

2007-1130  
(Serial No. 08/833,892)

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**United States Court of Appeals**  
*for the*  
**Federal Circuit**

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IN RE BERNARD L. BILSKI  
and RAND A. WARSAW

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*Appeal from the United States Patent and Trademark Office, Board of  
Patent Appeals and Interferences*

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**BRIEF OF AMICUS CURIAE BOSTON PATENT LAW  
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April 7, 2008

**UNITED STATES COURT OF APPEALS  
FOR THE FEDERAL CIRCUIT**

In re Bernard L. Bilski and Rand A. Warsaw  
No. 2007-1130  
(Serial No. 08/833,892)

**CERTIFICATE OF INTEREST**

Counsel for the Amicus, Boston Patent Law Association, certifies the following:

1. The full name of every party or amicus represented by me is:  
Boston Patent Law Association

2. The name of the real party in interest (if the party named in the caption is not the real party in interest) represented by me is:  
None

3. All parent corporations and any publicly held companies that own 10 percent or more of the stock of the party or amicus curiae represented by me are:  
None

4. There is no such corporation as listed in paragraph 3.

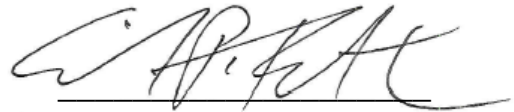
5. The names of all law firms and the partners or associates that appeared for the party or amicus now represented by me in the trial court or agency or are expected to appear in this court are:

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WTO.com, Part II — Standards concerning the availability, scope and use of  
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## **INTEREST OF *AMICUS CURIAE***

The Boston Patent Law Association is an intellectual property association that provides educational programs and a forum for the interchange of ideas and information concerning patent, trademark, copyright, and other intellectual property rights. *Amicus* is concerned that any decision narrowing the scope of patent eligible subject matter may have a detrimental effect on innovation and the American economy. The BPLA has authority to file this brief pursuant to this Court's order. *In re Bilski*, No. 2007-1130, 2008 WL 417680 (Fed. Cir. Feb. 15, 2008). This brief is filed as a joint effort of the Amicus and Computer Law Committees of the BPLA.

## **INTRODUCTION**

The founding principle and spirit of patent law, announced in the Constitution, is to “promote the progress of science and useful arts.” U.S. Const. art. I, § 8, cl. 8. In keeping with this principle and spirit, Congress explained that “anything under the sun made by man” is eligible for patent protection. S. Rep. No. 82-1979, at 5 (1952); H.R. Rep. No. 82-1923, at 6 (1952). In turn, the Supreme Court has announced that any process, machine, manufacture, or composition of matter is eligible so long as it has a practical application or useful result. Under this test, a method claim like

Bilski's may theoretically be eligible for a patent, even if it is not tied to a machine or does not cause a physical transformation.

The result of raising the threshold of eligibility to exclude claims like Bilski's would be to stifle innovation – it would throw the baby out with the bathwater. But the patent system is meant to stimulate innovation – and it does so. As a matter of public policy, substantial adjustments to such economic incentives should be left to Congress.

Accordingly, in keeping with these principles and precedent, the BPLA proposes that any process is patent eligible so long as it has a practical application or useful result and so long as the patent does not seek to claim laws of nature, natural phenomena, or abstract ideas.<sup>1</sup>

## **ARGUMENT**

### **I. The Statute and Supreme Court Precedent Support a Broad Construction of Section 101**

#### **A. The Supreme Court Accommodated New Technologies By Requiring Only that the Claimed Invention Have a Practical Application or Useful Result**

In the 18th Century, the cutting edge of technology included plows, sextants, and smelting processes – *i.e.*, the machines and arts needed for

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<sup>1</sup> The BPLA does not take a position on whether Bilski's claim is ultimately patentable. The BPLA did not have access to Bilski's confidential disclosure or the prior art. Consequently, because claims must be read in light of the specification, the BPLA does not take a position as to whether his claim meets the requirements of 35 U.S.C. §§ 101, 102, 103, and 112.

what was still largely an agricultural and seafaring nation that was just on the verge of the Industrial Revolution. Back then, it would have been easy to confine eligible subject matter to machinery or industrial processes – to iron and steel, to springs and gears, to steam and water power. But in the 19th Century, practical applications of new inventions progressed from the seen to the unseen – to the transmission of signals over a distance (Morse’s telegraph, Patent No. 1,647), to the transmission of sound over a distance (Bell’s telephone, Patent No. 174,465), to incandescence (Edison’s light bulb, Patent No. 223,898). A narrow definition of eligible subject matter, limited to physical machines or industrial processes, would have blocked these great inventions from patentability. Without the incentives created by our patent system, these world-altering innovations may never have come to be, let alone entered the public domain when the limited term of their patents expired. But instead, the Supreme Court accommodated this new wave of technology by announcing a broad rule that embodied the intent of the statute and the legislature: subject matter is patent eligible so long as it is applied to a practical application or useful result.

