No. 08-964

IN THE

Supreme Court of the United States

BERNARD L. BILSKI AND RAND A. WARSAW,
Petitioners,

v.

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

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

BRIEF OF *AMICI CURIAE* ENTREPRENEURIAL SOFTWARE COMPANIES IN SUPPORT OF PETITIONER

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TABLE OF CONTENTS

Page

Interest of the *Amici* 1

Summary of Argument 2

Argument 4

I. Constraints on patenting software-related inventions are harmful to small- and mid-size software innovators 4

A. Software companies provide a considerable portion of the United States' innovation and play a significant role in the U.S. economy 4

B. Current legal uncertainty is causing entrepreneurial software companies to lose significant value due to depreciation of their existing intellectual property and intellectual property potential 6

C. Inability to patent software innovation cripples the ability of small- and mid-size entrepreneurial software businesses to compete in the market against established companies.... 9

D. The current approach of determining patent-eligible subject matter harms small- and mid-size software companies by increasing the unpredictability and costs of prosecution and enforcement 13

II. Even if the Federal Circuit did not intend the machine-or-transformation test to affect software patents, software patents are negatively impacted by the BPAI's and district courts' interpretations of that test 16

III. This Court should recognize its own precedent and maintain a broad view of statutory subject matter 22

Conclusion 25

TABLE OF AUTHORITIES

Page

Cases

AT&T Corp. v. Excel Commc'ns, Inc., 172 F.3d 1352 (Fed. Cir. 1999) 23
CyberSource Corp. v. Retail Decisions, Inc., No. 04-03268, 2009 WL 815448, (N.D. Cal. Mar. 27, 2009) 15, 21
DealerTrack Inc. v. Huber, No. CV 06-2335 AG (FMOx), 2009 WL 2020761, (C.D. Cal. July 7, 2009). 21
Diamond v. Chakrabarty, 447 U.S. 303 (1980). 22, 23
Diamond v. Diehr, 450 U.S. 175 (1981) 18
Every Penny Counts, Inc. v. Bank of America Corp., No. 2:07-cv-042, 2009 U.S. Dist. LEXIS 53626 (M.D. Fla. May 27, 2009) 22
Ex parte Cornea-Hasegan, No. 2008-4742, 89 U.S.P.Q.2d 1557, 2009 WL 86725 (Bd. Pat. App. & Interf. Jan. 13, 2009) 14, 18, 19, 20
Ex parte Godwin, No. 2008-0130, 90 U.S.P.Q.2d 1326, 2008 WL 4898213 (Bd. Pat. App. & Interf. Nov. 13, 2008) 20
Ex parte Gutta, No. 2008-3000, 2009 WL 112393 (Bd. Pat. App. & Interf. Jan. 15, 2009) 19, 20, 21
Ex Parte Halligan, No. 2008-1588, 89 U.S.P.Q.2d 1355, 2008 WL 4998541 (Bd. Pat. App. & Interf. Nov. 24, 2008) 18, 20
Ex parte Harris, No. 2007-0325, 2009 WL 86719 (Bd. Pat. App. & Interf. Jan. 13, 2009) 14, 18, 20
Ex parte Kasper, No. 2008-2297, 2009 WL 271857 (Bd. Pat. App. & Interf. Feb. 2, 2009) 14
Ex parte Kirshenbaum, No. 2007-3223, 2008 WL 867774 (Bd. Pat. App. & Interf. Mar. 31, 2008) .. 19

Ex parte Koo, No. 2008-1344, 2008 WL 5054161 (Bd. Pat. App. & Interf. Nov. 26, 2008) 18
Ex parte Langemyr, No. 2008-1495, 89 U.S.P.Q.2d 1988, 2008 WL 5206740 (Bd. Pat. App. & Interf. May 28, 2008) 19
Ex parte Li, No. 2008-1213, 88 U.S.P.Q.2d 1695, 2008 WL 4828137 (Bd. Pat. App. & Interf. Nov. 6, 2008) 14
Ex parte Noguchi, No. 2008-1231, 90 U.S.P.Q.2d 1379, 2008 WL 4968270 (Bd. Pat. App. & Interf. Nov. 20, 2008) 20
Ex parte Uceda-Sosa, No. 2008-1632, 90 U.S.P.Q.2d 1625, 2008 WL 4950944 (Bd. Pat. App. & Interf. Nov. 18, 2008) 14, 19
Gottschalk v. Benson, 409 U.S. 63 (1972) 24
In re Alappat, 33 F.3d 1526 (Fed. Cir. 1994) 24
In re Beauregard, 53 F.3d 1583 (Fed. Cir. 1995) 19
In re Bilski, 545 F.3d 943 (Fed. Cir. 2008)..... passim
In re Comiskey, 89 U.S.P.Q.2d 1641 (Fed. Cir. 2009) 22
State Street Bank & Trust Co. v. Signature Fin. Group, Inc., 149 F.3d 1368 (Fed. Cir. 1998) 23

