No. 08-964

IN THE Supreme Court of the United States

BERNARD L. BILSKI AND RAND A. WARSAW,

v.

Petitioners,

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

Respondent.

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

BRIEF OF KONINKLIJKE PHILIPS ELECTRONICS N.V. AS AMICUS CURIAE IN SUPPORT OF PETITIONERS

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## **QUESTION PRESENTED**

Whether the Court of Appeals erred by holding that a "process" must be tied to a particular machine or apparatus, or transform a particular article into a different state or thing ("machine-or-transformation" test), to be eligible for patenting under 35 U.S.C. § 101.

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#### **INTEREST OF AMICI CURIAE<sup>1</sup>**

Patent rights are defining assets for high technology businesses and the monetary values of patents are often used as important gating metrics for strategic investment decisions. The Court of Appeals decision abruptly upsets decades of established patent law precedents and thus undermines business valuations that were and are currently being made in reliance upon the established law. The new test for patentable subject matter which is mandated by the decision is radical, uncertain and raises many new and unanswered questions. These factors will likely chill and delay planned investments in new research and in start-up ventures which are essential to American economic recovery. This fundamental redefinition of the law is properly the province of Congress, particularly when the economic and social impact of the change will have very immediate and uncertain consequences.

*Amici curiae* Koninklijke Philips Electronics N.V. (aka Royal Philips Electronics N.V.) is the parent corporation of a worldwide family of companies ("Philips"). Philips has been inventing and manufacturing electronic and electrical products for over 115 years and is one of the largest users of the patent system in the United States.

<sup>&</sup>lt;sup>1</sup> No counsel for a party authored this brief in whole or in part, and no such counsel or party made a monetary contribution intended to fund the preparation or submission of this brief. No person other than the *amicus curiae*, or its counsel made a monetary contribution intended to fund its preparation or submission.

Philips began operations as a 19th century electric lamp manufacturer and our company history is rooted in the classic patent battles of the industrial age. We are thus able to offer a unique perspective of the commercial importance of this case and its potential negative impact on the American research, manufacturing and service industries.

Last year Philips filed U.S. patent applications for more than 1,000 inventions. Scientists and engineers at our American laboratories have made pioneering advances in the fields of high efficiency lighting, medical diagnosis and imaging, high definition television, optical CD and DVD recording, and digital rights management. Philips' annual income from patent licensing activities is in excess of five hundred million dollars. In our experience, meaningful patent protection in the United States and other jurisdictions can best be achieved when the patent system provides a broad spectrum of alternative patent claim categories to assure that all unauthorized users of our inventions can be charged with acts of direct patent infringement.

Like many established companies, Philips needs to assure that our products and services will remain relevant and profitable as software and intelligent systems replace traditional electronic hardware components. Thus, Philips has recently divested much of its semiconductor and consumer electronics product lines and is investing billions of dollars to acquire promising start-up companies and technologies to build our businesses in the medical diagnostics, patient monitoring and energy-efficient lighting sectors. We are keenly interested in assuring that the U.S. patent system will provide protection with enough claim scope to deter trans-national infringers and with economic incentives for continued research in these fields.

Philips is a technology company. Very few of our patented inventions involve methods of doing or conducting business in the sense exemplified by the petitioners' hedging transactions. But the decision below also affects the patentability of technologies and it is already being applied as precedent by the Patent Office to reject patent applications for technological innovations in our traditional product lines. Thus we have grave concerns that a mandatory machine-ortransformation test for patentable subject matter will severely limit our ability to obtain effective patent protection for our concrete and tangible technical innovation.

