ultimate merits of the case.<sup>1</sup>

Founded in 1884, the Intellectual Property Law Association of Chicago is a voluntary bar association of over 1,000 members who practice in the areas of patents, trademarks, copyrights, trade secrets and the legal issues they present. IPLAC is the country's oldest bar association devoted exclusively to intellectual property matters. In litigation, IPLAC's members are split about equally between plaintiffs and defendants. Its members include attorneys in private and corporate practices before federal bars throughout the United States, as well as the U.S. Patent and Trademark Office and the U.S. Copyright Office. As part of its central objectives, IPLAC is

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<sup>1</sup> Petitioner and respondents each have filed and lodged with the Clerk a letter of consent to the filing of amicus curiae briefs in support of either party or of neither party. Pursuant to Supreme Court Rule 37.6, this brief was not authored, in whole or in part, by counsel to a party, and no monetary contribution to the preparation or submission of this brief was made by any person or entity other than IPLAC or its counsel. After reasonable investigation, IPLAC believes that (a) no member of its Board or Amicus Committee who voted to prepare this brief, or any attorney in the law firm or corporation of such a member, represents a party to this litigation in this matter, (b) no representative of any party to this litigation participated in the authorship of this brief, and (c) no one other than IPLAC, or its members who authored this brief and their law firms or employers, made a monetary contribution to the preparation or submission of this brief.

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dedicated to aiding in the development of intellectual property law, especially in the federal courts.<sup>2</sup>

### SUMMARY OF ARGUMENT

Congress implemented a plan for providing and protecting rights of inventors and promoting the advance of the useful arts by broadly drafting the patent statute without technological exclusions in order to embrace yet unknown innovations. Thus, 35 U.S.C. § 101 places few limits on the types of inventions that are eligible for patent protection.

For more than a century, this Court has applied § 101 using a flexible and broad subject matter analysis. It is this elasticity of § 101 that has made the U.S. patent system one of the strongest in the world.

This Court now seeks to resolve whether a specific type of invention – a computer-implemented invention – is patent-eligible under § 101. The Court has stated repeatedly that § 101 is a filter of subject matter for patenting that does not include laws of nature, natural phenomena, and abstract ideas. *See, e.g., Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, \_\_\_ U.S. \_\_\_, 132 S.Ct. 1289 (2012). However, a concern has arisen that perhaps “no one understands what makes an idea ‘abstract.’” *CLS Bank International v. Alice Corp. Pty. Ltd.*, 685 F.3d 1341 at 1349 (Fed. Cir. 2012) (citing M. Lemley, et al., *Life after Bilski*, 63 Stan. L. Rev. 1315, 1316 (2011)).

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<sup>2</sup> While over 30 federal judges are honorary members of IPLAC, none of them was consulted or participated in any way regarding this brief.



As set forth in more detail below, IPLAC respectfully requests that the Court continue to apply its prior precedent regarding patent eligibility under 35 U.S.C. § 101 to computer-implemented inventions. According to the Court's precedent, exceptions to patent eligibility under § 101 must necessarily include laws of nature, natural phenomena and abstract ideas, including algorithms or mathematical formulas and fundamental scientific and business principles. This is the test this Court should continue to apply.

This Court should not disturb Congress and the Court's prior precedent stating the threshold for patent eligible subject matter, which has fostered innovation and public disclosure over a wide variety of useful arts—and importantly, in new and emerging fields of technology, including computer-implemented inventions. The judgment of this Court should be consistent with the Court's prior precedent that computer-implemented inventions are eligible for patenting if they cover specific implementations of an abstract idea and do not wholly preempt the abstract idea itself.

### **PROCEEDINGS BEFORE THE FEDERAL CIRCUIT**

The original Federal Circuit opinion in this case, *CLS Bank Int'l v. Alice Corp.*, 685 F.3d 1341 (Fed. Cir. 2012), adopted a general test that a patent claim is not patentable under § 101 where ineligibility is “manifest”, i.e., when “the single most reasonable understanding is that the claim is directed to nothing more than a fundamental truth or disembodied concept.” 685 F.3d at 1352. However,

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this Court's decisions are devoid of a "manifest exclusion test." This test should not be adopted.