Constitutional Provisions

U.S. Const. art. I, § 8, cl. 8 12

Statutes

35 U.S.C. § 101 ..... 13, 14, 16, 18
35 U.S.C. § 102 ..... 16, 24
35 U.S.C. § 103 ..... 16, 24
35 U.S.C. § 112 ..... 16, 24

Legislative History

S. Rep. No. 82-1979 (1952) 22

Other Authorities

2008 Report on Patenting in Technology Classes, breakout by Geographic Origin, produced by the U.S. Patent and Trademark Office Electronic Information Products Division Patent Technology Monitoring Team, http://www.uspto.gov/web/offices/ac/ido/oeip/taf/tecstc/ clstc_gd.htm (last visited July 30, 2009) 5

Alfonso Gambardella & Marco S. Giarratana, *Innovations for Products, Innovations for Licensing: Patents and Downstream Assets in the Software Security Industry* (Oct. 10, 2006), http://ssrn.com/abstract=935210 11

Annual Report on Gross Domestic Product by Industry Account Produced by the U.S. Department of Commerce Bureau of Economic Analysis, http://www.bea.gov/industry/gpotables/gpo_action.cfm (April 28, 2009) 5

Brief of *Amicus Curiae* Red Hat, Inc. in Support of Appellee, *In re Bilski*, 545 F.3d 943 (Fed. Cir. 2008) (No. 2007-1130) 11

Iain M. Cockburn & Megan J. MacGarvie, *Patents, Thickets, and the Financing of Early-Stage Firms: Evidence from the Software Industry* (Boston Univ. and Nat'l Bureau of Econ. Research, Working Paper No. 13644, 2007), http://www.nber.org/chapters/c3050.pdf 7

Iain M. Cockburn & Megan MacGarvie, *Entry, Exit, and Patenting in the Software Industry* (Nat'l Bureau of Econ. Research, Working Paper No. 12563, 2006), http://www.nber.org/papers/w12563 10

Industry Overview: Computer Software Development, *at* http://www.hoovers.com/computer-software-development/--ID__88--/free-ind-fr-profile-basic.xhtml (last visited August 2, 2009) 5

James E. Malackowski & Jonathan Barney, *Patent Attribution to Equity Returns*, (Jan. 6, 2009), http://www.oceantomo.com/PDFs/Patent_Attribution_to_Equity_Returns_1-6-09.pdf..... 8

Josh Lerner & Feng Zhu, *What is the Impact of Software Patent Shifts?: Evidence from* Lotus v. Borland (Nat'l Bureau of Econ. Research, Working Paper No. 11168, 2005), http://www.nber.org/papers/w11168 ..... 8, 12

Michael Messinger *et al.*, *BPAI Reaches Beyond Bilski to Machines*, Intellectual Property Today, March 3, 2009, *available at* http://www.iptoday.com/news-article.asp?id=3622&type=ip 13

Ronald J. Mann, *Do Patents Facilitate Financing in the Software Industry?*, 83 Tex. L. Rev. 961 (2005) 7, 9, 10

Ronald Mann & Tom Sager, *Patents, Venture Capital, and Software Start-ups* (Am. Law & Econ. Ass'n Annual Meetings, Working Paper No. 62, 2006), http://law.bepress.com/a;ea/16th/art62..... 7

Scott Shane, *The Likely Adverse Effects of an Apportionment-Centric System of Patent Damages*, (Jan. 14, 2009), http://www.mfgpatentpolicy.org/images/Apportionment_of_Damages_Adverse_Effects_Jan14_09.pdf 7

Interest of the *Amici*

This brief is filed with the consent of the parties[1] on behalf of Armanta; Asentinel, LLC; CyberSource Corp.; and Hooked Wireless, Inc.

Armanta develops specialized software to automate its clients' business processes. Armanta's software tools are designed for the finance, health science, and telecommunications industries, and facilitate clients' data management requirements. Armanta protects its innovative software and its research and development (R&D) investment through patent protection. Armanta currently has at least three pending U.S. patent applications.

Asentinel, LLC has developed innovative telecommunications expense management (TEM) software. Its TEM software addresses the complex task of processing and auditing telecommunications invoices. Their TEM software has saved its customers millions of dollars by streamlining invoice analysis and management. To protect its innovative software, Asentinel currently has at least one U.S. patent and at least two pending U.S. patent applications.

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[1] The parties' blanket letters of consent have been filed with the Clerk in compliance with Rule 37.3. This brief was not authored in whole or in part by counsel for any party. No person or entity other than the *amici* made a monetary contribution to the preparation or submission of this brief.

CyberSource Corp. is an e-commerce payment management company. CyberSource has developed innovative software to facilitate secure payment transactions over the Internet. Understanding that security is the cornerstone of e-commerce, CyberSource continues to develop software to identify and evaluate fraudulent activity and aid e-commerce transactions. CyberSource protects its R&D investment with a patent portfolio including at least eight U.S. patents and at least two pending U.S. patent applications.

Hooked Wireless, Inc. creates graphic technology for mobile devices; including cell phones, music players, and other portable electronics. Hooked Wireless relies on its intellectual property as an asset in the hyper-competitive mobile device industry. Hooked Wireless currently has at least one pending U.S. patent application.

