No. 08-0964

IN THE

Supreme Court of the United States

BERNARD L. BILSKI AND RAND A. WARSAW,
Petitioners,

v.

JOHN J. DOLL, ACTING UNDER SECRETARY OF COMMERCE FOR INTELLECTUAL PROPERTY AND ACTING DIRECTOR, PATENT AND TRADEMARK OFFICE,
Respondent.

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

BRIEF OF *AMICUS CURIAE* BORLAND SOFTWARE CORPORATION IN SUPPORT OF PETITIONERS

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QUESTIONS PRESENTED

Whether the Federal Circuit erred by holding that a "process" must be tied to a particular machine or apparatus, or transform a particular article into a different state or thing ("Machine-or-Transformation" test), to be eligible for patenting under 35 U.S.C. § 101, despite this Court's precedent declining to limit the broad statutory grant of patent eligibility for "any" new and useful process beyond excluding patents for "laws of nature, physical phenomena, and abstract ideas."

Whether the Federal Circuit's "Machine-or-Transformation" test for patent eligibility, which effectively forecloses meaningful patent protection to many business methods, contradicts the clear Congressional intent that patents protect "method[s] of doing or conducting business." 35 U.S.C. § 273.

INTEREST OF THE *AMICUS CURIAE*

The *Amicus Curiae*, Borland Software Corporation of Austin, Texas ("Borland") is one of the world's oldest and enduring software companies having introduced numerous innovative products. A wholly-owned subsidiary of Micro Focus International plc of Newbury, United Kingdom since July 2009, Borland produces enterprise software development applications and platforms for Application Lifecycle Management and Quality Assurance. Founded in 1981, Borland has made substantial global investments in the development of products for the software industry, and pioneered the emergence of new technologies that have enabled software products ranging from compilers, object-oriented programming languages, graphical user interfaces, web services, enterprise integrated development solutions, and development software for use across a wide variety of industries.[1]

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[1] The parties have consented in writing to the filing of this brief. 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, apart from the *Amicus Curiae* or its counsel. Counsel of record for the parties received notice of the *Amicus Curiae*'s intent to file this brief and written consent was granted in accordance with Supreme Court Rule 37.2(a).

SUMMARY OF THE ARGUMENT

1. Section 101 of the Patent Act provides patent eligibility for any "process, machine, manufacture, or composition of matter." This statute enumerates the four categories of eligible subject matter in the disjunctive. The language of section 101, including the word "or," has remained relatively unchanged since Congress enacted the Patent Act of 1793. The dictionary definition of the word "or" contemporary with the enactment of the statute indicates that "or" is disjunctive, and, thus, serves to separate. Consistent with the legislative history of the Patent Act of 1952 and this Court's precedents, the word "or" in section 101 has been construed as disjunctive. Therefore, process claims need only fall within any one of the statutory categories to be eligible for patent. But the Federal Circuit's new "Machine-or-Transformation" test now requires that the word "or" in the statute must be construed in the conjunctive as "and" when evaluating the eligibility of certain process claims. In particular, the "Machine-or-Transformation" test now requires a process claim to be tied to a machine. Therefore, an eligible claim must recite limitations to two statutory categories (i.e., to a process and to a machine). The Federal Circuit's test conflicts with the plain language of the statute.

2. The Federal Circuit has held that a claim combining two separate statutory classes is invalid under section 112, paragraph 2. But for purposes of patent eligibility, the Federal Circuit's "Machine-or-Transformation" test mandates that process and machine categories of § 101 must be

tied together, thereby combining two different statutory categories in a single claim. Therefore, a claim that recites a mixture of statutory categories for purposes of patent eligibility under section 101 also risks invalidity under section 112 for that same mixture of statutory categories. Therefore, the "Machine-or-Transformation" test clashes with its own jurisprudence under section 112, and consequently places patent applicants and patentees in a "Catch-22" situation.

3. This Court set forth a framework to determine patent eligibility from which the Federal Circuit strays widely. This Court declared that an inquiry must be made into whether a claim is seeking patent protection for a formula (e.g., a law of nature, physical phenomena, or idea) in the abstract. Such an inquiry explores whether a claim preempts others from using the formula in all cases, or whether the claim forecloses others from using only the combination of the formula and limitations recited in the claim, thereby permitting other processes and persons to practice different combinations of the formula with different limitations. In reaching its conclusion, the Court made no explicit references to or reliance on its analysis of the transformation of rubber into a different state or thing. The "Machine-or-Transformation" test abandons the necessity to inquire as to whether a law of nature, physical phenomena, or idea in a claim is one that is excluded from patent eligibility. Therefore, a process claim that fails the test is deemed—by the mere fact the test failed—to: (1) automatically include a law of nature, physical phenomena, or idea, and (2) preempt and foreclose the use of the law of nature, physical phenomena, or idea by

others. This test ignores the teachings of this Court.

4. The "Machine-or-Transformation" test, if affirmed by the Court, may discourage investment in new and emerging technologies in the software-related industries. Industries that develop massively multiplayer online games, networked data communications, security applications, financial services, application development and testing, and other types of software may be lose substantial value if the lower court's holding is affirmed.

5. A broad interpretation to determine patent eligibility was envisioned by Congress and the Court. Congress signaled its intent when it passed the 1952 Patent Act by indicating generally that the word "art" was replaced by "process" and intended to cover processes or methods generally.[2] Congress did not create any exceptions to the types of processes or methods that are patent-eligible. This was further reinforced by Congress' comments in the Revision Notes for Section 100.[3] In its notes to the amendment of the patent statutes to include 35 U.S.C. § 273 (i.e., the "earlier-inventor defense"), Congress reinforced its intent to maintain a broad scope of patent-eligible subject matter for process-related inventions by acknowledging that innovative business processes and methods are valuable to businesses in the financial services, software, and manufacturing

[2] H.R. No. 82-1923, at 17 (1952).
[3] Id. at 17.

industries and, again, no legislated exceptions were created.[4]

6. Regarding the Court, its precedents illustrate that the scope of patent-eligibility was intended to be expansive. To do otherwise invites substantial loss for software-related industries, many of which have gained tremendous value in process-related patents. Specifically, Borland may lose substantial investments made in its innovative software. Further, since its successful defense in *Lotus Development Corporation v. Borland International, Inc.*, Borland may lose substantial value derived from its patent efforts over the last three decades.