This rule starts with Section 101 of the patent statute, which by its terms applies to any useful process or thing:

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 therefore, subject to the conditions and requirements of this title.

35 U.S.C. § 101 (emphasis added). The Supreme Court has interpreted this provision broadly. *See Diamond v. Chakrabarty*, 447 U.S. 303, 308 (1980) (noting that “Congress plainly contemplated that the patent laws would be given wide scope”); *Id.* at 309 (noting that “Congress intended statutory subject matter to ‘include anything under the sun that is made by man’”).

The inclusive reading of the statute is subject to only a few judicially created exclusions. Laws of nature, natural phenomena, and abstract ideas are not patentable. *Diamond v. Diehr*, 450 U.S. 175, 185 (1981). Similarly, an algorithm (i.e. mathematical formula) cannot be the subject of a patent. *Id.* at 186.

Although laws of nature, natural phenomena, abstract ideas, and algorithms, are not patentable by themselves, the practical applications of such principles are eligible for patent protection. For example, Alexander Graham Bell discovered the basic principle that speech could be reproduced at distances by “changing the intensity of a continuous electric current, so as to make it correspond exactly to the changes in the density of the air caused by the sound of the voice.” *Dolbear v. Am. Bell Tel. Co.*, 126 U.S. 1, 532 (1888). Bell was entitled to a patent because he devised a practical use for an otherwise unpatentable scientific principle:

[Bell] devised a way in which ... changes of intensity could be made, and speech actually transmitted. Thus, his art was put in a condition for practical use. In doing this, both discovery and invention, in the popular sense of those terms, were involved: discovery in finding the art, and invention in devising the means of making it useful. For such discoveries and such inventions the law has given the discoverer and inventor the right to a patent, as discoverer, for the useful art, process, method of doing a thing, he has found; and, as inventor, for the means he has devised to make his discovery one of actual value.

*Id.* at 532-33 (emphasis added). Thus, the Supreme Court separated the underlying scientific principle (modulation of electrical current to reproduce sound) from the application (the phone system) and explained that the former is not eligible while the latter is because it provides actual value. The Court's reasoning makes sense because a scientific principle or algorithm, standing alone, does not meet the statutory requirement that the invention be "useful." But once the principle or algorithm is applied to a practical application, it becomes "useful" and meets that statutory requirement.

In *Diamond v. Diehr*, the Supreme Court reinforced the objective test set forth in *Bell*. In *Diehr*, the applicant's invention required use of a well-known algorithm but was also directed to a process of curing synthetic rubber. 450 U.S. at 187 The Court held that the process was patent eligible because it had a practical application (*i.e.* molding rubber products):

[W]hen a claim containing a mathematical formula implements or applies that formula in a structure or process which, when considered as a whole, is performing a function which the

patent laws were designed to protect ..., then the claim satisfies the requirements of § 101. Because we do not view respondents' claims as an attempt to patent a mathematical formula, but rather to be drawn to an industrial process for the molding of rubber products, we affirm the judgment of the Court of Customs and Patent Appeals.

*Diehr*, 450 U.S. at 192-93; *see also O'Reilly v. Morse*, 56 U.S. 62, 119 (1853) ("Whoever discovers that a certain useful result will be produced, in any art, machine, manufacture, or composition of matter, by the use of certain means, is entitled to a patent for it") (emphasis added). Thus, the threshold for patent eligibility laid down by the Supreme Court is met so long as the applicant shows a practical application or useful result.

**B. This Court Should Not Narrow the Scope of Eligible Subject Matter**

We should not look backwards for guidance on what should be patentable but must look forward to inventions of the new economy and the new century. Looking ahead will ensure that we spur innovation and maintain a scope of eligible subject matter consistent with the mandate of the Constitution. A rule that a process does not meet Section 101 unless it performs a physical transformation or is tied to a machine would improperly limit the scope of eligible subject matter.