The original Federal Circuit panel dissent, in contrast, adopted a test of "inventive concept" to apply in evaluating patent eligibility under § 101. *Id.*, 685 F.3d at 1356. Yet this alternate test is precisely the type of exclusion from patent eligibility that Congress, through its implementation of the patent statute sought to avoid. Moreover, this Court's precedent does not provide a focused test of inventiveness as to § 101. An "inventive concept" test will only reintroduce the difficult problem of evaluating "inventiveness." The absence of a uniform definition for "invention" is well known, expressed by this Court itself to be avoided (*see Graham v. John Deere & Co.*, 383 U.S. 1 (1966)), and specifically sought by Congress to be avoided by the adoption of 35 U.S.C. 103. *Id.* at 14-17.

Following its rehearing en banc, the Federal Circuit introduced conflicting tests for patent eligible subject matter under 35 U.S.C. § 101. While seven judges affirmed the district court's decision that none of the method and computer readable media claims at issue were patent eligible subject matter under § 101, there was no majority opinion to guide the lower courts in reviewing such patent claims in the future. Moreover, the en banc panel was evenly divided on the patent eligibility of the asserted system claims and thus affirmed the district court's holding that the system claims are not directed to patent eligible subject matter under § 101.

Judge Lourie's concurring opinion (joined by Judges Dyk, Prost, Reyna and Wallach) found all asserted method, computer readable media and

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system claims ineligible for patent protection. Judge Lourie emphasized the preemption test, which hinges on whether a claim covers an abstract idea that preempts all uses of the idea within the stated field. See *CLS Bank Int'l v. Alice Corp.*, 717 F.3d 1269, 1273-92 (Fed. Cir. 2013) (en banc). He explained that “[a]bstract methods do not become patent-eligible machines by being clothed in computer language.” *Id.* at 1292.

By contrast, Chief Judge Rader (joined by Judges Linn, Moore and O'Malley) took a broader view of patent eligible subject matter and found the asserted system claims patent eligible:

[I]t is important to remember that all patents ‘pre-empt’ some future innovation in the sense that they preclude others from commercializing the invention without the patentee’s permission. Pre-emption is only a subject matter eligibility problem when a claim preempts all practical uses of an abstract idea.

*Id.* at 1300.

Judge Newman seemed to take the broadest view of patent eligibility under § 101 and found all asserted method, computer readable media and system claims to be patent eligible. Directly contradicting Judge Lourie’s plurality opinion, Judge Newman rejected the focus on preemption, writing that “[t]here is no need for an all-purpose definition of ‘abstractness’ or ‘preemption,’ as heroically attempted today.” *Id.* at 1322.

As set forth above, the Federal Circuit not only was unable to reach common ground, but also

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propounded conflicting standards for determining patent eligibility of computer-implemented inventions under § 101. It is of the utmost importance to have a consistent legal standard for evaluation of patent eligibility of computer-implemented inventions under § 101 to guide the U.S. Patent and Trademark Office and the courts.

## **ARGUMENT**

### **I. PATENT CLAIMS SATISFY 35 U.S.C. § 101 WHEN THEY DO NOT PREEMPT THEIR UNDERLYING ABSTRACT IDEAS**

#### **A. This Court Has Fulfilled Congress' Intent In Construing § 101 Broadly and Flexibly**

This Court's prior decisions are consistent with 35 U.S.C. § 101, which 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.

