No. 08-964

IN THE

Supreme Court of the United States

BERNARD L. BILSKI and RAND A. WARSAW,

Petitioners,

v.

JOHN DOLL, Acting Under Secretary of Commerce for Intellectual Property and Acting Director, Patent and Trademark Office,

Respondent.

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

BRIEF OF AMICI CURIAE ASSOCIATION INTERNATIONALE POUR LA PROTECTION DE LA PROPRIETE INTELLECTUELLE AND INTERNATIONAL ASSOCIATION FOR THE PROTECTION OF INTELLECTUAL PROPERTY (U.S.) IN SUPPORT OF REVERSAL

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I. INTEREST OF AMICI CURIAE[1]

This brief is submitted on behalf of *amici curiae* Association Internationale Pour la Protection de la Propriete Intellectuelle ("AIPPI") and International Association For The Protection Of Intellectual Property – United States ("AIPPI-US")(hereinafter referred to collectively as "AIPPI").

AIPPI is an international organization, founded in 1897, dedicated to the development, improvement, and legal protection of intellectual property. AIPPI is a politically neutral, non-profit organization headquartered in Switzerland having over 9000 members representing over 100 countries and operating mainly through National Groups, such as the AIPPI-US.

The members of AIPPI include intellectual property lawyers, patent and trademark attorneys, and patent agents in corporate and private practice throughout the world, as well as academics and other persons interested in intellectual property, and including members from North America, South America, Europe, Asia, Australia and Africa.

The primary goals of AIPPI, in accord with its implementing statutes and regulations, are to promote the protection of intellectual property on a national and international basis and to study and compare existing laws and proposed new laws to

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[1] The parties have consented to the filing of this brief. No counsel for a party authored this brief in whole or in part, and no counsel or party made a monetary contribution intended to fund the preparation or submission of this brief. No person other than the Amici has made a monetary contribution to the preparation or submission of this brief.

propose improvements thereto. AIPPI pursues these objectives, in part, by working for the development, expansion and improvement of international and regional treaties and agreements and also of national laws relating to intellectual property. In its long history, AIPPI has adopted more than 700 Resolutions and Reports. An AIPPI "Resolution" is a Statement of Policy regarding a specific Intellectual Property issue, approved by the collective country members of AIPPI. Such a Resolution is issued only after lengthy study and discussion and subsequent vote by a majority of delegates present at an Annual Meeting of the Executive Committee of AIPPI. The presentation of these Resolutions and Reports to international Governmental Organizations, in particular the World Intellectual Property Organization ("WIPO"), has contributed considerably to the development, improvement and harmonization of the international protection of intellectual property. AIPPI has adopted two Resolutions on issues touching those before this Court: Resolution Q133 ("Patenting of computer software") and Resolution Q158 ("Patentability of Business Methods"), discussed below and attached hereto.

For at least the above-noted reasons, and on behalf of both resident and non-resident AIPPI members who seek patent protection in the United States for inventors they represent, AIPPI submits this brief to this Court.

II. INTRODUCTION

The framers of the United States Constitution recognized the need to encourage innovation, and dissemination of the same, by rewarding inventors and granted the U.S. Congress the authority "[t]o promote the Progress of . . . useful Arts, by securing for limited Times to . . . Inventors the exclusive Right to their . . . Discoveries." U.S. Const. art. I, § 8, cl. 8. Congress enacted the first United States Patent Act in 1790 requiring, *inter alia*, the applicant to "have invented or discovered any useful art, manufacture, engine, machine, or device, or any improvement therein." Act of April 10, 1790, ch. 7, § 1, 1 Stat. 109. Congress amended this Act in 1793 to require that the applicant "have invented any new and useful art, machine, manufacture or composition of matter, or any new and useful improvement." Act of February 21, 1793, ch. 11, § 1, 1 Stat. 318. In the revisions to Patent Act of 1952, Congress amended the language of 35 U.S.C. § 101 to use the term "process,"[2] in lieu of "art," stating: "[w]hoever 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 Act of 1952

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[2] The new use of the term "process" did not alter the scope of patent eligibility over processes because "[i]n the language of the patent law, [a process] is an art." *Diamond v. Diehr*, 450 U.S. 175, 182-84 (1981). 35 U.S.C. § 100(b) defines "process" to mean "process, art or method, and includes a new use of a known process, machine, manufacture, composition of matter, or material."

further required the subject matter of the invention to be novel (*see* 35 U.S.C. § 102), to be non-obvious (*see* 35 U.S.C. § 103), and to satisfy certain disclosure requirements (*see* 35 U.S.C. § 112).

The Court has made the threshold determination of patent-eligible subject matter using a broad and flexible analysis, permitting accommodation of new areas of innovation. *See generally Gottschalk v. Benson,* 409 U.S. 63 (1972); *Parker v. Flook,* 437 U.S. 584 (1978); *Diamond v. Chakrabarty,* 447 U.S. 303 (1980); *Diamond v. Diehr,* 450 U.S. 175 (1981). The United States has been historically, and remains currently, a leader in innovation. Manufacturing, chemistry, electronics, biotechnology, and computer software are just a few of the technological fields that have seen tremendous commercial development within the United States. The Court's flexible determination of patent eligible subject matter has accommodated and fostered innovation in and development of all of these technologies, and has helped the United States to maintain its position in the global economy, despite a waning manufacturing base.[3]

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[3] *See, e.g.,* James Rogan, U.S. Under Sec'y of Com. for Intell. Prop. and Dir. of U.S. Pat. & Trademark Office, *Remarks at the Hearings on Competition and Intellectual Property Law and Policy in the Knowledge-Based Economy* (Feb. 6, 2002), http://www.ftc.gov/opp/intellect/rogan.shtm:

> Another development has been the expansion of the subject matter of patents. Whenever new technologies are presented for patenting, such as with microorganisms or computer software, the entry of patent law into these areas was greeted with predictions of disaster. Yet today

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The United States Court of Appeals for the Federal Circuit ("Federal Circuit"), in its *en banc* decision in *In re Bilski*, 545 F.3d 943 (Fed. Cir. 2008) (*en banc*), and in its development therein of a rigid, bright-line test for determining patent-eligible subject matter, has taken a step that will, if left unchecked, limit innovation in important areas of technology, such as information technology. The Federal Circuit has insisted that its "machine or transformation" test articulated in *Bilski* is the only test for determining if a process is patent eligible. *See In re Ferguson,* 558 F.3d 1359 (Fed. Cir. 2009). The Federal Circuit's "machine or transformation" test requires that a process must be tied to a machine or transform an article from one physical state to another. *See Bilski,* 545 F.3d at 954. Although perhaps capturing helpful insights into aspects of this Court's jurisprudence concerning statutory subject matter, the exclusive use of the inflexible "machine or transformation" test is antithetical to innovation in the information age and will limit the ability of the United States patent

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> the United States is the international leader in these and all other technological areas.
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> In short, over the past two decades the value of patents as business portfolio assets has increased, their validity has become more predictable, and the areas in which patents could be obtained have expanded. Each of these developments enhances the usefulness of patent law as a motivator for innovation.

system to accommodate both developing and new technologies.