The Supreme Court has recognized the Congressional policy that patent eligibility should be broadly construed and has thus consistently

stated that physical transformation and connection to a machine are not requirements for eligible processes. In *Gottschalk v. Benson*, for example, the Supreme Court specifically addressed this point:

It is argued that a process patent must either be tied to a particular machine or apparatus or must operate to change articles or materials to a “different state or thing.” We do not hold that no process patent could ever qualify if it did not meet the requirements of our prior precedents. ...

It is said we freeze process patents to old technologies, leaving no room for the revelations of the new, onrushing technology. Such is not our purpose.

409 U.S. 63, 71 (1972) (emphasis added).

If, in *O’Reilly v. Morse*, the Supreme Court devised a rule that statutory inventions could not be based on the principle of electromagnetism (*e.g.*, because no inventions were based on electromagnetism in the previous century), then Morse’s telegraph (or Bell’s telephone) would not have been patentable. Such a decision would have stymied the wave of innovation that followed Morse’s telegraph, ultimately yielding today’s radar, cell phones, and computers, to name a few. Some call such consequences “the law of unintended results” and give good reason to tread carefully when making such rules.

Likewise, in *Parker v. Flook*, the Supreme Court disavowed the notion that a process must be tied to a machine or result in a physical

transformation. *See* 437 U.S. 584, 589, n.9 (1978) (noting “that a valid process patent may issue even if it does not meet one of [the] qualifications of [this Court’s] earlier precedents”). Similarly, in *Diehr*, the Supreme Court preceded the terms “transforming or reducing an article to a different state or thing” with an “e.g.,” thus, denoting that transformation is just one example, not an exclusive requirement of eligibility. *AT&T Corp. v. Excel Commc’n, Inc.*, 172 F.3d 1352, 1359 (Fed. Cir. 1999) (citing *Diehr*, 450 U.S. at 192). Accordingly, this Court should not narrow the scope of subject matter eligibility because the Supreme Court has explicitly avoided implementing such requirements and because, to do so, would forestall innovation in emerging – but not yet invented – technologies and arts.

**C. This Court’s Useful, Concrete, and Tangible Result Test Is Consistent with the Supreme Court’s Practical Application Test**

Although this Court has never defined the meaning of the terms “useful, concrete, and tangible result” as used in *State Street* and *AT&T*, the terms must be construed consistently with this Court’s intent in the case of *In re Alappat*, 33 F.3d 1526 (1994) (en banc) (Rich, J.) and *State St. Bank & Trust Co. v. Signature Fin. Co.*, 149 F.3d 1368 (Fed. Cir. 1998) (Rich, J.). In those cases, this Court distinguished between non-eligible subject matter producing only abstract results and eligible subject matter producing useful



results. As this Court explained in *Alappat*, the difference between the two is that eligible subject matter is directed to a practical application, but non-eligible subject matter is not:

A close analysis of *Diehr*, *Flook*, and *Benson* reveals that the Supreme Court never intended to create an overly broad, fourth category of subject matter excluded from § 101. Rather, at the core of the Court's analysis in each of these cases lies an attempt by the Court to explain a rather straightforward concept, namely, that certain types of mathematical subject matter, standing alone, represent nothing more than abstract ideas until reduced to some type of practical application ...

33 F.3d at 1543 (emphasis added). Similarly, in *State Street*, the Court emphasized that the test for statutory subject matter is its practical utility:

The question of whether a claim encompasses statutory subject matter should not focus on which of the four categories of subject matter a claim is directed to - process, machine, manufacture, or composition of matter - but rather on the essential characteristics of the subject matter, in particular, its practical utility.

149 F.3d at 1375 (emphasis added); *see also id.* at 1373 (equating a “practical application, [with] *i.e.*, ‘a useful, concrete and tangible result’”). In contrast, if the idea or algorithm is not applied in a useful way, it is not eligible for patent protection. *Id.* (“From a practical standpoint, this means that to be patentable an algorithm must be applied in a ‘useful’ way”).

This Court’s focus on the practical application or useful result of the claimed process falls squarely within the Supreme Court’s requirements.

For example, as discussed above, Bell’s discovery that electrical current could replicate sound was patentable only after put in a condition for practical use. *Bell*, 26 U.S. at 532-33; *see also Benson*, 409 U.S. at 67 (reasoning that invention comes “from the application of the law of nature to a new and useful end”); *Corning v. Burden*, 56 U.S. 252, 268 (1853) (holding that a “patent is granted for the discovery or invention of some practicable method or means of producing a beneficial result or effect and not for the result or effect itself”). Thus, this Court’s “useful, concrete, and tangible result” test properly focuses on the useful result or practical application of the subject matter.