Summary of Argument

Small- to mid-size entrepreneurial software companies represent a considerable portion of U.S. innovation and have significant impact on U.S. global competitiveness. These same companies are being harmed by the overly-narrow, inflexible definition of statutory subject matter outlined by the U.S. Court of Appeals for the Federal Circuit in its decision in *In re Bilski*, 545 F.3d 943 (Fed. Cir. 2008).

This Court has long proffered a broad view of patent-eligible subject matter. Without any corresponding change in this Court's precedent, the

Federal Circuit has instigated an overly-narrow and limiting test, by which all types of innovation must be evaluated. As a result, many valuable software-related inventions are being left without adequate patent protection.

The inability to appropriately protect software-related innovation is crippling the ability of small- and mid-size entrepreneurial software businesses to compete in the market against more-established companies. Uncertainty caused by the current legal landscape, and the overly-broad application of the machine-or-transformation test, is causing these software companies to lose significant value due to depreciation of their existing patents and patent potential. Furthermore, small- and mid-size software companies are being particularly harmed by the overbearing increase in unpredictability and costs of patent prosecution and enforcement.

Even if the Federal Circuit did not intend for its machine-or-transformation test to be applied to any statutory classes other than methods, the U.S. Patent and Trademark Office and various district courts are extending the test to all statutory classes of innovation. Additionally, there is great inconsistency among the adjudicative bodies regarding the interpretation of the machine-or-transformation test. This Court should recognize its own precedent and maintain a broad view of statutory subject matter, and strike down the rigid machine-or-transformation test, or at the very least indicate clearly that this test does not apply to software patents.

Argument

I. Constraints on patenting software-related inventions are harmful to small- and mid-size software innovators

A. Software companies provide a considerable portion of the United States' innovation and play a significant role in the U.S. economy

The U.S. economy is continually moving away from a "manufacturing" economy and toward a services and information economy. As such, companies that develop software to implement services and manage data are playing an increasingly important role in the U.S. economy. Such companies innovate in the form of intangible ideas, rather than physical objects. Consequently, promoting further innovation and protection of "intangible ideas" through the U.S. patent system is of critical importance to the U.S. economy.

In 2008, the value added to the United States' gross domestic product (GDP) by "information communications technology producing" industries

was $535.7 billion, or 3.8% of the entire GDP.[2] Indeed, about 50,000 companies are involved in computer software development alone in the United States, with combined annual revenue of about $180 billion.[3] In 2008 alone, nearly 10% of all patents issued to U.S. companies were related to data processing.[4] These numbers, relative to other individual industries, are significant and show that software companies are major contributors to the

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[2] "Information communications technology producing" industries are defined by the Bureau of Economic Analysis as the following industries: computer and electronic products, publishing industries (including software), information and data processing services, and computer systems design and related services. *See* Annual Report on Gross Domestic Product by Industry Account Produced by the U.S. Department of Commerce Bureau of Economic Analysis, http://www.bea.gov/industry/gpotables/gpo_action.cfm (April 28, 2009).

[3] Hoovers collects information and provides data on over 43,000 companies in 600 different industries. *See* Industry Overview: Computer Software Development, *at* http://www.hoovers.com/computer-software-development/--ID__88--/free-ind-fr-profile-basic.xhtml (last visited August 2, 2009).

[4] The U.S. Patent Office has identified classes 700-707 and 715-717 as "data processing" classes. In 2008, 7412 patents issued to U.S. companies that were listed in one of the data processing classes as the primary classification. A total of 77,501 patents were issued to U.S. companies by the USPTO, meaning that 9.56% of patents issued to U.S. companies were classified in the data processing classes. *See* 2008 Report on Patenting in Technology Classes, breakout by Geographic Origin, produced by the U.S. Patent and Trademark Office Electronic Information Products Division Patent Technology Monitoring Team, http://www.uspto.gov/web/offices/ac/ido/oeip/taf/tecstc/clstc_gd.htm (last visited July 30, 2009).

U.S. economy. Any change in patent law or policy that negatively impacts the software industry would have a corresponding, and considerable, negative effect on the U.S. economy.

B. Current legal uncertainty is causing entrepreneurial software companies to lose significant value due to depreciation of their existing intellectual property and intellectual property potential

Industry leaders and venture capitalists in the multi-billion dollar software industry are less likely to invest and take risks in unpatented technology developments. Investors recognize that they are often unlikely to reap the full benefit of their investment when technology is unprotected and competitors can enter the market with minimal research and development costs. Patent protection has been a most (and sometimes the only) effective blockade against such egregious copy-cat behavior.