This Court has interpreted the language of § 101 broadly: "In choosing such expansive terms as 'manufacture' and 'composition of matter,' modified by the comprehensive 'any,' Congress plainly contemplated that the patent laws would be given wide scope." *Diamond v. Chakrabarty*, 447 U.S. 303, 308 (1980). Through its broad language, § 101 readily accommodates the rapid pace of innovation and assimilation of new technologies, including technologies never anticipated at the time § 101 was enacted. As this Court has stated, patentable subject matter includes "anything under the sun that is

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made by man.” *Id.* at 309 (quotations and citations omitted). This Court has not excluded particular technologies from § 101, no matter how unusual or bizarre. See *Diamond v. Diehr*, 450 U.S. 175, 182-83 (1981).

More recently, in *Bilski v. Kappos*, \_\_\_ U.S. \_\_\_, 130 S. Ct. 3218 (2010), the Court considered the Federal Circuit’s previous “machine or transformation” test for determining patent-eligible subject matter and “cautioned that courts should not read into the patent laws limitations and conditions which the legislature has not expressed.” *Id.* at 3226 (quotations and citations omitted). Thus, this Court ruled that “[t]he machine-or-transformation test is not the sole test for deciding whether an invention is a patent-eligible ‘process’ [under § 101].” *Id.* at 3227.

Although in *Bilski*, this Court recognized that its precedents provide “three specific exceptions” to § 101’s patent-eligibility principles, the Court emphasized that those exceptions do not give “the Judiciary *carte blanche* to impose other limitations that are inconsistent with the text and the statute’s purpose and design.” *Id.* at 3226.

Even more recently, in *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, \_\_\_ U.S. \_\_\_, 132 S.Ct. 1289 (2012), this Court reiterated that too broad an interpretation of the exclusionary principle could eviscerate patent law. *Id.* at 1293. In doing so, the Court acknowledged that all inventions at some level embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas. *Id.* In *Mayo*, the Court referenced its earlier opinion in *Diehr*, explaining that:

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[T]he Court pointed out that “a process is not unpatentable simply because it contains a law of nature or a mathematical algorithm.” 450 U.S. at 187, 101 S.Ct. 1048 (quoting *Parker v. Flook*, 437 U.S. 584, 590, 98 S.Ct. 2522, 57 L.Ed.2d 451 (1978)). It added that “an application of a law of nature or mathematical formula to a known structure or process may well be deserving of patent protection.” *Diehr*, *supra*, at 187, 101 S.Ct. 1048. And it emphasized Justice Stone’s similar observation in *Mackay Radio & Telegraph Co. v. Radio Corp. of America*, 306 U.S. 86, 59 S.Ct. 427, 83 L.Ed. 506 (1939): “While a scientific truth, or the mathematical expression of it, is not a patentable invention, a novel and useful structure created with the aid of knowledge of scientific truth may be.” 450 U.S. at 188, 101 S.Ct. 1048 (quoting *Mackay Radio*, *supra*, at 94, 59 S.Ct. 427).

*Mayo* at 1293-94.

The Court added, “Still as the Court has also made clear, to transform an unpatentable law of nature into a patent-eligible application of such a law, one must do more than simply state the law of nature while adding the words ‘apply it.’ See, e.g., *Benson*, *supra*, at 71-72, 93 S.Ct. 253.” *Id.* at 1294.

This Court found in *Mayo* that the process claims at issue did not satisfy the conditions of § 101 because (a) the steps in the claimed processes (apart from the natural laws themselves) involved well-understood, routine, conventional activity previously engaged in by researchers in the field, and (b) at the same time, upholding the patents would risk

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disproportionately tying up the use of the underlying natural laws, inhibiting their use in the making of further discoveries. *Mayo* at 1294. This Court also stated:

If a law of nature is not patentable, then neither is a process reciting a law of nature, unless that process has additional features that provide practical assurance that the process is more than a drafting effort designed to monopolize the law of nature itself. A patent, for example, could not simply recite a law of nature and then add the instruction “apply the law.”

*Id.* at 1297.

