By David L. Applegate*

The day before Halloween 2008, the Court of Appeals for the Federal Circuit released a much-anticipated en banc decision in the case of In re Bernard L. Bilski and Rand Warsaw, but it was difficult to tell whether it was a trick or a treat.¹ In that appeal from a final decision of the Board of Patent Appeals and Interferences, the Federal Circuit held that a claimed invention of a method for hedging the "consumption risks" associated with a commodity sold at a fixed price-in short, a method for hedging commoditieswas not patent-eligible subject matter under 35 U.S.C. § 101 ("Section 101").² The Federal Circuit therefore sustained the examiner's rejection of all eleven claims of Bilski's and Warsaw's U.S. Patent Application, Serial No. 08/833,892, without ever determining whether the claimed invention was novel, useful, or nonobvious under 35 U.S.C. §§ 102 and 103 ("Sections 102 and 103").³

On the last day of its 2010 term, the United States Supreme Court issued its long-awaited ruling in the same case, and observers are wondering once again if they have been tricked or treated.⁴ Perhaps naively anticipating a ruling that would definitively guide future conduct, practitioners, academics, and commentators alike have expressed reactions ranging from non-plussed to consternation to derision—and all of this from a result that was unanimous: that Bilski's claimed invention did not represent patentable subject matter under Section 101. (Like the Federal Circuit, the Supreme Court had no reason to decide whether the claimed invention complied with Sections 102 and 103.)

In a decision that is difficult to characterize numerically (i.e., 5-4, 6-3), the Supreme Court issued three opinions: a sixteen-page opinion by Justice Kennedy, in twelve pages of which Justices Thomas, Alito, Roberts, and Scalia joined;⁵ a forty-seven page concurrence in the judgment by now-retired Justice John Paul Stevens, in which Justices Ginsburg, Breyer, and Sotomayor joined;⁶ and a four-page concurrence by Justice Breyer in which Justice Scalia joined.⁷

As this lineup suggests, the Supreme Court's last-day-of-Term ruling didn't really clarify *Bilski* all that much. Although smacking down the Federal Circuit's efforts to formulate a bright-line test for patent-eligible subject matter, the Supreme Court also did not resolve any questions that the Federal Circuit had left open.

Whatever patentable subject matter means, it is more complicated than whether the claimed invention results in a change from one state to another or is tied to a machine. Beyond that, the Supreme Court did not definitively say. But before examining the Supreme Court's opinions in detail, some background on *Bilski* in the court of appeals is in order.

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I. Federal Circuit Opinion

The Federal Circuit itself had issued a fractured decision that ran 132 pages and included three dissents and one concurrence.⁸ It raised and purported to answer five interrelated questions that the court had invited amici to address:

(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 Section 101 (No);

(2) whether the standard for determining whether a process is patent-eligible subject matter under Section 101 is whether it results in a transformation of an article or is tied to a machine (Yes);

(3) whether Bilski's claimed subject matter was ineligible for patent protection because it constituted an abstract idea or mental process (Yes);

(4) whether a method or process must result in a transformation of an article or be tied to a machine to be patent-eligible under Section 101 (Yes);

(5) whether it was appropriate to reconsider *State Street Bank & Trust Co. v. Signature Financial Group, Inc.*⁹ and *AT&T Corp. v. Excel Communications, Inc.*¹⁰, and, if so, whether those cases should be overruled in any respect (sort of).¹¹

The Federal Circuit's lengthy opinions left practitioners and commentators disagreeing over *Bilski*'s precise holding and puzzling over *Bilski*'s likely practical effect, including in these pages: exactly what kind of transformation from one state to another (physical? chemical? electrical?) was required, and would *Bilski* make so-called "business method" patents harder or easier to get-and therefore more (or less) valuable in the future?¹²

A. Bilski's Background

Technically at issue in *Bilski* were two questions: (1) whether the examiner of the original USPTO application had erroneously rejected the claims as not directed to patenteligible subject matter under 35 U.S.C. § 101, and (2) whether the Board of Patent Appeals and Interferences had erred in upholding that rejection.¹³ More broadly speaking, the issue of concern to most of the intellectual property community was the continued vitality of so-called "business method" patents such as Amazon.com's "one-click" Internet shopping patent and others even more abstract.¹⁴

