Intellectual Property

In re Blinski: Business Method Patents Transformed?

*By David L. Applegate**

The day before Halloween, the Court of Appeals for the Federal Circuit released its much-anticipated en banc decision in the case of *In re Bernard L. Bilski and Rand A. Warsaw.*[1] But was it a trick or was it a treat? Even discounting for different points of view, no one seems yet to know for sure.

In re Bilski is an appeal to the Federal Circuit from a final decision of the Board of Patent Appeals and Interferences sustaining an examiner's rejection of all eleven claims of U.S. Patent Application, Serial No. 08/833,892. In essence, the application was for getting a U.S. patent on a process of hedging commodities. At issue specifically in *Bilski* were (1) whether the examiner had erroneously rejected the claims of the application for a U.S. patent as not directed to patent-eligible subject matter under 35 U.S.C. § 101, and (2) whether the Board erred in upholding that rejection.[2] At issue more broadly was—and is—the continued vitality of so-called "business method" patents, such as Amazon.com's famous patent on "one-click" shopping over the Internet.[3]

Although patents on processes and even financial patents have been recognized since nearly the adoption of the Constitution, they have become more widespread—and thus at the same time more controversial—in the age of computers and the Internet. At the end of the last decade, the Federal Circuit decided in *State Street Bank & Trust Co. v. Signature Financial Group, Inc.*[4] and *AT&T Corp. v. Excel Communications, Inc.*[5] that it was no longer necessary for the courts or the Patent Office to distinguish between "technology-based" and "business-based" patents. With those two decisions, the floodgates opened. Applicants deluged the U.S. Patent and Trademark Office with applications for patents on ways of doing business, from methods of online shopping to methods of raising funds in financial markets.[6] The resulting thicket of patent protection has left many business managers confounded and many critics of "business method" patents and patent holding companies unamused.

I. En banc *Bilski* Issues

Thus when the Federal Circuit agreed on February 15, 2008, to hear the *Bilski* appeal en banc, many hoped that the court would clarify—if not limit—the extent to which "business methods" remain eligible for patent protection under U.S. law in a more general way. Hopes were raised when the Federal Circuit invited amici to address the following five sets of questions:

> (1) whether a claim addressed to a method practiced by a commodity provider for hedging the "consumption risks" associated with a commodity sold at a fixed price is patent-eligible subject matter under 35 U.S.C. § 101 ("Section 101");
>
> .....

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> (2) what standard should govern in determining whether a process is patent-eligible subject matter under Section 101;
>
> (3) whether the claimed subject matter was not patent-eligible because it constituted an abstract idea or mental process, and when a claim that contains both mental and physical steps creates patent-eligible subject matter;
>
> (4) whether a method or process must result in a physical transformation of an article, or be tied to a machine, to be patent-eligible subject matter under Section 101;
>
> (5) whether it is appropriate to reconsider *State Street Bank & Trust Co. v. Signature Financial Group, Inc.*[7] and *AT&T Corp. v. Excel Communications, Inc.*,[8] and, if so, whether those cases should be overruled in any respect.[9]

In a fractured decision that generated 132 pages of opinion, including three dissents and one concurrence, the Federal Circuit ultimately answered the first four questions directly and the fifth indirectly. Nonetheless, practitioners and commentators are still puzzling over *Bilski*'s likely practical effect: will it make so-called "business method" patents harder or easier to get—and therefore more or less valuable—in the future?[10]

There is as yet no clear answer. But first, a little background is in order.

II. Patent Law's Constitutional Origins

The Constitutional source of all U.S. patent law is Article I, Section One, Clause Eight of the Constitution, which empowers Congress, among other purposes, to "promote the progress of… the useful Arts" by "securing for limited Times to… Inventors the exclusive right to their respective… Discoveries."[11] Although the Founders' word choice and capitalization now strike us as archaic, the purpose and reasoning behind this clause are clear enough: to promote the general progress of "the arts" (what we now call "science") by providing inventors with the economic incentive of a time-limited monopoly on new "discoveries" or inventions.[12] At the same time it empowers such monopolies, this clause also requires that they be limited in time, implicitly recognizing that—if the "useful arts" are indeed to progress—then knowledge of how to make or use something new and useful can not rightly be permanently restricted to the first person to invent or to discover it.