Software innovation can often be easily reverse-engineered once a product is launched into the marketplace. Under current law, software innovation can often only be effectively protected against reverse engineering through patents. Without appropriate legal protection, software-based innovation will be less attractive as an asset class and will represent a more speculative and less-valued investment. Indeed, studies show a direct correlation between the patent portfolio held by an emerging software company and the likelihood that

the software company will obtain funding from venture capitalists and other investors.[5]

Without adequate patent protection, small- and mid-size software companies such as those represented by the *amici* would have reduced investment, and accordingly reduced incentive to innovate and take costly risks. Put simply, decreased patent protection will mean less investment and innovation in the software industry. As a real-world proof of this concept, it has been determined that a 10% decrease in a company's patent premium corresponds to a 7% decrease in research and development.[6] In contrast, an increased reliance on patent protection in the late-1990s was shown to correlate significantly with sales growth, increased number of employees, and

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[5] *See, e.g.*, Iain M. Cockburn & Megan J. MacGarvie, *Patents, Thickets, and the Financing of Early-Stage Firms: Evidence from the Software Industry* 9 (Boston Univ. and Nat'l Bureau of Econ. Research, Working Paper No. 13644, 2007), http://www.nber.org/chapters/c3050.pdf; Ronald Mann & Tom Sager, *Patents, Venture Capital, and Software Start-ups* (Am. Law & Econ. Ass'n Annual Meetings, Working Paper No. 62, 2006), http://law.bepress.com/aiea/16th/art62; Ronald J. Mann, *Do Patents Facilitate Financing in the Software Industry?*, 83 Tex. L. Rev. 961 (2005).

[6] The patent premium is "the value that an innovator gains from use of the patent to protect the innovation against imitation. In other words, the patent premium is the value difference between Technology A with a patent and Technology A without a patent." Scott Shane, *The Likely Adverse Effects of an Apportionment-Centric System of Patent Damages* 4, (Jan. 14, 2009), http://www.mfgpatentpolicy.org/images/Apportionment_of_Damages_Adverse_Effects_Jan14_09.pdf.

increased market capitalization in the software industry.[7]

A legal landscape that restricts patenting of software-related inventions not only affects future innovation, but also has a negative impact on the companies owning software-related patents that issued under the pre-*Bilski* landscape. A recent study has put the average value of a U.S. patent at between $93,463 and $118,988 (in 2008 dollars).[8] While significant, these averages understate the value of software patents that may be core to a company's business and competitive posture. Such patents may be worth tens or even hundreds of millions of dollars. When it is considered that patents are responsible for approximately 22.5% of an average company's value[9], it follows that the reduction of a small- to mid-size software company's patent portfolio to a near-zero value would be devastating to its bottom line. Plus, the entry of competitors who can appropriate a company's innovation with minimal research and development expense could slash the innovative company's profit margin—delivering a likely death blow to the company that invests significant time and money into research and development. Such a legal

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[7] Josh Lerner & Feng Zhu, *What is the Impact of Software Patent Shifts?: Evidence from* Lotus v. Borland 21-22 (Nat'l Bureau of Econ. Research, Working Paper No. 11168, 2005), http://www.nber.org/papers/w11168.

[8] Shane, *supra* note 6.

[9] James E. Malackowski & Jonathan Barney, *Patent Attribution to Equity Returns*, (Jan. 6, 2009), http://www.oceantomo.com/PDFs/Patent_Attribution_to_Equity_Returns_1-6-09.pdf.

landscape encourages the software copy-cat and punishes the software innovator.

C. Inability to patent software innovation cripples the ability of small- and mid-size entrepreneurial software businesses to compete in the market against established companies.

For the companies represented in the *amici* group, software development is at the core of their businesses. Protection of that development is essential to obtaining and maintaining a competitive advantage, whether through obtaining funding or gaining market access through licensing of their developments. As found by Ronald J. Mann in his empirical studies on whether patents facilitate financing in the software industry:

> Contrary to the perception that patents tilt the playing field in favor of large incumbent firms to the disadvantage of small firms, patents in this context afford a unique opportunity to the small startup. The patent system grants the small firm an automatic stay of competitive activity that remains in force long enough for the firm to attempt to develop its technology.

Ronald J. Mann, *Do Patents Facilitate Financing in the Software Industry?*, 83 Tex. L. Rev. 961, 986 (2005). Mann further highlights the reasons why patents may actually be <u>more</u> important to small

software companies than large, established companies:

> For large firms, the marginal increase in appropriability that comes from patents may have little benefit: IBM could compete quite successfully against smaller firms even if it did not have patents protecting its product from copycat competitors. For the smaller firm, however, the ability of the implicit threat of patent litigation to prevent incumbents like IBM and Microsoft from taking its technology can be the difference between life and death.

Id. at 986-987. In fact, empirical evidence shows that, all other things being equal, companies holding software patents associated with a market are three times more likely to enter that market, and 36% less likely to exit the market after entry.[10]

Additionally, the value of patent-protected processes is increasingly being manifested and extracted through joint venture licensing, or other business arrangements, where intellectual property transfer creates additional business opportunities

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[10] Iain M. Cockburn & Megan MacGarvie, *Entry, Exit, and Patenting in the Software Industry* 34 (Nat'l Bureau of Econ. Research, Working Paper No. 12563, 2006), http://www.nber.org/papers/w12563.

and revenue streams.[11] Small software companies often collaborate with third parties for the commercial development of their technologies and access to new technologies essential to remain competitive. Devaluation of a company's intellectual property places that company at a disadvantage in license negotiations with third parties and prohibits growth of that company. Devaluation of an entire industry's intellectual property results in severe checks on joint ventures and technology transfers, and inhibits entry of small- and mid-size, singularly-focused (i.e., "niche") companies into the marketplace.