1. Historical Background

In keeping with Article One, Section 8, Clause 8 of the Constitution,¹⁵ Congress has authorized patent rights for new inventions and discoveries almost from the nation's

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start, beginning with the first Patent Act in 1790. Under the current Patent Act in 1952, as from time to time amended,¹⁶ patents are available for inventions or discoveries that are new ("novel"), "non-obvious" to others of "ordinary skill" in the "art," and "useful" (although the standard of utility is low).¹⁷

Subject to specified conditions and requirements, the current U. S. Patent Code explicitly limits patent-eligible subject matter to five categories: processes, machines, manufactures, compositions of matter, and new and useful "improvements thereof, but it does not define these terms."¹⁸ Of particular debate and confusion are what constitute "processes" and "machines."

In the 18th and 19th century mechanical age, the answer seemed fairly clear: although logarithms (abstract ideas) were not potentially patentable, for example, the slide rule (a machine) clearly was. Even at the dawn of the 20th century's electrical age, the line of patentability was typically not difficult to draw: Faraday's Law was not potentially patentable, but the microwave oven was. Ever since the dawn of the microprocessor, however, inventors and their lawyers, patent examiners, and the courts have had a tougher time drawing the line. A primary source of recent consternation has been the field of "business method" patents.

2. Business Methods

The U.S. has long granted patents on processes and even financial-related inventions, but patents on methods of doing business have become both more widespread and more controversial in the age of the Internet. At the end of the last decade, the Federal Circuit decided in *State Street Bank* and AT corp. that the courts and the U.S. Patent and Trademark Office need no longer distinguish between "technology-based" and "business-based" patents. To the dismay of many, *State Street Bank* prompted a rash of applications for such things as methods of online shopping and methods of raising funds in financial markets.

A threshold difficulty in determining whether such business methods constitute patentable "processes" is that Congress has in part defined the term "process" tautologically:

The term *"process" means process*, art or method, and includes a new use of a known *process*, machine, manufacture, composition of matter, or material.¹⁹

In other words, in part, "process" includes a "process" or a new use of a "process," which is not particularly illuminating. 20

B. The Issue in Bilski

Against this background the central issue before the Federal Circuit in *Bilski* was akin to whether the applicants had discovered logarithms on the one hand or had invented the slide rule on the other—or, some would say, having already seen the slide rule attempted to patent logarithms Starting with the observation that the applicants' claim was for a method of hedging risk in the field of commodities trading and the proposition that abstract ideas are not patentable, a majority of nine judges agreed that, to be patent-eligible

under 35 U.S.C. § 101, a method or process must (a) result in a transformation of an article or (b) be tied to a machine, as set forth in a sequential trilogy of U.S. Supreme Court cases: *Gottschalk v. Benson*,²¹ *Parker v. Flook*,²² and *Diamond v. Diehr*.²³

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. The court nonetheless 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.²⁴ But because this merely "clarified" existing law in light of Supreme Court precedent, the majority said, "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."²⁵

At the Federal Circuit level, then, *Bilski* "clarified" the state of patentability law as follows: Abstract ideas, mental processes, fundamental truths, and general knowledge remained unpatentable, but 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 transformation of matter. Thus, it would seem, a "business method" would need to employ a machine or transform matter in some fashion in order to be potentially patentable.

II. Supreme Court Opinions

Bilski reached the Supreme Court for oral argument in November 2009 and was the last case to be decided from among those argued that month.²⁶ Ultimately all nine Justices agreed with the Federal Circuit that Bilski's claimed invention is unpatentable as an abstract idea. All nine Justices also rejected the Federal Circuit's "machine or transformation" test as too narrow for purposes of determining patentable subject matter under Section 101.²⁷ But apart from these two points the Justices were far from unanimous, and the Supreme Court's decision may raise as many questions as it answers.

A. Justice Kennedy's Opinion

Writing for the Court except as to two parts in which Justice Scalia would not join,28 Justice Kennedy found that (1) Section 101 specifies four independent patenteligible categories of inventions or discoveries: "process[es]," "machin[es]," "manufactur[es]," and "composition[s] of matter"; (2) the machine-or-transformation test is therefore not the sole test for § 101 patent eligibility; (3) "process" does not categorically exclude business methods; (4) Bilski's claimed invention was not categorically outside of Section 101 but did not constitute a "process" under § 101; and (e) because Bilski's application could be rejected solely as for a patent on an abstract idea, the Court need not further define what constitutes a patentable "process."29 Justice Kennedy grounded this practical and judicially cautious opinion on both the Constitution and the Court's prior decisions; that is, stare decisis.