To promote, rather than restrict, the advance of the "useful arts, it has long been accepted U. S. law that inventions or discoveries are potentially patentable, but abstract ideas or fundamental principles are not.[13] The rule is easy enough to state, but where does one draw the line between potentially patentable and unpatentable subject matter?

In the Industrial Age of the 18th and 19th centuries, the answer seemed fairly clear: logarithms were not patentable, for example, but the slide rule clearly was. In addition, an inventor

(or "discoverer") first had to "reduce the invention to practice," typically by making a working model and sending it in to the Patent Office. (Making a working model, if nothing else, demonstrated that the inventor actually had an invention, not just an abstract idea, even if that invention were anticipated, obvious, or for some other reason not actually patentable.[14]) But the Patent Office long ago became overwhelmed with models of inventions, and the model-building practice is now archaic; instead, one "reduces an invention to practice" by describing it in words and pictures sufficiently to demonstrate to a person having of ordinary skill in the art how to make and use it.[15]

Even in the 20th century, with the advent of the Electrical Age, the line was not difficult to draw: Faraday's Law was not patentable, but the microwave oven was. But at the dawn of the Internet Age, things somehow seemed to go awry. Since that time, inventors, the Patent Office, and the courts have all seemed to have a harder time in interpreting the Constitutional mandate as implemented by Congress, and in knowing where to draw the line.

III. Statutory Implementation

In keeping with the Constitution's limited grant of power to create patent monopolies, Congress has authorized time-limited patent rights for new inventions and discoveries almost from the start of the republic. Beginning with the original patent statute in 1790, just a year after the Constitution was ratified, and continuing through the current Patent Act of 1952, as from time to time amended, the U.S. has had a patent statute virtually throughout its history. Subject to filing requirements and other limitations, the operative patent statutes have authorized the grant of patents to those who invent or discover something that is new ("novel"), non-obvious (to others of ordinary skill in the "art"), and useful (although the standard of utility is low[16]).

Subject to the conditions and other requirements of title 35 of the U. S. Code, the current 1952 patent statute explicitly limits patent-eligible subject matter to five specified categories—processes, machines, manufactures, compositions of matter, plus new and useful "improvements thereof"—in the following language:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor.[17]

Thus, the threshold of patentability in the United States is to determine whether a claimed invention is a process, a machine, a manufacture, a composition of matter, or an improvement on one of those four things.

Machines, manufactures, and compositions of matter can raise their own patentability issues, but those three categories are for the most part readily understandable. Similarly, the extent of "improvement" necessary for patentability is subject to vigorous debate in litigation on a case-by-case basis, as accused infringers argue that the invention is at best obvious in light of the relevant prior art, if not outright anticipated, but it is generally not difficult to determine if the starting point is a machine, manufacture, or composition of matter. It is the meaning of "process" that has seemed to cause the most trouble, especially in the wake of computer software, electronic communications, and the Federal Court decisions in *State Street Bank* and *AT&T*.

IV. What Does "Process" Mean?

A. Statutory Definition

One difficulty in deciphering the term "process" is that Congress has tautologically used the word "process" itself in its own definition:

> The term *'process' means process*, art or method, and includes a new use of a known process, machine, manufacture, composition of matter, or material.[18]

Up until 1952, U. S. patent statutes dating back to the 1793 Act had used "art" instead of "process," but this too is not particularly helpful. Substituting "art" for "process" as the defined term in Section 100(b) would likewise produce the following tautological definition:

> The term *'art' means* process, *art* or method, and includes a new use of a known process, machine, manufacture, composition of matter, or material.

Thus the Supreme Court has long held that the change from "art" to "process" did not alter the scope of eligibility for patent protection because "[i]n the language of the patent law, [a process] is an art."[19] Whatever the answer may be, it is clear that it is not apparent from the face of the statute.

B. Common Parlance v. Supreme Court Jurisprudence

As several amici argued in *Bilski*, the word "process" generally has a broad meaning in lay usage. Citing Webster's New International Dictionary of the English Language, the *Bilski* majority conceded that in 1952, when Congress amended § 101 to include "process," the ordinary meaning of the term was quite broad: "A procedure... A series of actions, motions, or operations definitely conducing to an end, whether voluntary or involuntary."[20]

Still, as *Bilski* itself observed, the Supreme Court has held that "process" as used in § 101 has a narrower meaning.[21] In common parlance, therefore laying out a series of scales of logarithms of numbers end-to-end to achieve the results of multiplication would be a "process," but for § 101 purposes the discovery would not be a "patentable process" until an inventor had achieved the slide rule.