#### SUMMARY OF THE ARGUMENT

The new statutory construction and restated legal principles that underlie the Court of Appeals' decision raise a host of issues and unanswered questions which will delay new investments in essential research and technologies. The decision is overreaching, works an unnecessary sea change in deep-rooted principles of patent law, and will necessitate a massive revaluation of America's intangible technology assets. This Court needs to act swiftly to review the decision and to redirect the Court of Appeals for the Federal Circuit before this unwise new course disrupts our research and business environment. The scope and fallout of the *Bilski* decision are not ted to methods of doing business. The new test that is

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limited to methods of doing business. The new test that is mandated for patentable process subject matter affects the claim language used in tens of thousands of granted patents for commercially important technology inventions. Patent owners will now need to evaluate and correct potential defects in technology process claims before they can assert, license and/or enforce their previously granted rights against infringers. The projected costs of reevaluating and correcting these unanticipated defects in existing patent portfolios are enormous and the work will take years to complete. Many patent holders will seek to reissue their patents in proceedings that will divert scarce Patent Office resources away from the already backlogged examination of new inventions.

The newly mandated machine-or-transformation test is unsound jurisprudence and contrary to long established precedents of this Court and Federal Circuit law. Statutory processes are a broad collective category that includes many more inventions than simple manufacturing methods. The principle that patentable subject matter broadly includes all of the technological arts was already firmly established in American law by the late 19th century. Processes claims are often seen as the only means to achieve effective patent protection for important inventions in the medical diagnostics, environmental control, and information science technologies. The holding below thus inherently discriminates against industry sectors. The patent statutes should be construed in an even-handed manner which is free of bias that disfavors any particular technology or industry segment. The holding also disrupts the delicate strategic balance between patent and trade secret protection which has been carefully crafted by Congress and this Court's precedents.

#### ARGUMENT

I. The Court of Appeals decision works an unnecessary sea change in deep-rooted principles of patent law that will necessitate a massive revaluation of technology assets and will delay new investments that are essential to economic recovery.

Circuit Judge Newman aptly reminded us that: "Stable law on which industry can rely, is a foundation of commercial advance into new products and processes. *In re Bilski*, 545 F.3d 943, 992 (Newman, J., dissenting) (Fed. Cir. 2008). An important benefit of the patent system is to establish a body of rules which apply to the exploitation of technical innovations and more particularly to the financial valuation of technology. Published patents serve as an important, often critical vehicle through which firms can credibly convey information about their inventions to observers. *See* Clarisa Long, *Patent Signals*, 69 U. Chi. L. Rev. 625 (2002). The International Chamber of Commerce (the "ICC") reports that:

"businesses and the financial community are becoming increasingly sophisticated about the importance of evaluating intellectual property rights as a component of preinvestment due diligence, not only from a financial perspective but also from a legal perspective, concerning issues such as validity, enforceability, scope of intellectual property rights, potential revenue from infringement by others, and any potential liability from infringing the rights of others. As a result, such studies provide more reliable information about the financial value of intellectual property as well as information useful in setting business direction and strategy."

ICC, Current and Emerging Intellectual Property Issues for Business: A Roadmap for Business and Policymakers (Ninth Ed. 2008) at 55 http:// www.iccwbo.org/uploadedFiles/ICC/intellectual \_property/pages/IP\_roadmap-2005(1).

The Court of Appeals for the Federal Circuit has now abruptly recast and reversed decades of wellestablished patent law. The decision below is a capricious, ill-conceived, admittedly incomplete and improper extension of judicial authority into the heart of legislative economic and industrial policy. This Court first addressed the patentability of processes under the 1952 Patent Act in Gottschalk v. Benson, 409 U.S. 63 (1972). The Court of Appeals has now discarded over thirty five years of post-*Benson* case law in favor of a mandatory, two-pronged machine-or-transformation test for patentable subject matter. But the first ("machine") prong of the Federal Circuit's new test is illusory, Bilski, 545 F.3d at 962 (stating "... issues specific to the machine implementation part of the test are not before us today. We leave to future cases the elaboration of the precise contours of the machine implementation . . ."). Without the first prong, the new test is, in substance, simply a return to the stale physical transformation tests for patentability, which were already discredited and rejected at the end of the nineteenth century.

