

## Bilski v. Kappos: New Vista or End of the Road for many Business Methods and new Technologies?

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### Overview

Bilski v. Kappos, currently on appeal to the US. Supreme Court (No. 08-964), may greatly restrict the type of business methods that may be patented, and may have dire consequences for patents directed to new technologies such as biomarkers, medical diagnostics, software, etc. The basic question to be decided is whether process claims, to be statutory under 35 U.S.C. § 101, need to be tied to a particular machine or transform a particular article into a different state or thing, the so-called machine-or-transformation (M-or-T) test. This case has generated so much interest that a record number of 66<sup>2</sup> briefs for amicus curiae have been filed. This article reviews the arguments and issues presented in the case, and provides an analysis of the amicus briefs, as well as a spread sheet analyzing the *amicus* briefs. The analysis shows that while each industry would have been expected to support the same outcome of the case, that there are differing opinions within a single industry. A deeper analysis, based upon the *amici's* interest in the outcome, provides a clearer view of *amici's* concerns regarding the case, as well as the great economic impact this case will have on our patent system and overall economy.

### Background - The Bilski invention

Bilski application (S.N. 08/833,892 filed April 10, 1997) titled “Energy Risk Management Method” is directed to methods for managing the consumption risk costs of a commodity sold at a fixed price, and, more particularly, methods for managing weather-related risks associated with energy pricing. The specification discloses that the two key sources for the energy cost risk facing customers are price risk and consumption risk. Consumption risk involves more or less energy being consumed due to changes in weather. Through the proliferation of price risk management tools, price risk is easily managed in energy markets. However, consumption risk is not. Bilski’s invention seeks to provide a fixed bill product to manage total energy cost risk, including both price risk and consumption risk.

### Representative claim

Claim 1, reprinted below, the only claim argued by Bilski, is representative of the invention.

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<sup>2</sup> Although 67 Amicus briefs are listed on the Supreme Court site, one brief, by the State of Oregon, has been listed twice.

1. A method for managing the consumption risk costs of a commodity sold by a commodity provider at a fixed price comprising the steps of:

- (a) initiating a series of transactions between said commodity provider and consumers of said commodity wherein said consumers purchase said commodity at a fixed rate based upon historical averages, said fixed rate corresponding to a risk position of said consumer;
- (b) identifying market participants for said commodity having a counter-risk position to said consumers; and
- (c) initiating a series of transactions between said commodity provider and said market participants at a second fixed rate such that said series of market participant transactions balances the risk position of said series of consumer transactions.

### The rejection

Claims 1-11 were rejected by the Patent Examiner under 35 U.S.C. § 101 as being directed to non-statutory subject matter.

### 35 U.S.C. § 101

#### **35 U.S.C. § 101 Inventions patentable.**

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

### The Patent Examiner's Position

The Patent Examiner's basis for the rejection was that the invention is not implemented on a specific apparatus; merely manipulates an abstract idea, and solves a purely mathematical problem without any limitation to a practical application.

### The BPAI (Board) Decision

The issue before the Board was whether the subject matter of Claims 1-11 was directed to a statutory process under 35 U.S.C. § 101. Equally important to the Board was what test should be applied in determining statutory subject matter. The majority Opinion (authored for an expanded panel by Judge Lee E. Barrett) states (Respondent's Appendix, page A-10) that "Non-machine-implemented methods, because of their abstract nature, present § 101 issues." The Board wrote (Respondent's Appendix, page A-10) that "the claims do not recite how the steps are implemented and are broad enough to read on performing the steps without any machine or

apparatus... do not expressly or impliedly recite any physical transformation of physical subject matter ... from one state to another.”

The Board refers to Diamond v. Diehr, 450 U.S. 175, 182 (1981) for the oft-quoted statement that “Congress intended statutory subject matter to include „anything under the sun that is made by man.”” The Board pointed out that some subject matter made by man does not fall within any of the four categories of 35 U.S.C. § 101. The judicially recognized exclusions are (1) laws of nature, (2) natural phenomena and (3) abstract ideas. Some examples of abstract ideas are computer programs, music, art, literature, etc. Citing Ex parte Lundgren, 76 USPQ2d, 1385, 400, the Board stated that “Methods tied to a machine generally qualify as statutory process under 35 U.S.C. §101 because machines inherently act on and transform physical subject matter.” The BPAI noted that although In re Grams, 888 F. 2d 835 (Fed. Cir. 1989) and In re Schrader, 22 F. 3d 290 (Fed. Cir. 1994) both involve non-machine-implemented process claims, the question left open is whether the “useful, concrete and tangible result” test of State Street, 149 F. 3d at 1373 and AT&T, 172 F. 3d at 1358 are intended to be extended past the original facts of the machine-implemented invention. The Board (Respondent’s Appendix, page A-28) interpreted the State Street and AT&T cases to be limited to machine-implemented processes or to a transformation of data, stating that “State Street, and AT&T all involved transformation of data by a machine.”

With regard to Bilski’s Claim 1, the Board wrote (Respondent’s Appendix, page A-50) that:

Claim 1 describes a plan or scheme for managing consumption risk cost in terms of a method. It is nothing but an disembodied “abstract idea” until it is instantiated in some physical way so as to become a practical application of the idea. The steps of “initiating a series of transactions” and the step of “identifying market participants” merely describe steps or goals in the plan, and do not recite how those steps are implemented in some physical way: the steps remain disembodied. Because the steps cover (“preempt”) any and every possible way of performing the steps of the plan, by human or by any kind of machine or by any combination thereof, we conclude that the claim is so broad that it is directed to the “abstract idea” itself, rather than a practical implementation of the concept.

The Board found (Respondent’s Appendix, pages A53-54) that Claim 1, while useful, does not meet the “concrete and tangible result” or a “practical application” under the State Street test, to the extent that State Street may be applied to non-machine-implemented process claims.

In response to Bilski’s argument that their claimed process was useful, tangible and concrete, the Board found (Respondent’s Appendix, page A-65) that the holding in State Street is limited to the context of “transformation of data...by a machine,” and that AT&T involved a machine-implemented process. The Board found that the “useful, concrete and tangible result” test does not appear to apply to the present situation, and that the statement of the Court in State Street, at 1372-1373 “[t]he plain and unambiguous meaning of § 101 is that any invention falling within one of the four stated categories of statutory subject matter may be patented, provided it meets

the other requirements for patentability set forth in Title 35, i.e., those found in §§ 102, 103, and 112, ¶ 2” was not inconsistent with their holding because (Respondent’s Appendix, page A-68) that “the Supreme Court’s definition of a „process” requires a transformation of physical subject matter from one state to another.”