7. Increasingly complex software has evolved far beyond the industrially-applied computer programs of *Benson*, *Flook*, or *Diehr*. As many of these technologies may not pass the "Machine-or-Transformation" test, Borland urges the Court to maintain its liberal interpretation of patent-eligibility, which is flexibly suited to address unforeseen technologies. If the Federal Circuit is affirmed, a potential decline in investment into American software companies and the U.S. economy may occur during a time of dire economic crisis. The Court must consider the effects of narrowly interpreting patent-eligibility in view of new and emerging technologies that are creating substantial value for our society. In short, Borland believes it would be harmed if the "Machine-or-Transformation" test becomes the exclusive test for patent-eligibility of process-

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[4] *See* CONFERENCE REPORT, INTELLECTUAL PROPERTY AND COMMUNICATIONS OMNIBUS REFORM ACT OF 1999, H.R. Rep. No. 106-464, at 121-122 (1999).

related inventions such as software under 35 U.S.C. § 101.

ARGUMENT

1. THE FEDERAL CIRCUIT HAS ERRED IN HOLDING THAT A PROCESS—AS ONE STATUTORY CATEGORY—MUST BE TIED TO ANOTHER STATUTORY CATEGORY

A. The Language of the Patent Eligibility Statute does not Require that a Process Must be Tied to a Machine.

Patent eligibility is codified in 35 U.S.C. § 101, which provides that "[w]hoever invents or discovers any new and useful process, machine, manufacture, or composition of matter . . ." may obtain a patent. Section 101 enumerates four categories of patentable subject matter in the disjunctive. But the Federal Circuit's new test now requires that the word "or" in the statute must be construed in the conjunctive as "and" when evaluating the eligibility of certain process claims.

The "Machine-or-Transformation" test specifies that "[a] claimed process is surely patent-eligible under § 101 if: (1) it is tied to a particular machine or apparatus, or (2) it transforms a particular article into a different state or thing." *In re Bilski*, 545 F.3d 943, 951 (Fed. Cir. 2008) (en banc). This new requirement, which is the first prong of the test, is at odds with the disjunctive nature and intent of the plain language in the statute. A process-related invention that does not meet the second prong must recite a claim to two statutory categories—to both a process and a machine—if it

is to survive the "Machine-or-Transformation" test.

The Federal Circuit stated that the Court did not provide an explicit definition to the term "tied to" and crafted its own. *See Id.* at 954. Specifically, a process claim is "tied to" a machine if the claim recites a machine. Any recitation of a machine in a process claim is a limitation to the scope of that claim.

Thus, a claim must now recite limitations to both process and machine categories to satisfy the machine implementation prong of the "Machine-or-Transformation" test. *See Id.* at 965 (explaining that a claim is ineligible for patent if it effectively is drawn only to a mathematical algorithm, and where "[n]o machine was recited in the claim.") (citation omitted). *See Id.* at 961 (remarking that "even a claim that recites 'physical steps' but neither recites a particular machine or apparatus, nor transforms any article into a different state or thing, is not drawn to patent-eligible subject matter[,]" as the claim fails the "Machine-or-Transformation" test). *See also Id.* at 957 (specifying that "even if a claim recites a specific machine or a particular transformation of a specific article," thereby passing the "Machine-or-Transformation" test, "the recited machine or transformation must not constitute mere 'insignificant postsolution activity.'"). Accordingly, if a claim is to pass muster under the machine implementation prong, then that claim must recite limitations to both a process and a machine.

Statutory construction begins with the language of the statute. *Diamond v. Diehr*, 450 U.S. 175, 182 (1981). "[U]nless otherwise defined,

words will be interpreted as taking their ordinary, contemporary, common meaning." *Id.* (quoting *Perrin v. United States*, 444 U.S. 37, 42 (1979)). Further, the Court has "cautioned that courts 'should not read into the patent laws limitations and conditions which the legislature has not expressed.'" *Diamond v. Chakrabarty*, 447 U.S. 303, 308 (1980) (quoting *United States v. Dubilier Condenser Corp.*, 289 U.S. 178, 199 (1933)).

The plain meaning of the word "or" was disjunctive in the Patent Act of 1793. This Act defined the categories of statutory subject matter that is eligible for patent in language almost identical to § 101. The relevant language of the statute is as follows: "any new and useful art, machine, manufacture, or composition of matter." Act of Feb. 21, 1793, § 1, 1 Stat. 319. In view of above-identified cannons of statutory construction, the dictionary definition contemporary with the Patent Act of 1793 for the word "or" was: "a disjunctive particle, marking distribution, and sometimes opposition; it corresponds to Either, he must Either fall Or fly." Thomas Sheridan, A.M., A COMPLETE DICTIONARY OF THE ENGLISH LANGUAGE, Vol. II, (3d ed., 1790). "Canons of construction indicate that terms connected in the disjunctive . . . be given separate meanings." *Garcia v. United States*, 469 U.S. 70, 73 (U.S. 1984) (remarking that terms connected in the following manner are disjunctive: "mail matter" or "money" or "other property"), citing *FCC v. Pacifica Found.*, 438 U.S. 726, 740 (U.S. 1978) (explaining that words enumerated in the format 'word 1,' 'word 2,' or 'word 3' are "written in the disjunctive, implying that each has a separate meaning."). As with the statutory language in

FCC, § 101 includes an enumerated list of statutory categories in the disjunctive. Therefore, the word "or" in 35 U.S.C. § 101 must not be construed as mandating a conjunctive construction for the word "or," and, thus, the word "or" must not be interpreted as "and." Each of the four categories must be treated separately.

The legislative history is consistent with this statutory construction. In particular, the legislative history of the Patent Act of 1952 intended that the language of the previous patent eligibility statute was to be "preserved except that the word 'art' which appears in the present statute has been changed to the word 'process.'" S. REP. NO. 82-1979 (1952), reprinted in 1952 U.S.C.C.A.N. 2394, 2398, 2409-10. Thus, Congress intended that the disjunctive nature of the patent eligibility statute would endure, whereby a claimed invention falling within any one of the statutory categories is sufficient to be eligible for patent.

This Court's precedents have been consistent with the construction of § 101, as set forth above, and do not require that a claimed invention must cover two statutory categories. In *Kewanee Oil Co. v. Bicron Corp.* 416 U.S. 470, 483 (1974), the Court stated that: "no patent is available . . . unless it falls within one of the express categories of patentable subject matter of 35 U. S. C. § 101." "Congress has spoken in the area of those discoveries which fall within one of the categories of patentable subject matter of 35 U. S. C. § 101." *Id.* In *Diehr*, the Court explained that section 101 "is a general statement of the type of subject matter that is eligible for patent protection . . .

