

No. 08-964

In The
Supreme Court of the United States

BERNARD L. BILSKI AND RAND A. WARSAW,

Petitioners,

v.

DAVID J. KAPPOS, UNDER SECRETARY OF
COMMERCE FOR INTELLECTUAL PROPERTY AND
DIRECTOR, PATENT AND TRADEMARK OFFICE,

Respondent.

**On Writ Of Certiorari To The United States
Court Of Appeals For The Federal Circuit**

**BRIEF OF *AMICI CURIAE* AMERICAN INSURANCE
ASSOCIATION, THE HARTFORD FINANCIAL
SERVICES, JACKSON NATIONAL LIFE
INSURANCE COMPANY, PACIFIC LIFE
INSURANCE COMPANY, SUN LIFE ASSURANCE
COMPANY OF CANADA (U.S.), AND
TRANSAMERICA LIFE INSURANCE COMPANY
IN SUPPORT OF RESPONDENT**

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INTEREST OF *AMICI CURIAE*¹

Amici deal in contracts – insurance policies, annuities, and other insurance related services. Accordingly, *amici* will be particularly affected by whether the Court’s construction of 35 U.S.C. § 101 expands the definition of patent subject matter eligibility to include abstract ideas – contractual promises in particular – that are administered through routine computer functions like mathematical calculation, record-keeping, and communication. *Amici* are a concrete example of the easily-overlooked “other side” of the delicate balancing act that patent law performs, and a reminder that tests for the protection of actual technological innovation must be tailored so that aggressive applicants cannot use the patent law to seize abstract ideas – including promises – that are the common right of everyone and turn them into a sword against competitors. Several of these *amici* are subject to allegations of infringement by owners of insurance business method patents.

Amicus curiae the American Insurance Association (“AIA”) is a leading national trade association which includes some 350 major property and casualty insurance companies that collectively underwrote in

¹ Consent of all parties to submission of *amicus curiae* briefs has previously been filed with the Court. Pursuant to Rule 37.6, *amici* state that no counsel for any party authored this brief in whole or in part, and no person or entity other than the *amici* or their counsel made a monetary contribution to the preparation or submission of this brief.

excess of \$117 billion in direct property and casualty premiums in 2008. AIA members, ranging in size from small companies to the largest insurers with global operations, underwrite virtually all lines of property and casualty insurance, including personal and commercial auto insurance, commercial property and liability coverage for small businesses, workers' compensation, homeowners' insurance, medical malpractice coverage, and product liability insurance. On issues of importance to the property and casualty insurance industry and marketplace, AIA advocates sound and progressive public policies in legislative and regulatory forums at the state and federal levels and files *amicus curiae* briefs in significant cases before state and federal courts, including this Court.



SUMMARY OF ARGUMENT

Insurance providers are currently threatened by patent holders asserting patents that should have been rejected under 35 U.S.C. § 101 as claiming patent-ineligible subject matter. By adding routine computerization to otherwise ineligible concepts like insurance contract features, these patent holders seek to circumvent the traditional limitations of § 101 and essentially secure monopolies on all uses of the claimed insurance contracts and contract features.

In deciding *Bilski*, the Court should frame its discussion of the test for determining patent

eligibility under § 101 with an eye toward the rapidly increasing number of such “business method” patent applications that recite a “process” consisting of nothing more than an abstract idea, such as an insurance policy feature or contract term, administered through the routine use of computers. These applications threaten the longstanding rule that no one may patent an abstract idea. They effectively appropriate every practical application of the abstract idea that they claim – despite this Court’s past decisions strongly indicating that such subject matter is not eligible for a patent.

The *Bilski* “machine-or-transformation” test for § 101 patent eligibility correctly applies the statute’s requirements and prevents clever applicants from obtaining patent protection merely by draping ineligible abstract ideas with unimportant limitations related to routine computerization. This Court should affirm the test and, considering the issues facing industries like insurance that rely heavily on contracts, further explain it, confirming that abstract ideas, including ideas like insurance policies and annuities, may not be patented even if a computer is used to administer them, and that the subject matter eligibility of a patent claim depends on the essence of the claim’s innovation, not on the presence of insignificant secondary claim limitations like routine use of a computer. Furthermore, in order to expedite litigation when patents incompatible with § 101 are asserted, the Court should also confirm the procedural consequences of this rule of law – that a

district court may rule on § 101 subject matter eligibility without conducting full claim construction for a patent, and that § 101 eligibility may be raised at any point in a litigation.

◆

ARGUMENT

The Federal Circuit, in its *en banc* opinion, declared that the “machine-or-transformation” test is the only test for determining patent-eligible subject matter for process patents under 35 U.S.C. § 101. *In re Bilski*, 545 F.3d 943, 956-61 (Fed. Cir. 2008) (*en banc*), *cert. granted*, 129 S. Ct. 2735 (2009). These *amici* support the position of the Patent Office, the test articulated by the Federal Circuit, and the finding that the *Bilski* patent application does not claim patent-eligible subject matter.

