

PATENTABLE SUBJECT MATTER IN *Bilski v. Kappos*, 130 S. CT. 3218 (2010)

The scope of patentable subject matter has continued to generate fierce debate even after Congress created the Federal Circuit in 1982 to promote uniformity and predictability in the nation's patent laws.¹ Section 101 of the Patent Act of 1952 (Section 101) defines patentable subject matter as "any new and useful process, machine, manufacture, or composition of matter."² In 1972, the Supreme Court explained in *Gottschalk v. Benson* that "[the 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."³ In 2008, the Federal Circuit held that *Benson's* "machine-or-transformation test," was "the sole test governing § 101 analyses."⁴ Last Term, in *Bilski v. Kappos*,⁵ the Supreme Court rejected both the Federal Circuit's "machine-or-transformation" holding and the suggestion of an alternative categorical ban on business method patents.⁶ Instead, the Court denied *Bilski's* application on the

1. Debra D. Peterson, *Can this Brokered Marriage be Saved? The Changing Relationship Between the Supreme Court and Federal Circuit in Patent Law Jurisprudence*, 2 J. MARSHALL REV. INTELL. PROP. L. 201, 202 (2003) ("Concerns about the uniformity of United States patent decisions and the stability of patent law were two of the main factors underlying creation of the Federal Circuit.") (citing S. Rep. No. 97-275, at 2-3 (1981)); see, e.g., Richard S. Gruner, *Intangible Inventions: Patentable Subject Matter for an Information Age*, 35 LOY. L.A. L. REV. 355, 355-59 (2002) (arguing that "[r]ecent developments in computer technology and related business practices are forcing courts" to expand the scope of patentable subject matter increasingly to include intangible inventions, and "propos[ing] new standards for distinguishing patentable, useful inventions having intangible content from unpatentable intellectual and scientific discoveries"); R. Carl Moy, *Subjecting Rembrandt to the Rule of Law: Rule-Based Solutions for Determining the Patentability of Business Methods*, 28 WM. MITCHELL L. REV. 1047, 1058-59 (2002) (reviewing the scholarly debate regarding the patentability of business methods).

2. 35 U.S.C. § 101 (2006).

3. 409 U.S. 63, 70 (1972) (citation omitted).

4. *In re Bilski*, 545 F.3d 943, 955-56 (Fed. Cir. 2008) (en banc), *aff'd sub nom. Bilski v. Kappos*, 130 S. Ct. 3218 (2010).

5. 130 S. Ct. 3218 (2010).

6. *Id.* at 3227 (holding that the "machine-or-transformation test" is not the sole test); *id.* at 3228 (holding that the language of Section 101 precludes a categorical business method ban).

finding that it was an unpatentable abstract idea.⁷ Although the Court purported to decide the case narrowly to avoid “impos[ing] limitations on the Patent Act that are inconsistent with the Act’s text,”⁸ the Court’s interpretation of Section 101 all but guarantees increased uncertainty in an already convoluted area of patent law because it denies the Federal Circuit the ability to create a clear and predictable patentable subject matter standard and encourages the Federal Circuit to experiment with the doctrine through case-by-case analysis.

In the initial patent application Bernard Bilski and Rand Warsaw filed on April 10, 1997 they described “how buyers and sellers of commodities in the energy market can protect, or hedge, against the risk of price changes.”⁹ Bilski’s invention required only three steps: first, selling commodities to consumers at a fixed rate based on historical averages and corresponding to the risk position of the consumers; second, identifying market participants for that commodity having a counter-risk position to the consumers; and third, initiating a series of transactions between the commodity seller and the market participants at a second fixed rate that balances the risk position of the series of consumer transactions.¹⁰ Bilski’s application focused on using this process in energy markets.¹¹ The patent examiner rejected Bilski’s application, stating that because it was not limited to a practical application of the abstract idea of hedging risk, it was not directed to the technological arts.¹² In 2006, the Board of Patent Appeals and Interferences affirmed the rejection, concluding that Bilski’s application “involved

7. *Id.* at 3229–30 (“Rather than adopting categorical rules that might have wide-ranging and unforeseen impacts, the Court resolves this case narrowly on the basis of this Court’s decisions in *Benson*, *Flook*, and *Diehr*, which show that petitioners’ claims are not patentable processes because they are attempts to patent abstract ideas.”).