Some parties in opposition to software patents claim that software patents hinder innovation. They argue that "[o]pen source software developers constantly face the hazard that the original code they have written in good faith might be deemed to infringe an existing software patent." Brief of *Amicus Curiae* Red Hat, Inc. in Support of Appellee at vi, *In re Bilski*, 545 F.3d 943 (Fed. Cir. 2008) (No. 2007-1130). This hazard cannot be avoided, they argue, because there are a large number of software patents that "cannot possibly be searched and cleared at reasonable cost." *Id.* They thus conclude

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[11] In the security software industry, the commercial success of start-ups is in large part due to their ability to license technology to incumbent firms downstream having large product portfolios. Alfonso Gambardella & Marco S. Giarratana, *Innovations for Products, Innovations for Licensing: Patents and Downstream Assets in the Software Security Industry* (Oct. 10, 2006), http://ssrn.com/abstract=935210.

that software patents should, as a class, be eliminated from patent-eligibility.

While eliminating software patents would certainly remove any perceived barrier to the open source effort, the existence of a large number of prior art patents is problematic for any company producing goods in any field - yet there is no real argument that patents covering, for example, a diesel engine should be invalidated as non-statutory simply because others wish to participate in the diesel engine market. Software should not be singled out as somehow different from older, established forms of innovation, simply because it is a relatively new and exciting industry in which many companies wish to participate.[12] The implementation of the invention in software versus hardware indeed is often a mere design choice and in no way reflects the underlying innovation. Such discrimination of software compared to hardware and other brick-and-mortar goods is arbitrary and contrary to promoting the progress of useful arts, as dictated by Art. I, §. 8, cl. 8 of the U.S. Constitution. Indeed, if we are to increase innovation in and growth of the information economy, we cannot shortsightedly set our legal framework so as to leave the work product of an entire industry unprotected.

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[12] Further, empirical evidence suggests that there is no correlation whatsoever between increased reliance on patent protection and any apparent decrease in innovation in the software industry. Lerner & Zhu, *supra* note 7, at 22.

D. The current approach of determining patent-eligible subject matter harms small- and mid-size software companies by increasing the unpredictability and costs of prosecution and enforcement

The number of rejections under 35 U.S.C. § 101 being affirmed by the United States Patent and Trademark Office (USPTO) Board of Patent Appeals and Interferences (BPAI) using the rigid machine-or-transformation test has dramatically increased since the U.S. Court of Appeals for the Federal Circuit (Federal Circuit) decision in *In re Bilski*, 545 F.3d 943 (Fed. Cir. 2008).[13] Also increasing are the number of *sua sponte* rejections under § 101 raised by the BPAI.[14] Prior to the use of the machine-or-transformation test by the USPTO[15], it was uncommon in the software and electrical arts for

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[13] Michael Messinger *et al.*, *BPAI Reaches Beyond Bilski to Machines*, Intellectual Property Today, March 3, 2009, at 1, *available at* http://www.iptoday.com/news-article.asp?id=3622&type=ip.

[14] *Id.*

[15] Although the Federal Circuit's decision in *Bilski* was not issued until Oct. 30, 2008, the USPTO began using the machine-or-transformation test to reject claims under § 101 as early as May 15, 2008. On May 15, 2008, John J. Love, the Deputy Commissioner for Patent Examination Policy at the time, circulated a memorandum entitled "Clarification of 'Processes' under 35 USC § 101." In the memorandum, Dep. Comm. Love provided guidance that a § 101 process must (1) be tied to another statutory class or (2) transform underlying subject matter to a different state or thing. This test was later adopted by the Federal Circuit as the *Bilski* machine-or-transformation test.

rejections to be raised under § 101. Now that the examining corps has been emboldened by the Federal Circuit's adoption of the machine-or-transformation test, rejections under § 101 have radically increased. The unexpected jump in such rejections, under an interpretation of § 101 that was not anticipated at the time of application filing, has wreaked havoc on software patent applications filed pre-*Bilski*, increasing prosecution costs and delaying (or blocking) issuance of software patents.

As if that were not enough, the application of the machine-or-transformation test to patented and pending claims is inconsistent.[16] Such inconsistencies make prosecution inefficient and increasingly expensive for software innovators, whose claims are often targeted for issues under § 101. Because of the inconsistencies, lessons learned in addressing a § 101 rejection in one application cannot necessarily be applied to another application—rather, the learning process becomes a problematic continuous loop. These inefficiencies

