

IN THE
Supreme Court of the United States

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SUPREME COURT, U.S.**

ALICE CORPORATION PTY. LTD.,

Petitioner,

v.

CLS BANK INTERNATIONAL, *et al.*,

Respondents.

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

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

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QUESTION PRESENTED

Whether claims to computer-implemented inventions—including claims to systems and machines, processes, and items of manufacture—are directed to patent-eligible subject matter within the meaning of 35 U.S.C. § 101 as interpreted by this Court?

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INTEREST OF *AMICUS CURIAE*

The New York Intellectual Property Law Association (“NYIPLA” or “Association”) respectfully submits this *amicus curiae* brief in support of neither party.¹

The arguments set forth herein were approved on January 21, 2014 by an absolute majority of the officers and members of the Board of Directors of the NYIPLA, including any officers or directors who did not vote for any reason, including recusal, but do not necessarily reflect the views of a majority of the members of the Association, or of the law or corporate firms with which those members are associated. After reasonable investigation, the NYIPLA believes that no officer or director or member of the Committee on *Amicus* Briefs who voted in favor of filing this brief, nor any attorney associated with any such officer, director or committee member in any law or corporate firm, represents a party in this litigation. Some officers, directors, committee members or associated attorneys may represent entities, including other *amici curiae*, which have an interest in other matters which may be affected by the outcome of this litigation.

The NYIPLA is a professional association of approximately 1,300 attorneys whose interests and

1. Petitioner and Respondents consented to the filing of *amicus curiae* briefs in support of either party or neither party in separate docket entries dated December 11, 2013. Pursuant to Sup. Ct. R. 37.6, no counsel for a party authored this brief in whole or in part, and no counsel or party made a monetary contribution intended to fund the preparation or submission of this brief. No person other than the NYIPLA, its members, or its counsel made a monetary contribution to its preparation or submission.

practices lie in the area of patent, trademark, copyright, trade secret and other intellectual property law. The Association's members include a diverse array of attorneys specializing in patent law, from in-house counsel for businesses that own, enforce and challenge patents to attorneys in private practice who represent inventors in various proceedings before the United States Patent and Trademark Office ("PTO").

A substantial percentage of the Association's member attorneys participate actively in patent litigation, representing both patent owners and accused infringers. The NYIPLA's members also frequently engage in patent licensing matters on their clients' behalf, representing both patent licensors and licensees.

The entities served by the Association's members include inventors, entrepreneurs, venture capitalists, businesses, universities, and industry and trade associations. Many of these entities are involved in research, patenting, financing and other commercial activity relating to the financial industry and other software-dependent fields.

The NYIPLA's members and their respective clients have a strong interest in the issues presented by this case because their day-to-day activities depend on the consistently-applied and longstanding broad scope of patent-eligible subject matter under the Patent Act in general. Because of the vital and increasing importance of computer-implemented technology to the economy, moreover, the NYIPLA and its members have a particularly strong interest in ensuring that their reasonable expectation that those principles continue to be consistently applied in those important areas.

SUMMARY OF ARGUMENT

Without offering any opinion on the validity of the claims at issue, the NYIPLA respectfully submits this brief to provide its views on how the Court should answer the question presented to clarify the lower courts' application of this Court's precedent under 35 U.S.C. § 101, as set forth in *Bilski v. Kappos*, 130 S. Ct. 3218, 3229, 3231 (2010), and *Diamond v. Diehr*, 450 U.S. 175, 188-89 (1981).

Recent patent-eligibility jurisprudence has not yet dispelled many of the doubts surrounding patents covering computer-implemented inventions. The NYIPLA encourages the Court to clarify that claims to computer-implemented inventions—including claims to systems and machines, processes, and items of manufacture—may indeed be directed to patent-eligible subject matter within the meaning of 35 U.S.C. § 101. This Court has previously espoused fair, reasonable and predictably applied principles that allow appropriate inventions to be the subject of patent protection. The NYIPLA believes that any confusion regarding the patent-eligibility of computer-implemented inventions under 35 U.S.C. § 101 may be laid to rest by applying the guiding principles set forth herein, which have been extracted from this Court's patent-eligibility jurisprudence. *See infra* Part I.