1. Patent-Eligible Categories

In choosing such "expansive terms" as processes, machine, manufacture, and composition of matter, Justice Kennedy wrote, "Congress plainly contemplated that the patent laws would be given wide scope."³⁰ Consistent with patent law's requirement that a patentable process be "new and useful" and now embedded in the law as a matter of *stare decisis*, he found, Supreme Court precedent provides only three specific exceptions: "laws of nature, physical phenomena, and abstract ideas."³¹

Even if a claimed invention meets one of the four § 101 categories, Justice Kennedy reminds us, it must also be novel (§ 102), nonobvious (§ 103), and contain a full and particular description (§ 112).³² Thus, he reminds us, § 101 is not the be-all and end-all of patentability.

2. The Machine-or-Transformation Test

Justice Kennedy next determined that the Federal Circuit's "machine-or-transformation" test may be "a useful and important clue or investigative tool" but that it is not "the sole test for deciding whether an invention is a patent-eligible 'process."³³ In holding otherwise, in his view, the Federal Circuit violated two principles of statutory interpretation: (1) that Courts should not read into the patent laws limitations and conditions that Congress has not expressed and that (2) unless otherwise defined, words should be taken at "their ordinary, contemporary, common meaning."³⁴

Unaware of any ordinary, contemporary, common meaning of "process" requiring that it be tied to a machine or the transformation of an article, Justice Kennedy observed that §100(b) already defines "process" to include "process," which must mean something in addition to a machine or transformation.³⁵ Finally, citing *Parker v. Flook*,³⁶ Justice Kennedy noted that the Supreme Court has never endorsed the machine-or-transformation test as the exhaustive or exclusive test, so that it is not bound to do so now.³⁷ (In and of itself, of course, that would not have prevented the Supreme Court from doing so in *Bilski*.)

3. Textual Analysis

As a textual matter, Justice Kennedy also found that the inclusion of "method" within § 100(b)'s definition of "process" may include some methods of doing business, and stated that he is unaware of any "ordinary, contemporary, common meaning" of "method" that excludes business methods.³⁸ Nor is it clear to Justice Kennedy that even a business method exception would provide an easy-to-apply "bright line" test would exclude technologies for conducting business more efficiently.³⁹

Further undermining such a categorical exclusion, Justice Kennedy said, is § 273(b)(1)'s explicit recognition of a defense of prior use to an infringement claim based on "a method in [a] patent."⁴⁰ A contrary conclusion, says Justice Kennedy, would therefore violate the canon against interpreting statutory provisions in a manner to render another provision superfluous.⁴¹

Thus, based on constitutional history, legislative language, and the Court's prior decisions, Justice Kennedy and

his majority saw no reason categorically to exclude methods of doing business from potential U.S. patent protection.

4. Not a Process

Although §273 leaves open the possibility of some business method patents, says Justice Kennedy, it does not suggest their broad patentability.42 Under Benson, Flook, and Diehr, therefore, Justice Kennedy found that Bilski's concept of hedging risk and the application of that concept to energy markets are not patentable processes but merely attempts to patent abstract ideas.⁴³ In particular, Bilski's reduction of the basic concept of hedging to a mathematical formula in Claims 1 and 4 (like the algorithms at issue in *Benson* and *Flook*) is an unpatentable abstract idea.44 Bilski's remaining claims, Justice Kennedy found, merely provide broad examples of how to use hedging in commodities and energy markets using wellknown random analysis techniques to help establish inputs into the equation.⁴⁵ Accordingly, Justice Kennedy found that those claims add even less to the underlying abstract principle than the invention held patent ineligible in Flook.46 Thus, concluded Justice Kennedy, Bilski's and Warsaw's claimed "invention" is unpatentable under Section 101.47