The Court of Appeals recognized that this Court "may ultimately decide to alter or perhaps even set aside . . . [the machine-or-transformation] test to accommodate emerging technologies." Id. at 956. Furthermore, the Court of Appeals did not "rule out the possibility that ... [the Court of Appeals itself] may in the future refine or augment the test or how it is applied". Id. The Federal Circuit has thus chosen to reject its own established system of precedents in favor of a massive, open-ended redirection of patent principles put forth by a slim majority who candidly admit a lack conviction in their own reasoning. Companies cannot tolerate additional uncertainty regarding what is patentable.<sup>2</sup> Patents play a key role in determining the values of innovation. In a recent survey, American R&D executives said that 60 percent of the projects that ultimately produced new discoveries would never have happened without patent protection.<sup>3</sup> Uncertainty about the value of the patents introduces uncertainty in determining the value of the patent owner's business.<sup>4</sup>

<sup>3</sup> Robert J. Shapiro, *Remarks to the CSIS Forum on Intellectual Property Rights: Implications for Economic Development* (2007) available at http://www.csis.org/media/csis/ event/070404\_shapiroremarks.pdf

<sup>4</sup> Using a very conservative estimate, patents now contribute between \$77.3 billion - \$98.4 billion to the value of (Cont'd)

<sup>&</sup>lt;sup>2</sup> Today some two-thirds of the value of large American businesses can be traced to intangible assets that embody ideas, especially the intellectual property of patents and trademarks. See Robert J. Shapiro and Nam D. Pham, Intellectual Property Intensive Manufacturing in the United States (July 2007) available at http://www.the-value-of-ip.org/ip\_report.pdf

The projected costs of reevaluating existing United States patent portfolios in light of the *Bilski* decision are staggering and the work will take years to complete. Investors will undoubtedly shy-away from investments in research and development and acquisitions until these issues are clarified, but the American economy cannot afford to wait. This Court should grant certiorari to remove an unnecessary and untimely roadblock to American economic recovery and should promptly redirect the Court of Appeals before the uncertain expectations surrounding the effects of these new, judicially created patent policies can stall high technology investment.

#### II. Broad process claims are commercially necessary and they contribute significant added value to patented inventions in the new economy.

The four categories of patentable subject matter that Congress specified in § 101 "process, machine, manufacture or composition of matter" are not mutually exclusive. A patentable invention may fall into multiple categories. Thus, while each patent must be directed to a unitary invention, it is commonplace that claims which define the bounds of the very same invention can, by competent draftsmanship, be directed to a process, machine, or an article of manufacture. The inventor of

#### (Cont'd)

U.S. public companies. See Scott Shane, *The Likely Adverse Effects* Of An Apportionment-Centric System Of Patent Damages. Manufacturing Alliance On Patent Policy, (2009) available at http://www.mfgpatentpolicy.org/images/Apportionment\_of\_Damages\_ Adverse\_Effects\_Jan14\_09.pdf.

such an invention has the option as to the form that the claims in his patent will assume and there is nothing wrong with this practice. *Bandag, Inc. v. Al Bolster's Tire Stores, Inc.*, 750 F.2d 903, 922 (Fed. Cir. 1984).

Most modern patents in the electronic, computer and information processing arts include several independent claims, which together define the same invention from the viewpoints of both a process and a machine (i.e., a system). This is not just a formalism or semantics – an inventor or patent owner will receive less substantive protection from infringement if she is limited to claiming her invention as just a machine or a manufacture and is denied a right to protect the same invention with process claims.