This Court has consistently framed the patent-eligibility analysis under 35 U.S.C. § 101 as a two-part inquiry involving the following questions:

1. Does the claimed subject matter fall within one of the four statutory categories of patent-eligible subject matter: (i) process, (ii) machine, (iii)

manufacture, or (iv) composition of matter (or any improvement thereof)?

2. If so, is the claimed subject matter directed to one of the three “fundamental principles”—laws of nature, natural phenomena, or abstract ideas—that are exceptions to patent-eligible subject matter?

See, e.g., Bilski, 130 S. Ct. at 3225.

The first question is a relatively straightforward inquiry: is the claim directed to at least one of the four statutory forms of patent-eligible subject matter? For the most part, the courts have applied this first question as a relatively low hurdle, and should not now introduce any extra-statutory limitations. *See infra* Part I.

However, as illustrated by the opinions of the lower courts in this case, there has been much debate among the trial courts and at the Federal Circuit on the proper analysis to use when answering the second question. It has proven exceptionally difficult to reach a consensus on the proper method of determining whether “abstract ideas” are claimed in the area of computer-implemented inventions. Although the Federal Circuit sought to resolve this issue in an *en banc* rehearing, the resulting opinions were too divided to provide the necessary guidance on this important issue. The NYIPLA respectfully proposes, consistent with this Court’s decisions in, *e.g., Diehr* and *Bilski*, that the focus of any Section 101 inquiry must be on the difference between claims that preempt an abstract idea, which are patent-ineligible, and claims that are directed to a particular application of an abstract idea, which are patent-eligible. *See infra* Part I.

Under this Court’s governing precedent, the mere presence of a computer in a claim should not alter the fundamental analysis as to whether the claim as a whole preempts the abstract idea at issue or whether there remain available ways outside of the claim to apply the abstract idea. *See infra* Part II.A. Moreover, this inquiry must address the claim as a whole. Efforts in some lower court decisions to dissect the claim into old and new parts or computer and non-computer elements, should be rejected as squarely inconsistent with this Court’s holdings in *Diehr* and *Bilski*.

Unfortunately, much of the recent confusion of this point can be traced to the ways that some lower courts have misconstrued *Mayo Collaborative Services v. Prometheus Laboratories, Inc.*, 132 S. Ct. 1289, 1297 (2012). The NYIPLA respectfully suggests that the Court’s language in *Mayo*—including “the steps in the claimed processes . . . involve well-understood, routine, conventional activity previously engaged in by researchers in the field,” and “those steps, when viewed as a whole, add nothing significant beyond the sum of their parts taken separately,” *id.* at 1294, 1298—has led some lower courts to ignore the fundamental principle laid out in *Diehr*, 450 U.S. at 187-88, that patent claims must be analyzed as a whole and not be dissected and analyzed piecemeal. Accordingly, the NYIPLA respectfully requests that the Court readdress this language and reaffirm the principles set forth in *Diehr* and *Bilski*.

In addition, while the presence of a computer in a claim that preempts an abstract idea should not in and of itself be sufficient to establish patent-eligible matter, it is not insignificant to the analysis. For example, in the context

of the “mental steps” doctrine, the use of a machine, *i.e.*, a computer or hardware, to participate meaningfully in the claimed actions can overcome these categories of objections to patent-eligibility. *See infra* Part II.B.

Finally, the NYIPLA respectfully submits that whether a computer-implemented invention is claimed as a method, system or storage medium should not affect the Section 101 analysis. *See infra* Part III. A proper analysis should not depend upon the form of the claims. This would elevate form over substance. Nevertheless method, system and storage medium claims should not *ipso facto* rise and fall together. Rather, each claim (regardless of its type) should be considered independently as a whole to determine whether it is directed to patent-eligible subject matter.