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[16] *Compare Ex parte Harris*, No. 2007-0325, 2009 WL 86719 (Bd. Pat. App. & Interf. Jan. 13, 2009) (finding that claims reciting a network and a server were not tied to a particular machine), *with Ex parte Kasper*, No. 2008-2297, 2009 WL 271857 (Bd. Pat. App. & Interf. Feb. 2, 2009) (finding claims reciting a network statutory), *and Ex parte Uceda-Sosa*, No. 2008-1632, 90 U.S.P.Q.2d 1625, 2008 WL 4950944 (Bd. Pat. App. & Interf. Nov. 18, 2008) (finding claims reciting a network statutory); *Compare Ex parte Cornea-Hasegan*, No. 2008-4742, 89 U.S.P.Q.2d 1557, 2009 WL 86725 (Bd. Pat. App. & Interf. Jan. 13, 2009) (finding a *Beauregard*-style claim non-statutory), *with Ex parte Li*, No. 2008-1213, 88 U.S.P.Q.2d 1695, 2008 WL 4828137 (Bd. Pat. App. & Interf. Nov. 6, 2008) (finding a *Beauregard*-style claim statutory).

are passed down as costs to the software innovators and their backers, who must carefully shepherd each application through the patent system, encountering unpredictable, arbitrary obstacles at every turn. As a result, patent prosecution is becoming increasingly, and oftentimes prohibitively, expensive.

Even if a software patent is granted by the USPTO, enforcement of that patent is becoming more expensive, with a less predictable result, due to the uncertainty in claim scope and validity resulting from the Federal Circuit's unnecessary line drawing. In one particularly pertinent example, CyberSource Corp., one of the *amici* represented herein, is the assignee of U.S. Patent No. 6,029,154 ("the '154 patent"). The '154 patent issued in February 2000, and was asserted by CyberSource in August 2004. The defendant in that case requested reexamination of the '154 patent in October 2004. The USPTO examined the '154 patent a second time, and in July 2008 issued a reexamination certificate.[17] Despite being twice considered and approved by the USPTO, the District Court in the related litigation held the patent invalid as failing the machine-or-transformation test outlined in *Bilski*. *CyberSource Corp. v. Retail Decisions, Inc.*, No. 04-03268, 2009 WL 815448, at *7 (N.D. Cal. Mar. 27, 2009).

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[17] Although the reexamination certificate was issued prior to the Federal Court's decision in *In re Bilski*, the USPTO was already applying the machine-or-transformation test to pending applications, pursuant to Dep. Comm. Love's memorandum of May 15, 2008. Although the claims of the '154 patent were amended during reexamination, a rejection under § 101 was not raised by the examiner.

CyberSource has therefore been forced to incur significant and unexpected expense in the procurement and enforcement of its patent rights only to find itself the victim of inconsistent and unpredictable interpretations of the machine-or-transformation test.

Although expenses such as those described above may be easily absorbed by some larger corporations, small- to mid-size companies and individual inventors do not always have this ability. Instead, they are often forced to decide between spending precious funds protecting their prior innovations or investing in new innovation. Such do-or-die practices do not foster a sustainable growth economy for the small business sector.

A broad interpretation of statutory subject matter is favored by the *amici*, as it removes the uncertainty and cost associated with frequent, inconsistent applications of 35 U.S.C. § 101 while leaving sufficient tools, such as 35 U.S.C. §§ 102, 103, and 112 to address overly-broad, uninventive, or poorly defined patent claims.

II. Even if the Federal Circuit did not intend the machine-or-transformation test to affect software patents, software patents are negatively impacted by the BPAI's and district courts' interpretations of that test

The Federal Circuit appeared to have carved out software claims as being specifically unaffected by its decision in *In re Bilski*, stating:

> Therefore, although invited to do so by several *amici*, we decline to adopt a broad exclusion over software or any other such category of subject matter beyond the exclusion of claims drawn to fundamental principles set forth by the Supreme Court. (citation omitted.) We also note that the process claim at issue in this appeal is not, in any event, a software claim. Thus, the facts here would be largely unhelpful in illuminating the distinctions between those software claims that are patent-eligible and those that are not.

In re Bilski, 545 F.3d at 960, fn. 23. The Federal Circuit further stated:

> We leave to future cases the elaboration of the precise contours of machine implementation, as well as the answers to the particular questions, such as whether or when recitation of a computer suffices to tie a process claim to a particular machine.

Id. at 962. Nonetheless, the BPAI and the USPTO examining corps have taken an aggressive and all-encompassing position regarding the machine-or-transformation test, and have applied the test inflexibly to a large number of software and electronics applications. For instance, the machine-or-transformation test has been used to eliminate not only abstract method claims, but also method and apparatus claims reciting servers, server-client

systems, databases, processors coupled to floating point hardware, displays, and computer program products.[18]

As an example, the BPAI found in *Ex Parte Halligan,* No. 2008-1588, 89 U.S.P.Q.2d 1355, 2008 WL 4998541 (Bd. Pat. App. & Interf. Nov. 24, 2008) that reciting "a programmed computer method" in a method claim was an attempt to circumvent § 101 by "limit[ing] the use of the formula to a particular technological environment." *Ex parte Halligan,* 2008 WL 4998541, at *13 (quoting *Diamond v. Diehr*, 450 U.S. 175, 191-92 (1981)). Similarly, in *Ex parte Cornea-Hasegan*, No. 2008-4742, 89 U.S.P.Q.2d 1557, 2009 WL 86725 (Bd. Pat. App. & Interf. Jan. 13, 2009), the BPAI deemed that a method reciting a "processor" using "floating-point hardware" was not tied to a particular machine. The BPAI in *Ex parte Harris,* No. 2007-0325, 2009 WL 86719 (Bd. Pat. App. & Interf. Jan. 13, 2009) determined that claims reciting "a network," and "a server" were not statutory, as they could potentially be embodied in only human activity, and went so far as to say that the claims would not be statutory even if the components were construed as electronic. *Ex parte Harris*, 2009 WL 86719, at *2, *9. In *Ex parte Koo*, No. 2008-1344, 2008 WL 5054161 (Bd. Pat. App. & Interf. Nov. 26, 2008), the BPAI found that a claim reciting a relational database management system was not tied to a particular machine.