Because the *Bilski* patent application does not attempt to claim a machine, the Federal Circuit’s explanation of the “machine” prong of the test is understandably and expressly minimal. *Bilski*, 545 F.3d at 962. Nevertheless, for many industries, including providers of insurance, the “machine” prong of the test is an area of critical importance. For decades the insurance industry has used many different kinds of machines to provide insurance services, including typewriters, printers, adding machines, and calculators. Today, the industry intensively uses computer platforms (both hardware and software) to support insurance policies that add

contract features to create new combinations. These computer platforms were often developed starting in the second half of the Twentieth Century and routinely modified to accommodate new combinations of insurance policy features. Accordingly, these *amici* respectfully submit that a more comprehensive treatment of the “machine” prong is critically important to their ability to assess the boundaries of patents on insurance business methods.

Of course, this Court may revise the test, or declare a different test. In either event, these *amici* respectfully submit that the Court should account for two very important considerations.

First, abstract ideas such as insurance policies, insurance contracts, annuities, payment obligations, contractual promises, and legal documents are not patent-eligible subject matter under a proper reading of § 101 and this Court’s well-established precedent. Similarly, mathematical formulas and algorithms are not patent-eligible. The Court should explicitly reaffirm this principle.

Second, it is also firmly established that insertion of incidental or routine computer tasks as limitations into patent claims does not transmute ineligible subject matter into eligible subject matter. The Court should explicitly reaffirm this principle as well.

I. The Insurance Industry's Concern with, and Real World Examples of, Business Method Patents

Insurance providers have more than a theoretical interest in whether patent subject matter eligibility extends to abstract “business methods” or insurance policy features combined with incidental and routine computer limitations. Many insurers, including several *amici*, now face patent infringement allegations seeking substantial damages or injunctions that stem from such “business method” patents. The asserted claims regularly combine insurance services with routine, incidental administrative computerization. Three examples² illustrate the real world nature of such patents.

First, Lincoln National Life Insurance Company is currently asserting three insurance patents³ against several other life insurance companies.⁴

² Several *amici* are already in litigation or have been threatened by assertions of these example patents.

³ U.S. Patent Nos. 6,611,815 (“the ’815 Patent”) (filed Jan. 2, 2001); 7,089,201 (“the ’201 Patent”) (filed Sep. 24, 1999); and 7,376,608 (“the ’608 Patent”) (filed Mar. 12, 2001).

⁴ See *Lincoln Nat’l Life Ins. Co. v. Transamerica Fin. Life Ins. Co.*, No. 1:04-cv-396-JVB-RBC (N.D. Ind. filed Oct. 21, 2004); *Lincoln Nat’l Life Ins. Co. v. Jackson Nat’l Life Ins. Co.*, No. 1:07-cv-265-JVB-RBC (N.D. Ind. filed Oct. 30, 2007); *Lincoln Nat’l Life Ins. Co. v. Transamerica Life Ins. Co.*, No. 2009-1403, 1491 (Fed. Cir. filed June 16, 2009); *Lincoln Nat’l Life Ins. Co. v. Transamerica Fin. Life Ins. Co.*, No. 1:08-cv-135-JVB-RBC (N.D. Ind. filed May 20, 2008); *Sun Life Assurance Co. of Can. (U.S.) v. Lincoln Nat’l Life Ins. Co.*, No. 1:09-cv-10245-GAO (D. Mass.

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These three patents, with the '815 Patent as a particular example, seek to preempt an entire category of contracts, a type of variable annuity that provides guaranteed minimum payments to policy holders combined with potentially larger distributions based on positive stock market performance.⁵

Second, Equitable Life & Casualty Insurance Company is currently asserting against American National Insurance Company⁶ a patent⁷ (“the '645

filed Feb. 18, 2009); *Merrill Lynch Life Ins. Co. v. Lincoln Nat'l Life Ins. Co.*, No. 2:09-cv-158-JVB-RBC (N.D. Ind. filed June 5, 2009).

⁵ Claim 1 of the '815 Patent recites:

1. A data processing method for administering an annuity product having an account value and a guarantee of lifetime payments, comprising the steps of:
 - a. establishing a charge for paying the lifetime payments after the account value reaches zero in accordance with the guarantee;
 - b. using a computer:
 1. determining an initial benefit payment;
 2. determining a subsequent periodic benefit payment; and
 3. periodically determining the account value;
 - c. periodically paying the initial payment and the subsequent payment and reporting the account value to the beneficiary.

U.S. Patent No. 6,611,815, col.13, ll.41-51 (filed Jan. 2, 2001).

⁶ *Equitable Life & Cas. Ins. Co. v. Am. Nat'l Ins. Co.*, No. 2:09-cv-00580-TC (D. Utah filed July 1, 2009).

⁷ U.S. Patent No. 5,761,645 (“the '645 Patent”) (filed Dec. 21, 1995). The '645 Patent uses a “means-plus-function” claim

(Continued on following page)

Patent”) that claims a “system” whereby designated life insurance beneficiaries receive gift payments on specific dates over a period of years, *e.g.*, birthday gifts for ten years.⁸

format and is not a “method” claim. Because the claims must be considered as a whole, consistent with *Diamond v. Diehr*, 450 U.S. 175, 188 (1981), the “means-plus-function” claim format should be irrelevant to the analysis under § 101.