ARGUMENT

I. GUIDING PRINCIPLES OF PATENT-ELIGIBILITY DERIVED FROM GOVERNING SUPREME COURT PRECEDENT

The statutory language of 35 U.S.C. § 101 clearly defines patent-eligible subject matter:

Whoever invents or discovers any new or useful process, machine, manufacture or composition of matter, or any new or useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

35 U.S.C. § 101. Decades of this Court’s detailed interpretation confirm Section 101’s breadth. Recently,

in *Bilski v. Kappos*, the Court once again “decline[d] to impose limitations on the Patent Act that are inconsistent with the Act’s text,” 130 S. Ct. at 3231, and reconfirmed the wide scope for patentability of inventions under Section 101. *Id.* at 3225; see *J.E.M. Ag Supply, Inc. v. Pioneer Hi-Bred Int’l, Inc.*, 534 U.S. 124, 130 (2001) (“As this Court recognized over 20 years ago in *Chakrabarty*, the language of § 101 is extremely broad.”) (citation omitted); *Diamond v. Chakrabarty*, 447 U.S. 303, 308 (1980).

The Association respectfully submits that nothing about the case at bar compels any reevaluation of the straightforward rules for assessing patent eligibility. These rules, when applied as discussed below, should enable inventors, practitioners and the public alike to determine with reasonable certainty whether computer-implemented inventions are patentable under Section 101.

Since *Diehr*, the Court has consistently based the patent-eligibility investigation on two inquiries:

1. Does the claimed subject matter fall within one of the four statutory categories of patent-eligible subject matter: (i) process, (ii) machine, (iii) manufacture, or (iv) composition of matter (or any improvement thereof)?
2. If so, is the claimed subject matter directed to one of three so-called “fundamental principles,” *i.e.*, laws of nature, natural phenomena or abstract ideas, which are exceptions to patent-eligible subject matter?

See *Bilski*, 130 S. Ct. at 3225; *Diehr*, 450 U.S. at 185 (harmonizing, *inter alia*, *Diamond v. Chakrabarty*, 447 U.S. 303, 309 (1980); *Parker v. Flook*, 437 U.S. 584, 589 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 67 (1972)).

Under the first inquiry, for an invention to be patent-eligible, it must fall within at least one of the four enumerated categories of patent-eligible subject matter, namely: “process,” “machine,” “manufacture” or “composition of matter.” 35 U.S.C. § 101. This should be a straightforward analysis and should not include narrow definitions. For example, in *Bilski*, the Court refused to adopt a new rule categorically excluding patent-eligible subject matter from the term “process.” *Bilski*, 130 S. Ct. at 3227 (“Section 101 is a ‘dynamic provision designed to encompass new and unforeseen inventions.’”) (quoting *J.E.M. Ag Supply*, 534 U.S. at 135; *Charkrabarty*, 447 U.S. at 308 (cautioning that “courts should not read into the patent laws limitations and conditions which the legislature has not expressed”) (internal quotation and citation omitted)).

The second inquiry asks whether the invention falls into what this Court has historically recognized as the three exceptions to this general rule: it must not claim (*i.e.*, preempt) “laws of nature, natural phenomena, [or] abstract ideas.” *Mayo*, 132 S. Ct. at 1293 (quoting *Diehr*, 450 U.S. at 185); *Bilski*, 130 S. Ct. at 3225; *Chakrabarty*, 447 U.S. at 309. This Court has reasoned that these fundamental principles “are not patentable, as they are the basic tools of scientific and technological work.” *Benson*, 409 U.S. at 67. “Thus, a new mineral discovered in the earth or a new plant found in the wild is not patentable subject matter. Likewise, Einstein could not patent his celebrated law that

$E=mc^2$; nor could Newton have patented the law of gravity. Such discoveries are ‘manifestations of . . . nature, free to all men and reserved exclusively to none.’” *Chakrabarty*, 447 U.S. at 309 (citation omitted).

With respect to this second inquiry, however, as discussed in *Diehr*, *Bilski* and *Mayo*, ample, and in some cases ancient, precedent has recognized that an invention may nonetheless be directed to the **practical application** of a fundamental principle and be patent-eligible. See *Mayo*, 132 S. Ct. at 1293-94 (“[A]n **application** of a law of nature or a mathematical formula to a known structure or process may well be deserving of patent protection.”) (quoting *Diehr*, 450 U.S. at 187); *Bilski*, 130 S. Ct. at 3230 (same); *Cochrane v. Deener*, 94 U.S. 780 (1877); *O’Reilly v. Morse*, 56 U.S. (15 How.) 62 (1854); *Le Roy v. Tatham*, 55 U.S. (14 How.) 156 (1853). Thus, under the second inquiry, a determination must be made as to which side of the line the claimed subject matter falls: a fundamental principle, which is not patent-eligible, or a practical application of a fundamental principle, which is patent-eligible.