[based on] whether the invention falls into a category of statutory subject matter." 450 U.S. at 189-190 (citing *In re Bergy*, 596 F.2d 952, 961 (1979)). "The United States Supreme Court has never held that 'process' inventions suffered a second-class status under our statutes, achieving patent eligibility only derivatively through an explicit 'tie' to another statutory category." *In re Bilski*, 545 F.3d at 990 (Newman, J., dissenting).

The "Machine-or-Transformation" test and its machine implementation prong are incongruous with both the patent eligibility statute and the Court's precedents. Therefore, the mandatory tying of two statutory categories must be rejected to recalibrate patent eligibility determinations to comply with 35 U.S.C. § 101.

B. The Federal Circuit's "Machine-or-Transformation" Clashes with its Own Jurisprudence under 35 U.S.C. § 112.

In *IPXL Holdings, L.L.C. v. Amazon.com, Inc.* 430 F.3d 1377 (2005), which was a case of first impression at the Federal Circuit, the court held that a claim combining two separate statutory classes was invalid. The invalidity of such a claim is premised on 35 U.S.C. § 112 ¶ 2. A claim is invalid if it fails to "particularly point[] out and distinctly claim[] the subject matter which the applicant regards as his invention." 35 U.S.C. § 112 (1975). In *IPXL Holdings*, the Federal Circuit ruled that a claim that recites "both a system and the method for using that system . . . does not apprise a person of ordinary skill in the art of its scope, and it is invalid under section 112,

paragraph 2." *Id.* at 1384. Three years after *IPXL Holdings*, the Federal Circuit revisited the issue and stated that "no single claim may cover more than one subject matter class." *Microprocessor Enhancement Corp. v. Tex. Instruments Inc.*, 520 F.3d 1367, 1374 (2008), citing *IPXL Holdings* 430 F.3d at 1384 (holding indefinite a claim covering both an apparatus and a method of using that apparatus).

The MANUAL OF PATENT EXAMINATION PROCEDURE ("the MPEP") sets forth rules to guide the Examination Corps of the United States Patent & Trademark Office in the examination of all patent applications. The MPEP recites a rule against combining different statutory classes in a single claim, and requires the rejection of such claims. The MANUAL OF PATENT EXAMINATION PROCEDURE, § 2173.05(p)(II) (July 2008) dictates that: "[a] single claim which claims both an apparatus and the method steps of using the apparatus is indefinite under 35 U.S.C. § 112, second paragraph." (citations omitted). Notably, the MPEP continues:

> [s]uch claims may also be rejected under 35 U.S.C. 101 based on the theory that the claim is directed to neither a 'process' nor a 'machine,' but rather embraces or overlaps two different statutory classes of invention set forth in 35 U.S.C. 101 which is drafted so as to set forth the statutory classes of invention in the alternative only.

Id. citing *Ex parte Lyell*, 17 USPQ2d 1548, 1551 (1990). The MPEP comports with the above

statutory construction and Court precedents. Thus, Examiners are to view § 101 as a list of statutory categories enumerated in the "alternative only" (i.e., in a disjunctive manner). *Id.*

For purposes of patent eligibility, the Federal Circuit's "Machine-or-Transformation" test mandates that process and machine categories of § 101 must be tied to each other, thereby combining two different statutory categories. In particular, a claim to a certain process must also recite a machine or apparatus. This requirement is in contravention with the prohibition of *IPXL Holdings* in that a single claim cannot overlap two different statutory classes. Therefore, a claim reciting a mixture of statutory categories for purposes of patent eligibility under 35 U.S.C. § 101 is also—and simultaneously—at risk of invalidity under 35 U.S.C. § 112 ¶ 2 for that same mixture of statutory categories. The "Machine-or-Transformation" test consequently places patent applicants and patentees in a "Catch-22" situation. Compliance with both 35 U.S.C. § 101 and 35 U.S.C. § 112 are now mutually exclusive. The Federal Circuit's "Machine-or-Transformation" test exacerbates the uncertainty in protecting patent properties and adds confusion to the patent application examination process for not only software patent applicants, but for all applicants for which a process patent is sought. This Court must clarify or dispense with the "Machine-or-Transformation" to stabilize the jurisprudence of patent eligibility at the Federal Circuit.

2. THE "MACHINE-OR-TRANSFORMATION" TEST DEPARTS FROM THE PATENT ELIGIBILITY FRAMEWORK SET FORTH IN *DIEHR*

A. Determining Patent Eligibility under Diehr Requires Preemption Analysis.

The Court set forth a framework in *Diehr* to determine patent eligibility. This framework requires that a claim must be analyzed to determine whether it preempts all uses of a law of nature, physical phenomena, or idea (i.e., in the abstract). *Id.* at 191 ("[A]n inquiry must be made into whether the claim is seeking patent protection for that formula in the abstract . . . when a claim recites a mathematical formula (or scientific principle or phenomenon of nature.")).

Such an inquiry explores whether a claim preempts others from using the equation in all cases, or whether the claim forecloses others from using only the combination of the equation and limitations recited in the claim. *See generally Id.* at 187 ("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.").

If a claim prevents others from using the equation, then the claim seeks to preempt the use of the equation, and, therefore, is excluded from eligibility under § 101. For example, the limitations of a claim directed to only an equation preempts the use of the equation by others. But if

a claim forecloses others from using only a particular combination of the equation and claim limitations while permitting others to use the equation in combination with different steps, then the application of the equation is eligible for patent. *See generally Id.* at 187. For example, a claim directed to a combination of an equation and limitations A, B, and C does not foreclose others from practicing a claimed combination including the equation and a limitation D.

In resolving the question of patent eligibility, the Court in *Diehr* analyzed the claims initially and observed that the claims "involve the transformation of an article, in this case raw, uncured synthetic rubber, into a different state or thing." *Id.* at 184. The transformation into different states or things is a "clue" or factor in determining patent eligibility. *Id.* But the Court neither ended its analysis there nor relied expressly on that observation that the claims involve such a transformation; rather, the Court performed its preemption analysis to reach its conclusion.