5. Patentable Process Undefined

Because Bilski's and Warsaw's application could be rejected as an unpatentable abstract idea, Justice Kennedy did not further define a patentable "process" beyond that provided in §100(b). Most significantly, relying on *State Street*,⁴⁸ Justice Kennedy declared for (a majority of) the Court that "[n]othing in today's opinion should be read as endorsing the Federal Circuit's past interpretations of §101."⁴⁹ In disapproving the Federal Circuit's exclusive machine-or-transformation test, however, Justice Kennedy said that the Supreme Court does not mean to preclude the Federal Circuit from developing other "limiting criteria that further the Patent Act's purposes and are not inconsistent with its text."⁵⁰

Up until his last two points, Justice Kennedy's opinion could easily have simply adopted Judge Rader's sentence from the Federal Circuit below: "Because Bilski claims merely an abstract idea, this court affirms the Board's rejection."⁵¹ That would have left the state of the law exactly where it was before *Bilski* in the Federal Circuit: business methods are patenteligible but Bilski's claimed invention was not because it was an abstract idea, not an invention. Instead, while affirming the result below, Justice Kennedy repudiated the Federal Circuit's "machine or transformation" test but in effect invited it to keep trying. Joining Justice Kennedy's opinion in full were Justices Roberts, Thomas, and Alito; Justice Scalia joined except for Parts II-B-2 and II-C2.

B. Justice Stevens' Opinion

In a much lengthier opinion than Justice Kennedy's, now-retired Justice Stevens concurred in the judgment, joined by Justices Ginsburg, Breyer, and Sotomayor.⁵² Had this four-Justice opinion prevailed, the new patent law of the land would be that a claim that merely describes a method of doing business would not qualify as a "process" under § 101. Questions of utility, novelty, and obviousness need never be reached.

Justice Stevens began by observing that in the area of patents, it is especially important that the law remain stable and clear. The only question *Bilski* presented is whether the "machine-or-transformation" test should be the exclusive Section 101 test of a patentable "process," Justice Stevens said.⁵³ One could answer that question, he continued, simply by holding that although the machine-or-transformation test is in most cases reliable, it is not the *exclusive* test.⁵⁴

But to eliminate further uncertainty currently pervading the patent field, Justice Stevens would have provided further guidance: Rather than broadly trying to define "process" or "tinkering with the bounds of" unpatentable abstract ideas, Justice Stevens would have restored patent law to what he understands as its historical and constitutional moorings by recognizing that a series of steps for conducting business is, in itself, simply not patentable.⁵⁵

In the view of Justice Stevens, courts considered this principle well-established until the late 1990's when the Federal Circuit's *State Street Bank* decision called it into question.⁵⁶ Congress then responded with a simple stopgap measure, the "First Inventors Defense Act of 1999,"⁵⁷ which provided a limited defense to claims of patent infringement for "method(s] of doing or conducting business."⁵⁸ The majority should therefore not have put much stock into § 273(3)(b)(1)'s defense based on prior use of a "method," Justice Stevens suggested, because § 273's reference to "method" patents was an attempt to weaken them, not to recognize their existence or importance.⁵⁹

Following "several more years of confusion," Justice Stevens wrote, the Federal Circuit then changed course, overruled several of its recent decisions, and held in *Bilski* that a series of steps may constitute a patentable process only if it is tied to a machine or transforms an article into a different state or thing.⁶⁰ In his view, however, the Federal Circuit's "machine-or-transformation test" excluded not only general methods of doing business but also potentially a variety of other processes, some of which are potentially patentable.⁶¹

Although in his view the majority correctly held that the sole test of patentability is not the machine-or-transformation test,⁶² Justice Stevens therefore also thought the majority wrong to suggest that any series of steps that is not itself an abstract idea or law of nature may ever constitute a "process" within the meaning of \$101.⁶³ In his view, the language in the Court's opinion to this effect "can only cause mischief."⁶⁴ The wiser course would therefore have been to hold that Bilski's method is not a "process" because it describes only a general method of engaging in business transactions and business methods simply are not patentable.⁶⁵

C. Justice Breyer's Opinion

Like Justice Stevens, Justice Breyer concurred in the judgment. He did so in two parts. Justice Scalia joined him in Part II, which explained the areas in which Justices Breyer and Scalia viewed the entire Court as in agreement.