The focus in this case is on the “abstract idea” exception. Both this Court and the Federal Circuit have recognized that categories of unpatentable abstract natural principles at times may be difficult to define. Indeed, no clear definition of “abstract” has emerged. *Flook*, 437 U.S. at 589 (“The line between a patentable ‘process’ and an unpatentable ‘principle’ is not always clear.”); see also *Bilski*, 130 S. Ct. at 3236 (noting the absence of a “satisfying account of what constitutes an unpatentable abstract idea”) (Stevens, J., concurring); *Research Corp. Techs., Inc. v. Microsoft Corp.*, 627 F.3d 859, 868 (Fed. Cir. 2010) (“[T]his court also will not

presume to define ‘abstract’ beyond the recognition that this disqualifying characteristic should exhibit itself so manifestly as to override the broad statutory categories of eligible subject matter and the statutory context that directs primary attention on the patentability criteria of the rest of the Patent Act.”).

Nevertheless, this Court has confirmed the following guidelines to determine whether a claim is directed to a patent-ineligible fundamental principle or to the patent-eligible practical application of a fundamental principle:

1. Merely restricting an abstract idea to a particular field of use, like energy markets in *Bilski*, does not convert an abstract principle into a practical application of an abstract principle. *Bilski*, 130 S. Ct. at 3225; *see also Mayo*, 132 S. Ct. at 1294; *Diehr*, 450 U.S. at 191-92.
 2. Merely tying a claim to a machine or computer in an extra-solutional manner is also not sufficient to transform an abstract principle into a patent-eligible practical application of that principle. *See Mayo*, 132 S. Ct. at 1294; *Bilski*, 130 S. Ct. at 3230; *Diehr*, 450 U.S. at 191-92; *Flook*, 437 U.S. at 590, 594.
 3. As stated in *Bilski*, the so-called machine-or-transformation test, while useful, is not dispositive, and, as suggested by the patent-ineligible result in *Mayo*, satisfying the transformation prong is not necessarily a safe harbor. *Mayo*, 132 S. Ct. at 1302-03; *Bilski*, 130 S. Ct. at 3225-27.
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4. A claim must do something more than merely “apply” a fundamental principle to transform it into a practical application thereof. *Mayo*, 132 S. Ct. at 1294; *Benson*, 409 U.S. at 71-72.

Although this Court in *Bilski* left it to the Federal Circuit to develop, based on this foundation, the contours of the distinction between preempting an abstract idea and practically applying one, 130 S. Ct. at 3229, the Federal Circuit has been unable to do so. *CLS Bank Int’l v. Alice Corp. Pty. Ltd.*, 717 F.3d 1269, 1292 n.1 (Fed. Cir. 2013) (Rader, J., dissenting-in-part) (“No portion of any opinion issued today other than our Per Curiam Judgment garners a majority. . . . Accordingly, though much is published today discussing the proper approach to the patent eligibility inquiry, nothing said today beyond our judgment has the weight of precedent.”). Instead, Section 101 analysis and judicial analysis of “abstract ideas” has become muddled.²

For example, inconsistent with this Court’s directive in *Diehr* to analyze the claim as a whole, some Federal Circuit panels have appeared to dissect claims into their various elements and analyze the elements considered to be “inventive” divorced from the remaining elements of the claim. See, e.g., *Bancorp Servs., LLC v. Sun Life Assurance Co. of Can.*, 687 F.3d 1266, 1279 (Fed. Cir. 2012), *petition for cert. filed* (U.S. Nov. 8, 2013) (No. 13-584) (setting aside purportedly “insignificant computer-based limitations” and then analyzing the additional features that remain in the claims ignoring the computer

2. See generally Charles R. Macedo & Sandra A. Hudak, *Understanding Patent Eligibility of New Technology in the United States*, 7 J. Intell. Prop. L. & Prac. 865-71 (2012).

aspects); *Cybersource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1374 (Fed. Cir. 2011) (explaining that the patent-eligibility analysis must “look to the *underlying invention* for patent-eligibility purposes” rather than limit the analysis to the statutory category—“process, machine, manufacture, or composition of matter”—of the claim language) (emphasis added).