8. *Id.* at 3231.

9. *Id.* at 3223.

10. *Id.* at 3223–24.

11. *Id.* at 3224.

12. *Id.* (Bilski’s application was rejected at the Patent and Trademark Office (PTO) because it “is not implemented on a specific apparatus and merely manipulates [an] abstract idea and solves a purely mathematical problem without any limitation to a practical application, therefore, the invention is not directed to the technological arts.” (quoting *Ex parte Bilski*, No. 2002-2257 WL 5738364, at *1 (B.P.A.I. Sept. 26, 2006)).

only mental steps that do not transform physical matter and was directed to an abstract idea.”¹³

In 2008, the United States Court of Appeals for the Federal Circuit heard the case en banc and affirmed.¹⁴ The majority opinion rejected the “useful, concrete and tangible result” test that had governed patentable subject matter since *State Street Bank*¹⁵ in 1998.¹⁶ The court held that, “[a] claimed process is surely patent eligible under Section 101 if: (1) it is tied to a particular machine or apparatus, or (2) it transforms a particular article into a different state or thing.”¹⁷ According to the court, this “machine-or-transformation test” was “the sole test governing § 101 analyses” of patentable processes.¹⁸ Applying the machine-or-transformation test, the court held that Bilski’s method claimed nonpatentable subject matter.¹⁹ The Federal Circuit hearing also produced four other opinions,²⁰ but only one judge concluded that the application claimed only patentable subject matter.²¹

The Supreme Court affirmed the judgment²² in an opinion by Justice Kennedy.²³ Justice Kennedy’s opinion purported to defend the plain meaning of Section 101 from efforts to restrict the reach of the patent laws by reading new limitations into the statute.²⁴ He began with Section 101’s definition of patentable subject matter as including “any new and useful process, machine, manufacture, or composition of matter,”²⁵ and relied on

13. *Bilski*, 130 S. Ct., at 3224.

14. *Id.*

15. *State St. Bank & Trust Co. v. Signature Fin. Grp., Inc.*, 149 F.3d 1368, 1373 (Fed. Cir. 1998).

16. See *In re Bilski*, 545 F.3d 943, 959–60, 960 n.19 (Fed. Cir. 2008) (en banc), *aff’d sub nom Bilski v. Kappos*, 130 S. Ct. 3218 (2008).

17. *Id.* at 954.

18. *Id.* at 955–56.

19. *Id.* at 966.

20. *Bilski v. Kappos*, 130 S. Ct. 3218, 3224 (2010).

21. See *Bilski*, 545 F.3d at 997 (Newman, J., dissenting).

22. *Bilski*, 130 S. Ct. at 3231.

23. Justice Kennedy delivered the opinion of the Court, except for Parts II.B.2 and II.C.2 of his opinion. Chief Justice Roberts, and Justices Thomas and Alito joined the opinion in full, and Justice Scalia joined the opinion except for Parts II.B.2 and II.C.2.

24. *Id.* at 3231 (“Today, the Court once again declines to impose limitations on the Patent Act that are inconsistent with the Act’s text.”).

25. *Id.* at 3225 (citing The Patent Act of 1952, 35 U.S.C. § 101 (2006)).

*Diamond v. Chakrabarty*²⁶ to read those subject matter categories broadly.²⁷ Although he recognized that Supreme Court precedent established the machine-or-transformation test as “a useful and important clue,” he held that it “is not the sole test for deciding whether an invention is a patent-eligible ‘process.’”²⁸ Justice Kennedy explained that adopting the machine-or-transformation test as the sole test would “read into the patent laws limitations and conditions which the legislature has not expressed,”²⁹ and would ignore the “ordinary meaning” of the word “process,”³⁰ thus violating two important principles of statutory interpretation.³¹ Because Congress defined the word “process” without any additional limitations,³² and because the ordinary meaning of the word would not require satisfaction of the machine-or-transformation test,³³ the Court refused to treat it as a term of art and rejected the Federal Circuit’s imposition of a rigid subject matter limitation into the text of Section 101’s definition of patentable subject matter.