In sum, the Board held that Bilski’s claims are not tied to a machine; do not involve any patent-eligible transformation; pre-empt any and every possible way of performing the steps of the claimed process; only claim an abstract idea which is ineligible for patent protection, and do not produce a “useful, concrete and tangible result.”

#### The Federal Circuit’s *En banc* Decision 88 USPQ2d 1385 (Fed. Cir. 2008)

The appeal turned on whether Bilski’s claims met the requirements of 35 U.S.C. § 101. The issue involved what the term “process” means and how to determine whether Bilski’s claim 1 is a “new and useful process.”

In 1952, congress amended 35 U.S.C. § 101 to include “process.” Congress provided a definition of process in 35 U.S.C. § 100(b). There is no dispute that Bilski’s claims would meet the ordinary definition of “process.” However, the Supreme Court has held that the meaning of “process” in 35 U.S.C. § 101 is narrower than its ordinary meaning. Specifically, the Supreme Court has held that a claim is not a patent-eligible process if it is directed to one of the three exceptions to patent-eligible subject matter; i.e., “laws of nature, natural phenomena, or abstract ideas.”

As noted by the Fed. Cir., the true issue is whether Bilski is seeking to claim a fundamental principle such as an abstract idea or a mental process. The underlying legal question presented is what test or criteria governs the determination by the PTO or the courts as to whether a claim to a process is patentable under 35 U.S.C. § 101.

According to the Fed. Cir., a canvas of Supreme Court cases reveals that the decisions were consistent with the machine or transformation test later articulated in Gottschalk, Comr. Pats. V. Benson, et al., 172 USPQ 577 (U.S. 1972) and reaffirmed in Diamond, Commissioner of Patents and Trademarks v. Diehr and Lutton, 450 U.S. 175, 191-192. With regard to the arguments by several amici and Bilski that the Supreme Court did not intend the machine-or-transformation test to be the only test governing 35 U.S.C. § 101 analysis, the Fed. Cir. stated that “the Court explicitly stated in Benson, at 70 that “[t]ransformation and reduction of an article „to a different state or thing” is the clue to the patentability of a process claim that does not include particular machines.” (emphasis added).

In addition, the Fed. Cir. noted the assertion by Bilski and several amici that in Benson, at 71, the Supreme Court 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.

The Fed. Cir. noted that in Parker v. Flook, 437 U.S. 584, 589, n. 9 the Supreme Court stated that “[a]s in Benson, we *assume* that a valid process patent may issue even if it does not meet [the machine-or-transformation test]” (emphasis added). This caveat was not repeated in Diehr, where the Supreme Court reaffirmed the machine-or-transformation test.” Of note is the statement by the Fed. Ckt. at 1396 that:

We 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.

Moreover, the Fed. Cir. Found that Bilski’s process, as claimed, did not transform any article to a different state or thing, and that Bilski’s argument that Claim 1 produces useful, concrete and tangible results, is insufficient to establish patent-eligibility under 35 U.S.C. §101.

The En banc Decision was not unanimous. In addition to Concurring Opinions by Judges Dyk and Linn, there were dissents by Judges Newman, Mayer and Rader.

#### The Fed. Cir. Dissents of Judges Rader, Mayer and Newman.

In his dissent, Judge Rader wrote that the language of 35 U.S.C. § 101 “contains no hint of an exclusion for certain types of methods,” and laments that “Ironically the Patent Act itself specifically defines „process“ without any of these judicial innovations.” Judge Rader asserted that the only limits on eligibility are inventions that embrace natural laws, natural phenomena, and abstract ideas. He notes that “this court today invents several circuitous and unnecessary tests.” However, while Judge Rader appears to reject the correctness of the machine-or-transformation test, he suggests that the hedging claim on appeal is a classic example of abstractness, and stated that “Bilski’s method for hedging risk in commodities trading is either a vague economic concept or obvious on its face.”

Judge Mayer expressed the position that “Affording patent protection to business methods lacks constitutional and statutory support, serves to hinder rather than promote innovation and usurps that which rightfully belongs in the public domain. State Street and AT&T should be overruled.” Judge Mayer explained that when congress enacted the current Patent Act, it was widely acknowledged that methods of doing business were ineligible for patent protection. In particular, Judge Mayer quotes from Rochelle Cooper Dreyfus, Are Business Methods Bad for Business? 16 Santa Clara Computer & high Tech. L.J. (2000) at 264, “Think how the airline industry might now be structured if the first company to offer frequent flyer miles had enjoyed the sole right to award them.” Judge Mayer notes that Bilski’s claim arguably involves a physical transformation, but that regardless of whether a claimed process involves a “physical

transformation” it should not be patent eligible unless it is directed to an advance in science or technology.

Judge Newman’s eloquent Dissent describes the court’s majority opinion as imposing a new and far-reaching restriction on the kinds of inventions that are eligible to participate in the patent system. Judge Newman wrote that the court achieves this by redefining the word “process” to exclude all processes that do not transform physical matter or that are not performed by machines. This exclusion of process inventions is viewed as contrary to statute, contrary to precedent, and a negation of the constitutional mandate. Judge Newman explained that the court’s new definition of process was rejected in Gottshalk v. Benson, at 67 where the Supreme Court 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.

Judge Newman wrote that the language in 35 U.S.C. § 101 “Whosoever invents or discovers any new or useful process . . . or any new and useful improvement thereof” (underlining added) shows that Congress plainly contemplated that the patent laws would be given wide scope. Judge Newman noted that in Diehr, there was no issue of machine or transformation because the Diehr process both employed a machine and produced a chemical transformation. Also, the Diehr court did not hold, as the majority opinion states, that transformation of physical state is a requirement of eligibility set by 35 U.S.C. § 101 unless the process is performed by a machine. In AT&T v. Excel Communications, Inc., 172 F. 3d 1352, 1358 (Fed. Cir. 1999) the court described physical transformation as “merely one example of how a mathematical algorithm may bring about a useful application.”