These departures from precedent may be attributed to language in *Mayo* that suggests that a requirement for patent-eligibility is that a claim “ha[ve] additional features that provide practical assurance that the [claim] is more than a drafting effort designed to monopolize the [fundamental principle] itself.” *Mayo*, 132 S. Ct. at 1297; see *Bancorp*, 687 F.3d at 1279 (interpreting *Mayo*’s statement—“What else is there in the claims before us?”—as setting aside the fundamental principle in the claim at issue rather than analyzing the elements of the claim as a whole). Yet *Mayo* did not disavow or overrule *Diehr*.

Diehr set forth three cardinal rules that must be followed when assessing whether a claimed process crosses the threshold from a patent-ineligible, abstract natural principle to the concrete human-made realm of patent-eligible subject matter:

1. The claim “must be considered as a whole.” *Diehr*, 450 U.S. at 188; see *Bilski*, 130 S. Ct. at 3230; *Flook*, 437 U.S. at 590 (“[A] process is not unpatentable because it contains a law of nature or a mathematical algorithm.”).
 2. “It is inappropriate to dissect the claims into old and new elements and then to ignore the presence
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of the old elements in the analysis.” *Diehr*, 450 U.S. at 188; *see Bilski*, 130 S. Ct. at 3230.

3. “The ‘novelty’ of any element or steps in a process, or even of the process itself, is of no relevance in determining whether the subject matter of a claim falls within the § 101 categories of possibly patentable subject matter.” *Diehr*, 450 U.S. at 188-89; *see id.* at 193 n.15 (“The fact that one or more of the steps in respondents’ process may not, in isolation, be novel or independently eligible for patent protection is irrelevant to the question of whether the claims as a whole recite subject matter *eligible* for patent protection under § 101.”) (emphasis in original).

Considering the claim as a whole respects the overall patentability framework, as claims “particularly point[] out and distinctly claim[] the subject matter which the [applicant] regards as his invention.” 35 U.S.C. § 112. For processes, an inventor’s characterization of the invention is critical because “a new combination of steps in a process may be patentable even though all the constituents in the combination were well known and in common use before the combination was made.” *Diehr*, 450 U.S. at 188.

The recent decisions misconstruing *Mayo* and overlooking *Diehr* harm the U.S. economy and the patent system as a whole insofar as they mistakenly deny patent protection to computer-implemented inventions that would have been held patent-eligible had a proper 35 U.S.C. § 101 analysis been conducted. As Judge Moore explained in her dissent below, failing to “evaluate each claim as a whole when analyzing validity” and substituting the reasoning of

Judge Lourie's concurring opinion could "render ineligible nearly 20% of all the patents that actually issued in 2011" and "decimate the electronics and software industries." *CLS Bank Int'l*, 717 F.3d at 1313 (Moore, J., dissenting-in-part).

The importance of computer-implemented inventions to the U.S. economy extends far beyond the importance of the American computer industry *per se*. As the Economics and Statistics Administration and the PTO reported in March 2012, computers and peripheral equipment are part of the top patent-intensive job-producing sector in the U.S. economy. Econ. & Statistics Admin. and PTO, *Intellectual Property and the U.S. Economy: Industries in Focus* (Mar. 2012), www.uspto.gov/news/publications/IP_Report_March_2012.pdf. Moreover, computer-implemented inventions are critical to the productivity of all sectors of the U.S. economy.³ Computers power our modern service economy as surely as steam and then internal combustion engines powered the manufacturing sector that drove our economic prosperity in the nineteenth and twentieth centuries.