The terms “concrete” and “tangible” appear to have been included in the test in order to distinguish the intangible (philosophical) from that which is in the world of commerce (useful). *See Brenner v. Manson*, 383 U.S. 519, 536 (1966) (“A patent system must be related to the world of commerce rather than to the realm of philosophy”) (quoting *In re Ruschig*, 343 F.2d 965, 970 (C.C.P.A. 1965) (Rich, J.)). If the subject matter has a practical application in the world of commerce then it is eligible. But if it lies outside the realm of commerce (*i.e.* philosophical), then it is not eligible. The aesthetic appeal of a painting is intangible and abstract, but a number representing a final share price or the condition of a patient’s heart is

something tangible, concrete, and practical – particularly in today’s information-based economy.

**D. The Requirements of Sections 102, 103, and 112 Are Separate From those of Section 101**

A claimed invention in a new technological field might be amorphous and, in the end, unpatentable, for reasons other than Section 101 eligibility – *e.g.*, as lacking novelty, as obvious, as indefinite, or as not enabled. These other tests for patentability should not be conflated or confused with the test for eligibility. The Supreme Court – and this Court – have long recognized this distinction. For example, in *Morse*, the Court allowed a set of claims directed to the telegraph, but disallowed a claim directed to the use of “electro-magnetism, however developed for marking or printing intelligible characters ... at any distances.” 56 U.S. at 112, 120, 129. Although both claims applied the principle of electromagnetism to a practical application (*i.e.* printing characters), the invalid claim too broadly claimed any means for printing characters using electro-magnetism. *Id.* at 113. The Supreme Court did not invalidate that particular claim because it was ineligible subject matter but rather because it was not properly described and supported:

[Morse] claims an exclusive right to use a manner and process which he has not described and indeed had not invented, and therefore could not describe when he obtained his patent. The

court is of opinion that the claim is too broad, and not warranted by law.

*Id.* at 113. Thus, the Supreme Court did not take issue with the patentee's right to claim the practical application of a scientific principle but instead objected to the claim's unsupported scope. *See id.* at 119 ("We presume it will be admitted on all hands, that no patent could have issued on such a specification"). In 1853, the Court did not have the facility of today's well-defined statutory standards for definiteness, written description, and enablement under Section 112, but the Court's discussion implicates and embodies these modern day standards more so than it implicates the statutory subject matter requirement of Section 101.<sup>2</sup>

In *Diehr*, the Supreme Court's most recent decision on eligibility, the Court makes clear that Section 101 is a threshold requirement and that importing statutory requirements from other statutory sections into the Section 101 analysis is inappropriate:

[An] Arrhenius' equation is not patentable in isolation, but when a process for curing rubber is devised which incorporates in it a more efficient solution of the equation, that process is at the very least not barred at the threshold by § 101.

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<sup>2</sup> Indeed, under the Patent Act of 1836, it was unclear whether the Supreme Court even had the option of invalidating Morse's claim on the grounds of insufficient description. *See Loom Co. v. Higgins*, 105 U.S. 580, 587-589 (1881) (acknowledging that it was unclear whether insufficient description was grounds for annulment of the patent and a defense to patent infringement under the Patent Act of 1836).

In determining the eligibility of respondents' claimed process for patent protection under § 101 their claims must be considered as a whole. It is inappropriate to dissect the claims into old and new elements and then to ignore the presence of the old elements in the analysis. This is particularly true in a process claim because a new combination of steps in a process may be patentable even though all the constituents of the combination were well known and in common use before the combination was made. The "novelty" of any element or steps in a process, or even of the process itself, is of no relevance in determining whether the subject matter of a claim falls within the § 101 categories of possibly patentable subject matter.

*Diehr*, 45 U.S. at 188-89 (emphasis added). In light of the holding in *Diehr*, this Court should clarify that the Section 101 inquiry is focused on whether a claim is directed to a practical application, and is independent of the requirements set forth in other statutory sections.