V. *Bilski* en banc

The central issue before the Federal Circuit in *Bilski* was comparable to whether the applicants, Bernard L. Bilski and Rand A. Warsaw, had discovered logarithms or had invented the slide rule (or, some might say, having already seen the slide rule, tried to get a patent on logarithms). In more familiar patent language, did the applicants "seek[] to claim a fundamental principle (such as an abstract idea) or a mental process"—or did they in fact actually reduce to practice a potentially patentable invention?[22] The Bilski applicants' claim 1 was representative:

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

(a) initiating a series of transactions between said commodity provider and consumers of said commodity wherein said consumers purchase said commodity at a fixed rate based upon historical averages, said fixed rate corresponding to a risk position of said consumer;

(b) identifying market participants for said commodity having a counterrisk position to said consumers; and

(c) initiating a series of transactions between said commodity provider and said market participants at a second fixed rate such that said series of market participant transactions balances the risk position of said series of consumer transactions.[23]

In essence, as the Federal Circuit quickly observed, the Bilski applicants' claim is for a method of hedging risk in the field of commodities trading.[24] From that simple observation, and the single proposition that abstract ideas are not patentable, followed thirty-two pages of majority opinion by Chief Judge Michel (joined by Judges Lourie, Schall, Bryson, Gajarsa, Linn, Dyk, Prost, and Moore); seventy-six pages of dissents (forty-one by Judge Newman, twenty-five by Judge Mayer, and ten by Judge Rader); and a twenty-page concurrence by Judges Dyk and Linn that responded to the dissents' assertion that the majority had "usurp[ed] the legislative role."[25]

A. Majority Opinion

Answering questions (1) through (4) from the grant of en banc hearing, a majority of nine judges agreed following a review of prior U.S. Supreme Court and Federal Circuit precedent that, to be patent-eligible subject matter under 35 U.S.C. § 101, a method or process must (a) result in a physical transformation of an article, or (b) be tied to a machine, as purportedly set forth in a sequential trilogy of U. S. Supreme Court cases, *Gottschalk v. Benson*,[26] *Parker v. Flook*,[27] and *Diamond v. Diehr*.[28]

In *Benson* and *Flook*, the *Bilski* majority found, the Supreme Court had expressly left open the possibility that a process outside the confines of the machine-or-transformation test could be patentable, but in *Diamond v. Diehr*, the Supreme Court foreclosed it by failing to mention it. Although academics have criticized this as insufficient foundation for embracing the "machine-or-transformation test" as the exclusive determinant of potential patent eligibility, the *Bilski* majority nonetheless found this reasoning dispositive.[29] Thus, the majority found, the § 101 standard that governs is the "machine-or-transformation" test, and the hedging process at issue before it in *Bilski* was therefore not patent-eligible subject matter.[30]

The *Bilski* majority nonetheless regarded this revelation as merely a clarification of existing law—not an overturning of either *State Street Bank* or *AT&T*—although it also cautioned in a footnote that "[a]s a result, those portions of our opinions in *State Street* and *AT&T* relying solely on a 'useful, concrete and tangible result' analysis" should no longer be relied upon.[31] Because this was merely a clarification of existing law in light of Supreme Court precedent, the majority concluded, "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."[32]

B. The Dissents

1. Judge Newman

Writing first in dissent, Judge Newman in essence accused the majority in a forty-one page opinion of being old fogies for imposing a "new and far-reaching restriction" on the scope of patentability more suited to the Industrial Age than "today's Information Age of electronic and photonic technologies, as well as other processes that handle data and information in novel ways."[33] This result, Judge Newman asserted, was also "contrary to statute, contrary to precedent, and a negation of the constitutional mandate," with an unknown "impact on the future, as well as on the thousands of patents already granted."[34]

With respect to the constitutional mandate, Judge Newman based her reasoning on her view that "[u]ncertainty is the enemy of innovation"—which is, after all, the motivating purpose of the Constitution's Patent and Copyright Clause.[35] Considering Supreme Court precedent, Judge Newman expressed her view that *Diamond v. Diehr* made clear that §101 is not an independent condition of patentability but merely a general statement of subject matter eligibility[36] and "directly held that computer-implemented processes are included in Section 101."[37] Moreover, Supreme Court precedents, including *Gottschalk v. Benson, Parker v. Flook*,[38] and *Diamond v. Chakrabarty*,[39] allegedly rejected the limitations imposed by the *Bilski* majority.[40]