⁸ Claim 1 of the '645 Patent recites:

1. A system for enabling delivery of insurance gift payments that an insurer is to make to designated beneficiaries on behalf of insureds, the system comprising:

input means for receiving at least information regarding at least one insured, at least one insurance gift plan, at least one occasion or date to send each gift, at least one message to send with the gift, and at least one beneficiary, said input means associated with means for entering received information into a storage device, and for accessing and modifying information in said storage device;

calculating and formatting means, responsive to said input means, for processing stored information, and creating insurance plan tables and schedules;

processing means, responsive to the calculating and formatting means, for determining an amount for each gift payment, and, after the insured has died, determining when each message and gift are to be sent to arrive for the occasion or date; and

output means, responsive to the processing means, for providing information stored in the storage device in formatted form.

U.S. Patent No. 5,761,645, col.47 ll.12-33 (filed Dec. 21, 1995).

A third set of patents⁹ is being asserted¹⁰ against financial services companies, including life, property, and casualty insurers. For example, Claim 2 of one of these patents, the '434 Patent, recites a method for automatic selection and presentation to a client of financial services appropriate to the client. Like the other examples cited, this claim does not address any novel computer technology; instead it centers on the idea of automatically customizing financial services for presentation to an individual.¹¹

⁹ U.S. Patent Nos. 5,987,434 (“the '434 Patent”) (filed June 10, 1996); 6,076,072 (“the '072 Patent”) (filed Apr. 15, 1997); and 6,999,938 (“the '938 Patent”) (filed July 16, 1999).

¹⁰ *Phoenix Licensing, L.L.C. v. Allstate Corp.*, No. 2:09-cv-255-TJW (E.D. Tex. filed Aug. 24, 2009).

¹¹ Claim 2 recites:

2. A method for using client information about clients comprising a plurality of client records to automatically select and present financial products appropriate for the clients, the method comprising:
automatically inputting into a computer-accessible storage medium the client information including the plurality of client records without human intervention between input of the respective client records, inputting information about the financial products, and inputting decision criteria pertaining to selection from among the financial products;
using a central processing unit in communication with the storage medium to select a subset of the financial products for each of the clients appropriate for that client using the client information, the financial products information, and the decision criteria; and

(Continued on following page)

As these examples show, applicants now often seek and obtain patent protection for innovations that are nothing more than abstract ideas incidentally administered through routine use of an ordinary computer system. With this formula for framing their claims, they seek to imply a machine-based innovation that would qualify as patent-eligible subject matter.

Accordingly, the insurance industry currently labors under a cloud of uncertainty – and bears the cost of resulting litigation – associated with business method patents that recite the use of a “machine.” Yet this Court’s precedents strongly support the conclusion that incidental, routine use of a computer to administer otherwise patent-ineligible ideas does not ritualistically convey patent eligibility. This principle should be explicitly declared in the Court’s construction of the § 101 test in the present case.

II. § 101 Patent Eligibility for Process Claims

Whether a process claim is patent-eligible subject matter under 35 U.S.C. § 101 is a “threshold inquiry” of patent validity. *Bilski*, 545 F.3d at 950-51.

using an output device to prepare a client communication for each of the clients which identifies the subset of the financial products appropriate for that client.

U.S. Patent No. 5,987,434, col.20 l.58 – col.21 l.10 (filed June 10, 1996).

Accordingly, any patent claim “failing the requirements of § 101 must be rejected even if it meets all of the other legal requirements of patentability.” *Id.* This threshold inquiry is an issue of law. *Id.* at 951.

A. Exclusions from Patent-Eligible Subject Matter

Diehr, 450 U.S. at 185, reiterates the familiar principle that a process may be patented, but that under § 101 patent eligibility does not extend to “laws of nature, natural phenomena, [or] abstract ideas.” *Diehr* rests on a foundation of other Supreme Court decisions illuminating the meaning of a patent-eligible invention.

Mathematical Formulas and Algorithms

Descriptions of the natural operations of the world cannot be patented. “[N]o one can appropriate this power exclusively to himself, under the patent laws. The same may be said of electricity, and of any other power in nature, which is alike open to all. . . .” *Le Roy v. Tatham*, 14 How. (55 U.S.) 156, 175 (1852). Nor can mathematical formulas and algorithms, the concise expressions of natural laws, be patented. *Gottschalk v. Benson*, 409 U.S. 63, 71-72 (1972). The rules defining the pre-existing constraints and operations of the human environment are laws of nature and abstract realities, not patent-eligible inventions. “The underlying notion is that a scientific principle, such as that expressed in respondent’s

algorithm, reveals a relationship that has always existed.” *Parker v. Flook*, 437 U.S. 584, 593 n.15 (1978).

Human Goals and Objectives

The goals and objectives of human activity cannot be patented. “A patent is not good for an effect, or the result of a certain process, as that would prohibit all other persons from making the same thing by any means whatsoever. This, by creating monopolies, would discourage arts and manufactures, against the avowed policy of the patent laws.” *Le Roy*, 14 How. (55 U.S.) at 175. “It is for the discovery . . . of some practical method . . . of producing a beneficial result . . . that a patent is granted, and not for the result or effect itself.” *Diehr*, 450 U.S. at 182 n.7 (quoting *Corning v. Burden*, 15 How. (56 U.S.) 252, 268 (1854)). No one may patent the abstract purposes that humans pursue. Regardless of what patents issue, people are always free to seek alternative means of obtaining a particular outcome.