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[18] The *amici* herein struggle to understand how a claim to a machine or product that performs a particular task can be considered not sufficiently tied to a particular machine.

The status of computer program product claims, often called "*Beauregard* claims" after the Federal Circuit's decision in *In re Beauregard*, 53 F.3d 1583 (Fed. Cir. 1995), that confirmed the patentability of certain software inventions, is also uncertain. When confronted at the Federal Circuit in 1995, the USPTO conceded that "computer programs embodied in a tangible medium, such as floppy diskettes, are patentable subject matter" and agreed that "the printed matter doctrine is not applicable." *In re Beauregard*, 53 F.3d at 1583. Recently, however, the BPAI has at least four times rejected *Beauregard* claims as non-statutory under the machine-or-transformation test.[19] In short, whether a *Beauregard* claim will survive at the BPAI is unknown.

Post-*Bilski*, the BPAI has also applied an overly-aggressive interpretation to the transformation prong of the machine-or-transformation test, such that the transformation of generic data or data unrelated to real-world physical objects is not sufficient to impart patent eligibility. For example, the BPAI in *Ex parte Gutta*, No. 2008-3000, 2009 WL 112393 (Bd. Pat. App. & Interf. Jan. 15, 2009) determined that only generic data was transformed in a processor-based method for recommending items to a user based on a modified

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[19] *See Ex parte Cornea-Hasegan*, *supra* note 17; *Ex parte Langemyr*, No. 2008-1495, 89 U.S.P.Q.2d 1988, 2008 WL 5206740 (Bd. Pat. App. & Interf. May 28, 2008) (decided before the holding in *In re Bilski* but nonetheless used the machine-or-transformation test); *Ex parte Uceda-Sosa*, *supra* note 17; *Ex parte Kirshenbaum*, No. 2007-3223, 2008 WL 867774 (Bd. Pat. App. & Interf. Mar. 31, 2008).

history of the user's prior selections. Because the data represented electronic user histories rather than a physical or tangible object, the claim failed the transformation prong.[20] Similarly, in *Halligan*, *Harris*, and *Cornea-Hasegan*, data representing trade secrets, bids, and floating point numbers, respectively, were deemed intangible.[21] Of note, however, *Cornea-Hasegan*'s step of determining whether to calculate a number using floating-point hardware was deemed insignificant extra-solution activity.[22]

Other BPAI cases, such as *Ex parte Godwin*, No. 2008-0130, 90 U.S.P.Q.2d 1326, 2008 WL 4898213 (Bd. Pat. App. & Interf. Nov. 13, 2008) and *Ex parte Noguchi*, No. 2008-1231, 90 U.S.P.Q.2d 1379, 2008 WL 4968270 (Bd. Pat. App. & Interf. Nov. 20, 2008) have recited a harsher rule: the transformation of data—without limit—is insufficient to satisfy the transformation prong.[23] In *Noguchi*, the method claim was directed to inspecting a request message for a code, analyzing the code, and determining whether to transmit based on the code analysis. In *Godwin*, the claim was directed to rendering a web page portal view by loading a style sheet, mapping attributes, parsing logic, replacing attributes, and compiling logic for

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[20] The BPAI issued a rejection under § 101, *sua sponte*. *Ex parte Gutta*, 2009 WL 112393, at *3.

[21] *See Ex parte Halligan*, 2008 WL 4998541, at *13; *Ex parte Harris*, *supra* note 17, at *6; *Ex parte Cornea-Hasegan*, *supra* note 17, at *5.

[22] *Ex parte Cornea-Hasegan*, *supra* note 17, at *5.

[23] *See, e.g.*, *Ex parte Godwin*, 2008 WL 4898213, at *4; *Ex parte Noguchi*, 2008 WL 4968270, at *5.

use in producing a view. As in *Gutta*, the data was viewed as unrelated to tangible real-world objects, even though the methods producing the data provided real-world benefits.

The BPAI is not the only judicial body interpreting the machine-or-transformation test as applicable to software-related claims. Federal district courts are also applying their own spin to the bevy of decisions post-*Bilski*. In one notable example, the software-related claims of CyberSource Corp., one of the *amici* signing hereto, were deemed by the U.S. District Court for the Northern District of California as being directed to non-statutory subject matter. *Cybersource Corp. v. Retail Decisions, Inc.*, No. 04-03268, 2009 U.S. Dist. LEXIS 26056 (N.D. Cal. Mar. 26, 2009). The claims specifically dealt with a process for validating a card transaction over the Internet. Not only was the method claim held patent-ineligible, but the corresponding *Beauregard* claim to a computer readable medium was also deemed patent-ineligible for not satisfying either prong of the machine-or-transformation test.