1. Part I

In Part I, Justice Breyer agreed with Justice Stevens that a "general method of engaging in business transactions" is not

a patentable "process" within the meaning of \$101.⁶⁶ Justice Breyer based this opinion on his view that the Supreme Court has never before held that so-called "business methods" are patentable, and on his view of the text, history, and purposes of the Patent Act.⁶⁷ He therefore claimed to join the Stevens opinion in full, but wrote separately to highlight what he saw as the substantial agreement among the Court's Justices, in "light of the need for clarity and settled law in this highly technical area." ⁶⁸

2. Part II

In Part II, Justice Breyer explained the four points on which he and Justice Scalia believed that the entire Court agreed, as follows:

a. First point of agreement

First, said Justice Breyer, the Court agrees that although the text of §101 is broad it nonetheless remains limited. This is because "the underlying policy of the patent system [is] that 'the things which are worth to the public the embarrassment of an exclusive patent,' . . . must outweigh the restrictive effect of the limited patent monopoly."⁶⁹ In particular, Justice Breyer emphasized that the Court has long held that "[p]henomena of nature, though just discovered, mental processes, and abstract intellectual concepts are not patentable" under §101, because allowing individuals to patent these fundamental principles would "wholly pre-empt" the public's access to the "basic tools of scientific and technological work."⁷⁰

b. Second point of agreement

Second, Justice Breyer said, the Court has for over a century stated that "[t]ransformation and reduction of an article to a different state or thing is *the clue* to the patentability of a process claim that does not include particular machines."⁷¹ Application of this so-called "machine-or-transformation test" has thus repeatedly helped the Court to determine, said Justice Breyer, what is "a patentable 'process."⁷²

c. Third point of agreement

Third, the machine-or-transformation test has never been the "sole test" for determining patentability.⁷³ Rather, Justice Breyer said, a process claim meets the requirements of 101 when, "considered as a whole," it "is performing a function which the patent laws were designed to protect (*e.g.*, transforming or reducing an article to a different state or thing)."⁷⁴ In Justice Breyer's view, therefore, the Federal Circuit erred in *Bilski* by treating the machine-or-transformation test as the exclusive test of patentable subject matter.

d. Fourth point of agreement

Rejecting the machine-or-transformation test as the only test for patentability does not mean, however, that anything that produces a "useful, concrete, and tangible result" is patentable.⁷⁵ According to Justice Breyer, "this Court has never made such a statement and, if taken literally, the statement would cover instances where this Court has held the contrary."⁷⁶ Indeed, in Justice Breyer's view, the Federal Circuit's introduction of the "useful, concrete, and tangible result" approach to patentability in *State Street Bank*

precipitated the grant of patents ranging from "the somewhat ridiculous to the truly absurd.⁷⁷ To the extent that the Federal Circuit rejected that approach in *Bilski*, therefore, nothing in the majority's decision should be taken as disapproving that determination.⁷⁸

e. Summary

In sum, in reemphasizing that the "machine-ortransformation" test is not necessarily the *sole* test of patentability, Justices Breyer and Scalia believe that the Court intended neither to deemphasize the test's usefulness nor to suggest that very many patentable processes lie beyond its reach.

D. Some Notes on the Decision's Dynamics

Perhaps coincidentally for a decision in a field of law in which the traditional liberal-conservative political divide would seem less relevant than in, say, the fields of civil rights or religious freedom, the Court's opinions broke down along familiar lines: the "conservative" Justices (Thomas, Alito, Roberts, and—for the most part—Scalia) on one side, the "liberal" Justices (Stevens, Ginsburg, Breyer, and Sotomayor) on the other, with Justice Kennedy forming a majority in the middle, for the portions for which the Court actually issued a majority opinion.⁷⁹

Equally interesting, however, is how close the Court might actually have come to issuing a different majority decision: namely the Justice Stevens opinion that "business methods" should not be patentable subject matter at all. A few days before the decision came out, for example, patent blogger Dennis Crouch argued persuasively—if ultimately incorrectly—that Justice Stevens would write *Bilski's* majority opinion because "[i]n the months since the oral argument in *Bilski*, every Justice save Justice Stevens has delivered an opinion from the set of cases argued in the November sitting,"⁸⁰

Indeed, the lengthy, weighty, and history-searching Stevens opinion—three times the length of the majority's reads in many ways as if Justice Stevens had begun it expecting to speak for the majority. Justice Kennedy's opinion, in contrast, reads more as if it were stitched together to gain a majority but did not quite completely get there. This suggests that it may be the product of some intense negotiating and a fair amount of compromise in order to gain a fifth "vote" for a majority opinion.