The practice of using multiple independent claims that capture separate § 101 categories is dictated by the law of patent infringement and by the economic realities of modern, globally-distributed and networked technology. Today, goods and services are often produced by groups of technicians and service firms who collaborate and/or serially add their contributions to the finished product. However, with a few minor exceptions, a patent holder can only establish infringement by showing that a single party has practiced every element of a patent claim within the United States. Conventional machine and manufacture claims often will not reach to patent infringement in network environments where, for example, some parts of a machine which implement steps of a process may not be located within the geographic boundaries of the United States. Likewise

novel and unobvious process steps that are performed within our borders may only affect articles that are overseas, in earth orbit, or beyond.<sup>5</sup>

The process claims which the Patent Office has heretofore allowed in the body of issued United States patents were all drafted to describe patentable inventions and relied upon the statutory construction and legal precedents that were in effect at the time that the patent rights were granted. Many of those process claims will likely fail the new, mandatory machine-ortransformation test for formal reasons: for example, because the claims' language does not expressly recite links between the process steps and a specific machines or apparatus. The patent law already provides procedures that patent owners can apply to correct formal defects by reissuing a defective patent, 35 U.S.C. § 251 or through reexamination 35 U.S.C. § 302. We expect that many owners will turn to reissue as a means to verify and assure that their claims can pass muster under the new test's mandatory criteria, before they seek to extract value from their rights by licensing or assert their patents in litigation against infringers. This Court needs to decide whether the new turn of Federal Circuit law is correct before industry embarks on this potentially wasteful undertaking.

<sup>&</sup>lt;sup>5</sup> The International Chamber of Commerce warns that "infringers are resourceful and have tried to structure their services in such a way to make it more difficult for rightsholders to enforce their rights, for example by using remote servers to avoid jurisdiction." *ICC, Current and Emerging Intellectual Property Issues for Business, supra* at 55.

#### III. The *Bilski* decision will spur existing patent holders to file a flurry of applications to make formal corrections of valid issued patents that will divert scarce human and economic resources, both in high technology industries and in the Patent Office.

The Court of Appeals' decision injects uncertainty into millions of issued patents that were properly granted under the former case law.<sup>6</sup> The very limited scope of patentable processes which the Federal Circuit's new statutory construction now affords to § 101 under this Court's decisions in *Benson* and *Parker* v. Flook, 437 U.S. 584 (1978) will force technology companies, including Philips, to undertake a comprehensive legal review of their patent portfolios. The Patent Office already takes an average of 32 months to examine and issue patent applications.<sup>7</sup> Patent validity studies and corrective action are time consuming and must be started years before the affected process claims can be asserted against infringers.

<sup>&</sup>lt;sup>6</sup> A query of the Patent Office on-line database indicates more than 1,235,000 of theUnited States patents granted during the seventeen year period from February 18, 1992 claimed processes. This is about 46% of the total utility patents granted. See: http://patft.uspto.gov/netahtml/PTO/search-adv.htm.

<sup>&</sup>lt;sup>7</sup> Pendency time of an average patent application - between filing and issuance of utility, plant and reissue applications. See: United States Patent and Trademark Office: Performance and Accountability Report Fiscal Year 2008 available at: www.uspto.goc/web/offices/com/annual/2008/0ai\_05\_ wlt\_04.html.

The unexpected financial impact of the new mandatory test for process claims on patent-centric companies like Philips will be severe. Counsel will need to 1) review entire portfolios of active issued patents; 2) determine the number of patents that contain claims for processes; 3) identify those patents that may not satisfy the new test and whether the claim defects are amenable to correction via reissue or reexamination; 4) select patents which appear likely to have commercial importance sufficient to justify the expense of a reissue patent application; 5) prepare and file requests for reissue; and 6) prosecute the reissue applications through the Patent Office examination process. Each of these steps is time consuming and fraught with uncertainty. Philips estimates that it will require in the neighborhood of twenty five thousand attorney-hours to review our portfolio of issued patents and take corrective actions to reissue process claims which are potentially defective under the new Federal Circuit test.<sup>8</sup> It is difficult to fund any unexpected expenses in today's economic climate, yet technology-based industry must expend this money to ensure the strength of their patent portfolios. In practical effect, monies expended to insure that an existing portfolio meets the new and as yet un-affirmed process patentability criteria will be diverted from investments that would otherwise flow