This Brief attempts to serve the Court by providing both a global perspective on the issue of patent-eligible subject matter, and a commentary on why the Federal Circuit erred in holding that a "process" must either be tied to a particular machine or apparatus or transform a particular article into a different state or thing to be eligible for patenting under 35 U.S.C. § 101.

III. SUMMARY OF THE ARGUMENT

AIPPI's mandate is to study the way patent systems around the world protect intellectual property and make recommendations for improvement. To this end, AIPPI has studied how the major patent systems around the world address the threshold issue of what constitutes patent-eligible subject matter. Treaties, such as the Agreement on Trade-Related Aspects of Intellectual Property Rights ("TRIPS"), ratified by the United States and much of the world, set forth a flexible approach to patentability. *See* Agreement on Trade-Related Aspects of Intellectual Property Rights, Marrakesh Agreement Establishing the World Trade Organization, Annex 1C, Legal Instruments – Results of the Uruguay Round, 33 I. L. M. 1197, 1869 UNTS 299 (1994). AIPPI, through its Resolutions Q133 and Q158, encourages all member countries to update their rules of subject matter patentability for computer-implemented inventions and business methods, and sees in this Court's grant of *certiorari* in *Bilski* the opportunity for the United

States to be a thought leader in its resolution of the complex questions presented by this interplay of technology, statutory mandate, legal precedent, and the public welfare.

The Federal Circuit's rigid "machine-or-transformation" test, as an exclusive test, conflicts with this Court's precedent, including *Benson*, *Flook*, and *Diehr*, wherein the Court explicitly stated that patentable subject matter is not limited to processes tied to particular machines or transformation of articles or materials into different states or things. *See Benson,* 409 U.S. at 71; *Flook,* 437 U.S. at 590; *Diehr,* 450 U.S. at 187. In this vein, the Court made clear that the scope of Section 101 is not only "expansive" and "extremely broad," but is also "*dynamic*." *See Chakrabarty*, 447 U.S. at 308; *J.E.M. Ag Supply, Inc. v. Pioneer Hi-Bred International, Inc.*, 534 U.S. 124, 130, 135 (2001) (emphasis added).

Indeed, this Court has previously rejected rigid *per se* tests the Federal Circuit has attempted to impose on the patent law, opting instead for flexible approaches that better accommodate emerging technology. *See, e.g., KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 415 (2007) ("We begin by rejecting the rigid approach of the Court of Appeals. Throughout this Court's engagement with the question of obviousness, our cases have set forth an expansive and flexible approach inconsistent with the way the Court of Appeals applied its TSM test here.").

The United States Patent and Trademark Office ("USPTO") is struggling to apply the rigid "machine-or-transformation" test, as an exclusive

test, and is achieving inconsistent results. For example, the use of the "machine-or-transformation" test has resulted in very different treatment of machine and process claims for similar subject matter. The USPTO has found claims to a computer system executing software to be statutory,[4] and "find[ing] structure (i.e., a multiprocessor machine)" in a claim in another case as being "implied through the term 'executing,'"[5] while holding in yet other cases that a claim having process steps executed by a processor was *non-statutory*[6] and holding a process claim unpatentable even though it recited a "database" and steps of "processing."[7] Further increasing the volatility of USPTO decisions since the Federal Circuit's *Bilski* decision, the USPTO is also struggling to consistently apply the "machine-or-transformation" test to process claims. For example, the USPTO has found process claims to be non-statutory even though limited to "a method executed in a computer apparatus,"[8] or to a "programmed computer," configured to execute various steps,[9] while on the other hand finding

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[4] *Ex parte Delta*, Appeal 2009-000982, 2009 WL 1702044, at *5 (B.P.A.I. May 26, 2009), *infra* in Section IV.B.4.

[5] *Ex parte Richter*, Appeal 2008-2386, 2009 WL 1709111, at *6 (B.P.A.I. May 29, 2009), *infra* in Section IV.B.4.

[6] *Ex parte Cornea-Hasegan*, 89 USPQ2d 1557, 1560-61 (B.P.A.I. 2009), *infra* in Section IV.B.4.

[7] *Ex parte Shahabi*, Appeal 2008-2472, 2009 WL 1067191, at *4 (B.P.A.I. Apr. 20, 2009), *infra* in Section IV.B.4.

[8] *Ex Parte Langemyr*, 89 USPQ2d 1988, 1996 (B.P.A.I. 2008), *infra* in Section IV.B.4.

[9] *Ex parte Halligan*, Appeal No. 2008-2823, 2009 WL 963939, at *11 (B.P.A.I., Apr. 8, 2009), *infra* in Section IV.B.4.

another process claim statutory because it was performed on a first and second "physical computing device."[10] In essence, in attempting to apply the Federal Circuit's holding in *Bilski,* the USPTO has taken the illogical approach that a "generic" computer system is not a machine but that two "generic" computing devices are a machine. In a pragmatic sense, the exclusive application of the machine or transformation step has already been a failure in the USPTO. AIPPI submits that this confusion may be alleviated, at least in part, by rejecting the Federal Circuit's "machine-or-transformation" test in *Bilski.*

IV. ARGUMENT

Before this Court is the question whether the Federal Circuit erred by holding that a "process" (1) must be tied to a particular machine or apparatus or (2) transform a particular article into a different state or thing (*i.e.*, the "machine-or-transformation" test), to be eligible for patenting under Section 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, natural phenomena, and abstract ideas." *Diamond v. Diehr*, 450 U.S. 175, 185 (1981).

Although respectfully declining to opine as to the specific extent to which this Court deems Section 101 should extend, AIPPI respectfully submits that patent-eligible subject matter under Section 101

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[10] *Ex parte Wasynczuk*, 87 USPQ2d 1826, 1833 (B.P.A.I. 2008), *infra* in Section IV.B.4.

should be confirmed to include generally business methods implemented utilizing a computer.[11] Under the rigid and exclusive "machine-or-transformation" test, as applied by the USPTO, it is not clear to what extent, if any, "business methods" are eligible for patent protection.

A. The National and International AIPPI Members Believe a Flexible Approach to Patent-Eligible Subject Matter Will Foster Innovation

The patentability of computer software related innovations has been the subject of lively debate throughout the world for the past 50 years, particularly in recent times, due in no small part to both its commercial value and relative ease of misappropriation. For example, *Ex Parte Lundgren* noted that "'[b]usiness methods' have long been considered statutory subject matter when performed by a machine . . . . [and] [t]he *State Street* and *AT&T* cases, often called 'revolutionary,' involved patented machines or machine-implemented processes that examiners have for some time regarded as nonexceptional." *Lundgren*, 76 USPQ2d 1385, 1392 (B.P.A.I. 2005). Further, the economies of the industrialized countries are increasingly dependent on service industries, to which software and business

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[11] At issue in the present case is a business method for managing the consumption risk costs of a commodity sold by a commodity provider at a fixed price, such method not expressly requiring implementation on a computer. *See Bilski*, 545 F.3d at 949-50.

method patents are important. The eligibility of patent protection for computer programs or business methods has wide-ranging impacts on the United States and world economies.