If Crouch's conjecture is correct, then what could have swung a fifth Justice away from the Stevens point of view, and who likely was that Justice? One speculation is that it may have been Justice Scalia—who after all did not join Justice Kennedy in all parts of the decision—and whose own respect for statutory language (as opposed to legislative history) may have given him pause about ignoring the language of § 273(b). On the other hand, perhaps it was Justice Breyer, who found many areas of agreement but simply could not agree with Justice Stevens that no business method should ever be patentable.

III. Where We Go From Here

In many respects, patent holders and patent practitioners are left where they were before: the machine-or-transformation test "clarified" in *Bilski* remains the key to patentable subject matter under Section 101, but business methods as a category still include potentially patentable subject matter. No one can say exactly where the courts (or the Congress) will ultimately draw the line. In the meantime, innovators should continue to feel free to apply for patents on business methods (beyond abstract ideas) that are new, non-obvious, and useful, and patent litigators should expect their business to continue apace.

Beyond that, *Bilski* will require further dissection and application as each additional case is litigated. Regrettably, though, the end result may be "business as usual," particularly at the Patent Office, whence the Bilski appeal arose.

Business method patents, it turns out, may have been one Justice away from going the way of buggy whips. It is easy, in any event, for practitioners and business people to imagine a more satisfactory and bright-line resolution of *Bilski*, but hard to imagine how the decision could have come down much more closely at the Supreme Court level.

Endnotes

- 1 545 F.3d 943 (Fed. Cir. 2008).
- 2 Id. at 966
- 3 Id.
- 4 Bilski v. Kappos, 130 S. Ct. 3218 (2010).
- 5 *Id.* at 3223.
- 6 Id. at 3231.
- 7 Id. at 3257.
- 8 In re Bilski, 545 F.3d 943 (Fed. Cir. 2008).
- 9 149 F.3d 1368; 47 USPQ 2d 1596 (Fed. Cir. 1998).
- 10 172 F.3d 1352 (Fed. Cir. 1999).

11 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 interchange carrier" for use in a telecommunications system were patent-eligible subject matter.

12 See, e.g., The Prior Art, In re Bilski and the Future of Business Method Patents, http://thepriorrart.typepad.com the_prior_art/200811Olin-re-bilski-decided.html (Oct. 31, 2008, 05:45).

13 See Ex parte Bilski, No. 2002-2257, 2006 \X!L 5738364 (BPAI, Sept. 26, 2006); In re Bilski, No. 2007-1130, 2008 \X!L 417680 (Fed. Cir. Feb. 15, 2008).

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

15 In Article I, Section One, Clause Eight, the Constitution empowers Congress in part to "promote the progress of . . . the useful Arts" by "securing for limited Times to . . . Inventors the exclusive right to their respective . . . Discoveries." U.S. CONST., Art. I, § 1, cl. 8. By authorizing limited monopolies, this clause recognizes that disseminating the knowledge of how to make or use something new and useful is essential to promoting the advance of the "useful arts," and has therefore long provided that inventions or discoveries are potentially patentable, but abstract ideas or fundamental principles are not. Although easy enough to state, the rule is often difficult to apply.

16 A Patent Reform Act has been pending in Congress since at least 2007, with repeated predictions that it would pass in the coming year too parlous to repeat here. *See, e.g.,* David Applegate, *A Billion Here and a Billion There: Talking Real Money in the Patent Damages Case,* PAT. LITIG. 2007, at 1376-77 (PLI 2007); David Applegate & Lewis M. Koppel, *A Mark, A Yen, A Buck, or A Pound: Damages Make the World Go Round,* PAT. LITIG. 2008, Vol. 2, at 485-486 (PLI 2008).

17 U.S. Const., art. I, § 1, cl. 8.

18 35 U.S.C.. § 100 (b) (emphasis added); see In re Bilski, 545 F.3d 943, 951 (Fed. Cir. 2008) ("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.'"). 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." 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, 130 S. Ct. 3218 (2010). Whatever the answer may be, it is clear that it is not apparent from the face of the statute.