<sup>&</sup>lt;sup>8</sup> During the 10 year period prior to *Bilski*, Philips and its related entities were granted more than 9200 U.S. patents and we estimate that 5500 of those patents have process claims that now need to be reviewed. We anticipate that we would select between 20 and 30 percent of the most commercially important patents for correction. The fixed Patent Office reissue application, examination and issue fees alone will cost almost five million dollars at 2009 rates.

into new businesses and for the development of new technologies.

Beyond the naked cost, there is another unanticipated problem with a mass filing of patent reissue applications. Even if only twenty percent of the issued Philips' patents with process claims have potential defects that warrant Patent Office review, we will need to prepare and file over one thousand applications for reissue. The number of applications, from our company alone, would then already exceed the maximum annual number of reissue filings that have ever been made in the United States Patent Office. When other, similarly situated companies also seek reissue patents, the average pendency of patent applications, already at a commercially unacceptable level of 32 months, will skyrocket.

In light of the expected burden on the Patent Office and associated delays in processing the onslaught of reissue applications proceedings, the unexpected and potentially unwarranted costs to patent holders and the delays imposed upon assertions of patent infringement, we urge this Court to hear this case, promptly clarify the definition of a patentable process under § 101, and inject certainty back into the patent system.

- IV. A mandatory machine-or-transformation test for process patent subject matter is legally unsound.
  - A. The Court of Appeals disregarded this Court's instructions that § 101 must be broadly construed and ignored the plain language of § 100(b).

The legislative history surrounding patentable subject matter supports a broad construction. This Court has unequivocally cautioned against reading limitations and conditions into § 101 which the legislature has not expressed. *Diamond v. Chakrabarty*, 447 U.S. 303, 308 (1980); Diamond v. Diehr, 450 U.S. 175, 182 (1981). This Court has also declined constructions that would narrow the scope of patentable subject matter. J. E. M. AG Supply, Inc. d/b/a Farm Advantage Inc. v. Pioneer Hi-Bred Int'l. Inc., 534 U.S. 124, 145-146 (2001) (Affirming that new plant varieties are patentable subject matter and noting "in the face of [highly visible decisions supporting a broad interpretation of § 101], ... Congress ... failed to pass legislation indicating that it disagrees . . . As in *Chakrabarty*, we decline to narrow the reach of § 101 where Congress has given us no indication that it intends this result."). Moreover, this Court also chose not to reconsider the Federal Circuit's State Street Bank decision (confirming that business methods are patentable subject matter). State Street Bank & Trust Co. v. Signature Financial Group, Inc., 525 U.S. 1093 (1999) (denying petition for *certiorari*).

Statutory construction must begin with the language of the statute and courts are forbidden from

disregarding clear expressions of Congressional intent. Chakrabarty, 447 U.S. at 308. The word "process" is expressly defined by Congress in the 1952 Patent Act 35 U. S. C. § 100(b): "The term process means process, art or method, and includes a new use of a known process, machine, manufacture, composition of matter or material." The Court of Appeals, however, did not give any weight to this definition in its opinion and summarily dismissed the statute as "unhelpful." Bilski, 545 F.3d at 951, n.3. In blatantly rejecting the definition that was expressly provided by Congress, the Court of Appeals disregarded Congress' intent that patentable subject matter under § 101 be interpreted as broadly as possible within the limits established by pre-1952 precedent.

#### B. The principle that patentable subject matter broadly includes all of the technological arts was already firmly established in American law by the late 19th century.