Human Thoughts, Decisions, Acts

The operations of a human mind cannot be patented. Mental processes and intellectual concepts are “basic tools,” *Benson*, 409 U.S. at 67, that are beyond patenting because they are critical to science, technology, and commerce. “[A]n original cause; a motive; these cannot be patented, as no one can claim in either of them an exclusive right.” *Flook*, 437 U.S.

at 589 (*quoting Le Roy*, 14 How. (55 U.S.) at 175). Humans are free to act and to think; patent eligibility only applies to new discoveries that exist apart from the operation of a human mind.

Patent-Eligible Subject Matter

The established examples of patent-ineligible concepts sketch a picture of what is required for a patent-eligible process. Patents issue for new discoveries that link intangible principles to a human goal by means of some specific, tangible technique other than use of the human mind. “[T]he processes used to extract, modify, and concentrate natural agencies, constitute the invention. The elements of the power exist; the invention is not in discovering them, but in applying them to useful objects.” *Le Roy*, 14 How. (55 U.S.) at 175. “If there is to be invention from such a discovery [of a hitherto unknown phenomenon of nature], it must come from the application of the law of nature to a new and useful end.” *Benson*, 409 U.S. at 67 (*quoting Funk Bros. Seed Co. v. Kalo Inoculant Co.*, 333 U.S. 127, 130 (1948)). “‘A process is a mode of treatment of certain materials to produce a given result.’” *Benson*, 409 U.S. at 70 (*quoting Cochrane v. Deener*, 94 U.S. 780, 788 (1877)).

Numerous *amici* emphasize the unpredictable nature of new discoveries, invoking the “Twenty-First Century” as a cliché to support an unfounded argument that § 101 must be thrown open to all

comers lest innovation cease. Instead, the Court should remain mindful of the reasons underlying the exclusions from, and limitations of, § 101. The logical framework established by the Court's past decisions accommodates new types of discoveries while guarding against harmful monopolization of natural laws, human objectives, and human mental processes.

B. Insurance Policies Historically Are Not Patent-Eligible Subject Matter

Questions about patent subject matter eligibility often arise in the context of mathematical algorithms. *E.g.*, *Diehr*, 450 U.S. 175; *Flook*, 437 U.S. 584; *Benson*, 409 U.S. 63. But exclusions from eligibility under § 101 go far beyond algorithms; they include insurance and legal guarantees, insurance valuations and calculations, insurance strategies, administration of insurance contracts, marketing campaigns and strategies, offers for sale, and business models, among other intangibles.

Insurance contracts – obligations to pay money upon the occurrence of specified events – are prototypical examples of abstract ideas. *See, e.g.*, 2 *Manual Of Patent Examining Procedure* § 2106, at 2100-10 (8th ed. 2001, rev. 2008) (“For example, a claim reciting only a musical composition, literary work, compilation of data . . . or **legal document (e.g., an insurance policy)** *per se* does not appear to be a process, machine, manufacture, or composition of matter.”) (emphasis added). Such practices are

human decisions, interactions, mental processes, and intellectual concepts – basic tools of modern commerce. Often these practices embody the “result or effect itself” of a human objective or goal, such as risk-spreading or securing income.

The courts properly disallow patent claims for such intangible “inventions.” For example, the Federal Circuit recently rejected patent claims for “a method and system for mandatory arbitration involving legal documents, such as wills or contracts,” *In re Comiskey*, 554 F.3d 967, 970 (Fed. Cir. 2009), as an attempt to “patent the use of human intelligence in and of itself,” *id.* at 981. *See also In re Schrader*, 22 F.3d 290, 291 (Fed. Cir. 1994) (rejecting claim for “method of competitively bidding on a plurality of related items”); *In re Meyer*, 688 F.2d 789, 790 (C.C.P.A. 1982) (rejecting claim for method of testing complex system by dividing into “elements” and associating a score of function or malfunction to each element); *In re Maucorps*, 609 F.2d 481 (C.C.P.A. 1979) (rejecting claim for computer-assisted method of sales representative organization); *Hotel Sec. Checking Co. v. Lorraine Co.*, 160 F. 467, 469 (2d Cir. 1908) (rejecting claim for method of preventing fraud by waiters and cashiers through use of receipts).

Nevertheless, claimants continue to assert patent rights over intangible, abstract ideas in the vein of *Comiskey*. The ’815 Patent and the ’645 Patent recite claim limitations that explicitly refer to legal obligations to make payments. The ’815 Patent describes

a method for calculating and administering distributions to beneficiaries of annuity contracts. The '645 Patent claims using life insurance to fund future birthday gifts to loved ones. The claims of the '434 Patent are yet more general, addressing use of a computer to select automatically various types of life insurance or home mortgages based on given factors. This Court should explicitly confirm that an "invention" directed to legal obligations and legal documents, such as insurance policies, does not present patent-eligible subject matter.