The Court reiterated:

[T]o consider the three steps [of the patent claims at issue] as an ordered combination adds nothing to the laws of nature that is not already present when the steps are considered separately. *See Diehr, supra*, at 188, 101 S.Ct. 1048 (“[A] new combination of steps in a process may be patentable even though all the constituents of the combination were well known and in common use before the combination was made”). Anyone who wants to make use of these laws must first administer a thiopurine drug and measure the resulting metabolite concentrations, and so the combination amounts to nothing significantly more than an instruction to doctors to apply the applicable laws when treating their patients. . . .

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To put the matter more succinctly, the claims inform 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. For these reasons we believe that the steps are not sufficient to transform unpatentable natural correlations into patentable applications of those regularities.

*Mayo* at 1298 (emphasis added).

This case is an opportunity for this Court to affirm that it will follow the same precedents in applying the broad and flexible scope of § 101 to computer-implemented inventions.

**B. Patent Claims To Computer-Implemented Inventions Recite Patent-Eligible Subject Matter When They Do Not Remove Their Underlying Abstract Ideas From The Public Domain**

Consistent with the broad language of § 101, the Court has correctly created exceptions to patent eligibility for laws of nature, natural phenomena, and abstract ideas. However, these exceptions do not limit the *subject matter* of the four specified categories of § 101. Instead, they provide guidance to the decision-maker in evaluating the eligibility of the claimed subject matter.

The exceptions that exist to § 101 patent eligibility — laws of nature, natural phenomena, and abstract ideas — are a matter of common sense: An

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inventor is not entitled to claim one of these basic principles in isolation, because to do so would remove it from the public domain. *See, e.g., Diehr*, 450 U.S. at 185. These are the “basic tools of scientific and technological work,” *Gottschalk v. Benson*, 409 U.S. 63, 67-68 (1972), “free to all men and reserved exclusively to none.” *Funk Bros. Seed Co. v. Kalo Inoculant Co.*, 333 U.S. 127, 130 (1948).

For example, this Court has refused to permit a patent claim where it would “wholly pre-empt” the use of a mathematical formula. *Benson*, 409 U.S. at 71-72. “. . . [A]n algorithm, or mathematical formula, “is like a law of nature, which cannot be the subject of a patent.” *Diehr*, 450 U.S. at 186. However, the Court in *Diehr* also stated, “It is now commonplace that an *application* of a law of nature or mathematical formula to a known structure or process may well be deserving of patent protection.” *Id.* at 187 (emphasis in original; citations omitted); *see also O’Reilly v. Morse*, 56 U.S. (15 How.) 62, 119 (1854) (provided application contains sufficient detail, “[w]hoever discovers that a certain useful result will be produced in any art, machine, manufacture, or composition of matter by the use of certain means is entitled to a patent for it”). Thus, “it is equally clear that a process is not unpatentable simply because it contains a law of nature or a mathematical algorithm.” *Parker v. Flook*, 437 U.S. 584, 590 (1978).

In *Diehr*, this Court held that a claim that incorporated a mathematical equation constituted patentable subject matter because the claim, *as a whole*, defined a rubber molding process and not just an equation. 450 U.S. at 192-93. In doing so, the Court distinguished two of its earlier decisions:

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*Parker v. Flook* and *Gottschalk v. Benson*. Distinguishing *Flook* as merely reciting a mathematical formula, the Court stated: “In contrast [to *Flook*], the respondents here do not seek to patent a mathematical formula. Instead, they seek patent protection for a process of curing synthetic rubber.” *Diehr*, 450 U.S. at 187. “Even though a phenomenon of nature or mathematical formula may be well known, an inventive application of the principle may be patented.” *Flook*, 437 U.S. at 594.

Similarly, the claims in *Benson* were directed to a method of programming a computer to convert signals from binary coded decimal form into pure binary form. The Court rejected the claims because they were not limited in scope; indeed, “the patent would wholly pre-empt the mathematical formula and in practical effect would be a patent on the algorithm *itself*.” *Benson*, 409 U.S. at 71-72 (emphasis added).