The Court of Appeals' disregard of the express statutory definition is sophistry in its purest form. The 1952 Patent Act, and more particularly the definition of a patentable "process" in § 100(b), was intended to codify the then-existing body of American patent law. The issues discussed by the Court of Appeals majority are neither new nor unique to this case and the relationship between patentable technological arts and industrial process is well documented in the classical 19th century treatises. Yet, the Court used tunnel vision to effectively bypass more than a century of well-established precedent and the concurrence even found it necessary to fall-back to pre-industrial English theories of monopoly which were already discredited by the industrial-age legal scholars.

The patentability of an art has always been recognized in the United States. Contrary to the Court of Appeals' pronouncement, the term "art" was not fully synonymous with an industrial method or series of process steps. By 1890, the patentable classification of an art was considered the "most comprehensive" of categories of patentable subject matter, which "embraced all of those [patentable inventions] which cannot embraced under one or more groups of instruments enumerated in the statutes, its outer limits are less easily discernable than any other class of operative means. See William C. Robinson, The Law of Patents for Useful Inventions, § 163-166 (Little, Brown and Company, 1890).<sup>9</sup>

<sup>&</sup>lt;sup>9</sup> Late 19<sup>th</sup> century law recognized that the category of [an Art ] includes (1) the application of a known force to a new object, . . . (2) the application of a new force to a new object . . . and (3) the application of a known force to known objects through known instruments used in a new manner. – An Art may be either a "Force Applied" a "Mode of Application" or the "Specific Treatment of a Specific Object". *Id.* § 164 – 165. Arts were considered patentable subject matter as long as they produced physical effects, that is: affected the character or condition of physical objects. There was no requirement that the objects had to be physically transformed. *Id.* at § 166

#### C. The Court of Appeals holding inherently discriminates against inventions in the computer, information science, content delivery and information science technologies.

The TRIPS Agreement provides that:

"... 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 ... patents shall be available and patent rights enjoyable without discrimination as to the place of invention, the field of technology and whether products are imported or locally produced."

Agreement on Trade-Related Aspects of Intellectual Property Rights, Including Trade in Counterfeit Goods, Apr. 15, 1994, Art. 27, in Marrakesh Agreement Establishing the World Trade Organization, Annex 1C, 33 I. L. M. 1197, 1208 (1994).

Yet a mandatory machine-or-transformation test inherently denies valuable process patent protection to service industries and manufacturers whose products are not traditional physical articles.

In 1990 almost all consumer electronic devices were implemented in separate specialized sets as combinations of hardware circuit elements. For example, televisions, VCR's and telephone answering machines were produced and marketed in separate boxes and often via different selling channels. Today those same product functions are usually implemented in software and we are moving toward a small number of common multiuse hardware platforms. Personal computers and PDA's now provide audio and video recorder functionality. Cameras, music players and television receivers are furnished as embedded features in cellular telephones. In this context, the boundary between hardware and software (*i.e.* articles and processes) becomes fuzzy. Software and firmware code effectively reconfigures hardware circuits to perform particular player or display functions that were formerly achieved in fixed circuitry. Processes that were once linked to specific, dedicated machines are now implemented on these general purpose devices.

The Patent Office is struggling with an expanding backlog of unexamined patent applications which is particularly severe for inventions in the electronics, information technology and biotechnology arts. Short product life cycles make the consumer electronics and computer industries especially vulnerable to patent processing delays: first and most obviously because many products are already obsolete before effective patent protection becomes available, but also because long application processing delays create an unfair impression that patents are being granted for wellknown ideas.<sup>10</sup> The new Court of Appeals test thus

<sup>&</sup>lt;sup>10</sup> Petitioner's argument mentions several cases in which the Patent Office Board of Appeals and Interferences (the "B. P. A. I.") has already expanded the Court of Appeals decision as a basis for rejecting article of manufacture claims for information processing systems and networks. Even more (Cont'd)

discriminates in favor of users of hardware technology and against users of software technology.

D. The mandatory machine-or-transformation test excludes a range of processes that were well recognized as being patentable under pre-1952 law and which Congress intended to include within the scope of the 1952 Patent Act.