Judge Newman also found no support for the majority's conclusion in the pre-Section 101 Supreme Court decisions *O'Reilly v. Morse*,[41] *Cochrane v. Deener*,[42] and *Tilghman v. Proctor*,[43] from which the *Bilski* majority claimed to draw support.[44] Likewise, she found no support in the Federal Circuit's own prior precedents, including *State Street Bank & Trust Co. v. Signature Financial Group, Inc.*,[45] and *AT&T v. Excel*, whose potential patentability test of producing only a "useful, concrete, and tangible result," "can no longer be relied on."[46]

Judge Newman devoted the remainder of her lengthy dissent to a comprehensive review of the English Statute of Monopolies and English common law;[47] the evolution of process patents in the United States;[48] the majority's rejection of its own CCPA and Federal Circuit precedents;[49] the public's reliance on the now-rejected Federal Circuit and Supreme Court precedent;[50] the "uncertain guidance for the future" that the majority's new test provides;[51] and—finally—the irony that the Bilski invention had not even yet been examined for patentability.[52]

Apart from her pique that the majority had unwisely and unnecessarily departed from precedent to create new law on its own, however, Judge Newman's view can perhaps best be summed up in a single sentence:

> The now-discarded criterion of a "useful, concrete, and tangible result" has proved to be of ready and comprehensible applicability in a large variety of processes of the information and digital ages.[53]

She simply saw no need to replace it.

2. Mayer dissent

Judge Mayer's twenty-five-page dissent opinion agrees in essence with the majority that "[t]he patent system has run amok",[54] starting with *State Street Bank*'s alleged allowance of "exclusive ownership of subject matter that rightfully belongs in the public domain."[55] Instead of merely "clarifying" Section 101's requirement of a "machine-or-transformation" therefore, Judge Mayer claims that "the time is ripe to repudiate *State Street* and to recalibrate the standards for patent eligibility, thereby ensuring that the patent system can fulfill its constitutional mandate to protect and promote truly useful innovations in science and technology."[56] For him, the *Bilski* majority therefore did not go far enough.

3. Rader dissent

Speaking last, and most succinctly, in dissent, Judge Rader noted wryly at the beginning of his ten-page discussion that "[t]his court labors for page after page, paragraph after paragraph, explanation after explanation to say what could have been said in a single sentence: 'Because Bilski claims merely an abstract idea, this court affirms the Board's rejection.'"[57] For him, the majority had simply said too much.

C. Dyk and Linn Concurrence

Finally, answering the dissents, Judges Dyk and Inn, in a twenty-page opinion, concurred fully with the majority and explained in detail why "the unpatentability of processes not involving manufactures, machines, or compositions of matter has been firmly embedded in the statute since the time of the Patent Act of 1793, ch. 11, 1 Stat. 318 (1793)."[58]

Looking as far back as the 1790 Act, Judges Dyk and Linn examined the legislative history of the current U. S. Patent Code, cited the "keen understanding of English patent practice" that it reflected,[59] and found that each of the five categories of patentable subject matter recognized by the 1793 Patent Act—carried forward to the current statute—was drawn from either the English Statute of Monopolies or the common law resolution of competing views of its application.[60] Save for "one aberrational patent," Judges Dyk and Linn found, this entire legislative history supported the *Bilski* majority's view that, to be patentable, an invention must be tied to a manufacture or a transformation, including James Watt's famous patent for a steam engine.[61]

Finding this legislative history and intent carried through to the current 1952 statue, as amended,[62] Judges Dyk and Linn also rejected the dissenters' reliance on the crutch of "technological change."[63] First, they responded, the Supreme Court has made clear that statutes must be interpreted in light of the practice at the time of codification, which points to 1793, not 2008.[64] Second, they said, essentially repeating themselves, Supreme Court jurisprudence "offers no warrant for rewriting the 1793 Act."[65] Finally, they observed, business method patents were not exactly unknown in Great Britain (and, by extension, the United States) in 1793, and only one of them had managed to sneak through—the aforementioned "aberration," which later commentators regarded as "clearly contrary to the Statue of Monopolies."[66]

In sum, the majority had it right and the dissents were all wrong.