Of particular note is Judge Newman’s assertion that the USPTO White Paper at 3-4 and Appendix A describes the history of financial apparatus and method patents dating back to 1799, including patents on bank notes, bills of credit, bills of exchange, check blanks, detecting and preventing counterfeiting, coin counting, interest calculation tables, and lotteries, all within the first fifty years of the United States patent system. She adds that it is a distortion of these patents to describe the processes as “tied to” another statutory category-- that is, paper and pencil.

Judge Newman added that:

Bilski’s process for determining risk in commodity transactions does not become an abstraction because it is broadly claimed in his first claim. It may be claimed so broadly that it reads on the prior art, but it is neither a fundamental truth nor an abstraction. Bilski’s ten other claims contain further details and limitations, removing them farther from abstraction. Although claim 1 may have been deemed “representative” with respect to Section 101, the differences among the claims may be significant with respect to Sections 102, 103, and 112. Bilski’s application, now

pending for eleven years, has yet to be examined for patentability.

### Certiorari

In granting *Certiorari*, the questions presented to the Supreme Court were:

- (1) 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.”
- (2) 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.

### Bilski’s Brief to the Supreme Court

Bilski asserted, *inter alia*, that:

- 1) The Federal Circuit’s mandatory “machine-or-transformation” test has no basis in the patent statute and conflicts with the Court’s precedents.
- 2) § 101 must be read broadly enough to protect method[s] of doing or conducting business in light of 35 U.S.C. § 273.
- 3) The Federal Circuit’s decision improperly legislates new public policy and disrupts the settled expectations of patent owners and inventors.
- 4) The Court should reaffirm the “practical application” rule for inventions involving fundamental principles.
- 5) The Fed. Cir. Decision should be reversed because the Bilski application claims patentable subject matter.

In particular, Bilski asserted (page 16) that the Federal Circuit has essentially confined all process patents to manufacturing methods, using a test that may have been appropriate during the Industrial Age but no longer fits our modern information-based economy. Any concerns over potentially vague or trivial patents for business methods should be addressed by the other requirements of patentability, such as novelty, nonobviousness, and definite claiming.

Bilski quotes the Federal Circuit’s statement that “the machine or transformation test is the only applicable test and must be applied...when evaluating the patent-eligibility of process claims” (page 20) and argues that the Supreme Court has twice expressly declined to hold that the machine-or-transformation test is the only test in determining whether a process is patentable under § 101.

Bilski asserted (page 26) that the Federal Circuit's difficulty in applying its machine-or-transformation test to "information-age processes" demonstrates the error of a rigid test for patentable subject matter. A primary strength of the Patent Act is the lack of subject matter exclusions, leaving the door open for emerging technologies. By design, Congress employed broad general language in drafting § 101 precisely because such inventions are often unforeseeable.

Bilski further asserted (page 29) that in 1999, Congress enacted § 273 of the Patent Act, providing a defense to infringement of patents of business methods. Like § 101, the text of § 273 makes no mention of methods tied to machines or transforming articles.

It is argued (page 30) that in State Street Bank, the Fed. Cir. rejected the "ill-conceived" notion that business methods were excluded from patenting, noting that "since the 1952 Patent Act, business method patents have, and should have been, subject to the same legal requirements of patentability as applied to any other process or method." In fact, the court noted that "the business method exception has never been invoked by this court, or the CCPA, to deem an invention unpatentable. The court in State Street Bank concluded that business methods, like other processes, are patentable under § 101 if they constitute a "practical application of an abstract idea" by producing "a useful, concrete and tangible result." On page 36, Bilski notes that in Ex parte Lundgren, 76 USPQ2d 1385 (BPAI, 2004) the PTO Board affirmed the patentability of processes with no ties to machines or physical transformation.

Bilski further asserted (page 37) that the Federal Circuit's decision marks an abrupt change in the law, imposing the "new and far reaching restriction on a kind of invention to be eligible to participate in the patent system." The machine or transformation test (page 38) changes the law by excluding many kinds of inventions that apply to today's electronic and photonic technologies, as well as processes that handle data and information in novel ways. Such processes have long been patent eligible, and contribute to the vigor and variety of today's information age.

Bilski additionally argued (page 42) that over a long line of cases, the Supreme Court has explained that abstract ideas, loss of nature, and natural phenomena are not patentable under § 101, but a practical application of one of these principles may be patented. On page 43, Bilski argued that the Court has applied its practical application standards consistently with the language of § 101. Tie to a machine or transformative process therefore is sufficient, but not necessary to demonstrate a patent that is eligible as a practical application of a principle. Under the Federal Circuit's jurisprudence interpreting the Supreme Court's "practical application test," the Bilski patent application claims would have been found patent eligible.

It is additionally asserted (page 55) that to rationalize the parting from this line of cases interpreting a patent-eligible "practical application" of a fundamental principle, the Federal Circuit has attempted to distinguish the State Street and Alappat cases as dealing with machines rather than processes. This marks reversal in the court's position, which previously maintained that "for the purposes of a § 101 analysis, it is of little relevance whether a claim...is directed to

a „machine“ or a „process,“ as long as it falls into at least one of the four enumerated categories of patentable subject matter. State Street Bank at 372; see also AT&T at 1357.

From the above, the position taken by Bilski, in its essence, is that the claims should be found patent-eligible because they are drawn to a process which is one of the four categories invention under § 101, and because the claims are drawn to a practical application of a fundamental principle.