The Court similarly refused to accept a categorical business method exception proposed by some amici.³⁴ The Court held

26. 447 U.S. 303 (1980) (stating that “Congress plainly contemplated that the patent laws would be given wide scope”).

27. *Bilski*, 130 S. Ct. at 3225 (“In choosing such expansive terms [in Section 101] . . . modified by the comprehensive ‘any,’ Congress plainly contemplated that the patent laws would be given wide scope.”).

28. *Id.* at 3227. Although Justice Kennedy recognized that Court precedent made the machine-or-transformation test “the clue” to patentable subject matter, he pointed out that this same precedent “assumes that a valid process patent may issue even if it does not meet [the machine-or-transformation test].” *Id.* (citing *Parker v. Flook*, 437 U.S. 584, 588 n. 9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972)).

29. *Id.* at 3226 (citing *Diamond v. Diehr*, 450 U.S. 175, 182 (1981)).

30. *Id.* at 3226.

31. *Id.*

32. *Id.* at 3225 (“Section 100(b) defines ‘process’ as ‘process, art or method, and includes a new use of a known process, machine, manufacture, composition of matter, or material.’” (quoting 35 U.S.C. § 100(b) (2006))).

33. *Id.* at 3226 (“This Court is unaware of any ‘ordinary . . . meaning’ of ‘process, art or method’ that would require these terms to be tied to a machine or to transform an article.”).

34. *E.g.*, Brief for Computer & Commc’ns Industry Ass’n as Amici Curiae Supporting Respondent at 23–24, *Bilski v. Kappos*, 130 S. Ct. 3218 (2010) (No. 08-964) (authored by Brian Kahin, Daniel L. Johnson, and Glenn B. Manishin) (“In the absence of a compelling case that Congress intended to abolish it, re-establishing the exclusion of business methods from patent-eligible subject matter would easily resolve this case.”).

that the language of Section 101 “precludes the broad contention that the term ‘process’ categorically excludes business methods.”³⁵ In addition to relying on the absence of a “business method” limitation in the language of Section 101, the Court also reasoned that 35 U.S.C. § 273 explicitly recognized the patentability of business methods because it creates a “prior use defense” against their enforcement.³⁶ “A conclusion that business methods are not patentable in any circumstances would render Section 273 meaningless.”³⁷ Finding that the text of Section 101 was clear and unambiguous, the Court refused to recognize a business methods exception.

Despite Justice Kennedy’s fierce advocacy of the plain meaning of the statute, his majority opinion acknowledged and reaffirmed a limited set of patentable subject matter exceptions.³⁸ He explained that “[a]ny suggestion in this Court’s case law that the Patent Act’s terms deviate from their ordinary meaning has only been an explanation for the exceptions for laws of nature, physical phenomena, and abstract ideas.”³⁹ Although these exceptions do not appear in the text of Section 101, Justice Kennedy justified them as consistent with the meaning of Section 101 as a whole,⁴⁰ as supported by long-standing precedent,⁴¹ and as potentially outside the power granted to Congress by the Intellectual Property Clause of the Constitution.⁴² He refused, however, to extend such reasoning to the machine-or-transformation test or to a categorical business methods exclusion.⁴³

35. *Bilski*, 130 S. Ct. at 3228.

36. *Id.*

37. *Id.*

38. *Id.* at 3225 (There are only “three specific exceptions to § 101’s broad patent-eligibility principles: ‘laws of nature, physical phenomena, and abstract ideas.’” (quoting *Diamond v. Chakrabarty*, 447 U.S. 303, 309 (1980))).

39. *Id.* at 3226.

40. *See id.* at 3225 (The exceptions for laws of nature, physical phenomena, and abstract ideas are “consistent with the notion that a patentable process must be ‘new and useful.’”).