The mathematical formula at issue in *Diehr* was well known, as were the process steps of installing rubber in a press, closing the mold, and determining the temperature of the mold. Additional steps included “constantly recalculating the appropriate cure time through the use of the formula and a digital computer, and automatically opening the press at the proper time.” *Diehr*, 450 U.S. at 187. While the Court noted that “insignificant post-solution activity will not transform an unpatentable principle into a patentable process,” *id.* at 191-92, that was not the case in *Diehr*:

On the other hand, when a claim containing a mathematical formula implements or applies

that formula in a structure or process which, *when considered as a whole*, is performing a function which the patent laws were designed to protect (e.g., transforming or reducing an article to a different state or thing), then the claim satisfies the requirements of §101.

*Id.* at 192; (emphasis added).

What separates a law of nature, natural phenomenon or abstract idea, including an algorithm or mathematical formula or scientific or business principle, from patent-eligible subject matter is the *application* of the law, phenomenon or idea to “a new and useful end.” *Diehr*, 450 U.S. at 188 n.11 (citations omitted); (emphasis added); *see also Mackay Radio & Tel. Co. v. Radio Corp.*, 306 U.S. 86, 94 (1939) (“While a scientific truth, or the mathematical expression of it, is not a patentable invention, a novel and useful structure created with the aid of knowledge of scientific truth may be.”)

### **C. Congress And The Court’s Precedent Do Not Permit Wholly New § 101 Tests For Different Types Of Claims**

Allowing for various tests in a § 101 analysis would eventually result in a rule that would allow for patenting of abstract ideas. *See Mayo* at 1298. It would allow non-eligible subject matter to be patented. Indeed, a test that would allow for patentability in the absence of “manifest” evidence otherwise, may allow for the patenting of abstract ideas and laws of nature in cases where the wording of the claims is sufficiently ambiguous to mask their true implication. It would allow the issuance and enforcement of claims which fail “the single most reasonable understanding” test, but that on balance

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are directed to “nothing more than a fundamental truth or disembodied concept.”

It is true that in *Bilski*, the Court specifically stated it was not “foreclos[ing] the Federal Circuit’s development of other [than machine-or-transformation] limiting criteria [for § 101 claim eligibility] that further the purposes of the Patent Act . . .” *Bilski* at 3231. However, the Court cautioned that the Federal Circuit may only develop criteria “not inconsistent with [the Patent Act’s] text.” *Id.* The “manifestly evident” test is inconsistent with the Patent Act’s text. The test would indeed disallow the detailed analysis of the claim language as a whole as evident in *Mayo*.

The bar to patent eligibility set by the “wholly preempted” rule in *Diehr* is low. Raising the bar further would be at odds with § 101 and this Court’s precedent. Claims to computer-implemented inventions fall within the scope of eligible subject matter under § 101 when they do not claim laws of nature, natural phenomena and abstract ideas (including algorithms or mathematical formulas and scientific or business principles) or nothing more than “apply [one of] these” to § 101 eligible subject matter. In other words, patent claims run afoul of § 101 and this Court’s precedent when they remove laws of nature, natural phenomena and abstract ideas (including algorithms or mathematical formulas and scientific or business principles), or the application of any of them, from the public domain.

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## II. CONGRESS AND THIS COURT'S PRECEDENT DO NOT INTEND § 101 PATENT ELIGIBILITY TO BE JUDGED BY “INVENTIVE CONCEPT”

Requiring a sole focus on the presence or absence of an “inventive concept” would lead to an improper reintroduction of the discredited “invention” test for patents. That reintroduction would wreak havoc on the patent system.

Section 101 has an interplay with other statutory sections such that courts need not solely focus on inventiveness under § 101. After all, § 101 ends with the caveat that even though a claim may be said to contain patent eligible subject matter, it still must satisfy the other requirements of 35 U.S.C. §§ 102, 103, and 112. “The understanding that these three requirements are *separate and distinct* is long standing and has been universally accepted.” *In re Bergy*, 596 F.2d 952, 960 (CCPA 1979) (emphasis in original), *vacated & affirmed by Diamond v. Chakrabarty*, 447 U.S. 303 (1980). Indeed, Judge Rich correctly described them as doors that require separate keys. *Id.* at 960-62.