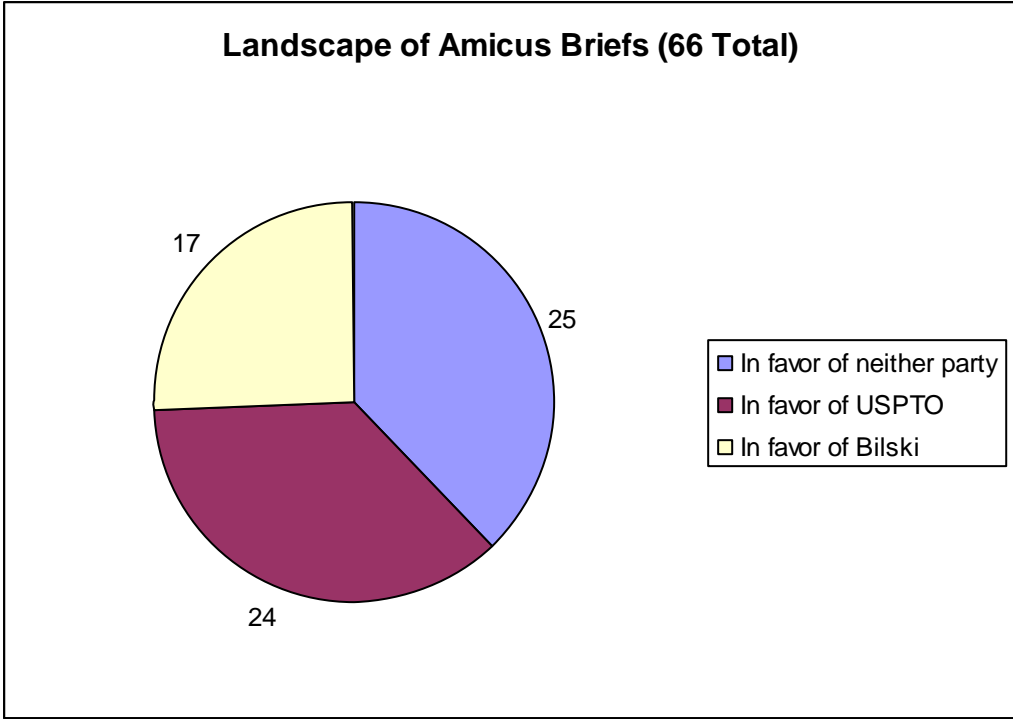
### The PTO Brief to the Supreme Court

The PTO argues, *inter alia*, that:

- (1) Section 101 sweeps broadly but imposes meaningful limits on the scope of patent protection.
- (2) “Process” in section 101 encompasses technological and industrial processes but excludes methods of organizing human activity.
- (3) Only technological and industrial methods are patent-eligible processes.
- (4) A patent-eligible process is one that concerns the operation of a particular machine or apparatus or effects a transformation of matter into a different state or thing.
- (5) The alternative tests for patent-eligibility proposed by Bilski and amici do not appropriately limit patent protection.

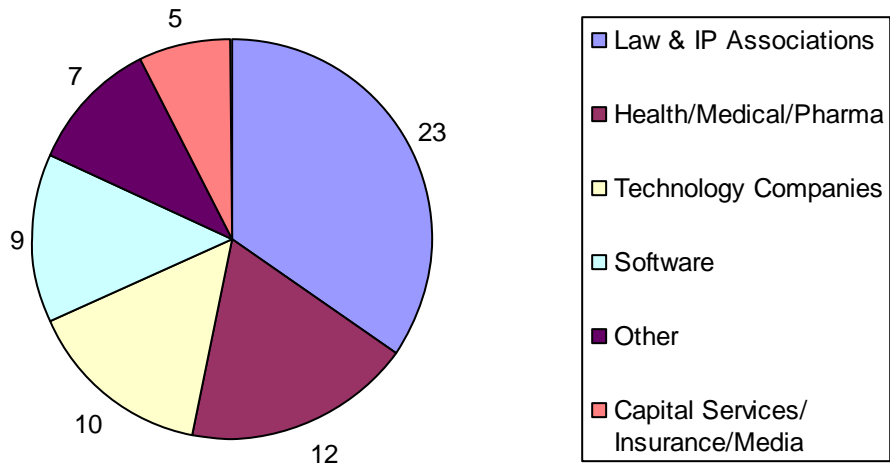
At the end of the article is a spreadsheet which shows that the briefs are largely split on the issue of Affirmance of the Fed. Cir. decision. Of the 66 Amicus Briefs, 24 support Affirmance, 17 support Reversal, and 25 support neither party.

The pie-chart below shows the number of amicus briefs supporting Bilski, PTO and neither party.

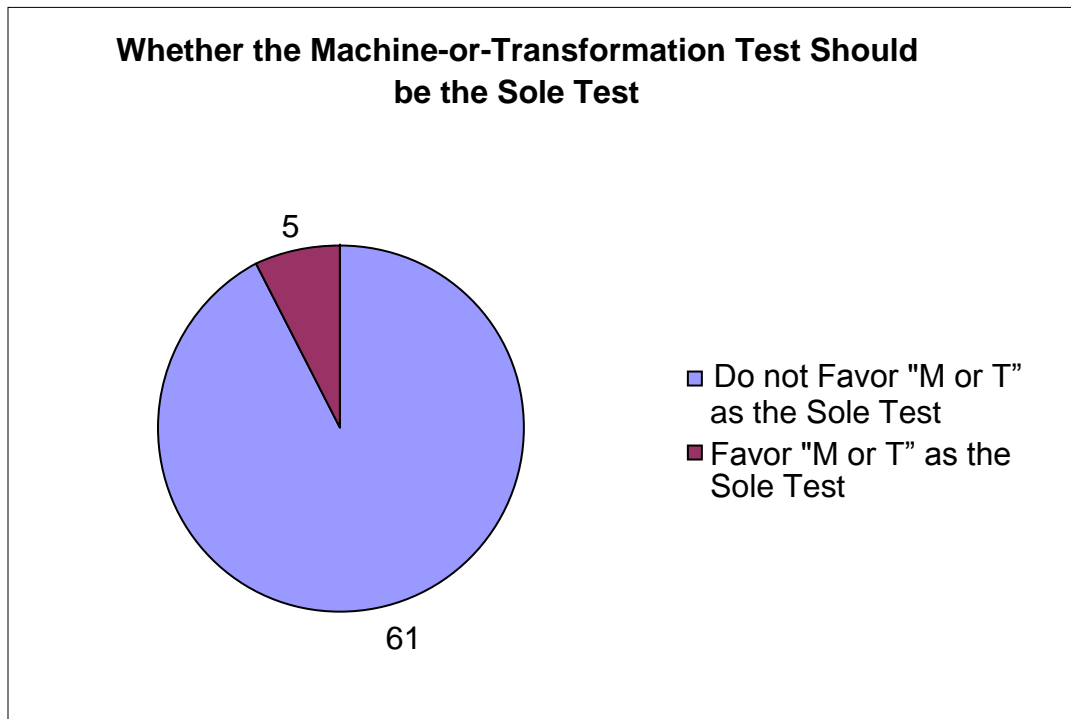


The pie-chart below shows the breakdown of amicus briefs by industry or group.

### Briefs by Industry



The pie-chart below shows the breakdown of amicus briefs with respect to whether the “Machine-or-Transformation” test should be the sole test for patent eligible subject matter.