CONCLUSION

So where does all this leave us? *State Street Bank* is not overruled, merely "clarified." Abstract ideas, mental processes, fundamental truths, and general knowledge remain unpatentable. Inventions or discoveries that are new, nonobvious, useful, and meet the remaining statutory requirements are patentable—so long as they are tied to a machine or result in a physical transformation of matter.

The *Bilski* majority has given us a test—that it insists is not new—that is easy enough to state, but perhaps difficult to apply: unless and until *Bilski* is reversed, overruled, or clarified, to be potentially patentable under 35 U.S.C. § 101, a "process" must involve either a "machine" or a "transformation" from one physical state to another.[67]

Bilski likely does not mean the end of "business method" patents, but will likely result in more careful—sometimes specious—claims drafting, and to more careful scrutiny of applications within the Patent Office.[68] It will almost certainly lead to more challenges in litigation, particularly by well-healed plaintiffs that find themselves otherwise stymied in the use of their own inventions. It may lead to lower licensing fees to patent holding companies, although the effect has apparently not yet been seen on Ocean Tomo.[69]

And perhaps, at bottom, what was at work here was simply what some commentators have suggested—by appearing to rein in the scope of potentially patentable inventions in the guise of merely "clarifying" existing law, consistent with Supreme Court precedent, the Federal Circuit was simply paying obeisance to avoid another intervention by the High Court in this area of the Federal Circuit's special expertise.[70]

Endnotes

1 ___ F.3d___, 88 U.S.P.Q.2d 1385 (Fed. Cir., Oct. 30, 2008).

2 *See Ex parte Bilski*, No. 2002-2257, 2006 WL 5738364 (B.PAI, Sept. 26, 2006).

3 *See* U.S. Patent No. 5,960,411, issued Sept. 28, 1999.

4 149 F.3d 1368, 47 USPQ 2d 1596 (Fed. Cir. 1998).

5 172 F.3d 1352 (Fed. Cir. 1999).

6 In State Street Bank & Trust Co. v. Signature Financial Group, Inc., 149 F.3d 1368 (Fed. Cir. 1998), the Federal Circuit held that a method of transforming data representing discrete dollar amounts into a final share price was patentable where the claims recited computer processor means, storage means, and other means corresponding to an arithmetic logic unit. In *AT&T Corp. v. Excel Communications, Inc.*, 172 F.3d 1352 (Fed. Cir. 1999), the Court found the following year that claims directed to a method of generating a message record and including in the message record an indicator of a "primary interexchange carrier" for use in a telecommunications system were patent-eligible subject matter.

7 149 F.3d 1368 (Fed. Cir. 1998).

8 172 F.3d 1352 (Fed. Cir. 1999).

9 *See In re Bilski*, No. 2007-1130, 2008 WL 417680 (Fed. Cir. Feb. 15, 2008).

10 *See, e.g.,* "In re Bilski and the future of business method patents," http://thepriorart.typepad.com/ the_prior_art/2008/10/in-re-bilski-decided.html.

11 U.S. Const., art. I, sec. 1, cl. 8.

12 *See, e.g., Application of Joliot*, 270 F.2d 954, 959, 47 C.C.P.A. 722, 728, 123 U.S.P.Q. 344 (C.C.P.A 1959) (Rich, J., concurring) ("the purpose of the

patent system is to promote the progress of the useful arts, which is done by granting patents for completed inventions.… Merely propounding the theories according to which they must be made in order to work is not enough.")

13 *E.g.,* Diamond v. Diehr, 450 U.S. 175, 185 (1981); Funk Bros. Seed Co. v. Kalo Inoculant Co., 333 U.S. 127, 130 (1948) ("[fundamental principles of knowledge are] "part of the storehouse of knowledge of all men ... free to all men and reserved exclusively to none."); Le Roy v. Tatham, 55 U.S. (14 How.) 156, 175 (1852) ("A principle, in the abstract, is a fundamental truth; an original cause; a motive; these cannot be patented, as no one can claim in either of them an exclusive right."). This is consistent with U.S. copyright law, which also derives from Article I, Section 8, clause 8, where one can not legally monopolize an idea, only its expression. *See, e.g., Eldred v. Ashcroft: Just Another Mickey Mouse Copyright Case?* 3 Engage, The Journal of the Federalist Society Practice Groups 3 (2002).