3. Indeed, as former Director Kappos explained: "Because many breathtaking software-implemented innovations power our modern world, at levels of efficiency and performance unthinkable even just a few years ago, patent protection is every bit as well-deserved for software-implemented innovation as for the innovations that enabled man to fly, and before that for the innovations that enabled man to light the dark with electricity, and before that for the innovations that enabled the industrial revolution." See David Kappos, PTO Dir., An Examination of Software Patents, Address at Center for Am. Progress (Nov. 20, 2012), *available at* www.uspto.gov/news/speeches/2012/kappos_CAP.jsp.

Accordingly, the NYIPLA believes this Court should confirm its historical commitment to a clear and consistent jurisprudence that allows for and encourages computer-implemented inventions that promote innovation and creativity. Following these principles, the NYIPLA addresses the question presented as follows.

II. TEST FOR ABSTRACTNESS OF COMPUTER-IMPLEMENTED INVENTIONS

As discussed above, after ascertaining that the claimed subject matter falls within one of the four statutory categories of patent-eligible subject matter, a proper Section 101 analysis should next consider whether the claimed subject matter is directed towards a fundamental principle: laws of nature, natural phenomena or abstract ideas.

The NYIPLA respectfully submits that in order to determine whether a claim is directed to a patent-ineligible abstract idea rather than a patent-eligible application of an abstract idea, the Court should confirm its commitment to an approach in which the “abstract idea” implicated is first defined, and next, the claim as a whole is analyzed to determine if there are ways to practice this “abstract idea” that fall outside the scope of the claimed invention. Under this approach, the presence or absence of a computer or machine in a claim is not dispositive. This approach is consistent with the methodology applied in *Bilski* and *Diehr*. See *infra* Part II.A.

However, including a computer in a claim may make a difference in addressing categories of patent-eligibility objections that are based on other doctrines,

like the “mental steps” doctrine. *See infra* Part II.B. Understanding the role of these doctrines also helps to explain the evolution of the so-called “machine-or-transformation test” and to understand the circumstances in which it is appropriately applied.

A. Proposed Test for Determining Whether Claims Preempt an Abstract Idea

The NYIPLA respectfully submits that, consistent with this Court’s precedent, a line should be drawn in favor of patent-eligibility of a claim that involves the practical application of an abstract idea, where a computer-implemented application of the idea is but one of multiple ways to practice the idea. To make this determination, first the “abstract idea” implicated must be defined, and then the claim as a whole must be analyzed to determine if there are ways to practice this “abstract idea” that fall outside the scope of the claimed invention.

Bilski and *Diehr* illustrate this approach. In *Bilski*, the abstract idea was “hedging risk.” *Bilski*, 130 S. Ct. at 3222-24. The *Bilski* claim was found to preempt anyone from practicing the abstract idea, albeit within a particular field of use, *i.e.*, energy markets. *Id.* at 3231. By contrast, in *Diehr*, the abstract idea was a particular mathematical formula. 450 U.S. at 177. However, the claim did not preempt all uses of that mathematical formula, even in the context of the field of use of curing rubber. Rather, it was limited to a particular application of that formula based on specific limiting steps:

[R]espondents here do not seek to patent a mathematical formula. Instead, they seek

patent protection for a process of curing synthetic rubber. Their process admittedly employs a well-known mathematical equation, but they do not seek to pre-empt the use of that equation. Rather, they seek only to foreclose from others the use of that equation ***in conjunction with all of the other steps in their claimed process.***

Id. at 187 (emphasis added); *see Mayo*, 132 S. Ct. at 1300-02 (discussing *Morse*, *Benson* and *Bilski*).

In this context, merely embodying an abstract idea in a computer or another machine does not, by itself, preclude it from being abstract. *See CyberSource*, 654 F.3d at 1375-76 (quoting *Bilski*, 130 S. Ct. at 3231). For example, Claim 8 in *Benson*, was found by this Court to preempt an abstract idea, and thus to not be patent-eligible, even though it integrated traditional computer elements like a shift register in a meaningful way into the claimed steps. 409 U.S. at 71-72.