19 35 U.S.C. § 100 (b).

20 In lay usage, as several *Bilski* amici argued in *Bilski*, the word "process" generally has a broad meaning. "A procedure. . . . A series of actions, motions, or operations definitely conducing to an end, whether voluntary or involuntary." *In re* Bilski, 545 F.3d at 951-52, forecloses a purely literal reading of § 101."). *See* Gottschalk v. Benson, 409 U.S. 63, 67 (1972). Still, as *Bilski* itself observed, the Supreme Court has held that "process" as used in §101 has a narrower meaning. *See* Parker v. Flook, 437 U.S. 584, 588-89 (1978). 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.

21 409 U.S. 63 (1972).

22 437 U.S. 584 (1978).

23 450 U.S. 175 (1981). 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. *Bilski*, 130 S.Ct. at 3230; *see, e.g.*, Posting of Randy Picker to The University of Chicago Law School Faculty Blog, In re Bilski: The Fed Circuit Tells Inventors to Stuff It, http://uchicagolaw.typepad.com/ faculty/2008/10/in-re-bilski-th.html (Oct. 30, 2008, 05:03 PM). 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.

24 After this 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." *Bilski, Dyk* and *Linn* dissent at 1.

25 In dissent, Judge Newman accused the majority of imposing, "contrary to statute, . . . precedent, and the constitutional mandate," a "new and farreaching 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." *Bilski*, 130 S. Ct at 3242 n.23; *In re* Bilski, 545 F.3d at 976 (Newman, J., dissenting). Judge Mayer agreed with the majority that "[t]he patent system has run amok," *In re* Bilski, 545 F.3d at 1010, but preferred 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." *Id.* Speaking last in dissent, Judge Rader noted simply 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.'" *Id.* at 1011 (Radar, J., dissenting).

26 See Dennis Crouch's Patently-O, noreply+feedproxy@google.com; on behalf of; Patent Law Blog (Patently-O) [patent@gmail.com] (June 26, 2010, 05:29 AM).

27 Bilski, 130 S. Ct. at 3221.

 $28\,$ Justice Scalia declined to join in Sections II-B-2 and II-C-2 of the opinion.

29 Bilski, 130 S. Ct. at 3221-31.

30 Id. at 3225 (citing Diamond v. Chakrabarty, 447 U.S. 303, 308 (1980)).

- 31 Id. (citing Le Roy v. Tatham, 55 U.S. 156, 174 (1852)).
- 32 Id.
- 33 Id. at 3227.
- 34 Id. at 3226 (citing Diamond v. Diehr, 450 U.S. 175, 182 (1981)).
- 35 Id. (citing Burgess v. United States, 553 U.S. 124, 130 (2008)).
- 36 437 U.S. 584, 588 (1978).
- 37 Bilski, 130 S. Ct. at 3231.
- 38 Id. at 3228 (citing Diehr, 450 U.S. at 182).
- 39 Id.
- 40 Id.
- 41 Id. at 3228-29 (citing Corley v. United States, 129 S. Ct. 1558 (2009)).
- 42 Id. at 3228-29.
- 43 Id. at 3229.
- 44 Id. at 3231.
- 45 Id.
- 46 Id.
- 47 Id.

48 149 F.3d 1368, 1373 (Fed. Cir. 1998).

- 49 Bilski, 130 S.Ct. at 3231.
- 50 Id.
- 51 In re Bilski, 545 F.3d at 1011 (Rader, J., dissenting).
- 52 Id.
- 53 Id.
- 54 Id. at 3232.
- 55 Id.
- 56 Id.

57 113 Stat. 1501A-555, codified at 35 U.S.C. §273.

58 Bilski, 130 S. Ct. at 3232 (citing 35 U.S.C. (273(a)(3)); see 35 U.S.C. (273(b)).

- 59 Id.
- 60 Id.
- 61 *Id.*

62 "Rather," said Justice Stevens, "it is a critical clue, even if the machineor-transformation test may not define the scope of a patentable process, it would be a grave mistake to assume that anything with a 'useful, concrete and tangible result,' may be patented. *Id.* (quoting State Street Bank & Trust v. Signature Fin. Group, Inc., 149 F.3d 1368, 1373 (Fed. Cir. 1998)).