**E. *State Street* and *AT&T* Should Not Be Reconsidered Because Their Holdings Are Consistent with Supreme Court Precedent**

The holdings in *State Street* and *AT&T* stand for the same principle enunciated in *Morse*, *Bell*, and *Diehr*: a process or machine is patent eligible so long as it has a practical application or useful result. In *State Street*, this Court upheld a claim that was directed to a machine programmed with hub and spoke software for determining a final share price. *State Street*, 149 F.3d at 1375. The Court held that determination of the final share price was a practical application and the final share price itself – a potentially quite

valuable piece of information – was a useful result. *Id.* at 1373 (reasoning that a final share price could be used “for recording and reporting purposes and even accepted and relied upon by regulatory authorities and in subsequent trades”).

Similarly, in *AT&T*, this Court upheld a claim that was directed to a process for including a “PIC” indicator in a message record of a telephone call. 172 F.3d at 1358. The Court held that a message record containing a “PIC” indicator was a useful result. *Id.* (reasoning that a “PIC indicator represents information about the call recipient’s PIC, a useful, non-abstract result that facilitates differential billing of long-distance calls made by [a] ... subscriber”). Thus, any revision to *State Street* and *AT&T* is not necessary because this Court applied the Supreme Court approved test in each case.

## **II. Strong Economic and Policy Reasons Support a Broad Construction of Section 101**

### **A. A Narrowed Section 101 Would Be Harmful to Individual Inventors, Small Businesses, and Others**

The primary purpose of the patent system is to “promote the progress of science and useful arts.” For much of this country’s history that progress has been achieved by individual inventors and small interests working to solve the technical problems of their day and reaping the rewards from patenting their innovations. In the modern day, solo inventors and small

businesses are joined by universities and other institutions dedicated to research who rely on patents as an important source of revenue and, often, as a bulwark against larger competitors.

The BPLA is not unmindful of the concerns raised by certain Justices of the Supreme Court that “bad patents” can be harmful. We agree. But it is equally true that the absence of protection for a meritorious invention can lead to an inability by an individual, small company or university to commercialize his/her/its invention. A careful balance is required, and, as described below, Congress has decided that Sections 102, 103 and 112 provide that balance. A broad scope of patentability favors these innovation incubators and thus greater progress of science and the useful arts.

A number of academic studies have attempted to quantify the importance of patents in various commercial settings. One recent study by Professor Ronald Mann at the University of Texas School of Law sought to ascertain the role of patents in software-based start-up companies. *See* Ronald J. Mann, *The Role Of Patents In Venture-Backed Software Start-Ups*, ACAD. ADVISORY COUNCIL BULLETIN 2.1 (THE Progress & Freedom Foundation, Washington D.C.) Apr. 2007, available at <http://www.pff.org/issues-pubs/ip/bulletins/bulletin2.1softwareventurepatents.pdf>.

Professor Mann studied 877 software companies that had received first-round venture financing in 1997-1999. *Id.* at 2. Those companies collectively received 624 patents. *Id.* at 2.

Despite the elusive nature of the data, Professor Mann concluded that patents, and more particularly software patents, are, on the whole, helpful to the economy:

Finally, the analysis has implications for more recent developments in patent scholarship that focus on the potentially harmful effects of the patent accumulations by mature industry incumbents. Even if those accumulations are deleterious to many of those firms, the analysis here suggests two important countervailing effects. The first is the possibility that patents support young firms in their efforts to compete, thus helping to stabilize the relatively decentralized structure of the industry and forestall movement toward greater concentration and the market power that goes with it. Even if we cannot disentangle the causal relation between patents and successful investments, the fact that patents are correlated so robustly with successful investments suggests that a software venture-investment cycle without patents would be different from the one we have now.

The second is the possibility that patents facilitate the intra-industry technology transfers upon which innovation depends in a realm of cumulative innovation. The work of Ashish Arora in particular has provided a strong theoretical basis for that understanding, rooted in the notion that the availability of patents will facilitate the entry of smaller firms contributing technology to products assembled by larger firms. If the optimal structure for complex cumulative innovation is a structure in which a relatively large group of small firms develops components that are integrated into products or used in the delivery of services provided by larger firms, then the



ability of patents to foster that structure is an important benefit.

*Id* at 8-9 (emphasis added) (footnotes omitted).

It is well documented by numerous economic studies that small firms account disproportionately for innovation and for new jobs. Professor Mann's work is one more study validating the importance of patents to at least some small software firms. A restrictive definition of subject matter will adversely impact those firms and the economy in general. Moreover, given the complexity of the situation, it would be rash for a court, on the scant information supplied in the record of one case, to make sweeping policy determinations when the economic study of the implications of such a determination is such a challenge even for experts on law and economics. This is precisely why we have in the past relied on Congress to make such decisions, after hearing from all parties and after weighing all factors.