The Court first identified the use of the Arrhenius equation in the claim at issue. Thus, the first step in the preemption analysis is to identify a law of nature, physical phenomena, or abstract idea covered by the claim. Then, the Court explored whether the equation in the claim was otherwise limited by other steps to determine whether the equation was claimed in the "abstract." The second step in the preemption analysis, therefore, is to determine whether the claims "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. In *Diehr*, the Court's analysis identified other steps in the claim: "installing rubber in a press, closing the mold, constantly determining the temperature of the mold, 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." *Id.* As there were limitations in the claim beyond those directed to just the equation, other processes and persons are not be foreclosed from practicing the Arrhenius equation in combination with different limitations. Based on its analysis, the Court in *Diehr* found that the application of the equation was eligible for patent. Importantly, the Court made no explicit references to or reliance on its analysis of the transformation of rubber into a different state or thing to reach its conclusion.

B. The "Machine-or-Transformation" Test Does Not Require Preemption Analysis and Fails to Comport with Patent Eligibility under *Diehr*.

The "Machine-or-Transformation" test under *In re Bilski* does not require a preemption analysis, and, therefore, abandons the necessity to inquire as to whether a law of nature, physical phenomena, or abstract idea in a claim is one that is excluded from patent eligibility. Thus, under *In re Bilski*, a process claim that fails either the machine prong or the transformation prong is deemed—by the mere fact the test failed—to: (1) include a law of nature, physical phenomena, or abstract idea, and (2) preempt and foreclose the

use of the law of nature, physical phenomena, or abstract idea by others.

By ignoring the teachings of *Diehr*, emerging and unforeseen technologies that fail the "Machine-or-Transformation" test will be deemed ineligible for patent, even though claims directed to some of the emerging and unforeseen technologies may not include a law of nature, physical phenomena, or abstract idea that are excluded from patent eligibility under § 101. The "Machine-or-Transformation" test automatically concludes that a process only embodies a law of nature, physical phenomena, or abstract idea if the process does not perceptibly transform a particular article into a different state or thing, thereby precluding inquiries into whether the claim actually seeks to foreclose others from using a fundamental principle.

The Federal Circuit acknowledged the necessity to perform a preemption analysis set forth in *Diehr* but did not include it in its test.

> *Diehr* can be understood to suggest that whether a claim is drawn only to a fundamental principle is essentially an inquiry into the scope of that exclusion; i.e., whether the effect of allowing the claim would be to allow the patentee to pre-empt substantially all uses of that fundamental principle. If so, the claim is not drawn to patent-eligible subject matter.

In re Bilski, 545 F.3d at 956. The "Machine-or-Transformation" test omits such an inquiry.

The Federal Circuit admits it did not have explicit definitions of the terms "transform" and "article" with which to fashion its test. *See generally Id.* at 954. If the "Machine-or-Transformation" test is to stand in its present form, patent eligibility will be won or lost based only on the perceptibility or physicality of the terms "transform" and "article," and whether the construction of those terms will be determined with a 19th century technological lens. It would be disconcerting if the "Machine-or-Transformation" test stands, especially as industrialized nations move from a manufacturing-based economy (i.e., that creates tangible products) to a service-based economy (i.e., that creates intangible products). The "Machine-or-Transformation" test strays widely from patent eligibility framework set forth by the Court in *Diehr* and must be rejected.

3. AFFIRMING THE FEDERAL CIRCUIT'S NARROW INTERPRETATION IGNORES THIS COURT'S PRECEDENT FOR A BROADER STANDARD UNDER WHICH EMERGING TECHNOLOGIES CAN BECOME PATENT-ELIGIBLE

A. Limiting the Judicial Determination of Patent-Eligible Subject Matter to the Exclusive Application of the "Machine-or-Transformation" Test Raises Barriers for New and Emerging Technologies in Software-Related Industries.

The Federal Circuit held that the "Machine-or-Transformation" test is the sole test for

determining patent-eligibility under 35 U.S.C. § 101. *In re Bilski*, 545 F.3d at 956. However, the Court's prior precedents indicate otherwise. *See Gottschalk v. Benson*, 409 U.S. 63, 70 (1972). In contrast to the Federal Circuit, the "Machine or Transformation" test is meant to be a "clue" and not the sole test for determining patent-eligibility. This Court stated this in *Benson* and *Parker v. Flook*, followed by more definite assertions in *Diehr* that patent eligibility under 35 U.S.C. §101 should be broadly interpreted. *See Benson*, 409 U.S. at 71; *see also Parker v. Flook*, 437 U.S. 584, 589 (1978); *see* 450 U.S. at 187-188 and192 (1981).

This Court's precedent clearly establishes that patent-eligible processes may be found under 35 U.S.C. § 101 regardless of whether the "Machine-or-Transformation" test is met. *See id.* For many emerging technologies in software-related fields, inventions are often not tied to a particular machine nor intended to effect a transformation of a particular article to a different state or thing. For example, the present *Amicus Curiae* develops complex software at considerable expense in time, money, and effort to create innovative software that other organizations may use to develop specialized computer applications for use in small, medium, and large enterprises, often being delivered or executed entirely "online" without connection to the physical environment around us. Thousands of businesses and individuals in software-related industries create innovative computer programs that do not require specific types of machines or transformations and seek patent protection for their inventions. However, if the motivation of patent protection is not

available, investment and motivation to innovate will likely decline.

In *Benson*, this Court specifically commented on whether a process, to be found patentable, must be tied to a particular machine or transform a particular article to a different state or thing. This Court unequivocally stated:

> "It is argued that a process patent must either be tied to a particular machine or apparatus or must operate to change articles or materials to a "different state or thing." *We do not hold that no process patent could ever qualify if it did not meet the requirements of our prior precedents. It is said that the decision precludes a patent for any program servicing a computer. We do not so hold…It is said we freeze process patents to old technologies, leaving no room for the revelations of the new onrushing technology. Such is not our purpose.*" (emphasis added)

See Benson, 409 U.S. 63, 71 (1972). The Court clearly anticipated that process-related inventions may be found beyond the confines of the "Machine-or-Transformation" test. As many software-related inventions are neither coupled to a particular machine nor transform a particular article into a different state or thing, the reliance upon a singular test to determine patent-eligibility is flawed. Further, the continued perception of software as purely mathematical is also inaccurate because of the advent of higher order programming and formatting languages that no longer require the direct input of mathematical

formulae (e.g., object-oriented programming that utilizes objects to define groups of functions and not individual functions themselves). At the time of *Benson*, *Flook*, and *Diehr*, contemporary computer programming was largely based on unstructured computer programming techniques that typically required writing individual routines, sub-routines, and mathematically-based operations. However, computing technologies today have evolved far beyond the use of writing program code based on purely mathematical formula such as the program code used to convert binary coded decimals into pure binary code as set forth in *Benson*. Object-oriented programming now allows software developers to write program and source code based on practical applications such as modeling workflows or simulating operation of a machine.