41. *Id.* (“[T]hese exceptions have defined the reach of the statute . . . going back 150 years.”).

42. *See, e.g.*, U.S. CONST. Art. I, § 8, cl. 8; *Bilski*, 130 S. Ct. at 3225 (“The concepts covered by these exceptions are ‘part of the storehouse of knowledge of all men . . . free to all men and reserved exclusively to none.’” (quoting *Funk Bros. Seed Co. v. Kalo Inoculant Co.*, 333 U.S. 127, 130 (1948))).

43. *Bilski*, 130 S. Ct. at 3226 (“[T]he existence of these well-established exceptions [does not give] the Judiciary *carte blanche* to impose other limitations that are inconsistent with the test and the statute’s purpose and design.”).

Although the Court was eager to reject new categorical limitations on patentable subject matter, it decided the case on the basis of a nonstatutory, but well-known, exception to patentable subject matter: the abstract idea exception.⁴⁴ The Court held that the Bilski application claimed “the basic concept of hedging, or protecting against risk.”⁴⁵ Justice Kennedy explained that the concept of hedging is a fundamental and “long prevalent” economic practice⁴⁶ and that it “is an unpatentable abstract idea, just like the algorithms at issue in *Benson* and *Flook*.”⁴⁷ He concluded that “[a]llowing petitioners to patent risk hedging would preempt use of this approach in all fields, and would effectively grant a monopoly over an abstract idea.”⁴⁸ The Court then held that Bilski’s focus on hedging in the commodities and energy markets did not sufficiently distinguish the claim from one covering the abstract idea of hedging risk.⁴⁹ Because the Court concluded that all of the claims in the Bilski application were directed to the unpatentable abstract idea of hedging risk, it affirmed the rejection of the Bilski application under Section 101.⁵⁰

Justice Stevens concurred in the judgment,⁵¹ but wrote a lengthy opinion criticizing the majority and suggesting an alternate holding. Justice Stevens agreed with the majority that the machine-or-transformation test “is not the *exclusive* test”⁵² and that the Bilski claims “seek to patent an abstract idea.”⁵³ However, he would have decided the case on broader grounds by imposing a categorical restriction on business method patents.⁵⁴ Because he found that Section 101’s definition of process was circular, he concluded that the text of Section 101 “does

44. *Id.* at 3229–30.

45. *Id.* at 3231 (quoting *In re Bilski*, 545 F.3d 943, 1013 (Fed. Cir. 2008) (en banc) (Rader, J., dissenting), *aff’d sub nom* *Bilski v. Kappos*, 130 S. Ct. 3218 (2010)).

46. *Id.* at 3231.

47. *Id.*; see *Parker v. Flook*, 437 U.S. 584 (1978); *Gottschalk v. Benson*, 409 U.S. 63 (1972).

48. *Bilski*, 130 S. Ct. at 3231.

49. *Id.* (“[T]hese claims add even less to the underlying abstract principle than the invention in *Flook* did . . .”).

50. *Id.* (“The patent application here can be rejected under our precedents on the unpatentability of abstract ideas.”).

51. Justice Stevens was joined by Justices Ginsburg, Breyer, and Sotomayor.

52. *Id.* at 3231–32 (Stevens, J., concurring in the judgment).

53. *Id.* at 3235.

54. *Id.* at 3232 (“For centuries, it was considered well established that a series of steps for conducting business was not, in itself, patentable.”).

not on its face convey the scope of patentable processes.”⁵⁵ Contrary to the Court, he would have rejected the common meaning of the word “process” in favor of the way the word has “traditionally been understood in the context of patent law.”⁵⁶ Relying in part on an originalist analysis,⁵⁷ Justice Stevens concluded that Congress did not have the power to protect business method patents under the Constitution and had never intended patentable subject matter to extend to business method patents.⁵⁸ Rather, Congress intended the judiciary to be the guardian of patentability.⁵⁹ Justice Stevens would have exercised this discretion to hold that “a claim that merely describes a method of doing business” is not patentable.⁶⁰