Computer software related inventions involve by their nature the use of a computer, computer network or other programmable apparatus. In many cases, such inventions are directed to new functionality to be executed by a computer or other programmable device. Computer software related inventions penetrate almost all fields of technology. Because of the distributed nature of computer networks, an apparatus can be distributed over multiple jurisdictions and can be under the control of multiple parties. The requirement that software methods be tied to an apparatus forecloses remedies for the patent holder in a pragmatic sense by often requiring the patent holder to draft an unduly narrow claim or to rely on theories of indirect infringement. AIPPI urges that processes, whether controlled by software or not, should be eligible for patent protection regardless of the apparatus used to effect the process, subject only to the exceptions articulated by the Court, *i.e.*, abstract ideas, naturally occurring phenomena, and laws of nature.

In recent years, patent applications in the United States directed to "business methods" became more prevalent, driven in part by the Federal Circuit's decision in *State Street Bank & Trust Co. v. Signature Financial Group, Inc.*, 149 F.3d 1368 (Fed. Cir. 1998), *cert. denied*, 525 U.S. 1093 (1999). Other national patent systems, such as those aligned with the basic laws and rules of the European Patent Commission (EPC), excluded "manual" business

methods from patentability, but considered as potentially patentable subject matter that specified an apparatus or technical process for carrying out at least some part of the method, that method and the apparatus or process having to be examined as a whole.

The TRIPS agreement, to which U.S. and most European countries are signatories, defines patentable subject matter in a broad and flexible manner, consistent with Supreme Court precedent and contrary to the Federal Circuit's rigid test:

> Subject to the provisions of paragraphs 2 and 3, patents shall be available for any inventions, whether products or processes, in all fields of technology, provided that they are new, involve an inventive step and are capable of industrial application. Subject to paragraph 4 of Article 65, paragraph 8 of Article 70 and paragraph 3 of this Article, patents shall be available and patent rights enjoyable without discrimination as to . . . the field of technology . . . .

TRIPS, *supra* Section III, at Art. 27, para. 1.[12] Article 27 provides very limited possibilities for exclusions from patentability, namely, exclusions

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[12] See also Vienna Convention on the Law of Treaties, May 23, 1969, Part III, Observance, Application And Interpretation Of Treaties, Section 3: Interpretation of Treaties, Art. 31, General Rule of Interpretation, para. 1, stating "[a] treaty shall be interpreted in good faith in accordance with the ordinary meaning to be given to the terms of the treaty in their context and in light of its object and purpose."

based on public order or morality, and exclusions for diagnostic, therapeutic and surgical methods, as well as for plants and animals. *Id.* at para. 2-3. The North American Free Trade Agreement ("NAFTA"), to which the United States also adheres, includes a similarly broad and flexible definition of patentable subject matter:

> 1. Subject to paragraphs 2 and 3, each Party shall make patents available for any inventions, whether products or processes, in all fields of technology, provided that such inventions are new, result from an inventive step and are capable of industrial application. For purposes of this Article, a Party may deem the terms "inventive step" and "capable of industrial application" to be synonymous with the terms "non-obvious" and "useful," respectively.
> . . .
>
> 7. Subject to paragraphs 2 and 3, patents shall be available and patent rights enjoyable without discrimination as to the field of technology . . .

North American Free Trade Agreement, U.S.-Can.-Mex., art. 1709, para. 1,7, Dec. 17, 1992, 32 I.L.M. 289 (1993).

In view of this backdrop, AIPPI, after extensive study and debate, adopted Resolution Q133 (Appendix at A1-A11) regarding "Patenting of computer software" and Resolution Q158 (Appendix

at A12-A15) regarding "Patentability of Business Methods." These positions, stated in the Resolutions and explained further below, reflect sound patent policy developed by international intellectual property experts and users of the patent system on the patentability of software-related inventions and business methods.

AIPPI believes that a rigid "machine-or-transformation" test for patent-eligible subject matter as the exclusive test under Section 101 threatens innovation. Software is often created and distributed independent of hardware and specific media and software functionality is often used across borders while being executed on a remote machine, or multiple remote machines in multiple jurisdictions. The rigid test of *Bilski* fails to recognize these realities and the Federal Circuit has not articulated a principled basis for distinguishing between the different types of computer software or for applying a different set of rules for computer software, as compared to other fields of technology.

As set forth in Resolution Q133, patents should be granted, without discrimination, in all areas of technology, including that of computer software. All computer software meeting the patentability requirements (for example, in the U.S., of Title 35 of the U.S. Code) should be considered patentable in the same manner and treated equally. Computer software provides innumerable useful practical results and is of significant importance to the United States and World economies. Innovation in computer software should be encouraged and protected. Computer software should be patent-eligible in any medium in which it can be

commercialized and patentability should not hinge on the type of software or the medium on which the software resides or is carried. Likewise, Resolution Q158 sets forth that the same criteria should be used to evaluate the patentability of all inventions, including methods used in all fields of industrial, commercial and financial activities.

Applying unduly-restrictive criteria to certain technical fields is antithetical to innovation. The development of economic activity on the Internet demonstrates the importance of patent protection for commercial or economic methods. Indeed, the processes of transmission of information to Internet users, and access to this information, are essential for the success of commercial operations carried out through the Internet. Further, innovators in traditional business sectors including mass retailing, banking, finance and insurance, are inventing new methods of doing business, which are frequently, although not necessarily, computer-implemented. These inventions may have great practical interest and economic import and protection for those inventions should not be arbitrarily or unexpectedly denied.

AIPPI respectfully submits that an inventor should have the freedom to protect innovations in ways that reflect market needs, practicability, and the various manners in which such innovations can be commercialized and misappropriated. Limiting patent-eligibility of computer programs or computer implemented methods to claims tied to a "particular

machine or apparatus,"[13] in accord with the first prong of the "machine-or-transformation" test in *Bilski*, as opposed to more flexibly permitting protection for computer programs or computer implemented methods in any medium in which they can be commercialized as proposed in Resolution Q133, may force inventors of computer software to rely, at best, on the theory of indirect infringement to protect their inventions. Proof of indirect infringement involves additional evidentiary burdens[14] and inventions involving computer implemented methods would, in effect, be relegated to less effective protection than that available for other types of inventions.