Accordingly, the crux of the patent-eligibility inquiry should properly focus on determining whether the claim as a whole preempts the use of the abstract idea. When it does not, such as when the computer-implemented application of the idea is one of multiple ways to apply the idea, the claim should be patent-eligible.

For example, Federal Circuit precedent, including *SiRF Technology, Inc. v. I.T.C.*, 601 F.3d 1319, 1333 (Fed. Cir. 2010), *Research Corp. Technologies, Ultramercial, Inc. v. Hulu, LLC*, 722 F.3d 1335 (Fed. Cir. 2013), *petition*

for cert. filed (U.S. Aug. 23, 2013) (No. 13-255)⁴ and other cases, provides useful guidance that helps distinguish between an abstract idea and the practical application of such an idea by listing certain specific, objective factors that can be considered. Factors suggesting patent-eligibility include:

- The claim is to a practical application of a concept;
- The claim includes limitations inextricably tied to the use of computers;
- The claim involves specific applications or improvements to technologies already in the marketplace;
- The claim involves controlled interactions over the internet or other network; and/or
- The abstract idea can be performed without infringing the claim.

On the other hand, factors tending to lead to the conclusion that a claim is not patent-eligible include:

- The claim preempts an abstract idea;

4. The NYIPLA recognizes that this Court's grant of *certiorari* and vacating of the first panel decision in *Ultramercial* may be understood as rejecting the "manifest abstractness" test advocated in this line of cases. *WildTangent, Inc. v. Ultramercial, LLC*, 132 S. Ct. 2431 (2012). Nevertheless, the NYIPLA respectfully submits that the factors set forth in those cases can serve as helpful guideposts dividing preempted abstract ideas from the patent-eligible practical application of such ideas.

- Limitations in the claim merely define a field of use, rather than a particular way of practicing the idea; and/or
- The claim merely says “apply it” with respect to a fundamental principle, without more.

In performing the analysis, the claim should be analyzed as a whole, and should not be parsed into new and old portions or dissected to remove computer portions to find the abstract principles buried within the claim. This Court made this requirement clear in, *e.g.*, *Diehr*:

In determining the eligibility of respondents’ claimed process for patent protection under § 101, ***their claims must be considered as a whole***. It is inappropriate to dissect the claims into old and new elements and then to ignore the presence of the old elements in the analysis. This is particularly true in a process claim because 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. The “novelty” of any element or steps in a process, or even of the process itself, is of no relevance in determining whether the subject matter of a claim falls within the § 101 categories of possibly patentable subject matter.

450 U.S. at 188-89 (footnote omitted) (emphasis added); *see also Classen Immunotherapies, Inc. v. Biogen IDEC*, 659 F.3d 1057, 1068 (Fed. Cir. 2011). Courts may not simply ignore claim limitations since, by statute, inventions are

defined in the claims by the patentee. 35 U.S.C. § 112 (2006). Thus, analysis of computer-implemented claims under Section 101 must account for all elements of those claims.

Despite this Court's reminder in *Mayo* that computer-implemented claims should not be rejected merely because they "at some level embody, use, reflect, rest upon, or apply . . . abstract ideas," 132 S. Ct. at 1293, some courts have misconstrued other language in *Mayo* to allow them to do just that. *See, e.g., Bancorp*, 687 F.3d at 1279-80 ("When the insignificant computer-based limitations are set aside from those claims that contain such limitations, the question under § 101 reduces to an analysis of what additional features remain in the claims. *See Mayo*, 132 S. Ct. at 1297 (questioning, after setting aside the claimed law of nature, '[w]hat else is there in the claims before us?').").

The Association respectfully submits that any approach that allows a claim to be parsed in this manner is inconsistent with the Patent Act and this Court's precedent, and should be unequivocally rejected.⁵

5. *Cf. Accenture Global Servs. v. Guidewire Software, Inc.*, 728 F.3d 1336, 1348 (Fed. Cir. 2013) (Rader, J., dissenting) ("I take this opportunity to reiterate my view that 'the remedy is the same: consult then statute!' The statute offers broad categories of patent-eligible subject matter. The 'ineligible' subject matter in [Accenture's] system claims is a further testament to the perversity of a standard without rules—the result of abandoning the statute.") (citation omitted).