Justice Stevens also criticized the majority’s imprecise explication of the abstract ideas test. Contrary to Justice Kennedy’s characterization of the invention, Justice Stevens argued that Bilski did not claim an abstract principle.⁶¹ Instead, he argued, Bilski’s claims limited the idea of hedging to “specific applications” in the particular field of energy and “as a means of enabling suppliers and consumers to minimize the risks resulting from fluctuations in demand during specified periods.”⁶² Justice Stevens accused the majority of “[d]iscount[ing] the applicant’s] limitation of what sorts of data to use and how to analyze those data as mere ‘token postsolution components’”⁶³ and “essentially assert[ing] its conclusion that [Bilski’s] application claims an abstract idea.”⁶⁴ He argued that the Court “artificially limit[ed] petitioners’ claims to hedging, and then conclude[d] that hedging is an abstract idea rather than a term that describes a category of processes including petitioners claims.”⁶⁵ In addition, he pointed out that the majority

55. *Id.* at 3237–39.

56. *Id.* at 3234.

57. *See id.* at 3239–46.

58. *Id.* at 3249 (“[N]either the Patent Clause, nor early patent law, nor the current § 101 contemplated or was publicly understood to mean that [business method] innovations are patentable.”).

59. *Id.* at 3245 (Since the 1793 Patent Act, “the whole [of patentability analysis] was turned over to the judiciary, to be matured into a system, under which every one might know when his actions were safe and lawful.”).

60. *Id.* at 3232.

61. *Id.* at 3235.

62. *Id.* at 3233.

63. *Id.* at 3235.

64. *Id.* at 3236.

65. *Id.* at 3235.

sometimes confused the issue of subject matter with the separate requirement of novelty.⁶⁶

Justice Breyer wrote a separate concurrence⁶⁷ to emphasize the Court's unanimous consensus that the machine-or-transformation test is not the sole test for patentable subject matter but is an important clue:⁶⁸ He opined that most business methods are probably not patentable.⁶⁹

The Court was correct to resist adding a new categorical exception to Section 101 because doing so would have risked unintended hindrance of technological development⁷⁰ and increased confusion among primary actors seeking patent protection.⁷¹ Because *Bilski's* application could easily be rejected under existing abstract idea precedent,⁷² there was no reason to adopt a broad new rule with uncertain consequences.

By using the abstract ideas test, the Court also avoided introducing yet another significant judicial gloss on the text of Section 101. Although a nuanced judicial gloss on the pat-

66. *Id.* at 3236.

67. Justice Breyer was joined in relevant part by Justice Scalia.

68. *Id.* at 3257–59 (Breyer, J., concurring in the judgment).

69. *Id.* at 3257.

70. See Gruner, *supra* note 1, at 426 (Patentable subject matter rules limited to “historical modes of innovation may exclude and fail to encourage new dimensions of advances reflecting the latest design approaches and technological insights.”).

71. See, e.g., Shubha Ghosh, *Patents and the Regulatory State: Rethinking the Patent Bargain Metaphor After Eldred*, 19 BERKELEY TECH. L.J. 1315, 1371 (2004) (“From the perspective of the assurance game, the treatment of patentable subject matter as an issue of regulation rather than as property is justified.”); Gruner, *supra* note 1, at 426 (“Patentable subject matter standards should . . . be articulated in terms of objective standards that courts, the PTO, patent applicants, and potential patent infringers can apply consistently.”).

72. See, e.g., *Ex parte Bilski*, No. 2002-2257 WL 5738364, at *20 (B.P.A.I. Sept. 26, 2006) (“The steps of ‘initiating a series of transactions’ and the step of ‘identifying market participants’ merely describe steps or goals in the plan, and do not recite how those steps are implemented in some physical way: the steps remain disembodied. Because the steps cover (‘preempt’) any and every possible way of performing the steps of the plan . . . we conclude that the claim is so broad that it is directed to the ‘abstract idea’ itself, rather than a practical implementation of the concept.”); see also Robert A. Kreiss, *Patent Protection for Computer Programs and Mathematical Algorithms: The Constitutional Limitations on Patentable Subject Matter*, 29 N.M. L. REV. 31, 61 (1999) (“[One] constitutional constraint [on patentable subject matter] is that a work must involve a *useful application* of knowledge. For example, laws of nature, natural phenomena, and abstract ideas are not patentable. To have an invention, one must create a practical application of laws of nature, natural phenomena, or ideas.”).