14 *See, e.g.,* 35 U.S.C. §§ 101, 102.

15 *See* 35 U.S.C. § 112, first paragraph.

16 The standard example of a "non-useful" invention would be a perpetual motion machine, which violates the laws of thermodynamics and therefore would not work. Unsatisfactory though that example may be, it is difficult to posit another example that, in theory, would not meet the threshold of utility.

17 35 U.S.C. § 101.

18 35 U.S.C. § 100 (b) (emphasis added)*; see In re Bilski*, *supra,* slip op. at n. 3 ("Congress provided a definition of 'process' in 35 U.S.C. § 100(b): … However, this provision is unhelpful given that the definition itself uses the term 'process.'")

19 Diamond v. Diehr, 450 U.S. 175, 182-84 (1981) (quoting Cochrane v. Deener, 94 U.S. 780, 787-88 (1877)); *see also In re Comiskey,* 499 F.3d 1365, 1375 (Fed. Cir. 2007*)*; *Bilski* at n. 4.

20 *Bilski*, Slip. Op. at 6.

21 *See* Parker v. Flook*,* 437 U.S. 584, 588-89 (1978). ("The holding [in *Gottschalk v. Benson*, 409 U.S. 63 (1972)] forecloses a purely literal reading of § 101."); *see Benson* at 67.

22 *Bilski*, slip. op. at 7.

23 '892 application c1.1; *see Bilski*, slip. op. at 2.

24 "For example," the Court went on to explain, "coal power plants (i.e., the 'consumers') purchase coal to produce electricity and are averse to the risk of a spike in demand for coal since such a spike would increase the price and their costs. Conversely, coal mining companies (i.e., the 'market participants') are averse to the risk of a sudden drop in demand for coal since such a drop would reduce their sales and depress prices. The claimed method envisions an intermediary, the 'commodity provider,' that sells coal to the power plants at a fixed price, thus isolating the power plants from the possibility of a spike in demand increasing the price of coal above the fixed price. The same provider buys coal from mining companies at a second fixed price, thereby isolating the mining companies from the possibility that a drop in demand would lower prices below that fixed price. And the provider has thus hedged its risk; if demand and prices skyrocket, it has sold coal at a disadvantageous price but has bought coal at an advantageous price, and vice versa if demand and prices fall. Importantly, however, the claim is not limited to transactions involving actual commodities, and the application discloses that the recited transactions may simply involve options, i.e., rights to purchase or sell the commodity at a particular price within a particular timeframe." Bilski, Slip. Op. at 2-3.

25 *Bilski*, Dyk and Linn dissent at 1.

26 409 U.S. 63 (1972).

27 437 U.S. 584 (1978).

28 450 U.S. 175 (1981).

29 Slip. op. at 14. *See, e.g.,* Randy Picker, "In re Bilski: The Fed Circuit Tells Inventors to Stuff It," http://uchicagolaw.typepad.com/faculty/2008/10/in-re-bilski-th.html, visited Monday, December 22, 2008.

30 Slip. op. at 32.

31 Slip. op. at 20, n. 19.

32 *See* slip. op. at 21, n. 23.

33 *Bilski*, Newman dissent at 1.

34 *Id.* at 1.

35 *Id.* at 2.

36 *Bilski*, Newman dissent at 3.

37 *Id.* at 9-10.

38 437 U.S. 584 (1978) (finding a claim to a mathematical formula for calculation of alarm limits for use in connection with catalytic conversion of hydrocarbons was not a "process" within the meaning of Section 101)

39 447 U.S. 303 (1980) (applying Section 101 to the fields of biotechnology and genetic engineering with respect to the patent eligibility of a new bacterium).

40 *Bilski*, Newman dissent at 5-9.

41 56 U.S. (15 How.) 62 (1853).

42 94 U.S. 780 (1876).

43 102 U.S. 707 (1880).

44 *Bilski*, Newman dissent at 13-9.

45 149 F.3d 1368 (Fed. Cir. 1998).

46 *Bilski*, Newman dissent at 29, citing to Maj. Op. at 20 n.19.

47 *Id.* at 17-25.

48 *Id.* at 25-27.

49 *Id.* at 27-29.