Hence, AIPPI respectfully submits that computer programs or processes utilizing computer programs, whatever the media upon which such instructions are borne, constitute statutory subject

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[13] *See, e.g., Bilski*, 545 F.3d 943, 954. *See also Id.* at 994 (Newman, J., dissenting) ("[w]e aren't told when, or if, software instructions implemented on a *general purpose computer* are deemed 'tied' to a 'particular machine' . . . .") (emphasis added); *Id.* at 1015 (Radar, J., dissenting) ("What link to a machine is sufficient to invoke the 'or machine' prong? Are the 'specific' machines of *Benson* required, or can a *general purpose computer* qualify?") (emphasis added).

[14] *See* 35 U.S.C. §§ 271(a)-(c); *see also Ricoh Co., Ltd. v. Quanta Computer Inc.*, 550 F.3d 1325, 1335 (Fed. Cir. 2008) (holding the sale of disc drives that include "software containing instructions to perform a patented method does not infringe the patent under § 271(a)" because infringement of a method claim requires performing the actions described in the claim and "software is not itself a sequence of actions, but rather it is a set of instructions that directs hardware to perform a sequence of actions.").

matter under 35 U.S.C. § 101 and should be properly evaluated under 35 U.S.C. §§ 102, 103, and 112, and that inventions including computer software and "business methods" should be entitled to the same patent protection given to other advances in technology.

B. The "Machine-or-Transformation Test" is an Inappropriate Test that Conflicts with this Court's Precedent

In *Bilski*, the Federal Circuit adopted the "machine-or-transformation" test as the "*governing test* for determining patent eligibility of a process under § 101." 545 F.3d at 955 (emphasis added). The Federal Circuit reiterated its intent in *In re Ferguson*, stating that the "machine-or-transformation" test is its "definitive test" to determine whether a process claim is tailored narrowly enough to encompass only a particular application of a fundamental principle rather than to pre-empt the principle itself. *Ferguson*, 558 F.3d at 1363. The Federal Circuit's test, however, rests on an oversimplification of this Court's precedent.

The determination of whether an invention is patent-eligible subject matter under Section 101 has historically met with a flexible analysis sufficient to accommodate new technologies. *See Chakrabarty*, 447 U.S. at 307. This flexibility has benefitted the United States' position as a leader in technological development. The *per se* "machine-or-transformation" rule set forth by the Federal Circuit, as noted by Judge Newman in her concurrence to

Ferguson, is not the test of the Supreme Court. *See Ferguson*, 558 F.3d at 1367; *see also Benson*, 409 U.S. at 71 ("We do not hold that no process patent could ever qualify if it did not meet the requirements of our prior precedents. It is said that the decision precludes a patent for any program servicing a computer. We do not so hold.").

The exclusivity of the "machine-or-transformation" test is yet another rigid, bright-line test that the Federal Circuit has attempted to impose on the patent law. *See infra* Section IV.B.3. This Court appropriately rejects such attempts, and similarly should reject the exclusive use of the "machine-or-transformation" test. Indeed, the USPTO is already having difficulty applying the Federal Circuit's test consistently for processes or in a manner consistent with its approach to determining the patent-eligibility of other statutory categories (such as machines). *See infra* Section IV.B.4.

1. The Federal Circuit Has Based Its Section 101 Policy in *Bilski* on a Mischaracterization of Supreme Court Case Law

Three cases, *Gottschalk v. Benson*, *Parker v. Flook*, and *Diamond v. Diehr* are the main sources cited for the "machine-or-transformation" test used in *Bilski*. *Bilski*, 545 F.3d at 954. However, as explained by the *amicus curiae* brief filed on March 2, 2009, by the American Intellectual Property Law Association (AIPLA), this rich precedent was drawn upon narrowly and failed to capture significant insights and guidance therein. By way of example,

the Court clearly stated in *Benson*, responsive to an argument that a process "must either be tied to a particular machine or apparatus or must operate to change articles or materials to a 'different state or thing,'" that "[w]e do not hold that no process patent could ever qualify if it did not meet the requirements of our prior precedents." *Benson*, 409 U.S. at 71. Reiterating this point, the Court stated, responsive to arguments that "[this] decision precludes a patent for any program servicing a computer," that "[w]e do not so hold." *Id.* *Flook* likewise rejected the *Bilski* court's test, stating that "[t]he statutory definition of 'process' is broad" and that, although "[a]n argument can be made . . . that this Court has only recognized a process as within the statutory definition when it either was tied to a particular apparatus or operated to change materials to a 'different state or thing' . . . [a]s in *Benson*, we assume that a valid process patent may issue even if it does not meet one of these qualifications of our earlier precedents." *Flook*, 437 U.S. at 588 n.9 (citing *Cochrane v. Deener*, 94 U.S. 780, 787-788 (1876)). These statements indicate this Court's intention to avoid a rigid *per se* rule for Section 101 that would, for example, require subject matter be tied to a particular machine or apparatus or to operate to change articles or materials to different states or things.

At the heart of the *Bilski* majority decision lies an acknowledgement that its "machine-or-transformation" test might poorly adapt to new technology:

> Thus, we recognize that the Supreme Court may ultimately decide to alter or perhaps even set aside this test to accommodate emerging technologies.

> And we certainly do not rule out the possibility that this court may in the future refine or augment the test or how it is applied.

545 F.3d at 956. Not only is this rigid test poorly adapted to new, as well as current technologies, the "machine-or-transformation" test appears suspect at the outset, as its narrow scope and selective focus appears incongruent with other Supreme Court precedent. For example, the "machine or transformation" does not address *The Telephone Cases*, which concerned the patentability of and infringement of, *inter alia*, a claim, unusual by today's standards, directed to "certain new and useful Improvements in Telegraphy," issued in U.S. Letters Patent No. 174,465 ("the '465 Patent") to Alexander Graham Bell. *The Telephone Cases*, 126 U.S. 1, 6 (1888).[15] The Court stated that:

> 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.

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[15] The *Telephone Cases* involved suits in equity filed in Circuit Court of the United States by the American Bell Telephone Company and others, as owners of the '465 patent and another patent, known as the Bell-telephone Patents, to enjoin several defendants against infringement of those patents. *The Telephone Cases*, 126 U.S. at 3. In the lower courts, *inter alia*, the validity of the '465 patent was challenged and upheld.

Id. at 533. The Court further stated that "[t]he patent for the art does not necessarily involve a patent for the particular means employed for using it" and that "[i]ndeed, the mention of any means, in the specification or descriptive portion of the patent, is only necessary to show that the art can be used; for it is only useful arts -- arts which may be used to advantage -- that can be made the subject of a patent." *Id.*

The Court framed the question underlying each of the cases at issue as being "the scope of the fifth claim."[16] *Id.* at 531. The Court, addressing its broad construction of the unusual claim, appeared to acknowledge that the claim is virtually "a claim for speech transmission by transmitting it; or, in other words, for all such doing of a thing as is provable by doing it" and justified such construction by stating that "[s]urely a patent for such a discovery is not to be confined to the mere means he improvised to prove the reality of his conception." *Id.* at 538-539.[17]

How would this patent, so interpreted by the Court, fare under the "machine-or-transformation" test? It would appear that this claim, despite reciting what could be said to be "physical steps"

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[16] Claim 5 of the '465 patent recited "[t]he method of, and apparatus for, transmitting vocal or other sounds telegraphically, as herein described, by causing electrical undulations, similar in form to the vibrations of the air accompanying the said vocal or other sounds, substantially as set forth." *Id.* at 531.