With the advent of object-oriented programming and higher order programming and formatting languages, software has become fundamentally complex and defines relationships between data structures such as objects, classes, libraries, or data constructs that are not found in nature, but are intangible creations of man and, thus, should be patentable. These new and useful processes should also be patentable because software often acts, models, or performs functions similar to physical machines producing benefits or results that are as useful as a patent-eligible rubber-curing process under the "Machine-or-Transformation" test. In other words, the Patent Act, in its presently amended form, was not intended to promote the *contemporaneous* useful arts of 1952, 1999, or 1793, but was intended to be ubiquitously applied to determining patent-

eligible subject matter in any era or epoch of human technological development.

As amended from "art" by the 1952 Patent Act, the term "process" was intended to describe subject matter that should be patent-eligible as these promote "…the Progress of Science and useful Arts," as set forth by the Constitution in Article 1, Section 8. To allow the lower court's holding to stand invites the destruction of untold value and investments made in process-related software inventions and disregards a historically broad interpretation of 35 U.S.C. § 101.[5]

Today, this Court's prior precedents for establishing patent-eligibility are broader than the "Machine-or-Transformation" test, as stated by the Federal Circuit. Due to advances in computing and information technology such as increasingly powerful processors, computer memories, network

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[5] As of the time of submission of this brief, the present Amicus Curiae notes that several cases have been appealed to the Federal Circuit, which has issued a stay pending the outcome of the present case, but all of which are raising similar issues as to whether and how a process-related invention is patent-eligible under 35 U.S.C. § 101. Specifically, each of the stayed appeals may be implemented using software, increasing the urgency of requesting this Court's intervention to reaffirm established precedent that process-related inventions may be found without requiring passage under the "Machine-or-Transformation" test. *See Every Penny Counts, Inc. v. Bank of America Corp.*, No. 2:07-cv-042, slip op. (M.D. Fla. May 27, 2009), *motion for stay pending*, No. 2009-1442 (Fed. Cir. Jul. 27, 2009). S*ee also CyberSource Corp. v. Retail Decisions, Inc.*, No. 3:04-cv-03268, slip op. (N.D. Cal. Mar. 27, 2009), *appeal stayed*, No. 2009-1358 (Fed. Cir. Jul. 30, 2009). *See also Fort Properties, Inc. v. American Master Lease, LLC*, No. 8:07-cv-365, slip op. (C.D. Cal. Jan. 22, 2009), *appeal stayed*, No. 2009-1242 (Fed. Cir. Jun. 11, 2009).

communications systems, devices, and techniques, and reduced transistor and semiconductor feature sizes, many innovations in these fields may not be patent-eligible under the "Machine-or-Transformation" test because they may not require any type of specialized equipment other than a "general purpose computer." For example, software applications developed by the present *Amicus Curiae* may be used by companies to develop other computer programs intended for downloading over the Internet (or another data network) or installed on a general purpose computer from a type of storage medium known as a "CD-ROM" (i.e., "Compact Disc-Read-Only Memory"). Many computer programs are written exclusively for performing a task or set of tasks between computers, often being hosted or served from a general purpose computer, server, computing cloud, or the like. This software may not be tied to a particular machine or transform a particular article into a different state or thing. In many instances, software developers may not be aware of the specific machines (e.g., servers) that are being used to host their applications, which may reside in "server farms" that are far-removed from the physical locale of the software development site. Given current trends in software development, the present *Amicus Curiae* urges the Court to reinforce its interpretation that a broader reading of 35 U.S.C. § 101 is consistent with its prior precedents and suitable for application to process-related inventions such as software and other new or emerging technologies.

B. The Court's Precedents Do Not Limit Patent-Eligibility for Process-Related Inventions to Those that Meet the "Machine-or-Transformation" Test.

In *Benson*, the Court stated that a process may be patentable even if it does not meet the "Machine-or-Transformation" test. *See* 409 U.S. at 71. This guideline was further reinforced by Justice Stevens writing for the majority in *Flook*, when he stated that:

> "[A]n argument can be made, however, that this Court has only recognized a process as within the statutory definition when it was either tied to a particular apparatus or operated to change materials to a "different state or thing." See *Cochrane v. Deener*, 94 U.S. 780, 787-788. As in Benson, we assume that a valid process patent may issue even if it does not meet one of these qualifications of our earlier precedents." See *Parker v. Flook*, 437 U.S. at 589.

By contrast, the Federal Circuit contends that this breadth of interpretation does not exist because these statements were not recited in *Diehr*. *In re Bilski*, 545 F. 3d at 956. Justice Stevens did not opine, nor has any Justice writing for a majority of the Court, ever stated that the "Machine-or-Transformation" test was intended to be the sole and exclusive test for determining patent-eligibility. The so-called "caveat" (i.e., that process-related inventions may be found patentable apart from those that meet the

"Machine-or-Transformation" test) was absent from the Court's opinion in *Diehr* and the Federal Circuit assumed that the Court had narrowed the scope of patent-eligible subject matter. *See In re Bilski*, 545 F.3d at 956. However, the Court's use of open-ended language in the decision in *Diehr* suggests that the Court was not receding from a broader interpretation of 35 U.S.C. § 101. *See* 450 U.S. at 184. Further, if the Court meant to draw down the scope of interpretation of patent-eligible subject matter, it would have done so. In other words, the Federal Circuit improperly assumed this Court's intent in the absence of any other indications of the scope of patent-eligible processes.

The Federal Circuit failed to take into account the analysis performed by this Court establishing that processes may be patentable, regardless of particular machinery or transformations coupled thereto. In *Diehr*, the Court reinforced the long-standing, guiding principle by which any invention is deemed to be patentable based on whether it claims a law of nature, mathematical algorithm, or fundamental principle wholly or claims an *application* thereof. As recited by the Court previously, "[T]hat a process may be patentable, irrespective of the particular form of instrumentalities used, cannot be disputed." *See Cochrane*, 94 U.S. at 787-788. If claimed as a process, software should need to exhibit nothing more to gain patent-eligibility than show that pre-emption of all uses of a fundamental principle, law of nature or physics, phenomenon of nature are not ought. *See Diehr*, 450 U.S. at 191.