The U.S. District Court for the Northern District of California dealt a death blow to another software-based invention when it deemed a claim reciting "a central processor...consisting of a specially programmed computer hardware and database," "a remote application entry and display device," and "a remote funding source terminal device" patent-ineligible as not being directed to a particular machine. *DealerTrack Inc. v. Huber*, No. CV 06-2335 AG (FMOx), 2009 WL 2020761, at *4 (C.D. Cal. July 7, 2009).

The U.S. District Court for the Middle District of Florida handed down a similar fate to a computer- and network-based system claim for payment distribution, holding that the recited system comprising a network and computer means was merely a non-statutory process in disguise. *Every Penny Counts, Inc. v. Bank of America Corp.*, No. 2:07-cv-042, 2009 U.S. Dist. LEXIS 53626 (M.D. Fla. May 27, 2009).

In a post-*Bilski* comment, Federal Circuit Judge Moore pointed out that the Federal Circuit in *Bilski* "went to great lengths in *Bilski* to clarify that the decision was limited to process claims, and further limited to process claims not involving a machine." *In re Comiskey*, 89 U.S.P.Q.2d 1641, 1650 (Fed. Cir. 2009) (Moore, J., dissenting) (citing *In re Bilski*, 545 F.3d 943, 951, 962 (Fed. Cir. 2008)). Nonetheless, the USPTO and district courts alike are using the *Bilski* decision to dispose of cases without having to address the purported invention on its merits.

III. This Court should recognize its own precedent and maintain a broad view of statutory subject matter

As this Court stated in *Diamond v. Chakrabarty*, 447 U.S. 303 (1980), "[e]verything under the sun that is made by man is patentable." 447 U.S. at 309 (quoting S. Rep. No. 82-1979 (1952)). The U.S. software industry has operated, indeed flourished, under the broad definition of statutory subject matter that was set out by this Court in

Diamond v. Chakrabarty and relied upon by the Federal Circuit in *State Street Bank & Trust Co. v. Signature Fin. Group, Inc.,* 149 F.3d 1368 (Fed. Cir. 1998) and *AT&T Corp. v. Excel Commc'ns, Inc.,* 172 F.3d 1352 (Fed. Cir. 1999). There is no need for the arbitrary rule resulting from the Federal Circuit's recently promulgated machine-or-transformation test, especially one that has such stifling ramifications beyond the apparent intent of the Federal Circuit. As asserted in Petitioner's brief on the merits, and as agreed with by *amici*, a method or process need not result in a physical transformation or be tied to a machine in order to constitute patent-eligible subject matter. (Br. for Pet'r at 20-28.).

However, should this Court determine that the machine-or-transformation test is an appropriate test applicable to all forms of innovation, *amici* would appreciate guidance on whether recitation of a computer or other tangible device suffices to tie a process claim to a particular machine. Such guidance would put to rest many of the uncertainties caused by the Federal Circuit's decision. In the decision below, the Federal Circuit stated:

> We leave to future cases the elaboration of the precise contours of machine implementation, as well as the answers to the particular questions, such as whether or when recitation of a computer suffices to tie a process claim to a particular machine.

In re Bilski, 545 F.3d at 962.

As discussed above, the uncertainty surrounding the Federal Circuit's comments causes

unnecessary and significant confusion and inconsistency in current patent prosecution and enforcement. Should the machine-or-transformation test stand, *amici* support the position that an indication in a recited claim that the claimed method is performed on a computer or other tangible device or system is more than sufficient to tie a claimed process to a machine and result in patent-eligible subject matter, in accordance with the Federal Circuit's own precedent. *In re Alappat*, 33 F.3d 1526, 1545 (Fed. Cir. 1994) (holding that software converts a general purpose computer into a special purpose machine, and is patent-eligible when claimed as such). Recitation of such a tangible device removes the possibility that a given method claim would read on mental thoughts or human activity, and leaves the claim scope appropriately broad for innovation in the digital age. Such a recitation also does not prevent application of other requirements on statutory subject matter set out by this Court in prior precedent, such as the requirement that a claimed method must not preempt all practical implementations of the method. (*See, e.g.*, *Gottschalk v. Benson*, 409 U.S. 63, 71-72 (1972).)

Even without limiting the bounds of statutory subject matter, many of the concerns of those opposed to software patents (e.g., that they are overly-broad, not truly inventive, or confusing) can be addressed by proper application of the existing tools, namely 35 U.S.C. §§ 102, 103, and 112. There is no need to overly-restrict the scope of statutory subject matter, at the expense of the entire software industry, not to mention future, as yet

unimaginable, industries, when the tools to achieve the desired result already exist.

Conclusion

For the reasons stated in Petitioner's Brief and this brief, the Court should reverse the judgment of the Court of Appeals for the Federal Circuit.

Respectfully submitted,

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