In other words, simply because an invention contains patent eligible subject matter does not mean that a patent should issue. “The ‘novelty’ of any element or step in a process, or even of the process itself” is a separate question to be considered under § 102 and “is of no relevance in determining whether the subject matter of a claim falls within the § 101 categories of patentable subject matter under § 102.” *Diehr*, 450 U.S. at 188-89. Section “101 was never intended to be a ‘standard of patentability’; the standards, or conditions as the statute calls them,

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are in § 102 and § 103 [and § 112].” *Bergy*, 596 F.2d at 963; *see also Diehr*, 450 U.S. at 189 (reinforcing that while § 101 is a “general statement of the type of subject matter that is eligible for patent protection,” § 102 “covers in detail the conditions relating to novelty.”) (Citations omitted). The legislative history of § 101 is consistent. “Section 101 sets forth the subject matter that can be patented, ‘subject to the conditions and requirements of this title.’ The conditions under which a patent may be obtained follow, and § 102 covers the conditions relating to novelty.” S. Rep. No. 82-1979, 82d Cong., 2d Sess., at 5 (1952), *reprinted in* 1952 U.S.C.C.A.N. 2399.

Once § 101 is satisfied, the inventor still must satisfy §§ 102, 103 and 112 before he will be entitled to a patent. *See Bergy*, 596 F.2d at 960-62 (discussing separate doors for §§ 102 and 103). The object and purpose of § 103 is to promote “really novel advances in the art, rather than those attributable merely to a person having ordinary skill in the trade.” *Vincent v. Suni-Citrus Prods. Co.*, 215 F.2d 305, 315 (5<sup>th</sup> Cir. 1954). The test of nonobviousness is independent of §§ 102 and 112 tests of novelty, enablement and definiteness, and patentability depends upon satisfaction of all of these requirements. *See, e.g., Nat’l Dairy Prods. Corp. v. Borden Co.*, 261 F. Supp. 771 (E.D. Wis. 1966); *see also Eimco Corp. v. Peterson Filters & Eng’g Co.*, 406 F.2d 431 (10th Cir. 1968); *Bros. Inc. v. Browning Mfg. Co.*, 317 F.2d 413 (8th Cir. 1963).

The profound truth underlying Congress’ broad statement of eligibility is that it fosters innovation. Indeed, the foundation of our patent system is the notion that the lure of a United States patent

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encourages creativity.<sup>3</sup> Filing an application provides the applicant's quid pro quo—disclosure and ultimate publication—to the benefit of the public. Even if those applications do not issue as patents, the public benefits because of their dedication. A cramped reading of § 101 would discourage filings, and it would be impossible to gauge what the public lost as a result.

It is true that *Mayo*, *Diehr* and *Flook* reference “inventive concept” as a matter for § 101 consideration. *Mayo* at 1304. But *Bilski*, *Benson* and *Morse* do not reference “inventive concept.” Moreover, *Diehr* describes the holding in *Flook* as standing “for no more than [] long established principles [against patenting of laws of nature, natural phenomena, and abstract ideas].” *Diehr* at 185.

While it is true the Court has used the term “inventive concept,” and acknowledged the potential for overlap with §§ 102, 103 and 112 (*Mayo* at 1304), the Court has never stated that an “inventive concept” is *per se* or *always* needed in a § 101 analysis. Instead, the Court has stated that the portions of a claim that recite a law of nature or abstract idea must be accompanied by other elements sufficient to ensure that the patent claim

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<sup>3</sup> See, e.g., *The Supreme Court Engages in Judicial Activism in Interpreting the Patent Law in eBay, Inc. v. MercExchange, L.L.C.*, 10 Tul. J. Tech. & Intell. Prop. 165, 199-200 (2007) (a strong patent system provides incentives for enterprises and capital to smaller enterprises; however, a weaker patent system allows existing dominant enterprises to avoid additional competition, and by reducing the economic value of patents, increases incentives for the dominant enterprises to infringe).

as a whole amounts to significantly more than a recitation of an application of a natural law or abstract idea. *Mayo* at 1294.