Software has a practical application that should be patent-eligible, regardless of whether it meets the "Machine-or-Transformation" test. As a process-related invention, software typically relies upon the use of computer programs to help encode or generate the necessary object and source code that provides instructions to a computer processor (or group thereof) for performing a function or set of functions. The Federal Circuit's assumptive logic that patent-eligible processes may be found apart from the "Machine-or-Transformation" test disregards the Court's guidelines that patent-eligible processes may be also be found apart from the test when a practical application is determined. *See Diehr*, 450 U.S. at 187-188. The lower court's flawed logic assumes that the Court intended to disavow breadth in its interpretation of 35 U.S.C. § 101 because it did not repeat the "caveat" set forth in *Benson* or *Flook*. *See In re Bilski*, 545 F.3d at 956. The present *Amicus Curiae* disagrees in that the Court signaled its continued intent to ensure that the scope of patent-eligible processes remained broadly interpreted in order to accommodate new and emerging technologies, "[I]t 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." *See Diehr*, 450 U.S. at 187-188.

C. Alternatively, if the Definitive Test for Patent Eligibility is the "Machine-or-Transformation" Test, the Court Must Establish its Precise Contours for Process-Related Inventions such as Software.

If, as stated in *Benson*, the "Machine-or-Transformation" test is the "clue" to determining patent-eligibility under 35 U.S.C. § 101, the Court is urged to provide guidance to the software industry on its full interpretation. Already, the present *Amicus Curiae* is contending with a wide variety of inconsistent examination results for software-related inventions from the Patent and Trademark Office and, without clear guidance from this Court, will undoubtedly continue to do so. Further, there is concern regarding lower courts that are attempting to apply the "Machine-or-Transformation" test, including interpreting the "machine" prong, but without guidance from either the Federal Circuit or this Court. For example, in *CyberSource Corp. v. Retail Decisions, Inc.*, No. 3:04-cv-03268, slip op. (N.D. Cal. Mar. 27, 2009), *appeal stayed*, No. 2009-1358 (Fed. Cir. Jul. 30, 2009), the District Court applied the "machine" prong of the "Machine-or-Transformation" test in a patent infringement matter without guidance from the Federal Circuit or this Court resulting in an appeal of the decision. Fortunately, this appeal has been stayed pending the outcome of the present case.

Without guidance or precedent from either the Federal Circuit or this Court, District Courts such as that in *CyberSource*, will mistakenly jeopardize the patent rights of legitimate inventors and assignees of software-related inventions. In light of the Federal Circuit's admission that "[W]e leave to future cases the elaboration of the precise contours of machine implementation, as well as the answers to particular questions, such as

whether or when recitation of a computer suffices to tie a process claim to a particular machine," the present *Amicus Curiae* believes that the "future" case is the present one. *See In re Bilski*, 545 F.3d at 962. If the "Machine-or-Transformation" test is to be the exclusive challenge to patent eligibility, this Court must set forth (and the lower courts shall follow) the precise contours of the test so as to create predictable, enforceable rights for inventors seeking patents on process-related inventions. Further, by defining the precise contours of the "machine" prong of the "Machine-or-Transformation" test, lower courts will be discouraged from speculative interpretation and application of this Court's precedent.

4. CONGRESSIONAL INTENT BEHIND THE ENACTMENT OF 35 U.S.C. § 273 CLEARLY ENVISIONED PROCESSES SUCH AS BUSINESS METHODS AND SOFTWARE AS BEING WITHIN THE SCOPE OF PATENT-ELIGIBLE SUBJECT MATTER UNDER 35 U.S.C. § 101

A. Congress' Intent to Establish a Legislative Defense to Infringement for Business Methods Indicates Processes Other Than Those Meeting the "Machine-or-Transformation" Test are Patentable under 35 U.S.C. § 101.

The enactment of the Intellectual Property and Communications Omnibus Reform Act of 1999 provided a "first inventor defense" against new forms of process-related inventions that were

previously thought unpatentable. However, Congress' enactment of an infringement defense in lieu of passing legislation to ban patents from being issued for inventive methods for doing and conducting business, as set forth in 35 U.S.C. § 273(a)(3), signaled that the legislature intended that existing patent law should be interpreted and applied to emerging technologies in fields such as "…financial services, software companies, and manufacturing firms-any business that relies up on innovative business processes and methods."[6] If Congress had intended to enact a policy-driven change to the patent laws believing the current patent laws were over-reaching with regard to process-related inventions, it would have done so.

In the Conference Report for the Intellectual Property and Communications Omnibus Reform Act of 1999, Congress acknowledged the on-going breadth of interpretation of 35 U.S.C. § 101 when it stated:

> "Subtitle C strikes an equitable balance between the interest of U.S. inventors who have invented and commercialized business methods and processes, many of which until recently were thought not to be patentable, and U.S. or foreign inventors who later patent the methods and processes."

See CONFERENCE REPORT, INTELLECTUAL PROPERTY AND COMMUNICATIONS OMNIBUS

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[6] *See* CONFERENCE REPORT, INTELLECTUAL PROPERTY AND COMMUNICATIONS OMNIBUS REFORM ACT OF 1999, H.R. Rep. No. 106-464, 122 (1999).

REFORM ACT OF 1999, H.R. Rep. No. 106-464, at 121.

Clearly, Congress did not intend to curtail the scope of interpretation or applicability of 35 U.S.C. § 101, but instead intended that the existing law is broad enough to apply to new and emerging technologies, although the present *Amicus Curiae* maintains that software is no longer an "emerging" technology given its development over the last half-century.

B. By Broadly Interpreting the Scope of the Patent Statute to Include Process-Related Inventions such as Software, the Court is Not Making Policy, but Enforcing that Already Intended by Congress.

It is not policy-making to interpret the scope of the statute to encompass new and novel processes beyond those of the Industrial Age. As stated by the Court in *Diehr*:

> "It is for the discovery or invention of some practical method or means of producing a beneficial result or effect, that a patent is granted….It is when the term process is used to represent the means or method of producing a result that is patentable, and it will include all methods or means which are not effected by mechanism or mechanical means." *See Diehr*, 450 U.S. at 184; *see also Corning v. Burden*, 15 How. 252, 267-268 (1854).

Given the breadth of interpretation of 35 U.S.C. § 101 for finding patent-eligible processes, policy has been established by Congress and should be enforced by this Court's interpretation of its precedent in the present case.