63 Id.

64 *Id*.

65 Id.

66 Id. at 3257.

67 Id. at 3258.

68 If Breyer joined a four-justice plurality in full, why did that not make a five-justice majority?

69 *Bilski*, 130 S. Ct. at 3258 (citing Graham v. John Deere Co. of Kan. City, 383 U.S. 1, 10-11 (1966) (quoting Letter from Thomas Jefferson to Isaac McPherson (Aug. 13, 1813), *in* 6 Writings of Thomas Jefferson 181 (H. Washington ed.))).

70 *Id.* (citing Gottschalk v. Benson, 409 U.S. 63, 67, 72 (1972)); *see also, e.g.*, Diamond v. Diehr, 450 U.S. 175, 185 (1981); Diamond v. Chakrabarty, 447 U.S. 303, 309 (1980).

71 *Id.* (citing *Diehr*, 450 U.S. at 184 (emphasis added; internal quotation marks omitted)); *see also, e.g., Benson*, 409 U.S. at 70; Parker v. Flook, 437 U.S. 584, 588 n.9 (1978); Cochrane v. Deener, 94 U.S. 780, 788 (1877).

72 Id. (citing Flook, 437 U.S. 584).

73 *Id.* (citing ante, at 8; see also ante, at 1 (Stevens, J., concurring in judgment); *Benson*, 409 U.S. at 71 (rejecting the argument that "no process patent could ever qualify" for protection under §101 "if it did not meet the [machine-or-transformation] requirements").

74 Id. at 3258-59 (citing Diehr, 450 U.S. at 192).

75 *Id.* at 3259 (quoting State Street Bank & Trust Co. v. Signature Fin. Group, Inc., 149 F.3d 1368, 1373 (Fed. Cir. 1998)).

76 *Id.* (citing Lab. Corp. of Am. Holdings v. Metabolite Labs., Inc., 548 U.S. 124, 136 (2006) (Breyer, J., dissenting from dismissal of certiorari as improvidently granted)); *see also, e.g.*, O'Reilly v. Morse, 56 U.S. 62, 117 (1853); *Flook*, 437 U.S. at 590.

77 *Bilski*, 130 S. Ct. at 3259 (quoting *In re* Bilski, 545 F.3d 943, 1004 (Fed. Cir. 2008) (Mayer, J., dissenting) (citing patents on, *inter alia*, a "method of training janitors to dust and vacuum using video displays," a "system for toilet reservations," and a "method of using color-coded bracelets to designate dating status in order to limit 'the embarrassment of rejection."); *see also* Brief for Respondent 40-41, and n.20 (listing dubious patents).

78 *Id.* (citing ante, at 16; ante, at 2, n.1 (Stevens, J., concurring in judgment)).

79 With respect to two sections of what otherwise would have been a complete majority opinion, Justice Scalia opted out and instead joined hands across the aisle with Justice Breyer, who concurred separately in an effort to emphasize the points on which all Justices agreed: (1) that the broad text of § 101 is "not without limit" (Breyer at 2); (2) "[t]ransformation and reduction of an article to a different state or thing ["the so-called 'machine-or-transformation test"] is *the clue* to the patentability of a process claim that does not include particular machines" (*id.* (citing *Diehr*, 450 U.S. at 184) (emphasis added); Gottschalk v. Benson, 409 U.S. 63, 70 (1972); *Flook*, 437 U.S. at 588 n.9); Cochran v. Deener, 94 U.S. 780, 788 (1877)); (3) the machine-or-transformation test has never been the sole test for patentability (Breyer at 3); but (4) this "by no means indicates that anything which produces a 'useful, concrete, and tangible result' [citing State Street Bank & Trust Co. v. Signature Fin. Group, Inc., 149 F.3d 1368, 1373 (Fed. Cir. 1998)] is patentable."

80 Crouch, *supra* note 26. In the same source, Crouch also pointed out that the time required to write his lengthy dissent in *Citizens United v. FEC*, 558 U.S. 50 (2010), would help explain the tardiness of the Court's *Bilski* decision if in fact Justice Stevens had been assigned to draft the majority opinion. *Id.*