C. Insurance Company Activities and the Machine-or-Transformation Test

1. Transformation

Calculation of changes in insurance account values or insurance payments, and incidental administrative activities to implement transactions such as writing checks and making payments, are not patent-eligible transformations. *See Bilski*, 545 F.3d at 963-64 (holding that "[p]urported transformations or manipulations simply of public or private legal obligations or relationships, business risks, or other such abstractions" do not meet the transformation prong). Simply making payments and calculating changes in account value as claimed in the '201, '815, and '608 Patents is not a sufficient physical transformation. *See also* U.S. Patent No. 5,761,645 (filed Dec. 21, 1995).

2. Machine

While a claim cannot be summarily declared patent-ineligible based on its discrete parts, it also cannot be the case that tacking on incidental, routine computer- or machine-implementation to a mathematical algorithm or an abstract idea transfigures the algorithm or idea into patent-eligible subject matter. Both *Flook* and *Benson* found claims ineligible even though they recited a computer. *Flook*, 437 U.S. at 586, 589-90, 595; *Benson*, 409 U.S. at 65, 69-70, 73. Implicitly, the Court held that patent applications do not express patent-eligible subject matter merely by reciting the use of general computers to carry out routine tasks commonly performed on computers.

Instead, the Court in *Diehr* suggested that patent eligibility requires the claim, as a whole, to be directed toward patent-eligible subject matter. *Diehr*, 450 U.S. at 188-89. It was irrelevant to the claimant-favorable conclusion in *Diehr* that the claimed process used a computer to perform calculations. *See id.* at 183-84. Rather, the Court cautioned “a claim drawn to subject matter otherwise statutory does not become nonstatutory simply because it uses a mathematical formula, computer program, or *digital computer*.” *Id.* at 187 (emphasis added).

By definition any working computer has the ability to perform various routine tasks, such as making calculations (*e.g.*, determining, adjusting), engaging in communication (*e.g.*, inputting, outputting, coupling, displaying, presenting), and saving

data (e.g., storing, memory). See *Microsoft Computer Dictionary* 118 (5th ed. 2002); *IEEE 100: The Authoritative Dictionary of IEEE Standards Terms* 207-08 (7th ed. 2000). Accordingly, patent claims that merely recite routine computing activities, such as the examples cited above, do not transform abstract ideas into patent-eligible subject matter.

III. Evaluating § 101 Eligibility

A. Mere Combination of Routine Computer Limitations with Insurance Policy and Contract Features, However Novel, Is Not Patent-Eligible

Section 101 patent eligibility is separate from, and does not require determining, a claim's novelty or obviousness, the patentability requirements from 35 U.S.C. §§ 102 and 103. See *Diehr*, 450 U.S. at 189-90. Patent-eligibility under § 101 can be informed by the following question:

Does the claim merely recite an abstract idea or mathematical algorithm performed on a general purpose computer using generic operations, such as inputting, storing, processing, calculating, determining, comparing, adjusting, networking, displaying, and outputting?

An affirmative answer to this question provides a strong indication that the claim is not

patent-eligible.¹² See *Bilski*, 545 F.3d at 957, 963 (“[E]ven if a claim recites a specific machine or a particular transformation of a specific article, the recited machine or transformation must not constitute mere ‘insignificant postsolution activity’”); *In re Grams*, 888 F.2d 835, 841 (Fed. Cir. 1989) (concluding that claims directed to a method of testing complex systems were patent-ineligible subject matter, even with requirement that method be performed on a general computer); *Maucorps*, 609 F.2d at 482, 486 (holding system for processing data patent-ineligible where claims merely covered a mathematical process carried out on computer). Without a specific technological advancement, an abstract idea depends only upon the use of mental processes – even if a computer or machine can be used to automate the mental process.

Since *Bilski*, the Patent Office has rejected patent-ineligible process claims that attempt to overcome rejection by adding a limitation requiring a general purpose computer. See, e.g., *Ex parte Halligan*, Appeal No. 2008-1588, slip op. at 26-27 (B.P.A.I. Nov. 24, 2008). Adding a limitation for using a general purpose computer to otherwise patent-ineligible method steps would, as the Patent Office stated, “exalt form over substance” and “allow preemption of a fundamental principle.” *Id.* at 27.

¹² If the claim is based on technological innovation rather than an abstract idea combined with routine general purpose computer limitations, then the subject matter should be patent-eligible. See *Flook*, 437 U.S. at 594.

Examples

The Lincoln method patent claims often specify computer involvement for administering contracts, but the recited computer limitations (*e.g.*, inputting, storing, determining, adjusting, comparing) are incidental, routine, and only tangentially related to the claimed innovation. The only mention of a computer that appears in the '815 Patent is the phrase “using a computer” in Claim 1.¹³ During the Patent Office’s examination of the '201 Patent the examiner indicated that various computer limitations were well known and provided no basis for patent-eligibility.¹⁴ The novelty asserted by the patent owner is based on the features of the annuity contract. Though Claim 1 of the '815 Patent recites computerized administration of the annuity, the computer steps in the process (*e.g.*, “determining”) cannot convey patent subject matter eligibility; computer systems used to administer variable annuities are so old and well known that they often still rely on a variant of the COBOL programming language first developed in 1959. This claim recites an abstract idea (a patent-ineligible insurance policy) administered using routine computer features that have been used for decades to administer a wide range of prior art annuities.