**B. The Public Interest and International Agreements Are Served By A Broad Reading of Section 101**

Manifestly, a broad test for subject matter eligibility serves the public interest by potentially extending the benefits of the patent system to a broad class of inventions. No matter where the line is drawn on eligible subject matter, there will always be cases in which the claim draftsman tests the precise position of that line. In attempting to define the position of the line,

the courts should be hesitant to create rules and exceptions that inherently deprive applicants of the full measure of protection afforded by Congress – there is great risk of throwing out the meritorious with the unmeritorious. Thus, adding exceptions and drawing artificial lines prompted by a specific case at bar is not the solution. This approach only creates an atmosphere of uncertainty about the scope of the law and we all suffer the consequences. Indeed, elimination or minimization of such uncertainty being one of the very reasons this Court was created. Rather, with proper application of Sections 102, 103 and 112 as described below, it is difficult to imagine a need to distort the plain meaning of Section 101.

Just as Congress has seen fit to grant broad protection for U.S. inventions, the U.S. Government argued for, and obtained, in the Trade-Related Aspects of Intellectual Property Rights (TRIPS) Agreements of the General Agreements on Tariffs and Trade (Uruguay Round) a requirement that our trading partners not discriminate in their patent systems against any subject matter and that they not apply different tests for different subject matter.

An official summary of the scope of patentable subject matter on the WTO web site ([http://www.wto.org/english/tratop\\_e/trips\\_e/intel2\\_e.htm](http://www.wto.org/english/tratop_e/trips_e/intel2_e.htm)) states:

The TRIPS Agreement requires Member countries to make patents available for any inventions, whether products or processes, in all fields of technology without discrimination, subject to the normal tests of novelty, inventiveness and industrial applicability. It is also required that patents be available and patent rights enjoyable without discrimination as to the place of invention and whether products are imported or locally produced (Article 27.1) (emphasis added).

There are three permissible exceptions to the basic rule on patentability. One is for inventions contrary to *ordre public* or morality; this explicitly includes inventions dangerous to human, animal or plant life or health or seriously prejudicial to the environment. The use of this exception is subject to the condition that the commercial exploitation of the invention must also be prevented and this prevention must be necessary for the protection of *ordre public* or morality (Article 27.2).

The second exception is that Members may exclude from patentability diagnostic, therapeutic and surgical methods for the treatment of humans or animals (Article 27.3(a)).

The third is that Members may exclude plants and animals other than micro-organisms and essentially biological processes for the production of plants or animals other than non-biological and microbiological processes. However, any country excluding plant varieties from patent protection must provide an effective *sui generis* system of protection. Moreover, the whole provision is subject to review four years after entry into force of the Agreement (Article 27.3(b)).

A note to the full text of Article 27 ([http://www.wto.org/english/docs\\_e/legal\\_e/27-trips\\_04c\\_e.htm](http://www.wto.org/english/docs_e/legal_e/27-trips_04c_e.htm)) equates eligibility with usefulness:

5. For the purposes of this Article, the terms “inventive step” and “capable of industrial application” may be deemed by a Member to be synonymous with the terms “non-obvious” and “useful” respectively.

Thus, this country has made an international commitment to treat as eligible subject matter any invention that is useful – and we pressed other countries to do likewise. A narrow interpretation of Section 101 would conflict with our international obligations. This is further evidence that Congress intended Sections 102, 103 and 112 as the place to draw the line on “bad” or undesirable patents, and that Section 101 should not be amended or construed to that end.

**C. This Court Should Not Limit Patent Rights When Congress and the Supreme Court Have Chosen Not To Do So**

The Supreme Court has noted that the 1952 Patent Act effects a Congressional determination that the statute extends protection to the limits of the empowerment provided in the US Constitution. *Chakrabarty*, 447 U.S. at 315. Also, the Supreme Court has recognized that it is “Congress, not the courts, [that] must define the limits of patentability.” *Id.* Thus, the Supreme Court has “cautioned that courts should not read into the patent laws limitations and conditions which the legislature has not expressed.” *Id.* at 308. For example, in conformity with this principle, the Supreme Court has expressly refused to preclude patents directed to software. *Flook*, 437 U.S. at 595; *Benson* 409 U.S. at 71. Instead, the Supreme Court has explained that it is for Congress to alter the scope of the patent laws because they are better suited to make the determination:

Difficult questions of policy concerning the kinds of programs that may be appropriate for patent protection and the form and duration of such protection can be answered by Congress on the basis of current empirical data not equally available to this tribunal.