Any sound test for patentability must recognize that § 101 processes are a broad category which includes all of the subject matter that was referred to as "the arts" in pre-1952 case law. Patentable processes thus should include methods (e.g., methods of testing and medical diagnosis, signal processing, energy management and control and electrical filtering, authentication and verification) which have historically been regarded as patentable arts, but do not involve manufacturing

<sup>(</sup>Cont'd)

recently, the B. P. A. I. further relied on expanded Federal Circuit *Bilski* precedents to hold that an invention of a computerized method used by a television set-top box or video recorder (for example a Tivo® brand DVR) to display lists of recommended programs on a television set screen is unpatentable, because claimed data processing apparatus is said to be non-specific and the television programs are not "physical and tangible objects". *Ex parte Gupta*, Appeal 2008-2000, Application 10/014,202, (B. P.A. I., January 15, 2009). There is thus every indication the Patent Office will use the *Bilski* opinion as a broad-brush tool to push-back its problematic patent examination backlog onto the Court of Appeals docket at the very time when issuing patents for new inventions could act as a stimulus for our economy.

processes, or inherently produce any physical transformations of raw materials or commodities.

Methods for non-destructive testing and diagnosis are a classic example of traditionally patentable, useful arts which strive to measure and characterize the physical properties of materials and commodities without producing any physical transformation that would impair the test article. Quality assurance processes in the electronics and aerospace industries typically stress components with forces and environmental conditions beyond their expected working limits and only accept articles whose physical properties remain unchanged after the stress. Process patent claims should be available to protect these inventions against all unauthorized users without regard to the pass-fail outcome of the tests. For example, the patentability of medical diagnostic methods should not be unduly restricted to exclude instances where only patients who suffer from a rare abnormal condition manifest some physical transformation of an analytical reagent.

Methods for energy management and system control provide another relevant example of traditionally patentable arts whose intended purpose is often to maintain the physical properties of articles and materials in an unchanged, stable state by means of predictive filtering, application of negative feedback or other similar modern process technologies in the face of a potentially hostile external environment.

The Court should promptly review the decision and clarify these important issues before the Patent Office

can use them as precedents to further cripple intellectual property protection for industrial and technical arts which are true backbones of the United States economy.

# E. The new patentability test disrupts the delicate strategic balance between patent and trade secret protection.

The patentable subject matter precedents of this Court are designed to navigate the "opposing and risky shoals" between patent overprotection and underprotection. Lab. Corp of Am. Holdings v. Metabolite Labs., Inc., 548 U.S. 124, 127 (2006) (Stevens, J., dissenting). In contrast, the Court of Appeals' new and regressive tests for patentable methods will undermine the economic rationales for the patent system because they will deny inventors their ability to recoup fixed costs of research and development and will encourage them to keep inventions secret. See W. Landes and R. Posner, The Economic Structure of Intellectual Property Law 294 (2003).

As this Court has noted, "the federal patent system ... embodies a carefully crafted bargain for encouraging creation and disclosure of new, useful, and non-obvious advances in technology in return for the exclusive right to practice the invention for a period of years". *Bonito Boats, Inc. v. Thunder Craft Boats, Inc.*, 489 U.S. 141, 150-51 (1989). If the Court of Appeals' new requirements are left to stand, innovators are less likely to spend research and development resources on methods for information processing, medical diagnosis, non-destructive testing and environmental control. If they

do invent such technologies, they likely will keep their inventions secret. American industry will "invest more resources in maintaining trade secrecy... and inventive activity [will] be inefficiently biased toward inventions that can be kept secret." Landis and Posner *supra* at 328. The end result will be to "reduc[e] the stock of knowledge available to society as a whole. *Id.* at 294.

#### CONCLUSION

The petition for certiorari should be granted. The Court should review and reverse the decision of the Court of Appeals.

Respectfully submitted,

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