¹³ U.S. Patent No. 6,611,815, col.13 l.47 (filed Jan. 2, 2001).

¹⁴ U.S. Patent No. 7,089,201 Office Action (dated June 26, 2002) at 10.

In the second example above, the system claimed in the '645 Patent releases gift payments to designated beneficiaries on specific dates over a period of years (e.g., birthday gifts for ten years).¹⁵ However clever one may regard the idea of being able to use life insurance to send birthday gifts to loved ones after death, any novelty in this patent surely does not lie in its computer aspects. The '645 Patent specification describes a general purpose computer, *see, e.g.*, Fig. 1, along with “system” claim limitations that are generic and incidental (e.g., inputting means, calculating and formatting means, processing means, outputting means). In fact, several of the limitations were added during prosecution to overcome a rejection of the claims by the examiner under § 101.¹⁶ The tangential relationship between the underlying insurance features and the computer administration recited in the patent claims clearly establishes that this is not patent-eligible subject matter under § 101. *Cf. Aristocrat Techs. Austl. Pty. Ltd. v. Int'l Game Tech.*, 521 F.3d 1328, 1333 (Fed. Cir. 2008).

A third example is Claim 2 of the '434 Patent, which claims, in part, a method for automatic selection and presentation to a client of financial services offers appropriate to the client. The computer

¹⁵ U.S. Patent No. 5,761,645, col.47 ll.12-38 (filed Dec. 21, 1995).

¹⁶ U.S. Patent No. 5,761,645 Office Action (mailed Mar. 31, 1997) at 2; U.S. Patent No. 5,761,645 Amendment (filed July 30, 1997) at 2-8.

limitations in Claim 2 refer to inputting and selecting. The apparatus claims of Claim 1 add to these routine operations coupling, storing, and preparing these offers. In reexamination, the patent owner argued that prior art describing selection and marketing of pre-existing financial services did not anticipate the system in the '434 Patent because this system *automatically* selected and presented financial services appropriate to the customer.¹⁷ The claims of the '434 Patent simply relate to customizing a financial services offer for automatic presentation. This is not eligible subject matter under § 101, and the *Bilski* “machine-or-transformation” test properly and efficiently confirms that conclusion.

B. Claims Preventing All Practical Applications of an Insurance Policy Feature are Not Patent-Eligible

Not only does a patent claim limitation reciting computerized administration of an idea fail to convert an abstract insurance idea into a specific and practical application that would qualify under § 101, such a “limitation” also fails § 101 by preempting every practical application of the abstract idea.

One frequent characteristic of a patent claim to an abstract idea or mathematical algorithm is a lack of precision such that the claim covers any and every

¹⁷ U.S. Patent No. 5,987,434 Amendment A and Response to Office Action (faxed Feb. 21, 2006) at 33-37.

possible way of applying the idea to a practical purpose. *Benson*, 409 U.S. at 64, 71-72. See *Le Roy*, 14 How. (55 U.S.) at 175; *Corning*, 15 How. (56 U.S.) at 268. Where a patent claim, taken as a whole, covers all practical ways of applying an abstract idea or mathematical algorithm, or the claim lacks the concrete steps or structures that would limit the claim, the claim is not patent-eligible under § 101. See *Benson*, 409 U.S. at 64, 71-72 (holding claim patent-ineligible where it was “not limited to any particular art or technology, to any particular apparatus or machinery, or to any particular end use” and would thus “wholly pre-empt the mathematical formula and in practical effect would be a patent on the algorithm itself”).

The routine way for an insurer to perform many of the calculations associated with modern insurance contracts while also meeting the relevant timing obligations is to automate many of the data calculation and storage functions using computers.¹⁸ The calculations need to be performed reliably, quickly, and for many accounts. Therefore, adding a computer to an insurance method patent claim is a meaningless limitation. Insurance policy features are increasingly performed by computer. Thus, an insurance patent claim that is “limited” to implementation via computer is not actually limited at all.

¹⁸ Use of a computer, of course, also requires inputting and outputting, other steps frequently claimed in patent applications for abstract ideas administered through computers.

Since insurance methods are routinely practiced in the real world via computer, an insurance method patent claim implemented by computer would impermissibly preempt the field of every routine application of the insurance concept. *See id.* at 64, 71-72; *Bilski*, 545 F.3d at 957.

Examples

During prosecution of the '815 Patent, the applicant added a limitation by Supplemental Amendment that the annuity process be performed “using a computer.”¹⁹ Because the claim would routinely be practiced in the industry by a computer performing those routine functions, the amendment added no meaningful limitation whatsoever.

A second example is the '645 Patent. The examiner initially rejected its claims, in part, because “[a] general purpose computer is being used for merely manipulating an abstract[] idea without any limit to a practical application.”²⁰ The applicant subsequently amended the claim to add terminology describing the computer functions that would manipulate the inputted data (calculating, formatting,

¹⁹ U.S. Patent No. 6,611,815 Supplemental Amendment (faxed Nov. 5, 2002) at 3-4.