entability of business methods could potentially be employed as a powerful filter against counterproductive patent grants, a clear and unambiguous rule is preferable so that parties involved in innovation can adapt to the requirements of patentability.⁷³ Justice Stevens' "mere business method" test is no more concrete than the abstract ideas test. Moreover, were courts actively to apply such a judicial gloss as a strong filter, the negative impact of its unpredictability would be magnified by focusing greater importance in patent law on the patentable subject matter requirement. Fortunately, it is unnecessary to rely so heavily on Section 101 to filter out undeserving business method patents because these patents are likely to fail on alternative grounds, such as novelty and obviousness.⁷⁴ Although the Court's decision failed to articulate a clear and predictable boundary line for patentable subject matter under Section 101, by resolving the case according to settled doctrine, the Court avoided further complicating its Section 101 jurisprudence.

Nevertheless, the Court regrettably failed both to articulate a clear abstract ideas test and to apply its abstract ideas precedent in a straightforward manner. Justice Stevens correctly criticized the majority for failing to explain how Bilski's application claimed an abstract idea and for basing its conclusion on a mis-

73. See, e.g., Gruner, *supra* note 1, at 361 ("In an administrative context, patent applicants will look to these new standards [of patentable subject matter] to shape their patent claims for intangible inventions so as to include the features necessary to qualify for patents."); *id.* at 362 (arguing that clarity in the bounds of patentable subject matter helps businesses and individuals shape and plan private actions); see also Jeffrey I. Ryen, Note, *The Return of the Walter Test: Patentability of Claims Containing Mathematical Algorithms After In re Grams*, 76 CORNELL L. REV. 962, 983 (1991) (noting that after the *Abele* decision, applicants flooded the PTO with patent applications for algorithm inventions).

74. See, e.g., Brief for Prometheus Laboratories Inc. as Amicus Curiae Supporting Neither Party at 8, *Bilski v. Kappos*, 130 S. Ct. 3218 (2010) (No. 08-964) (authored by Richard P. Bress) ("First, attempts to apply § 101 as a sweeping filter risk eliminating many broad swaths of genuinely innovative processes for which patent incentives are crucial. Second, a broad role for § 101 is not necessary because many troubling business methods are likely to fail other substantive requirements of patentability, such as novelty and non-obviousness."); Stefania Fusco, *In re Bilski: A Conversation with Judge Randall Rader and a First Look at the BPAI's Cases*, 20 ALB. L.J. SCI. & TECH. 123, 144-45 (2010) (contending that there is no need to screen out overly broad patents using a stringent subject matter filter because novelty and other requirements of patentability are more than adequate.) Gruner, *supra* note 1, at 366 (arguing that extending the boundaries of patentable subject matter does not lower the standards of patentability for business methods, it just shifts the analysis from subject matter to novelty, utility, obviousness, and definiteness).

characterization of *Bilski's* claims.⁷⁵ And as Justice Stevens observed, the Court's strained analysis might send a false signal to lower courts that *Bilski* modifies the standard for what constitutes an abstract idea.⁷⁶ Justice Kennedy's difficulty, however, is understandable. Because all inventions are based on abstract principles or laws of nature,⁷⁷ and because patent claims are necessarily abstract formulations of those inventions, the line between claiming an abstract idea and claiming an application of an abstract idea is necessarily murky.⁷⁸ Yet it is still the Court's responsibility to clearly delineate the boundaries of patentable subject matter.⁷⁹ In *Bilski*, the Court failed to live up to this responsibility. To compound the problem, Justice Kennedy effectively precluded the Federal Circuit from articulating any categorical rule that would provide true clarity, and instead invited the Federal Circuit to address these issues in a case-by-case manner.