A test of inventive concept akin to an evaluation of nonobviousness must certainly not be adopted. Such a test does not follow the totality of this Court's precedent on §§ 101 and 103, and will only reintroduce into § 101 doctrine immense confusion regarding the definition of the word "invention." That lack of definition is well known to the courts, expressed at length by the Court itself as to be avoided. *Graham v. John Deere & Co.*, 383 U.S. 1 (1966). Indeed, avoiding the very idea of testing inventions for an "inventive concept" was the underlying purpose of Congress' adoption of 35 U.S.C. 103. *Id.* at 14-17. This Court cannot have intended to introduce the amorphous concept of "invention" back into patent law as the sole test under § 101 following an eradication of this very test. *Id.*

Indeed, in *Bilski*, this Court confirmed the liberal application of § 101. The Court specifically cautioned "that courts should not read into the patent laws limitations and conditions which the legislature has not expressed." *Id.* at 3226. "Congress plainly contemplated that the patent laws would be given wide scope," and "took [a] permissive approach to patent *eligibility* to ensure that ingenuity should receive a liberal encouragement." *Id.* at 3225 (quotations omitted; emphasis added). Thus, this Court should not apply "inventive concept" as the test for patent eligibility under § 101.

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### III. SECTION 101 ELIGIBILITY IS SIMPLE – ALBEIT UNSATISFYING TO THOSE WHO DESIRE A BRIGHT LINE TEST

#### A. *Mayo* Is Instructive But Not Directly On Point

In her original dissenting opinion, Judge Prost correctly noted that the Federal Circuit did not write on a blank slate and cited to this Court's precedent regarding subject matter eligibility. *CLS Bank International v. Alice Corp. Pty. Ltd.*, 685 F.3d 1341, 1356 (Fed. Cir. 2012). However, the present case involves claims directed to computer-implemented inventions that are more closely related to applications of an abstract idea, algorithm or mathematical formula, or scientific or business principle, rather than a law of nature. As such, this Court's analyses in law of nature cases, such as *Mayo*, while instructive, are not directly on point.

In *Bilski*, a case involving claims to a “fundamental economic practice” and “mathematical formula” found to be “an unpatentable abstract idea,” the Court stated:

In light of these precedents, it is clear that petitioners' application is not a patentable “process.” Claims 1 and 4 in petitioners' application explain the basic concept of hedging, or protecting against risk: “Hedging is a fundamental economic practice long prevalent in our system of commerce and taught in any introductory finance class.” 545 F.3d, at 1013 (Rader, J., dissenting); \*\*\* [other citations omitted]. The concept of hedging, described in claim 1 and reduced to a mathematical formula in claim 4, is an

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unpatentable abstract idea, just like the algorithms at issue in *Benson* and *Flook*. Allowing petitioners to patent risk hedging would pre-empt use of this approach in all fields, and would effectively grant a monopoly over an abstract idea.

*Bilski*, \_\_\_ U.S. \_\_\_; 130 S.Ct. 3231.

Consistent with the above analysis, the Court should continue to focus its analysis under § 101 on whether the patent claims in question would effectively monopolize the underlying abstract idea and its application.

Most importantly, a court must consider the claim as a whole. A court must not strip the claim of important details that might not be essential to *understanding* the abstract idea underlying the invention, and then consider the remaining claim limitations in a vacuum. Where those details show that the claim does not patent the underlying abstract idea and remove the use of the abstract idea from the public domain, the claim should pass muster under § 101.

### **B. Applying § 101 Means Asking Two Questions**

Applying the Court's *Diehr* tests to computer-implemented inventions, a first inquiry asks: do the claims include an abstract idea, algorithm or mathematical formula, or scientific or business principle? If so, the second inquiry is as follows:

- Are the claims drawn to subject matter otherwise patent eligible? If so, such claims are not rendered patent ineligible simply because they *use* an abstract idea, algorithm or mathematical
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formula, or scientific or business principle (*Diehr* at 187).