*Flook*, 437 U.S. at 595. Although the Supreme Court has had multiple opportunities to limit the scope of patentability, it has rightly left the task of legislating narrower limits on eligible subject matter to Congress.

Congress, meanwhile, has declined to withdraw any scope of eligible subject matter from that set forth in 35 U.S.C. § 101 despite many opportunities (and even calls) to do so. Most recently, in response to this Court's decisions in *State Street* and *AT&T*, allowing software-implemented and business method patents, Congress considered the Business Methods Patent Improvement Act of 2000. H.R. 5364, 106th Cong. (2000) (proposing extensive changes to the handling of business method applications) (H.R. 5364 failed to make it out of committee). In doing so, it did not take the opportunity to amend Section 101 in any way. Moreover, in the current round of patent reform bills that have been going through Congress, many other aspects of the Patent Act are singled out for amendment, but neither bill seeks to amend Section 101. *See* Patent Reform Act of 2007, S. 1145, Cong. 110th (2007) (as introduced to the Senate, Apr. 18, 2007), H.R. 1908,

Cong. 110th (2007) (as introduced to the House, Apr. 18, 2007).<sup>3</sup> This Court should not undertake to limit subject matter eligibility where neither the Supreme Court nor Congress has seen the need to do so.

**D. This Court Should Look To Other Statutory Provisions To Screen “Bad Patents”**

The BPLA is not unmindful of the remarks by those in the media and others who argue that the patent system is broken because the PTO has issued patents on how to dust a room, use a laser pointer to play with a cat, or swing on a swing. To these pundits, the BPLA replies that this Court’s test is either the same as or narrower than the test announced by the Supreme Court. This Court did not, in fact, fashion a test that made eligible inventions already excluded by Supreme Court precedent. If the PTO is not doing a good job screening out unmeritorious applications, one needs to look beyond its administration of Section 101 for the reasons. There are many reasons, ranging from lack of adequate resources, to lack of examination time, to lack of proper training, arguably tilting the field too much in favor of applicants and not properly balancing the public interest.

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<sup>3</sup> Also, previous bills did not seek to amend Section 101. *See* Patent Reform Act of 2006, S. 3818, Cong. 109th (2006) (as introduced to the Senate, Aug. 3, 2006); Patent Reform Act of 2005, H.R. 2795, Cong. 109th (2005) (as introduced to the House, June 8, 2005).

“Bad” patents – those that the majority of us would agree lack merit under the statute – can be avoided through proper adherence to Sections 102, 103 and 112. We cannot think of an instance of a claim that passed muster under Sections 102, 103 and 112, and that provided a useful result, but which otherwise failed or should have failed to satisfy Section 101 because it would have violated some proposed “exception” or narrow reading. In the view of the BPLA, the majority of concern and outcry about particular patents that place the PTO in a bad light could have been avoided with more diligent application of the novelty and obviousness standards.

This used to be a problem because of the burden we placed on the PTO to justify an obviousness rejection. That is no longer the case. One might even argue that the law has swung to the other extreme. Given the Supreme Court’s opinion on obviousness as laid out in *KSR Int’l Co. v. Teleflex, Inc.*, 127 S.Ct. 1727 (2007), the PTO certainly is now better equipped – fairly or unfairly, with current resources, to reject unmeritorious patent claims – especially those that offend common sense but for which finding a printed example of prior art is an elusive task. Moreover, if the Court is of the impression that the PTO needs more resources to do a better job, it should so state and encourage Congress to facilitate that objective, not

lighten the load by throwing out the possibility of encouraging inventors and innovators in many technologically and economically important endeavors.<sup>4</sup>

It is important that this Court not compromise the scope of patentable subject matter because of claims that fail to meet other statutory requirements. The test for patentability must be kept separate from those of novelty, obviousness, etc.

In *State Street* and *AT&T*, this Court has properly considered the patentability of claims “as a whole” and refused to import limitations from Sections 102, 103, and 112 into the 101 analysis.<sup>5</sup> This approach is

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<sup>4</sup> Indeed, Congress is now considering laws which would end the practice of “fee diversion” from the PTO. *See, e.g.*, S. 1145, § 15.