[17] The Court also concluded that "[t]he patent is both for the magneto and variable resistance methods, and for the particular magneto apparatus which is described, or its equivalent." *The Telephone Cases*, 126 U.S. at 538.

(i.e., "causing electrical undulations"), does not recite "a particular machine or apparatus" (i.e., it is not confined to any particular means), and does not under the Federal Circuit's characterization of "article," transform such "article" into a different state or thing, unless a voltage or current is deemed to be the "article" transformed.[18] Thus, a claim that the Supreme Court found statutory likely would fail the Federal Circuit's rigid "machine-or-transformation" test.

2. The Court Has Preferred a Flexible Approach to Section 101 for Other Areas in Addition to Processes

The Court has applied a flexible approach to determining patent-eligibility of articles of manufacture and compositions of matter, two of the other enumerated statutory classes in Section 101. In doing so, the Court stressed that Section 101 was meant to be interpreted broadly to accommodate innovation. *Chakrabarty*, 447 U.S. at 308-09. This is in direct conflict with the Federal Circuit's rigid test for processes.

For example, in *Chakrabarty*, the Court held that a genetically-engineered bacterium was a patentable manufacture or composition of matter under Section 101. *Chakrabarty*, 447 U.S. at 310.

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[18] *But see In re Nuijten*, 500 F.3d 1346, 1356-57 (Fed. Cir. 2007) (holding that "[a] propagating electromagnetic signal is not a 'machine' as that term is used in § 101" and "Nuijten's signals, standing alone, are not 'manufacture[s]' under the meaning of that term in § 101.").

In doing so, the Court stressed that "[i]n choosing such expansive terms as 'manufacture' and 'composition of matter,' modified by the comprehensive 'any,' Congress plainly contemplated that the patent laws would be given wide scope." *Id.* at 308. The Court emphasized the goals of the patent system, noting that "[t]he Act embodied Jefferson's philosophy that 'ingenuity should receive a liberal encouragement.'" *Id.* (citations omitted). To that end, the Court, in dealing with this cutting-edge technology, rejected the argument that the bacterium was "a hitherto unknown natural phenomenon." *Id.* at 309. Rather Chakrabarty's "discovery is not nature's handiwork, but his own; accordingly it is patentable subject matter under § 101." *Id.* at 310. *Chakrabarty* cited with approval the statement in *Kewanee Oil Co. v. Bicron Corp.*, 416 U.S. 470, 480-481 (1974), that the authority conveyed under Art. I, § 8, cl. 8 of the Constitution is exercised in the hope that "the productive effort thereby fostered will have a positive effect on society through the introduction of new products and processes." *Chakrabarty*, 447 U.S. at 307 (citations omitted). *Chakrabarty* likewise emphasized that "[t]he Committee Reports accompanying the 1952 Act inform us that Congress intended statutory subject matter to 'include anything under the sun that is made by man.'" *Id.* at 309 & n.6 (citing S. Rept. No. 1979, 82d Cong., 2d Sess., 5 (1952); H.R. Rep. No. 1923, 82d Cong., 2d Sess., 6 (1952)).

Similarly, in *J.E.M. Ag Supply* the Court held sexually-reproduced plants to be patentable, reaffirming the statements in *Chakrabarty* that Section 101 was intended to be broad and flexible. *J.E.M. Ag Supply* 534 U.S. at 130, 135. For

example, the Court reiterated that "the language of § 101 is extremely broad" and that Section 101 is a "dynamic provision designed to encompass new and un-foreseen inventions." *Id.*

While the Federal Circuit's rigid test illustrates a misunderstanding of modern information technology as applied to methods, the Federal Circuit's *In re Nuijten* shows that this misunderstanding extends to articles of manufactures as well. *See In re Nuijten*, 500 F.3d 1346 (Fed. Cir. 2008), *cert. denied*, 2008 U.S. LEXIS 6858 (U.S., Oct. 6, 2008). In *Nuijten,* the Federal Circuit held that a signal with embedded supplemental data was not patentable because "to be perceived, [it] must be measured at a certain point in space and time by equipment" and that, "[i]n essence, energy embodying the claimed signal is fleeting and is devoid of any semblance of permanence during transmission." *In re Nuijten*, 515 F.3d at 1377. Like its approach in *Bilski,* the Federal Circuit's approach in *Nuijten* is contradicted by *Chakrabarty,* which held that genetically-engineered bacteria, clearly not perceivable without a microscope, could be a patentable manufacture or composition. *See Chakrabarty*, 447 U.S. at 310. Once again, the Federal Circuit's logic, if applied to other technologies, would exclude from patentability many technological innovations that are well accepted as being patent-eligible subject matter.

To illustrate the struggle that the Federal Circuit has had in dealing with this emerging technology, the Federal Circuit suggested that the same signal, if simply stored in a memory rather than transmitted via an electromagnetic

transmission, would have been patentable. *See Nuijten,* 500 F.3d at 1357 n.6; *see also In re Lowry,* 32 F.3d 1579, 1583-84 (Fed. Cir. 1994). The Federal Circuit, then, would protect an invention if that invention were carried from one place to another on a floppy disk or a solid state storage device, but not if that same invention were transmitted over radio waves. As it did in *Bilski*, the Federal Circuit in *Nuijten* put forth another bright-line test, based on outdated technology, that could result in insufficient patent protection for modern innovation.

Bilski and *Nuijten* thus underscore the Federal Circuit's tendency to place limitations on the patent-eligibility of new technologies, rooted in a lack of understanding of those technologies, which limitations would not be applied to other more established technologies. Computer software, whether articulated as a set of process steps, or as stored in hardware or embedded in a signal, is not an abstract idea; if particular software has use, it should be considered to be within the broad scope of Section 101, as confirmed by *Chakrabarty*'s language "anything under the sun made by man." *Chakrabarty*, 447 U.S. at 309 & n.6.

Thus, in addition to the Court's statements specifically in the context of patentable processes that patent-eligibility is not limited to claims passing a "machine-or-transformation" test, the Court has repeatedly reaffirmed the breadth and flexibility of Section 101 in other statutory categories.