The present *Amicus Curiae* acknowledges that the Court must exercise care and diligence when interpreting existing law with regard to its applicability to emerging technologies. As Justice Stevens stated in *Flook*, "…It is our duty to construe the patent statutes as they now read, in light of our prior precedents, and we must proceed cautiously when we are asked to extend patent rights into areas wholly unforeseen by Congress." 437 U.S. at 596. However, the application of 35 U.S.C. § 101 to methods of doing or conducting business was not wholly unforeseen by Congress. What was unforeseen may have been the instrumentalities (e.g., the Internet, networked computers and telecommunications systems, electronic commerce, logistics management software, commodities and futures trading software, electronic security systems and software, financial management software, among others) by which these methods are effected. Regardless, and as stated by this Court, a "…process may be patentable, irrespective of the particular form of instrumentalities used, cannot be disputed." *See Cochrane*, 94 U.S. at 787-788.

The Court is urged to maintain its vigilance and caution with regard to interpreting the law and its precedents when considering whether the "Machine-or-Transformation" test is the sole test for determining patent-eligibility under 35 U.S.C. § 101. The Federal Circuit's requirement of the

"Machine-or-Transformation" test as the only challenge to patent eligibility disregards precedent of this Court and Congress' intention that process-related inventions should be held to a broader categorical scope of patent-eligible subject matter.

5. THE SCOPE OF 35 U.S.C. § 101 SHOULD BE BROADLY INTERPRETED TO AVOID DISCOURAGING INNOVATION AND INVESTMENT IN SOFTWARE-RELATED INDUSTRIES

A. Innovations in Software-Related Industries are Becoming Increasingly Complex and are not Necessarily Reliant on a Particular Machine or Transformation of a Particular Article Into a Different State or Thing.

Thomas Jefferson believed that our patent statutes should recognize that "…ingenuity should receive a liberal encouragement." 5 Writings of Thomas Jefferson 75-76 (Washington ed. 1871). The promise of a grant of legal privilege conveying exclusive patent rights is the bargained-for exchange that motivates inventors to apply for a patent and disclose his invention to the public. If the incentive is removed, inventors may not only fail to disclose their inventions, but investors may divert investment and resources into other activities, where economic or other barriers to entry may be erected in order to mitigate the risk of losing substantial investments in personnel, time, energy, resources, and finance. Affirming the Federal Circuit will eliminate a strong incentive to invest in innovation, particularly for

technologies such as software, which are often very technically complex and devoid of any specific hardware (i.e., particular machine) requirement or transformation, requiring substantial time (often measured in months, if not years, of development time) and money in order to bring a new service, product, or technology to market.

Software-related innovations in fields such as enterprise software (of various sort), virtual machines (i.e., a software-based emulation of a physical machine), shard or instance-based computing platforms, mobile computing platforms and devices, distributed computing platforms (e.g., cloud computing), middleware applications (i.e., computer programs that provide functions between other computer programs), electronic commerce, financial transactions and services, and others are increasingly divorced from the need for application-specific hardware requirements. Applications (i.e., software) such as these are often distributed over data networks such as the Internet or World Wide Web in order to allow customers, individuals and businesses alike, to find, purchase, download, or stream (i.e., temporarily executing an application from a remote location without downloading a copy to one's computer) data, information, or content. Many of these process-related innovations, however, may likely run afoul of the "Machine-or-Transformation" test, failing this Court's enforcement of its traditionally broad scope of interpretation of patent-eligibility. Information technology has advanced to the point where the Federal Circuit's interpretation of existing patent laws is obsolete, not the law itself.

The enactment of the 1952 Patent Act clearly establishes that patent eligibility of inventions, including processes or methods, was intended to have a broad scope of application. Specifically, the Report from the Committee on the Judiciary for the House of Representatives for the 1952 Patent Act provided that:

> “”Process” has been used as its meaning is more readily grasped than “art” as interpreted, and the definition in section 100 (b) makes it clear that “process or method” is meant. The remainder of the definition clarifies the status of processes or methods which involve merely the new use of a known process, machine, manufacture, composition of matter, or material; they are processes or methods under the statute and may be patented provided the conditions for patentability are satisfied.” H.R. No. 1923, at 17 (1952).

Congress amended 35 U.S.C. § 101 to clarify the types of processes or methods that may be eligible for patenting, assuming other conditions for patentability are met, including 35 U.S.C. §§ 102 (anticipation of novelty) and 103 (obviousness). *See* H.R. No. 1923, at 6. As Congress did not further elaborate in its passage of the 1952 Patent Act on specific types of patent-eligible processes or exclusions therefrom, it is apparent that a broader interpretation of 35 U.S.C. § 101 than that provided by the Federal Circuit was intended. When combined with the subsequent judicial interpretations under *Benson*, *Flook*, and *Diehr*, illumination is shed upon the

proposition that a broad scope to 35 U.S.C. § 101 is appropriate and was intended to accommodate new and emerging complex technologies, regardless of whether a particular machine or transformation is involved. *See Benson*, 409 U.S. at 71; *see also Flook*, 437 U.S. at 589. The present *Amicus Curiae* urges this Court to import into its analysis of the lower court's decision its prior precedents and Congress' intent behind 35 U.S.C. § 101, not the historical, technological context surrounding those events (i.e., the Industrial Revolution).

B. Restricting Patent-Eligibility for Software-Related Inventions to Only Those that Meet the "Machine-or-Transformation" Test Increases Vulnerability of Software-Related Inventions to an Increasing Amount of Piracy and Theft.

Having a strong intellectual property regime, including patents, for process-related inventions is a crucial part of the U.S. economy, particularly for information technology concerns such as software companies and any type of organization that develops software. Despite the current economic crisis, worldwide information technology budgets are expected to top $750 billion in 2009.[7] The present *Amicus Curiae* provides, in addition to application lifecycle management (ALM) software, application testing and quality assurance (QA) computer programs for use by customers, typically

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[7] *See* Gary Kim, *U.S. IT Spending to Dip Slightly* (visited Aug. 4, 2009) <http://www.tmcnet.com/tmcnet/videos/video-news/articles/56329-us-it-spending-dip-slightly.htm>.

enterprises or other large organizations. By some estimates, annual revenues in the testing and QA sub-market alone exceeds $2 billion.[8] In other sectors such as application testing and gaming software, annual revenues are also increasing at a dramatic rate.[9] Despite these substantial markets, jobs, and revenue increases, the U.S. software market typically accounts for over $45 billion annually, but loses roughly $9.1 billion to piracy (i.e., copying of unlicensed software).[10] In the intervening years since *Diehr*, patent protection for process-related inventions has increased. When methods of operation for user interface software was found to be functional and therefore uncopyrightable in *Lotus Development Corporation v. Borland International, Inc.*, software development firms turned to the use of patents to protect its innovations. *See* 49 F.3d 807 (1st Cir. 1995), *aff'd per curiam*, 516 U.S. 233 (1996). Following *Borland*, software piracy has not only held steady against the backdrop of increased U.S. software patent filings and issuance, but the U.S. currently has the lowest

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[8] *See* Darryl K. Taft, *Micro Focus Gains ALM Muscle with Borland Compuware Unit Buys* (visited Aug. 4, 2009) <http://www.eweek.com/c/a/Application-Development/Micro-Focus-Gains-ALM-Muscle-with-Borland-Compuware-Unit-Buys-667571/>.