Bilski is just the latest example of how Supreme Court review of Federal Circuit patent jurisprudence can produce uncertainty and convolution that directly contradicts Congress's aim in creating the Federal Circuit. Congress created the Federal Circuit in 1982 to provide nationwide uniformity to the patent laws and to improve the Patent and Trademark Office's administration of them by relieving the Supreme Court, which was already "operating at full capacity," of some of the many complex and "unsettled controversies in the law."⁸⁰ The existence of differences among the federal courts of appeals in interpreting the patent laws had caused a great deal of forum

75. *Bilski*, 130 S. Ct. at 3235 (Stevens, J., concurring in the judgment).

76. *See id.* ("One might think that the Court's analysis means that any process that utilizes an abstract idea is *itself* an unpatentable, abstract idea. But we have never suggested any such rule.").

77. Rajendra K. Bera, *Patentable subject matter under the US Patent Act, 1952: Cases*, 95 CURRENT SCI. 1421, 1422 (2008) (explaining that inventions based on laws of nature are patentable and all machines obey laws of physics).

78. *See, e.g., id.* at 1424 ("[P]henomena of nature, mental processes and abstract intellectual concepts are difficult to define."); Gruner, *supra* note 1, at 424 ("Patentable subject matter standards are difficult to define because future innovations are hard to predict.").

79. *See* J.H. Reichman, *Legal Hybrids Between the Patent and Copyright Paradigms*, 94 COLUM. L. REV. 2432, 2450–51 (1994) ("A blurred [subject matter] line also may cause incoherence in intellectual property policies and premises.").

80. *See* Peterson, *supra* note 1, at 201 n.5 (quoting S. Rep. No. 97-275, at 3 (1981)).

shopping.⁸¹ By creating a nonspecialized court with special expertise,⁸² Congress hoped to solve these problems without creating institutional bias or “tunnel-vision.”⁸³ Although not termed a specialized court, the Federal Circuit still spends over fifty percent of its time deciding issues of patent law.⁸⁴

The relationship between the Federal Circuit and the Supreme Court has shifted dramatically since the Federal Circuit’s inception. The first decade or so of the Federal Circuit’s existence was a period of extreme Supreme Court deference in issues of patent law,⁸⁵ which in some cases even bordered on abdication.⁸⁶ In the almost fifteen years since the Supreme Court’s decision in *Markman v. Westview Instruments, Inc.*,⁸⁷

81. *E.g.*, SECTION OF ANTITRUST LAW, AMERICAN BAR ASSOCIATION, REPORT ON THE UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT 9 (2002) [hereinafter “ABA”] (arguing that the overcrowded Supreme Court docket left “virtually no opportunity to provide national uniformity in many complex areas of the law,” especially in patent law); *id.* at 20 (stating that Congress had a clear goal to “achieve uniformity in the interpretation and development of patent law”); Peterson, *supra* note 1, at 204 (“The Commission’s findings also confirmed that uncertainty in the law led to forum shopping among the circuits, with the most intense forum shopping occurring in the area of patent law.”).

82. *E.g.*, ABA, *supra* note 81, at 15 (noting that Congress created a nonspecialized court with a varied docket to avoid the institutional bias of a specialized court); Peterson, *supra* note 1, at 207 (“The Federal Courts Improvement Act of 1982 did not create a ‘specialized court,’ as was made explicitly clear by the Federal Circuit’s jurisdictional statutes, the Act’s legislative history, and the emphatic declarations of two Chief Judges of the Federal Circuit.”).

83. *See, e.g.*, ABA, *supra* note 81, at 10, 14 (explaining that Congress was concerned that specialized courts would have tunnel vision and an increased risk of capture by special interest groups); Peterson, *supra* note 1, at 204 (same).

84. Peterson, *supra* note 1, at 225–26 (“[T]he Federal Circuit spends over 50% of its time in the area of patent law.”).