From a review of the amicus briefs by industry, it is clear that within a given industry there can be different views of whether or not the rejection of Bilski’s claims should be affirmed and whether the Decision should apply to software patents. For example, Borland Software Corporation’s *amicus* brief supports reversal of the rejection of Bilski’s claims and seeks to avoid discouraging innovation in software related industries. In contrast, the Software Freedom Law Center’s *amicus* brief supports affirmance of the rejection of Bilski’s claims and believes that software is algorithms for computers in human readable terms, and is not patentable. Between these two positions, the Software and Information Industry Association’s *amicus* brief supports affirmance of the rejection of Bilski’s claims, but favors neither an expansive nor restrictive interpretation of patentable subject matter.

A clearer view of the position of the *amici* can be found from a deeper analysis by looking at *amici*’s interest in the outcome of the case. A number of *amici* assert that Bilski’s claim 1 is not statutory under Section 101 as being directed to an abstract idea, but that the machine or transformation test was either incorrect or should not be the only test. *Amici* expressed a lot of concern that Bilski is being applied, perhaps in an unintended fashion, to a number of different fields, such as software, biomarkers, medical diagnostics and information technology. There was concern that many patent portfolios that have been developed in these fields, at considerable time and expense, may not have future value, or greatly diminished future value. There is also concern that emerging technologies such as biomarkers and medical diagnostics could lose patent protection as they may not pass muster under the machine or transformation test, because

a biomarker does not transform an article. In addition, there are patents to inventions such as relational database management systems which are not tied to a machine or transformation, but must be carried out by a machine. These claims do not meet the machine or transformation test. Will they become patent ineligible if Bilski is affirmed?

There is widespread concern that the recent decisions of the BPAI and District courts threaten existing and future software-implemented inventions. Many amici make clear that they are not really concerned whether Bilski wins or loses. Rather, what is important is that these other emerging technologies do not lose patent eligibility. There is also considerable concern that the Federal Circuit’s opinion creates confusion over what it means to be “tied to a machine.”

The Supreme Court heard oral arguments in the case on November 9, 2009. The Court seemed to express concern that the scope of this decision could have unintended consequences for other, particularly emerging technologies. We may have difficult days ahead in the IP industry if the Court opts to sidestep the question of whether the machine-or-transformation test should be the sole test for determining patent-eligibility of processes.

The Court does not have an easy task ahead, and they are cognizant that their decision may have an enormous, unintended impact on both emerging technologies and the expectations of patent holders in many areas of new technology. Hopefully, the Court, with its collective wisdom and well grounded common sense, will set us on the correct path for our established and emerging technologies, which we rely upon so much for our economic stability and growth.

The 66 Amicus Briefs

<b>Amicus</b>	<b>Industry or group represented</b>	<b>In support of</b>	<b>Interest in outcome</b>	<b>Summary of position</b>
Timothy F McDounough, Ph.D.	Capital formation in the services sector of our economy	Bilski	Prevent impairment of formation of capital; preserve property rights and incentives to inventors	Industrial Age M-or-T test unsuited for services that comprise 69% of economic activity;
Borland Software Corporation	Software industry	Bilski	Avoid discouraging innovation in software-related industries	If M-or -T test maintained, precise contours for process-related inventions such as software must be established
Franklin Pierce Law Center	Patent bar	Bilski	Support of intellectual property system	Broad std. for patentability of method claims. Test should be “useful, concrete, and tangible” result test. If Fed. Cir. upheld, the decision would disturb

				existing property rights and severely decrease incentives for innovation.
Eagle Forum Education and Legal Defense	Non-profit, pro-family group that advocates fidelity to the Constitution	Bilski	Defending rights of small inventors and private property	M-or-T test is unsuitable for the 21 <sup>st</sup> century and will suppress and discourage invention.
Novartis Corporation	Health care solutions; pharmaceutical	Bilski	M-or-T test potentially threatens to remove from patent eligibility processes relating to personalized medicine	M-or-T test unduly narrows the scope of diagnostic-process claims. If upheld, the court should clarify that the test is not the dispositive standard
Caras Diagnostics, Inc.	Personalized medicine; tailoring therapeutics for individual patients using biomarkers	Bilski	Affirmance of the M-or-T for all processes would call into question patents for diagnostic methods and would chill future innovation	M-or-T test is not the exclusive test for patent eligibility of processes. Many diagnostic tests do not involve a M-or-T.
Georgia Biomedical Partnership, Inc.	Life sciences	Bilski	Broad reading of patent-eligibility benefits the biotech industry	M-or-T test is too rigid. Precedent is flexible and permissive
Boston Patent Law Association	Patent bar	Bilski	Support for a reliable patent system that fulfils its constitutional role of promoting the progress of the useful arts	M-or-T test should be overturned. Patent-eligible subject matter should be based on a new and useful invention.
Accenture and Pitney Bowes, Inc.	Consulting, technology and outsourcing	Bilski	Correct a serious mistake in the law.	Process satisfies § 101 if it is useful. Fed. Cir. Rigid M-or-T test has no reasonable basis.
John Sutton	Retired patent lawyer	Bilski	Clarity and consistency of patent law.	Rigid test of Fed. Cir. Should be vacated. Commodity trading is not the work of an artisan.
University of South Florida	University; research facility	Bilski	If allowed to stand and proceed unchecked, the	Only presents arguments for the first question presented. M-or-T test excludes from patent

			Bilski decision may have an adverse affect on USF's research programs.	eligibility certain processes that congress intended to be patent eligible.
Washington State Patent Law Association	Patent Bar	Bilski	Assure that the patent law is consistent with the congressional mandate to promote science and the useful arts	The M-or-T test restricts patent eligibility. This will incentivize institutions to hold future inventions as trade secrets.
Entrepreneurial Software Companies	Software industry	Bilski	Inability to appropriately protect software-related innovation is crippling the ability of small and mid-sized entrepreneurial software companies to compete with established companies	Even if the Fed. Ckt. did not intend for the M-or-T test to be applied to other statutory classes, the test is being applied to all statutory classes of innovation
Houston Intellectual Property Law Association	Patent Bar	Bilski	Software and business method patents are among the patent properties adversely affected by Bilski.	The court should reject the M-or-T test. The test should be to determine if the process falls under one of the three exclusions. If not, apply the transformation test of Diehr.
Awaken IP, LLC	IP Consulting services	Bilski	Concern that the Fed. Cir. has obfuscated Congressional intent by rigidly construing section 101. The M-or-T-test resonates negatively beyond business methods to unpredictable fields, such as	The M-or-T test is unworkable; will preclude patents and stifle innovation for new technology in unpredictable fields.