3. The "Machine-or-Transformation" Test is a Rigid *Per se* Test, Which is a Type of Test That This Court Has Rejected in the Past

The Court has rejected as inappropriate a number of rigid tests adopted by the Federal Circuit. *See, e.g., Festo Corp. v. Shoketsu Kizoku Kogyo Kabushiki Co.,* 535 U.S. 722 (2002); *KSR Int'l Co. v. Teleflex Inc.,* 550 U.S. 398 (2007); and *Quanta Computer, Inc. v. LG Electronics, Inc.*, 128 S. Ct. 2109 (2008).

In *Festo*, the Court rejected, in favor of a flexible approach, the Federal Circuit's "complete bar" to equivalents under the doctrine equivalents to a patentee who had made certain amendments before the Patent Office. *Festo*, 535 U.S. at 737-38. The Court explained that, in prior cases addressing the doctrine of equivalents, "[w]e have considered what equivalents were surrendered during the prosecution of the patent, rather than imposing a complete bar that resorts to the very literalism the equivalents rule is designed to overcome." *Id.* at 738. The Court recognized the difficulty of applying such a bright-line rule, noting that:

> The equivalent may have been unforeseeable at the time of the application; the rationale underlying the amendment may bear no more than a tangential relation to the equivalent in question; or there may be some other reason suggesting that the patentee could not reasonably be expected to

> have described the insubstantial substitute in question.

Id. at 740-41.

These sentiments against rigid, *per se* tests were further echoed in *KSR*, which "reject[ed] the *rigid approach* of the Court of Appeals [for the Federal Circuit]," explaining that "[t]hroughout this Court's engagement with the question of obviousness, our cases have set forth an *expansive and flexible approach* inconsistent with the way the Court of Appeals applied its TSM test . . . ." *KSR*, 550 U.S. at 415 (emphasis added). The Court noted that "[t]he obviousness analysis cannot be confined by a formalistic conception of the words teaching, suggestion, and motivation, or by overemphasis on the importance of published articles and the explicit content of issued patents . . . ." *Id.* at 419. The Court's reasoning in *KSR*, that "[t]he diversity of inventive pursuits and of modern technology counsels against limiting the analysis in this way," *id.*, rings particularly true in the instant case.

Finally, in *Quanta*, the Court's most recent patent law decision, the Court rejected the Federal Circuit's rigid policy of limiting patent exhaustion to apparatus claims. *Quanta*, 128 S. Ct. at 2117-18. As the Court remarked,

> Apparatus and method claims "may approach each other so nearly that it will be difficult to distinguish the process from the function of the apparatus." By characterizing their claims as method instead of apparatus claims, or including a method claim for the machine's patented method of

> performing its task, a patent drafter could shield practically any patented item from exhaustion.

Id. (internal citation omitted). This potential to exalt form over substance "illustrates the danger of allowing such an end-run around exhaustion. . . . We therefore reject LGE's argument that method claims, as a category, are never exhaustible." *Id.* at 2118.

4. The USPTO's Decisions Demonstrate the Inconsistency of Applying a Rigid "Machine-or-Transformation" Test to Processes

Rather than providing certainty, the *Bilski* case has fostered uncertainty. The USPTO's Board of Patent Appeals and Interferences ("BPAI") is struggling to apply the Federal Circuit's test in a manner consistent with its approach to other classes of statutory subject matter and even among processes. The Federal Circuit's rigid test is arbitrary and is causing the USPTO to exalt form over substance.

For example, in *Ex parte Delta*, the BPAI found a machine claim patentable because it "recit[ed] a 'computer system' executing processes" and "interpret[ed] this system to call for a computer (i.e., hardware) that is programmed with software that when executed causes the computer to perform

the claimed steps."[19] *Ex parte Delta*, Appeal 2009-000982, 2009 WL 1702044, at *5 (B.P.A.I. May 26, 2009). Yet, in *Ex parte Cornea-Hasegan*, the BPAI found that "[t]he recitation of a processor in combination with purely functional recitations of method steps, where the functions are implemented using an unspecified algorithm, is insufficient to transform otherwise unpatentable method steps into a patent eligible process." *Ex parte Cornea-Hasegan*, 89 USPQ2d 1557, 1560-61 (B.P.A.I. 2009). Similarly, in *Ex parte Halligan*, the USPTO, despite repeated recitation of a "programmed computer" in a process claim, stated "that the use of a specific machine must impose meaningful limits on the claim's scope to impart patent-eligibility." *Ex Parte Halligan*, 2009 WL 963939, at *11 (B.P.A.I. April 8, 2009) (citing *Bilski,* 545 F.3d at 961-962). The BPAI stated that allowing a claim to a "programmed computer" in combination with purely functional recitations "would exalt form over substance and would allow pre-emption of the fundamental principle" without describing *how,* as in *Benson*, the recited instructions for the programmed computer would "pre-empt" a fundamental principle. *Id.*

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[19] Moreover, the USPTO is not even consistent in evaluating machine claims, and appears to be trying to apply some form of the "machine-or-transformation" test to those types of claims as well. *See, e.g., Ex parte Greene,* Appeal 2008-4073, 2009 WL 1134839 at *7 (B.P.A.I. Apr. 24, 2009) (citing *Bilski,* the BPAI "[found] the nominal recitation of conventional computer components in an apparatus claim otherwise directed to a pure mathematical algorithm (e.g., a Fast Fourier Transform) does not impose meaningful limits on the scope of the claim").

In *Ex parte Shahabi*, the USPTO found a process unpatentable, even though it recited a "database," and steps of "processing," by construing "database" to not require a machine and by determining that "processing" could be performed in one's head. *Ex Parte Shahabi*, Appeal No. 2008-2472, 2009 WL 1067191, at *4 (B.P.A.I. Apr. 20, 2009). Yet in *Ex parte Richter*, the USPTO had no trouble "find[ing] structure (i.e., a multiprocessor machine)" as being "implied through the term 'executing'" in finding the machine claim to be patentable. *Ex parte Richter*, Appeal No. 2008-2386, 2009 WL 1709111, at *6 (B.P.A.I. May 29, 2009).

Thus the USPTO, on one hand, has found a conventional computer system that executed software to be a patentable machine, yet on the other hand found that executing software on a conventional computer was not tied closely enough to a machine to pass the Federal Circuit's "machine-or-transformation" test for processes. Likewise, the USPTO has refused to read a computer into method claims in rejecting their patentability, and has rejected method claims expressly reciting a programmed computer, yet has relied on similar language to read a computer into machine claims to sustain their patentability. *Bilski* reiterated the Court's caution in *Flook* regarding exalting form over substance. *See Bilski*, 545 F.3d at 957 (quoting *Flook*, 437 F.3d at 590). Yet, this is exactly what the USPTO is using the "machine-or-transformation" test to do.