²⁰ U.S. Patent No. 5,761,645 Office Action (mailed Mar. 31, 1997) at 2.

storing, etc.).²¹ It argued that the computer was a specific purpose machine, relying on the computer manipulation of the gift payment data to save the otherwise patent-ineligible abstract idea.²² However, every routine method of practicing this abstract idea is still preempted by this patent, since no real world business would actually administer this insurance contract without using computers.

The third example cited above, the '434 Patent, itself provides evidence that certain methods, like the customization of financial services offers for presentation to a client, are only routinely carried out on a large scale if performed automatically. After the patent's independent Claims 1 and 2 were rejected in prosecution, the applicant responded that one of the key improvements over the prior art was the method's provision for automatic inputting of client records, without human intervention. It emphasized that the prior art method was "inherently slow" and that its computer-automated method was "particularly adapted for highly automated *mass market high volume* applications."²³

Routine computerized automation of a known process does not provide an independent basis for

²¹ U.S. Patent No. 5,761,645 Amendment (filed July 30, 1997) at 2-6.

²² *Id.* at 8.

²³ U.S. Patent No. 5,987,434 Amendment A and Response to Office Action (faxed Feb. 21, 2006) at 35-36.

patent eligibility. Any modern company seeking to present customized financial services to large numbers of clients would likely use automated means for inputting client data. Since the patent claims any use of automated input methods, even in conjunction with some manual data input, in a computerized world it would co-opt the value of all prior practices and preempt the field from any practical method of practicing the described idea.

C. Token Post-Solution Activity Does Not Make an Otherwise Ineligible Patent Claim Eligible

Adding a general purpose computer as a token limitation to a patent claim cannot transform an otherwise patent-ineligible claim into an eligible one. *See, e.g., Benson*, 409 U.S. at 64-73 (method of programming general purpose digital computer to convert signals from decimal to binary form not patent-eligible subject matter). If merely adding the words “using a computer” to a patent claim, with nothing more, were sufficient to save a method claim from being found invalid, the prohibition against patenting abstract ideas would, in effect, become meaningless. Virtually any method involving an algorithm can be performed “using a computer.” *See Flook*, 437 U.S. at 590 (“The notion that post-solution activity, no matter how conventional or obvious in itself, can transform an unpatentable principle into a patentable process exalts form over substance. A competent draftsman could attach some form of

post-solution activity to almost any mathematical formula. . . .”); *Grams*, 888 F.2d at 841 (adding limitation to a claim “that the method be performed with a programmed computer” does not turn claim into eligible subject matter).

There is a clear gap between an abstract idea and a patent-eligible process, and the determination of whether a patent claim transcends that gap must focus on the center of the claim, not meaningless appendages such as routine computer limitations. *Cf. Flook*, 437 U.S. at 591 (process itself rather than the mathematical algorithm must be new and useful); *Quanta Computer, Inc. v. LG Elecs., Inc.*, ___ U.S. ___, 128 S. Ct. 2109, 2120 (2008) (asking whether the “essential features” of a patent exist in a product for purposes of determining patent exhaustion).

Examples

The '815 Patent claims are directed to data processing methods for administering an annuity contract. When originally filed, the claims neither mentioned nor required the use of a computer. The claims as eventually issued contain exactly one tie to a computer – the limitation “using a computer” which, according to the patent examiner, was added as a Supplemental Amendment to avoid rejection of the claims for covering ineligible subject matter.²⁴ The

²⁴ U.S. Patent No. 6,611,815 Office Action (filed Nov. 25, 2002) at 2.

essence of the invention claimed by the '815 Patent is an abstract idea – a variable annuity contract.

The '645 Patent discloses a procedure of making gift payments to designated beneficiaries on designated dates over a period of years.²⁵ The examiner found the patent lacking in both pre- and post-resolution activity and rejected the claims under § 101 as directed to the manipulation of an abstract idea.²⁶ Then the claims were amended to add computerized steps, including calculating, formatting, storing, and delivering information.²⁷ The patentee argued that the revisions more clearly claimed the invention and that the system constituted a specific machine.²⁸ However, these routine computer limitations are incidental to the essence of the patent, the technique of designating gift payments for numerous specific dates in the future. The prosecution history shows that the system limitations exist merely as an attempt to bring a patent-ineligible abstract idea about devising gifts within the ambit of § 101.

The essence of the '434 Patent is the idea of automatically selecting and presenting to a client financial service offers custom chosen as appropriate

²⁵ U.S. Patent No. 5,761,645, col.47, ll.12-38.

²⁶ U.S. Patent No. 5,761,645 Office Action (mailed Mar. 31, 1997) at 2.

²⁷ U.S. Patent No. 5,761,645 Amendment (filed July 30, 1997) at 2-6.

²⁸ *Id.* at 8.

for that client. In reexamination proceedings the patent owner relied heavily on the “automatic” provisions in the claims as the basis for patent eligibility, but these provisions amount to nothing more than routine application of data storage and sorting capabilities of a general purpose computer.²⁹ The functions performed by the computer are not the heart of the claimed invention.