			biotechnology.	
Double Rock Corporation, et al.	Small and mid-sized members of the financial service, e-commerce, and computer related industries.	Bilski	Maintain a strong patent system that allows for types of applications that do not pre-empt a fundamental principle to remain patent eligible subject matter.	Analysis for patent eligible subject matter should not be limited to the M-or-T test. Process is statutory as long as it does not pre-empt a fundamental principle.
Association Internationale Pour la Protection de la Propriete Intellectuelle, et al.	IP	Bilski	Non-profit IP organization dedicated to development, improvement, and legal protection of IP.	M-or-T test, if upheld, will limit innovation in important areas of technology, e.g., information technology. M-or-T test should be reversed and the breadth of section 101 should be reaffirmed.
Telecommunication Systems, Inc.	Provider of wireless communication technology.	Neither party	Detractors using Bilski to attack claims to a “gateway” (machine) to avoid paying royalties. Bilski threatens predictability in the patent system. Bilski incentivizes the cultivation of trade-secret protection.	Correct test should be that a process must not as a whole embody a fundamental principle. If upheld, Bilski should not be retroactively applied to existing patents.
State of Oregon	Patent Practitioners representing inventors, businesses, and law firms.	Neither party	Guidelines for Patent rights need to be clear. This is best accomplished by adhering to the laws as written, and as interpreted by the Supreme Court.	Because Bilski’s claims are indefinite, the court need not reach the broader issue of section 101. In Bilski, the court took the “clue” and hardened it into a rule.
Conejo Valley	High-tech, high	Neither party	Support the	All processes are patentable if

Bar Association	growth companies in fields such as software, biotech, computer networking, etc.		purpose of the patent system.	they pass scrutiny under sections 102, 103 and 112, which are the gatekeeper sections. "Process," should not be limited in any manner.
Intellectual Property Owners Association	Patent Bar	Neither party	Support of the patent system	M-or-T test is a clue but not the only clue to patent eligibility under section 101. Other tests should be considered. Court needs to clarify what meets the requirement of a "particular" machine.
Intellectual Property Law Association of Chicago	Patent Bar	Neither party	Dedicated to aiding in the development of the patent laws both in the PTO and the courts.	M-or-T test must be rejected as sole test as the test is too narrow and does not comport with the Court's expansive view of section 101.
Times Systems, Inc.	Advanced-technology company specializing in software for optimization of complex industrial problems.	Neither party	Patent laws are interpreted in a manner consistent with the constitutional underpinnings.	M-or-T test is far too limited and should be rejected in favor of a more flexible standard that is consistent with the encompassing language of section 101.
Regulatory Data Corp., Inc. et al.	Technology companies	Neither party	Balanced patent system in which patents are generally available on useful products, but are limited to true inventions that meet the requirements set forth in the statute.	Straight forward case of statutory interpretation to be resolved using the ordinary meaning of sections 100(b) and 101. M-or-T test is unnecessary.
Federation Internationale Des Conseils En Propriete	Swiss-based, international organization of IP attorneys	Neither party	Support predictable, balanced global protection of	M-or-T test narrows patent eligible technologies, particularly as to software and information technology. M-or-T

Industrielle	from over 80 countries.		patents, and the interests of inventors and the PTO for recognizing a fair scope of patent protection for the inventing public.	test should be reversed because it arbitrarily and unnecessarily constricts the scope of patentable subject matter.
Dolby Laboratories, Inc., et al	Electronics manufacturing	Neither party	Bilski's "article" requirement in the second prong of the test upsets the settled expectations of intellectual property companies.	Rigid M-or-T test will unreasonably foreclose valuable technological development. The test calls into doubt whether information age inventions that operate on data or waveforms are patent eligible.
Law Professor Kevin Emerson Collins	IP lawyer	Neither party	Application of patent statutes in a manner that most effectively promotes innovation and most accurately reflects the intent of Congress.	Serious first amendment problems require a narrow construction of section 101. M-or-T test improperly sanctions patent protection for mental-process inventions.
Prometheus Laboratories	Manufacturer of pharmaceutical, medical treatment and diagnostic processes	Neither party	No position on whether Bilski's claims satisfy section 101. An overly restrictive test would undermine patents relating to detection, diagnosis and treatment of gastrointestinal diseases and disorders in this country.	Court's interpretation of section 101 may have significant ramifications beyond business methods, and may adversely affect the field of medical diagnostic and treatment processes.
Legal OnRamp	Law-centered social networking website.	Neither party	Patentability of business methods. However, pure business methods	Appropriate test is whether the claim impermissibly seeks a patent on a Fundamental Principle or an Abstract Idea.

	Members practice in the fields of software, financial services, telecommunications, information technology, etc.		are not patentable subject matter.	Fed. Cir. Correctly held that Bilski's claim was not patent-eligible subject matter, but the rationale was flawed.
Raymond C. Meiers	IP attorney	Neither party	Concern for the advancement of patent law.	Not necessary to turn to M-or-T test or to subjective standards like "technology" or "mental processes." Patentable subject matter is defined by a tripartite system of manifestations of nature, invention, and useful result.
Monogram Biosciences, Inc. et al.	Emerging field of personalized medicine, using molecular diagnostic tests to correlate genetic and molecular biomarkers with clinically useful disease characteristics.	Neither party	Interest in ensuring that patent claims to the discovered diagnostic correlations remain patentable.	The Fed. Cir. Erred in holding that a process must be tied to a particular machine or transformation. It should not be the sole test. Non-physical processes should not be excluded.
Medtronic, Inc.	Research and development of medical technology	Neither party	Application of the patent laws in a manner that most effectively promotes innovation and most accurately reflects the intent of Congress.	M-or-T test would adversely affect medical technology innovation. M-or-T-test would render patent-ineligible, significant medical advances.
American Intellectual Property Law Association	Patent Bar	Neither party	Ensure that the patent law continues to provide the incentives that serve the	Rigid M-or-T test overlooks Congress' intent that section 101 have a broad construction. By excluding all processes not tied to a particular machine or transformation, settled