<sup>5</sup> However, in the case of *In re Comiskey*, 499 F.3d 1365 (Fed. Cir. 2007), the BPLA asks the Court to clarify the following passage:

The routine addition of modern electronics to an otherwise unpatentable invention typically creates a *prima facie* case of obviousness. Moreover, there is no pertinent evidence of secondary considerations because the only evidence offered is of long-felt need for the unpatentable mental process itself, not long-felt need for the combination of the mental process and a modern communication device or computer.

*Id.* at 1380 (citations omitted). The routine addition of modern electronics to a process that is known in the prior art may create a *prima facie* case of obviousness, but the addition of modern electronics to a non-statutory process, where that process is not itself in the prior art, does not create a *prima facie* case of obviousness. Determination of obviousness requires a separate analysis. To hold otherwise, would contradict the Supreme Court’s intention in *Diehr* when it explained that “whether a particular invention is



especially justified in light of the new standards of obviousness set forth by the Supreme Court and this Court's renewed vigor in applying the utility requirement. *See KSR*, 127 S.Ct. at 1740-42 (holding that the Patent Office does not need to conform to the rigid teaching-suggestion-motivation test in order to establish a *prima facie* case of obviousness); *In re Fisher*, 421 F.3d 1365, 1371, (Fed. Cir. 2005) (affirming rejection of claim under Section 101 where applicant did not provide evidence of specific and substantial utility). Now that the PTO has the ability to thoroughly test applications under the utility requirement of Section 101 and the non-obviousness requirement of Section 103, there is no need for this Court to limit the scope of patentability from that envisioned by Congress.

## CONCLUSION

The BPLA favors a strong and well administered patent system that is fair to all parties and that fosters innovation and promotes competition. We recognize that a system that is too lax or that is improperly administered strays from these objectives, but we do not believe that constraining Section 101 is either legally proper or justified by the *Bilski* claims or any other claim we can imagine. The prohibition on laws of nature, ideas and natural

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novel is 'wholly apart from whether the invention falls into a category of statutory subject matter.'" *Diehr* 45 U.S. at 190

phenomena already strikes the right balance. This Court should reiterate that an invention, be it expressed as a method or apparatus, that produces a useful result is eligible for patent protection under Section 101. This Court should further clarify that it meant no more when it used the expression “useful, concrete, and tangible,” and it should consider clarifying its statements in *Comiskey* to assure consistency. If this Court believes that any narrowing of the scope of Section 101 or other re-interpretation of Section 101 is warranted, it should suggest that Congress revisit the subject but defer action until Congress does so. This will bring certainty to the law and to the business community, put an end to the PTO’s creative construction of Section 101 rejections, and re-focus attention on compliance with Sections 102, 103 and 112.



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Association*

**CERTIFICATE OF SERVICE**

**United States Court of Appeals  
for the Federal Circuit  
2007-1130 (Serial No. 08/833,892)**

-----)  
IN RE BERNARD L. BILSKI  
and RAND A. WARSAW  
-----)

I, John C. Kruesi, Jr., being duly sworn according to law and being over the age of 18, upon my oath depose and say that:

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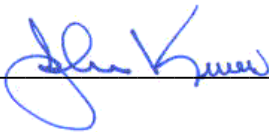
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April 7, 2008

  
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I certify that this brief complies with the type volume limitations of Fed. R. App. P. 32(a)(7)(B) and Fed. R. App. P. 29(d). According to the word-count program of the word processing system used in preparing this brief (Microsoft Word 2003), this brief contains **6,242** words, excluding the parts of the brief exempted by Fed. R. App. P. 32(a)(7)(B)(iii).

I further certify that this brief complies with the typeface requirements of Fed. R. App. P. 32(a)(5) and the type style requirements of Fed. R. App. P. 32(a)(6) because this brief has been prepared in a proportionally spaced typeface using Microsoft Word 2003 in 14 point Times New Roman font.

A handwritten signature in black ink, appearing to read "Erik Paul Belt", written over a horizontal line.

Erik Paul Belt  
Co-Chair, BPLA Amicus Committee

April 7, 2008

United States Court of Appeals  
for the Federal Circuit

2007-1130 (Serial No. 08/833,892)

-----)  
IN RE BERNARD L. BILSKI  
and RAND A. WARSAW  
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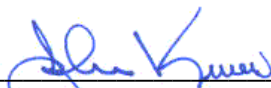
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April 7, 2008

  
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John C. Kruesi, Jr.