B. Objections Based on the “Mental Steps” Doctrine Can Be Overcome by Meaningfully Tying Claimed Steps to a Computer or Other Machine/Device

Under the “mental steps” doctrine, a claim that can be performed solely in a person’s mind is considered “abstract” and patent-ineligible. *See, e.g., Diehr*, 450 U.S. at 196; *CyberSource*, 654 F.3d at 1373 (a claim “that can be performed by human thought alone is merely an abstract idea and is not patent-eligible under § 101”); *see also Ass’n for Molecular Pathology v. U.S. Patent & Trademark Office*, 689 F.3d 1303, 1309 (Fed. Cir. 2012). Thus, “mental processes—or processes of human thinking—standing alone are not patentable even if they have practical application.” *In re Comiskey*, 554 F.3d 967, 979 (Fed. Cir. 2009).

However, when one or more steps of such a claim are tied in a meaningful way to a machine or device, like a computer, the claim no longer runs afoul of the mental steps doctrine. *Cf. Classen*, 659 F.3d at 1065; *Ultramercial*, 657 F.3d at 1329-30. Applying this distinction in *Classen*, the Federal Circuit found that those claims which included only mental steps (“correlation” steps that could be performed in the human mind) were not patent-eligible, while other claims that included both the same mental steps and additional physical implementations (*e.g.*, immunization) were patent-eligible under 35 U.S.C. § 101. 659 F.3d at 1066-68. A step that could have been performed in the human mind is no longer a purely mental step when performed by a computer or in conjunction with some other machine or mechanical implementation.

The NYIPLA respectfully submits that in this context, meaningfully tying claimed steps to a computer or other machine or device, as required under the traditional machine-or-transformation test, would overcome this type of objection.⁶ Nonetheless, to the extent a claim preempts an abstract idea (or another fundamental principle) it may still be found patent-ineligible. Therefore, claims must still be analyzed under the framework set forth in Part II.A., *supra*, where the “abstract idea” at issue is first defined and the claim as a whole is then analyzed to determine if there are ways to practice this “abstract idea” that fall outside the scope of the claimed invention.

III. APPLICATION OF THE GUIDING PRINCIPLES TO THE ANALYSIS OF A COMPUTER-IMPLEMENTED INVENTION CLAIMED AS A METHOD, SYSTEM OR STORAGE MEDIUM

As to the issue of whether a claim’s form as a method, system or storage medium should impact the Section 101 analysis, the NYIPLA respectfully submits that its particular form should not drive the analysis. *See Mayo*, 132 S. Ct. at 1294 (“patent eligibility [does not] ‘depend simply on the draftsman’s art’”) (quoting *Flook*, 437 U.S. at 593); *cf. Quanta Computer, Inc. v. LG Elecs., Inc.*, 553 U.S. 617, 629-30 (2008) (warning of the danger of adopting certain rules for method claims and others for apparatus

6. Likewise, other kinds of objections, such as a “printed matter” objection, might also be overcome by meaningfully tying the claim to a computer or other machine. *See, e.g., In re Lowry*, 32 F.3d 1579, 1583 (Fed. Cir. 1994) (“printed matter” objection overcome where “the invention as defined by the claims *requires* that the information be processed not by the mind but by a machine”) (citation omitted).

claims, where: “Patentees seeking to avoid [a particular result] could simply draft their patent claims to describe a method rather than an apparatus.”). A proper analysis should not depend upon the form of the claims. This would elevate form over substance.

In addition, as noted in Part II.B, *supra*, it is crucial that a claim be analyzed as a whole. Because each claim (regardless of its type) should be considered independently as a whole, the NYIPLA believes that method, system and storage medium claims should not *ipso facto* rise and fall together.

CONCLUSION

The NYIPLA supports the articulation of fair and reasonable principles that can be predictably applied and clearly define the bounds of patent-eligible subject matter. For this reason, the NYIPLA respectfully urges the Court to set forth the useful guidelines, discussed herein, for determining when a computer-implemented claim preempts an abstract idea, and is thus patent-ineligible, and when it merely claims an application of an abstract idea, and is thus patent-eligible.

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