			Constitutional purpose of promoting science and the useful arts.	expectations concerning issued patents are disrupted in many technologies.
20 Law and Business Professors	Patent law and business school professors	Neither party	Seeing that patent law develops in a way that continues to encourage innovation in all fields of endeavor.	Ideas implemented in a practical application are patent eligible. Fed. Ckt. has improperly converted a flexible, adaptable approach into a hard-and-fast rule.
Pharmaceutical Research and Manufacturers of America	Pharmaceutical and biotechnology industry	Neither party	If the Court adopts the Bilski test or some other test, it should make clear that medical-process patents that make use of pharmaceuticals are patent-eligible.	The court should not adopt a new test for the boundaries of section 101. Processes for medical processes have long been protected.
International Business Machines Corporation	Information technology	Neither party	Protection of software patents. Software is a fundamental and increasingly indispensable , technological innovation.	The M-or-T-test is a useful but not universally dispositive aid to determining patent eligibility. The proper inquiry is whether the claimed process makes a technological contribution.
San Diego Intellectual Property Law Association	Patent Bar	Neither party	Ensuring that the test for patent eligibility remains a flexible threshold to patentability that will continue to promote innovation.	M-or-T should not be the sole test. The Court should substitute “subject matter” for “article” in the transformation prong of the M-or-T-test. The “Machine test” should be broadened to include “manufacture” and “composition of matter.”
Robert R. Sachs et al.	Patent Lawyers	Neither party	Impact of the M-or-T-test on software and business related	Section 101 should be read broadly, with limited exceptions. M-or-T cannot be the only test. The M-or T test

			inventions; and to provide a framework for analysis of patent eligibility.	has been applied by Examiners, the BPAI and the District Court against software inventions, disturbing the settled expectations of the software industry.
Teles AG	Telecommunications and information technology industry. Capital investment.	Neither party	Support of robust patent systems that properly reward innovation.	Awarding patents for trivial inventions can hinder innovation. Need an expansive flexible test. M-or-T test would largely exclude innovations in cutting-edge technologies.
Austin Intellectual Property Law Association	Patent Bar	Neither party	Integrity of the Patent Act be maintained through consistent statutory interpretation.	Statutory definition of “process” in section 100(b) should control. When a statute contains an explicit definition, we must follow the definition. When section(b) was added to the Patent Act in 1952, the term “process” had a settled meaning in the common law that was, essentially, the M-or-T test.
Yahoo! Inc.	Computing and Internet sector.	Neither party	Balanced and efficient patent system that fairly rewards innovation.	M-or-T as sole test is flawed. Bilski’s process claim is not patent eligible because it essentially attempts to patent the <i>idea</i> of hedging. Permitting excessively broad patents would preempt future innovation.
Biotechnology Industry Organization, et al.	Biotech and medical technology industries	Neither party	Bilski raises concerns that unforeseen breakthroughs in the life sciences could be excluded from patenting under the rigid M-or-T test.	The Bilski test is not appropriate for determining patent eligibility of Biotechnology and medical technology under section 101.
Business Software Alliance	World’s leading software and hardware technology companies, including	Affirmance	By elevating the M-or-T test from a sufficient criteria for satisfying section 101 to a	Bilski’s claim is non-statutory because they seek a patent that would preempt the entire concept of hedging. Court should not interpret section 101 in a manner that upsets settled

	Apple, Cisco Systems, Dell, HP, IBM, Intel, Microsoft, etc.		necessary one, the Fed. Cir. Has unduly narrowed the scope of patentability and threatened future innovation. Concern that if the M-or-T test is confirmed, that the Court clarify that software-implemented inventions are protected.	expectations and has harmful economic consequences.
Professor Lee A. Hollaar et al.	Computer Science Professor and the IEEE-USA	Affirmance	Bilski, as well as subsequent decisions of the BPAI, threaten existing and future software patents. Concern that the decision will continue the unclear lines as to what is statutory subject matter.	The trilogy of “Benson,” “Flook” and Diehr” have resulted in confusion. An opinion holding software abstract would take a major area of innovation out of the patent system. The holding in “Benson” that the patent would preempt the algorithm denies patent protection to new techniques that have many applications. Claim 8 of Benson, because it is tied to a particular machine (reentrant shift register) should be patent-eligible. Even if a claim does not specifically recite a machine, it may be statutory if it requires elements that require a machine, such as a “relational database management system.”
Red Hat, Inc.	Open source software and related services	Affirmance	Most open-source software developers view software patents as hindering innovation. Computer software is among the types of	The M-or T test should be adopted and it should be made clear that it excludes software from patenting. An abstract idea does not become patentable by merely implementing it in computer software.

			abstract subject matter that are not patentable under Section 101.	
Mark Landesmann	Holder and owner of business method and software (anti-spam) patents.	Affirmance	Business methods should be eligible for patentability. The Court should not a priori, hold some fields of research inquiry as more deserving of patent protection than others.	M-or-T test is unduly restrictive and inconsistent with the statutory definition of “process.” Supports affirmance on different grounds. Bilski’s claim 1 is non-statutory as an abstract idea.
CASRIP	Independent research and policy development; affiliated with Univ. of Washington School of Law.	Affirmance	Unlimited scope of patent eligibility for any human activity that can be claimed or described as a process is unconstitutional.	The Court needs to determine what are the “useful arts.” The M-or-T test is usually correct, but sometimes is over-or-under inclusive. Claims must (1) pass the “useful arts” test, and (2) if implementing a known basic principle, which therefore could (but must not) preempt it, must also pass the M-or-T test.
IP Section, Nevada State Bar	Patent Bar	Affirmance	Interest in promoting a robust patent system. The Bilski holding will negatively impact Nevada’s business and entrepreneurial activity.	The M-or-T test improperly excludes useful arts from section 101, and should not be the law. Bilski’s claims are not patent eligible because they are an attempt to patent an abstract idea.
Software Freedom Law Center	Free and open source software	Affirmance	Interest in ensuring that limits are maintained on the reach of patent law so that free and open software development is not unreasonably and unnecessarily	Software is algorithms for computers in human readable terms, and is not patentable. Software standing alone, without the presence of a special purpose machine or transformation, is not a statutory process. Excluding software from patentable subject matter maximizes innovation in