Moreover, the BPAI, in rejecting the patentability of software executed on a computer, is rejecting as unpatentable claims that presumably

should pass the "machine-or-transformation" test. After all, the claims are tied to a particular machine – a computer. *Bilski*, of course, provided no guidance as to which machines a process could be tied to in order to render the process patent-eligible. *See Bilski*, 545 F.3d at 957 ("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."). The USPTO apparently has concluded that, in some cases, a computer is not one of those machines, *see Cornea-Hasegan*, 89 USPQ2d at 1561, even though a computer system executing a process can be a patentable machine, *see Delta*, 2009 WL 1702044, at *5. Quite simply, as the USPTO has demonstrated, the Federal Circuit's approach is arbitrary and unworkable.

Finally, the USPTO has been unable to consistently apply the "machine-or-transformation" test to process claims, sometimes finding a generic computer to be sufficient recitation of a machine, and sometimes not. For example, in *Ex Parte Langemyr* the USPTO determined that "a method executed in a computer apparatus" did not meet the "machine-or-transformation" test because:

> This recitation is so generic as to encompass any computing system, such that anyone who performed this method in practice would fall within the scope of these claims. Thus, the recitation of a computer apparatus in the preamble is not, in fact, a limitation at all to the scope of the claim, and the claim is

> directed, in essence, to the method performed by any means.

Ex Parte Langemyr, 89 USPQ2d 1988, 1996 (B.P.A.I. 2008). Yet, in *Ex parte Wasynczuk,* the USPTO found that a method in which the steps were practiced on a "first" and "second" "physical computing device" met the "machine-or-transformation" test because those "physical computing device[s]" were "'a particular apparatus' to which the process is tied, not simply a generic computing device for performing the steps." *Ex parte Wasynczuk*, 87 USPQ2d 1826, 1833 (B.P.A.I. June 2, 2008). The USPTO has interpreted nearly the same language, "a computer apparatus" and a "physical computing device," to be both "so generic as to encompass any computing system" and "not simply a generic computing device." Yet, a "physical computing device" is no more or less a particular structure than "a computer apparatus." In *Langemyr,* the USPTO has seemingly used the notion of preemption to find a claim non-statutory, while showing no such concern in nearly identical circumstances in *Wasynczuk.* These flatly contradictory results illustrate succinctly the impossibility of applying the Federal Circuit's bright-line test.

V. CONCLUSION

The Federal Circuit's decisions in *Bilski* and *Nuijten*, along with the USPTO decisions discussed in Section IV.B.4, *infra*, show inconsistent efforts on the part of the Federal Circuit and the USPTO to limit the patent-eligibility of information technology

inventions to the physical machines of the last century. Rigid tests based on past technologies must be avoided and sufficient flexibility in the statutory subject matter test must be available to foster innovation in undeveloped, nascent, and yet to be discovered technologies.

For the forgoing reasons, AIPPI respectfully submits that 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. AIPPI respectfully encourages the Court to reverse or vacate the Federal Circuit's decision in *Bilski* and reaffirm the breadth of Section 101, and its flexibility to accommodate new and unforeseen inventions.

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QUESTION 133

Patenting of computer software

Yearbook 1997/III, pages 299 - 303 Q133
Executive Committee of Vienna, April 18 - 22, 1997

Question Q133

Patenting of computer software

Resolution

AIPPI

considering its previous positions and resolutions adopted since 1974 recognising the need to protect creations embodied in computer software in general;

considering that copyright protection for computer software was initially recommended by AIPPI due to such type of protection being immediate and able to take benefit from already existing international conventions;

considering that copyright protection has been recognised by AIPPI as being inadequate as a sole system for protecting computer software;

considering the increasing technical and economic importance of computer software and the fact that effective protection for computer software developers is critical;

considering that the TRIPS Agreement requires patent protection without restriction for any inventions in all areas of technology; and

considering the **reasons** appended to this resolution,

Resolves that:

1. As a question of principle clearly reflected in the TRIPS Agreement and taking into account other reasons of a legal, economic and practical nature, patents should be granted without discrimination in all areas of technology, including that of computer software, such as programmes.

2. Computer software should be considered patentable provided that the claimed subject matter meets the traditional patentability requirements of novelty, inventive step (non-obviousness) and utility or industrial applicability.

3. The technical character of computer software

should be generally acknowledged and its industrial applicability should be construed in a broad manner so as to embrace the concept of enabling a useful practical result.

4. In spite of increasingly liberal interpretations by the national and regional Patent Offices and Courts, modifications in many national and regional laws regarding patents are recommended to provide or ensure adequate patent protection for computer software; this including the abolition of any limitations in the laws or treaties relating to industrial property, as well as to promote legal certainty.

5. All computer software meeting the patentability requirements should be considered patentable in the same manner and with equality of treatment with no distinction being drawn between the different types of software.

6. Patent protection and copyright protection for computer software are of a different nature and relate to different aspects of the software. They may co-exist notwithstanding their different terms of protection.

7. Computer software should be inherently patentable in any medium in which it can be commercialised.

8. The establishment of special rules for different technologies is undesirable in general with respect to the presentation of the

specification (description) and the drafting of the claims and the same principle should apply to patents relating to computer software, it being as usual the responsibility of the applicant to ensure that he meets the relevant national or international requirements. Moreover, special rules should not be encouraged as a solution to other problems, such as the difficulty to effect prior art searches. In this respect, AIPPI encourages all efforts by Patent Offices and all other interested parties to make prior art searches more reliable in the area of software without resorting to the adoption of special rules that could impose undue or unnecessary burden on patent applicants.

9. The concept of inventive step or non-obviousness should be applicable to the patentability of computer software, notwithstanding any practical difficulties that may exist.

10. The exercise of patent rights in the case of computer software is no different in principle from that in the case of other types of invention.

Reasons:

A) Principle of patentability

Independently of the terms of any specific national legislation, there is no doubt that the creation of computer software is of considerable technical complexity. In principle, therefore, there is no reason to deny patent protection to inventions in the area of computer software. Such a position is integrally in accordance with Article 27 of the TRIPS Agreement.

The creation of computer software is basically as lengthy and expensive a process as the software is simple to copy. A literal copy may be prohibited under copyright. However, the functional concept behind a given software may be copied without such an evident infringement of the copyright. Functional concepts translated into products or processes are the proper subject matter of patents and an efficient system of protection is highly desirable in order to protect investment and to encourage development in this particular technical area.

To exclude computer software from patent protection would be arbitrary and discriminative with respect to a technology of ever increasing importance and which merits concrete protection. In addition the dividing line between hardware and software is becoming increasingly blurred and it is discriminative to consider one patentable and the other not.

B) Conditions of patentability

If software is to be patentable, it is most appropriate that the same conditions apply as they do for other types of invention. Apart from novelty and inventive step (or non-obviousness), the law in most jurisdictions requires patentable inventions to have a technical character or technical applicability. Software can take many types of form, may be machine-integrated or not and new types of software will certainly appear with new technological development. It is therefore not appropriate to distinguish between the different types which should all be treated on an equal footing, the question of patentability depending on the invention meeting the traditional requirements.