The discussions in *Bilski* and various other lower court cases, such as *In re Alappat*, 33 F.3d 1526, 1545 (Fed. Cir. 1994), of “special purpose computers” are not helpful in analyzing the “machine” prong of the test for two reasons. First, there is no doctrinal or logical support for the notion that applying the label “special purpose computer” makes the claim patent-eligible subject matter under § 101. Instead, this Court has stated in *Benson*, *Flook*, and *Diehr* that merely inserting a digital computer into claim language is insufficient to transform abstract ideas into patent-eligible subject matter. To determine whether a claim covers patent-eligible subject matter requires specific consideration of whether the computer limitations (and the claim considered as a whole) represent a technological innovation. Second, the combination of routine computer limitations with very specific abstract ideas (*e.g.*, providing guaranteed minimum payments under specified conditions

²⁹ See U.S. Patent No. 5,987,434 Amendment A and Response to Office Action (faxed Feb. 21, 2006) at 33-37.

in Claim 1 of the '815 Patent) does not mean that the patent claims considered as a whole address a special purpose computer. Adding routine, generic computer limitations into patent claim language (especially limitations that simply recite attributes of a general purpose computer) cannot transform a patent claim into coverage of a “special purpose computer.” The focus in assessing patent eligibility should be on the essence or essential elements of the claimed invention – not token limitations. *Cf. Quanta*, 128 S. Ct. at 2120.

IV. Role of § 101: Claim Construction and Timing

In addition to the above analysis and examples about the real world implications of the substance of the test for patent-eligible subject matter under § 101, *amici* offer two procedural observations associated with how and when § 101 is applied.

A. § 101 Determination May Be Made After Only Limited Claim Construction

The determination of subject matter eligibility under § 101 should not require a full claim construction of all disputed claim terms. Just as § 101 can make it unnecessary to decide whether a patent application satisfies the requirements of § 102

(novelty) and § 103 (non-obviousness),³⁰ so too should § 101 make it unnecessary to fully construe all claims in a patent.

It is well-established that district courts have broad discretion over the process of claim construction. “[P]rocedurally a district court may conduct its claim construction task in any way, and at any time, it deems best suited to the particular case.” Robert A. Matthews, Jr., *Annotated Patent Digest* § 3:14 (2009). This discretion includes the extent of claims construed. Only “those [claim] terms need be construed that are in controversy, and only to the extent necessary to resolve the controversy.” *NTP, Inc. v. Research in Motion, Ltd.*, 418 F.3d 1282, 1311 (Fed. Cir. 2005) (quoting *Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999)).

Full claim construction is moot if a patent claim fails the legal threshold § 101 test. Under such circumstances, not all disputed claim terms need be fully construed for a district court to grant summary judgment. *E.g.*, *CyberSource v. Retail Decisions*, 620 F. Supp. 2d 1068, 1073 (N.D. Cal. 2009) (assuming

³⁰ *Diehr* confirmed that “[t]he question therefore of whether a particular invention is novel is ‘wholly apart from whether the invention falls into a category of statutory subject matter.’” 450 U.S. at 190 (quoting *In re Bergy*, 596 F.2d 952, 961 (C.C.P.A. 1979)). In *Flook* the Court rejected the claim as patent-ineligible subject matter under § 101 even though “[f]or the purpose of our analysis, we assume that respondent’s formula is novel and useful and that he discovered it.” 437 U.S. at 588.

plaintiff's construction of claims for purpose of deciding § 101 issue).

B. § 101 Challenges May Be Raised at Any Time

In addition to being the threshold requirement for an individual to obtain patent rights, subject matter eligibility also marks the boundaries of the statutory patent regime and of the rights of the public. As an inherently legal question with such broad significance to the wider public, it must be handled with diligence whenever it arises. Litigants should be able to raise § 101 eligibility at any point in a case – including during trial or on appeal.

The district courts have taken widely divergent views of whether subject matter eligibility must immediately be raised. *Compare Research Corp. Techs. v. Microsoft Corp.*, No. CV-01-658, 2009 WL 2413623 (D. Ariz. July 28, 2009) (considering § 101 subject matter eligibility in summary judgment motion filed five years after defendant filed initial motion for partial summary judgment) *with Transamerica Life Ins. Co. v. Lincoln Nat'l Life Ins. Co.*, 590 F. Supp. 2d 1093, 1103-05 (N.D. Iowa 2008) (declining to allow addition of § 101 subject matter eligibility defense one year after deadline to amend pleadings). Attempting to apply patent law concepts to patent ineligible subject matter will necessarily result in distorted outcomes which may very well prevent legitimate competition, against the public interest. There is

never a public interest in granting a practical monopoly to patent claims that are not even within the intellectual jurisdiction governed by patent law. Given this important public interest, challenges under § 101 should be considered whenever raised.



CONCLUSION

Many technological innovations have improved efficiency and reduced costs in the insurance industry. The computer and the internet are the most recent, but surely not the last. Accordingly, the industry needs clear guidance from this Court regarding the scope of “business method” patents and the role that a “machine” plays within them.

As supported above, it is the view of these *amici* that (1) mathematical algorithms and abstract ideas such as insurance policies, insurance contracts, annuities, payment obligations, contractual promises, and legal documents are not patent-eligible subject matter under a proper reading of § 101 and this Court’s precedents; and (2) the addition of incidental or routine computer limitations or post-solution activity to administer an abstract idea does not transform ineligible subject matter into eligible subject matter.

These *amici* respectfully request guidance and clarity from this Court on these critically important issues.

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