			impeded.	software.
Knowledge Ecology International	Advocate of new incentive and financing models for biomedical information.	Affirmance	Interest in ensuring that the guides patent law in a way that does not stifle innovation, while simultaneously respecting the interests of patients and protecting the future of science.	It is not necessary to fashion an overly broad definition of patentable subject matter merely to save medical innovations from an imagined and speculative danger.
William Mitchell College of Law Intellectual Property Institute	IP Law	Affirmance	Advocates for the responsible development and reform of intellectual property law, including patent laws and the patent system.	The financial methods of Bilski's claimed invention are not statutory. Statutory subject matter should only extend to applications of technology. The law excludes those things, created by human activity, that do not involve the use of technology. The law also excludes those things that , while technological, are not the product of human intervention into the natural world.
American Bar Association	Legal Profession	Affirmance	Measured, balanced approach to the determination of patent-eligible subject matter for business method patents in particular.	The Federal Circuit should be affirmed but on a different legal standard. Bilski's claim 1 should be considered an abstract idea that is non-statutory. The M-or-T test should not be upheld.
Brief of eleven Law Professors and AARP	Law professors and AARP	Affirmance	AARP has an interesting this case because of the trend to find "business methods" that are abstract ideas applied with out any invention to	Particularity or tangibility, which is required by the M-or-T rest, is insufficient without invention in the application. For a claim applying science, nature or ideas to be eligible, there must be invention in the application.

			be patent eligible.	
Internet retailers	L.L. Bean, Overstock.com, J.C. Penney Co., etc	Affirmance	Internet retailers are frequently sued under business method patents, and, as a practical matter, cannot, efficiently, effectively defend themselves.	Business method patents amount to a tax on Internet commerce, transferring hundreds of millions of dollars to “non-practicing entities,” also known as “trolls.” The Court should state that business methods are not patentable because they do not promote the progress of science and the useful arts.
Entrepreneurial and Consumer Advocates	Entrepreneurs and consumers	Affirmance	Support of entrepreneurship, and consumer interests, including the freedom to innovate.	Section 101 limits the construction of “process” to technological processes. Allowing patents on non-technological methods such as those in the business and services industry, is unnecessary and harmful to innovation.
American Insurance Association, et al.	Insurance Industry	Affirmance	Insurance providers are threatened by patent holders asserting patents that should have been rejected under Section 101.	The M-or-T test is correct. The court should confirm that abstract ideas may not be patented even if a computer is used to administer them. Insertion of routine computer tasks as limitations into patent claims does not transmute ineligible subject matter into eligible subject matter.
Microsoft, et al.	Microsoft, Phillips and Symantic	Affirmance	Interest in the patent-eligibility of process patents and in particular, computer-implemented processes.	Bilski’s claims are not patent eligible, but the M-or-T test should be disapproved. A process claim must describe a series of steps that use physical means to produce a result or effect in the physical world.
Foundation for a Free Information Infrastructure	Free information, IP justice, global software professionals	Affirmance	Concern about the dangers associated with unfettered grants of software and business method patents.	The Fed. Ckt. wisely followed the M-or-T test. To avoid issuing patents on abstract ideas, it is necessary to apply patentability standards to the claimed object rather than to the claim as a whole.
Free Software Foundation	Focus on free software	Affirmance	All users should have the freedoms	Information processing algorithms with “insignificant

			to study, copy, modify, and redistribute their own changed versions of software.	post solution activity” are barred from patent-eligibility. For many software developers, the patent system is unjust because they do not have the financial means to defend themselves.
Bank of America, et al.	Financial services and information services industries	Affirmance	Grave concern about threat to innovation posed by the issuance of patents on abstract ideas, such as Bilski’s claim.	A claim recites a patent-eligible process, rather than an unpatentable abstract idea, where there is a physical transformation or the process is tied to a particular machine or apparatus in a non-conventional manner.
Adamas Pharmaceuticals, et al.	Biomarkers and pharmaceuticals	Affirmance	Correct interpretation and application of US Patent laws.	Problematic business method patents should be eliminated. The M-or-T test violates NAFTA and the 1994 TRIPS Agreement. The M-or-T test directly overrules congresses choice (35 U.S.C. section 287(c)) to maintain broad subject matter coverage for health care related technology.
Peter Menell et al.	Individual law professors who teach intellectual property law and its economic effects	Affirmance	The constitution should be followed in determining patent-eligible subject matter.	The constitution precludes congress from authorizing patent protection for business methods and other subject matters outside the “useful arts.” The language in the legislative history of the 1952 Patent Act regarding “anything made by man under the sun” referred to machine or manufacture and was not intended to expand the scope of patentable subject matter.
Computer and Communications Industry	Non-profit trade association dedicated to “open markets, open systems and open networks.	Affirmance	No direct financial interest in the outcome of the litigation. Concern that the patent system has expanded without adequate	The limits of patentable subject matter should be clearly drawn for the benefit of all. The Court should affirm the M-or-T test. The fact that the business method exclusion generated little litigation or controversy, while in place for more than 100

			accountability and oversight.	years, speaks in its favor - not as an excuse to jettison it.
American Medical Association, et al.	Medical profession; physicians and geneticists	Affirmance	Urge the Court to enforce proper limitations on patentability under Section 101.	Bilski's claims are not directed to technology. The M-or-T test must remain secondary and cannot supplant this Court's requirement that claim address a technology, or the Court's preemption standard. The of the M-or-T test must be allowed to vary with each particular case.
Software and Information Industry Association.	Software, financial information, online content and education technology.	Affirmance	Favors neither an expansive nor restrictive interpretation of patentable subject matter. Urges a rational, predictable interpretation of the statute.	M-or-T test is a useful presumption but not the sole test. Urges the Court to affirm the rejection of Petitioner's patent application, while clarifying the legal standard for patentable subject matter. Software patents should and must remain patentable subject matter. Bilski's claim 1 is not directed to a useful process.
Bloomberg, L.P.	Information, news and media company	Affirmance	Concern over the proliferation of "business method" patents that cover broad strategies and methodologies for conducting business and financial transactions. This hinders innovation and leads to uncertainty and litigation.	Business and financial methods are not patentable because they do not promote innovation in the useful arts. If a process qualifies as a useful art, the next step is to analyze whether the claim preempts a fundamental principle. A fundamental principle includes laws of nature, natural phenomena, and the types of abstract ideas, mental processes, and mathematical algorithms that underlie many business and financial methods.

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