With respect to technical or industrial character or applicability, basically all computer software is technical in nature and this alone should meet this requirement. However, it is important that some useful practical result be obtained. Moreover, the difference between a technical result and, for example an aesthetic result is not pertinent to the generally technical nature of the software in itself. In considering the patentability of any given software, therefore, any legal requirement regarding technical character should be construed broadly so as to embrace the concept of obtaining a useful practical result.

It should also be observed that the requirement of technical nature is open to many interpretations, as

has been demonstrated by the many decisions on the matter. It is recommended that there only be a requirement for inventions to enable a useful practical result.

C) Legal Certainty and changes in legislation

The tendency of the courts in many countries that require inventions to have a technical character, including the European Patent Office, has become progressively less strict in construing the requirement as applied to software related inventions.

The laws of a large number of countries contain prohibitions to the patenting of software "per se". This is contrary to the TRIPS Agreement, contrary to the position given above and it is not useful.

Alterations in the relevant national and regional legislations, removing the software "per se" prohibition and eliminating the technical character requirement are therefore recommended to ensure the universal recognition of the patentability of computer software and to provide legal certainty.

It is emphasised that the removal of the software "per se" prohibition does not mean that all software is patentable. It only means that the mere fact that a claimed invention relates to software "per se" should

not be a reason in itself for rejection. Naturally, it must fulfil the normal requirements of patentability,

D) The co-existence of patent and copyright protection

In spite of the difficulties that may arise

- in attempting to draw a line of demarcation between the aspects of computer software that can be protected under copyright and by means of a patent;

- with regard to the differences there may be between the proprietary rights under copyright and patent law; and

- with regard to the different durations of copyright and patent protection, especially with regard to problems that may arise in determining which aspects of the computer software cease to be protected when the patent rights expire,

there appears to be no decisive reason against the co-existence of patent and copyright protection. The apparent problem appears to be analogous to the difference between patents and models or registered designs which have historically existed side by side. Similarly, there appears to be no overriding reason why the expiry of a patent relating to software should have any effect on the protection under copyright that may continue to be in force.

E) Purely abstract data handling operations

The fact that a computer software invention involves merely abstract data handling operations should not exclude it from patentability, provided that it enables a useful practical result.

F) Software in machine-readable form

Considering that software in combination with a known general purpose computer may be patentable when a useful practical result is obtained, and furthermore that it is the software itself that represents the true technical and economic importance of the creation, it is arbitrary to consider the product that is commercialised to be excluded from protection. It would be the same thing as to say that a novel nut can only be patented when claimed in combination with its bolt or that a spark plug can only be claimed in combination with an internal combustion engine. Consequently, it is reasonable to consider computer software to be inherently patentable in any medium in which it can be commercialised, provided that it is novel and inventive and, furthermore, that when used appropriately, i.e. in combination with a computer, it produces a useful practical result.

G) The specification (description) and claims

It is a basic position of AIPPI that specific rules or norms for the drafting or presentation of the specification or claims of patents should be avoided

wherever possible. There would appear to be no convincing reason for this to be different with respect to software inventions. The applicant for a patent should have the choice of presenting and claiming his invention as he thinks fit. Whether a patent does or does not meet the requirements of disclosure and patentability will always arise in the case of any technology and each applicant has to assume the responsibility of deciding how he meets the requirements. The meeting of very specific rules could well be an undue, unnecessary and possibly expensive burden on the applicant.

The only plausible reason for special rules for the presentation of the specification appears to be to facilitate prior art searches. However, this would not appear to justify the burden or the lack of liberty imposed on the applicant.

At the same time, AIPPI encourages Patent Offices and other interested parties to continue to make all efforts to devise manners, such as the development of classification systems and data-bases, to facilitate prior art searching.

H) The exercise of computer software patent rights

Notwithstanding the difficulties that may arise in the exercise of rights, in particular the questions of territoriality in the case of computer software used in international communications networks, no convincing reason has been found in principle for

the exercise of software patent rights to be different from the exercise of patent rights in any other technical field. Exceptions to rights, such as with respect to interoperability (e.g. the communication between one software and another) are not approved, without prejudice to parallel laws or regulations that may already exist in other areas, including those relating to commercialisation, anti-trust and others.

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QUESTION 158

Patentability of Business Method

Yearbook 2001/II, pages 243 - 244 Q158
38th Congress of Melbourne, March 23 - 30, 2001

Question Q158

Patentability of Business Methods

Resolution

AIPPI

Considering that:

(a) The patent system is designed to compensate fairly research as well as the creation of new inventions.

(b) The right to protect inventions arising out of economic activities is guaranteed by article 1 of the Paris Convention.

(c) Pursuant to article 27 of the TRIPS treaty,

a patent may be obtained for any invention in all fields of technology.

(d) The question of protection of business methods has been raised due to the widespread use of computers and the development of software.

(e) During the 1997 meeting of the Executive Committee held in Vienna, which considered Question 133 "The Patentability of Computer Software" the AIPPI formally declared it was in favour of patent protection of computer software.

And whereas:

(f) Since its origins, patent law has progressively adapted to new subject matter,

(g) Problems resulting from this expansion have nevertheless been resolved without the necessity of substantially modifying the criteria for the granting of patents,

(h) Creations of a purely abstract nature are generally excluded from the scope of protection of patents,

(i) In several legal systems, inventions, in order to be protected by patents, must not only be useful but must also possess a technical content,

(j) The TRIPS treaty has not specified how it intends the term "fields of technology" appearing in article 27 to be defined with

respect to the definition of patentable subject matter,

(k) The expansion of patentable subject matter, which has not yet been considered by different national laws may raise practical problems, particularly with respect to procedures and rules of examination before patent offices.

Adopts the following resolution:

1 Inventions including methods used in all fields of industrial, commercial and financial activities, herein referred to for purposes of simplification as "business methods", should be entitled to patent protection provided that the invention as defined in the claims has a technical content.

2 If such an invention as a whole has a technical content, that should be sufficient for patentability even though the point of novelty and inventive step (non-obviousness) does not lie in the technical content.

3 Further, the protection of such inventions by patents should be assessed or based upon the same criteria as other inventions, and no new or special criteria should be applied.

4 The assessment of inventive step for such inventions should be made on a case-by-case basis and even known methods may, if their application to a new field is inventive, be granted patent protection.

5 Merely transforming a known method into software form does not give rise to a presumption that such an invention has an inventive step.

6 Patents for business methods should be treated in the same way as patents in other fields. In particular:

a. The scope of protection granted by patents with respect to business methods should be the same as the protection granted to other inventions.

b. Where evidentiary methods allow for a reversal of the burden of proof, this should be available for business method patents as well.

c. The term for such patents should be the same as for patents in other fields.

d. The remedies for infringement of such patents, such as damages and injunctions, should be the same as for patents in other fields.

7 In the granting of such patents, AIPPI encourages the improvement of search and examination procedures by patent offices, particularly by the creation of databases in connection with prior art.