50 *Id.* at 30-32.

51 *Id.* at 5-9.

52 *Id.* at 36-39.

53 *Id.* at 29.

54 *Bilski*, Mayer dissent at 24.

55 *Id.* at 20.

56 *Id.* at 25.

57 *Bilski*, Rader dissent at 1.

58 *Bilski,* Dyk/Linn concurrence at 1.

59 *Id*. at 3.

60 *Id*. at 6-8, 16-20.

61 *Id*. at 9, 10-12. The "aberrational patent," explained in the Dyk/Linn concurrence at 15, "was a patent granted to John Knox in 1778 on a 'Plan for assurances on lives of persons from 10 to 80 years of age.'" *Id*. at 15; *see also, id.* at n. 16:

Similarly, another commentator states: 'it might be wondered why none of the many ingenious schemes of insurance has ever been protected by patenting it.' D.F. Renn, John Knox's Plan for Insuring Lives: A Patent of Invention in 1778, 101 J. Inst. Actuaries 285 (1974), available at http://www.actuaries.org.uk/_data/assets/ pdCfile/0006/25278/0285-0289.pdf (last visited Oct. 3, 2008).

62 *Id*. at 16-20.

63 *Id*. at. 12.

64 *Id.*

65 *Id*. at 14.

66 *Id.* at 15.

67 *Bilski*, slip. op. at 19, 20, 23, 29, 32.

68 In *Ex parte Halligan* (BPAI 2008), for example, which post-dates *In re Bilski*, the Board of Patent Appeals and Interferences rejected as unpatentable subject matter under 35 USC § 101 an application claiming a "programmed computer method" that operates to identify trade secret information (Claim 119). The BPAI found, in essence, that the program simply hardcoded the common law rules of trade secrets, then applied those rules to determine whether particular information is a "trade secret." As in *Bilski*, therefore, the BPAI found that the alleged "transformation" involved only legal rights,

not physical or tangible objects, and observed that Claim 119's only tie to a machine was the claim's preamble statement that the method is a "programmed computer method":

> This recitation fails to impose any meaningful limits on the claim's scope as it adds nothing more than a general purpose computer that has been programmed in an unspecified manner to implement the functional steps recited in the claims. Were the recitation of a "programmed computer" in combination with purely functional recitations of method steps, where the functions are implemented using an unspecified algorithm, sufficient to transform otherwise unpatentable method steps into a patent eligible process, this would exalt form over substance and would allow pre-emption of the fundamental principle present in the non-machine implemented method by the addition of the mere recitation of a "programmed computer." Such a field-of-use limitation is insufficient to render an otherwise ineligible process claim patent eligible.

Ex parte Halligan, Appeal No. 2008-1588 (Nov. 24, 2008) at 27. The BPAI expressly did not decide whether a second set of "means-plus-function" claims was particular enough to constitute a "particular machine," instead rejecting them under 35 USC § 112 as indefinite for failing to describe any particular structure in the specification: "The Appellant has failed to disclose any algorithm, and thus has failed to adequately describe sufficient structure, for performing the recited functions of claims 1 and 121 so as to render the claims definite." *Id*. at 18.

69 The Ocean Tomo 300® Patent Index (NYSE Euronext: OTPAT), established in 2003 and billed as "the first intellectual property index," represents a portfolio of 300 companies ranked according to their "Innovation Ratio" (the ratio of their patent value to their book value). *See* http://www.oceantomo.com/indexes.html, visited December 23, 2008. Along with several related indices, it is owned by Ocean Tomo, LLC, headquartered in Chicago. The name "Ocean" purportedly reflects the "cross-oceanic nature of intellectual property" as well as being an "acronym for the adverse possession of property (Open, Continuous, Exclusive, Adverse and Notorious)"; "Tomo" is Japanese for "intelligent and friendly" and "reflects the Asian notion of an integrated, friendly group of related businesses." See http://www.oceantomo.com/index.html and http://www.oceantomo.com/about.html, both also visited December 23, 2008.

70 *Cf*. Warner-Jenkinson Co. v. Hilton Davis Chem. Co. 520 U.S. 17, 40, 117 S.Ct. 1040, 1054 (1997) (reaffirming the vitality of the doctrine of equivalents but leaving its precise application to the Federal Circuit on a case-by-case basis based on its "sound judgment in this area of its special expertise").