[9] *See* Tor Thorsen, *Study: 2012 Game Revs to Hit $68.3 Billion* (visited Aug. 1, 2009) <http://www.gamespot.com/pc/rpg/worldofwarcraft/news.html?sid=6192719>.

[10] *See A Fifth of PC Software in United States is Pirated, Posing Challenges to High Tech Sector and Cyber Security* (visited Aug. 1, 2009) <http://www.bsa.org/country/News%20and%20Events/News%20Archives/global/05122009-idc-globalstudy.aspx>.

software piracy rate in the world at twenty percent (20%).[11] Affirming the Federal Circuit's exclusive assertion of the "Machine-or-Transformation" test may have a reversing effect that could not only cost the U.S. its lead in software-related industries, but also result in a dramatic rise of piracy-related losses. In other words, the present *Amicus Curiae* maintains that a broad scope of patent-eligibility is important for the U.S. to maintain its leadership position in the field of software.

The U.S. has the lowest piracy rate in the world due in no small measure to the existence of strong intellectual property rights, including the availability of patents for process-related inventions such as software. As the world's largest software market, the U.S. cannot afford to eliminate patent protection for process-related inventions, depriving thousands of companies and individuals of valuable patent rights. The present *Amicus Curiae* has garnered substantial revenues in the hundreds of millions of dollars from its wielding of patent rights that it has accrued over the last three decades. Further, maintaining the Federal Circuit's narrow interpretation of the scope of patent-eligible subject matter may well result in a dramatic rise of piracy and theft, which may also contribute to heightened national security concerns due to the unauthorized exploitation of unlicensed software left unprotected except by copyright, which is not a recognizable form of intellectual property protection in high-piracy regimes such as China. In short, reliance upon the "Machine-or-

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[11] *See id.*

Transformation" test as the exclusive test for determining patent-eligibility will irrevocably damage the U.S.' standing as the world's leading software market. Further, a pending appeal before the Enlarged Board of the European Patent Office regarding the patentability of software-related inventions will undoubtedly be influenced by the decision of this Court and affect global software markets.[12]

C. Without Exclusionary Patent Rights, Innovators in the Software-Related Industries May Have Less Incentive to Innovate and Investors May Have Less Incentive to Invest in American Companies and the US Economy.

Unlike the rubber-curing process in *Diehr* or the flour manufacturing processes in *Cochrane*, many software applications do not necessarily require Industrial Age implementations in order to be practiced, but often produce beneficial uses or results. Process-related inventions in software serve many useful and practical purposes, but do not, and should not be forced to include particular machinery or effect transformation of a particular article into a different state or thing. Due to the advent of new communication technologies such as the Internet and data networking technologies,

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[12] *See* Letter from Alison Brimelow, President, *European Patent Office*, to Peter Messerli, Chairman of the Enlarged Board of Appeal, European Patent Office (October 22, 2008) <http://documents.epo.org/projects/babylon/eponet.nsf/0/B89D95BB305AAA8DC12574EC002C7CF6/$File/G3-08_en.pdf>.

individuals and businesses in software-related industries are able to generate substantial returns on investments by employing and training a skilled development labor force, which fosters innovation. Further, these companies are motivated by the potential gain of exclusionary rights awarded under a patent. However, investing in a software-related company requires, in part, evaluating its intellectual property assets and determining how and whether these assets may be employed to gain a competitive position in a highly competitive market place. As the barriers to entering numerous software industries such as electronic commerce, social networking, online gaming, enterprise resource planning (ERP), customer relationship management (CRM), QA, and many others have been eased due to the growing use of Software as a Service (SaaS), distributed computing platforms (e.g., cloud computing), and other enabling technologies, investors must seek out companies that have developed other competitive advantages such as patents.

For many companies, investment in patent protection is a costly effort and time-consuming strategic activity. Investment in gaining patent protection is typically one of the most important decisions any software company makes and, by affirming the lower court's holding, valuable intellectual property is left vulnerable to piracy, theft, and, even, exploitation for purposes of gaining access to national security information. The use of an Industrial Age test to determine patent-eligibility for Information Age innovations is fundamentally flawed and this Court is urged to elaborate upon the proper scope of patent-eligible

processes under 35 U.S.C. § 101. In other words, to require a software-related invention to be tied to a particular machine or transform a particular article to a different state or thing is analogous to requiring the addition of a sail to a modern day U.S. Navy warship already replete with surface-to-air missiles and phased array radar systems.

New and emerging technologies fall under the scope of interpretation of 35 U.S.C. § 101 and should not be restrained by impermissibly narrow interpretations such as those set forth by the Federal Circuit. Both Congress and this Court have anticipated the arrival of unforeseen technologies and existing laws should not be narrowly interpreted to accommodate past technological contexts. The goal of obtaining a U.S. patent derives significant benefit and revenue for the country and encourages further investment in innovation at a time of economic crisis.

The process-related invention in *Diehr*, which was directed to an industrial process that employed a digital computer, is unlike today's information technology, which often relies upon nothing more than the Internet and networked communications. Innovative advances in software, distributed health care information systems, online communities and virtual worlds, social networking, communications systems, massively multiplayer online gaming, enterprise application development, software testing tools, quality assurance applications, and many others will fall victim to exclusion if the Federal Circuit's holding is affirmed leading to substantial, detrimental outcomes for Borland and the U.S.

software industry, including discouraging investment, fostering piracy, and the loss of its leadership position in the worldwide software industry, none of which can be afforded in a time of global economic crisis and ongoing geopolitical concerns.

CONCLUSION

Based on the foregoing reasons, this *Amicus Curiae* respectfully requests that the Court order the judgment of the court of appeals reversed.

Very respectfully,

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