- Do the claims apply an abstract idea, algorithm or mathematical formula, or scientific or business principle in a structure or process which, when considered *as a whole*, is performing a function which the patent laws were designed to protect (*e.g.*, transforming or reducing an article to a different state or thing)? If so, the claims are patent eligible (*id.* at 192).
- Do the claims apply the laws of nature to a new and useful end? If so, they are patent eligible (*id.* at 188 n.11).

Applying the *Mayo* test to computer-implemented inventions, the second inquiry asks: does the claim have additional features that provide practical assurance that the claim is more than a drafting effort designed to monopolize an abstract idea, algorithm, mathematical formula, scientific or business principle, itself? *Mayo* at 1297. Put another way, does the claim do more than instruct the relevant audience to apply the applicable idea, algorithm, formula, or principle in a specific situation? *Mayo* at 1298. Put more succinctly, do the claims do more than inform a relevant audience about an abstract idea, algorithm, mathematical formula, or scientific or business principle, by having additional steps that add something significant beyond the idea, algorithm, formula, or principle, and beyond well-understood, routine, conventional activity of a type necessary to apply the idea, algorithm, formula, or principle? *Mayo* at 1298. Essentially, do the claims do more than state an

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idea, algorithm, formula, or principle and add “apply it” [or “apply it using a computer.”] *Mayo* at 1294.

Claim limitations which tell the relevant audience about a natural law [abstract idea, algorithm, mathematical formula, or scientific or business principle] do not render claims patent eligible. *Id.* The same is true for limitations which suggest that a relevant person should take a law [abstract idea, algorithm, mathematical formula, or scientific or business principle] into account. *Id.* Similarly, process steps that instruct relevant individuals to engage in well-understood, routine, conventional activity do not confer patent eligibility. *Id.* at 1297-8. The same is true for steps in combination that amount to nothing more than instruction to apply applicable laws [abstract idea, algorithm, mathematical formula, or scientific or business principle]. *Id.* at 1298. Steps that tell relevant persons to gather data from which they may draw an inference in light of correlations are no better. *Id.* In sum, steps *that must be taken* in order to apply a natural law, abstract idea, algorithm, mathematical formula, or scientific or business principle merely instruct individuals to apply such concepts, and thus do not make claims patent eligible. *Id.* at 1299 (emphasis added).

Harmonizing this Court’s prior decisions, the test of § 101 is simple. A claim to a computer-implemented invention, when taken as a whole, that simply states a law of nature, natural phenomena or abstract idea, including an algorithm or mathematical formula or a scientific or business principle, and removes any of these from the public domain may not be patented. Similarly, a claim that does nothing more than state a law of nature,

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natural phenomena or abstract idea, including an algorithm or mathematical formula or a scientific or business principle, and then adds "apply it" [including "apply it using a computer"] may not be patented.

**C. Although Simple In Exposition And  
Difficult In Practice, The Simple Test Is  
Nevertheless The Correct Test**

Applying the two-question test of the Court's prior decisions to claims directed to computer-implemented inventions is no doubt difficult and will necessitate careful review by the PTO and the Courts on a case-by-case basis, and will involve evaluating each patent claim as a whole.

Since all computer-implemented inventions at some level embody, use, reflect, rest upon, or apply abstract ideas, mathematical formulas, algorithms, or fundamental scientific or business principles, all claims to computer-implemented inventions may require application of the two-question test. The simple two-question test, however, must nevertheless be the test under § 101. The rule of law through Congress and this Court's precedent does not allow otherwise.

**CONCLUSION**

For the foregoing reasons, IPLAC respectfully requests that the Court continue to apply its prior precedent regarding exceptions to patent eligible subject matter under 35 U.S.C. § 101 to computer-implemented inventions.

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January 28, 2014

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