85. *See, e.g.*, Arthur J. Gajarsa & Dr. Lawrence P. Cogswell, III, *The Federal Circuit and the Supreme Court*, 55 AM. U. L. REV. 821, 821–22 (2006) (noting that between 2004 and 2006 the Supreme Court granted certiorari to the Federal Circuit in four patent cases, the same number granted during the first twelve years of the Federal Circuit’s existence, whereas grants of petitions of certiorari were constant); Peterson, *supra* note 1, at 201 (“The early part of the Federal Circuit’s life may be viewed as its ‘honeymoon’ period with the Supreme Court. The Supreme Court rarely reviewed patent decisions from the Federal Circuit, and those it did review were generally given extreme deference.”).

86. *See* Peterson, *supra* note 1, at 210 (noting that the Supreme Court sat “quietly by as the new Federal Circuit ambitiously went to work, overturning many existing Supreme Court decisions on patent law”).

87. 517 U.S. 370 (1996).

however, this deference has given way to increased scrutiny.⁸⁸ This increased scrutiny has coincided with a decrease in the Federal Circuit's patent expertise and an increase in its political and professional diversity.⁸⁹ During the period of deference, the Federal Circuit presided over a broad expansion of patent rights.⁹⁰ The decrease in deference coincided with a slowing in this expansion, and even in a contraction of patent rights.⁹¹ *Bilski* is just one more link in this dual transition.

Like each important patent case decided by the Supreme Court, *Bilski* is part of an ongoing dialogue between the Court and the Federal Circuit. One commentator has described the current period of closer Supreme Court scrutiny as "the third wave" in this ongoing dialogue.⁹² In each decision, the Supreme

88. See, e.g., Gajarsa & Cogswell, *supra* note 85, at 821–22 (explaining that *Markman* represented the Supreme Court's first review of a case involving the substantive essentials of patent law and was a turning point in Supreme Court review of patent law); *id.* at 843 ("There appears to have been a recent increase . . . in the frequency of Supreme Court review of [Federal Circuit] decisions . . ."); Peterson, *supra* note 1, at 201 (same). The increase in the frequency of Supreme Court review of Federal Circuit decisions identified by Judge Gajarsa continued in 2006, during which "the Supreme Court's greater interest in issues of patent law—at a time when its docket of cases continue[d] to shrink—was a major theme of the Federal Circuit's published patent law decisions issued [that year]." Gregory A. Castanias et al., *Survey of the Federal Circuit's Patent Law Decisions in 2006: A New Chapter in the Ongoing Dialogue with the Supreme Court*, 56 AM. U. L. REV. 793, 796 (2007). The Supreme Court's frequent calls for the views of the Solicitor General in patent cases "provide[s] further confirmation of the exponential leap in the Supreme Court's interest in the development of the U.S. patent laws." *Id.* at 813–14.

89. Peterson, *supra* note 1, at 225 ("The Federal Circuit's patent expertise has . . . become diluted due to subsequent appointments . . . [and their] backgrounds . . . are generally more diverse than [before] . . .").

90. See Fusco, *supra* note 74, at 133–34 (arguing that *Chakrabarty* and *Diehr* are "indicative of the general attitude prevailing in the 1980s that favored an ever-expanding understanding of the scope of patent protection").

91. See, e.g., *KSR Int'l Co. v. Teleflex, Inc.*, 550 U.S. 398, 415 (2007) (rejecting Federal Circuit's rigid obviousness test); *MedImmune, Inc. v. Genentech, Inc.*, 549 U.S. 118 (2007) (allowing licensees to bring suit for declaratory judgment of invalidity); *Lab. Corp. of Am. Holdings v. Metabolite Labs., Inc.*, 548 U.S. 124, 136 (2006) (Breyer, J., dissenting) (questioning patentable subject matter jurisprudence); *eBay Inc. v. MercExchange, L.L.C.*, 547 U.S. 388, 394 (2006) (holding that injunction against infringer is no longer automatic); *Merck KGaA v. Integra Lifesciences I, Ltd.*, 545 U.S. 193, 206 (2005) (adopting a broader research exemption safe harbor); Fusco, *supra* note 74, at 135–37 (noting a new trend in which the Supreme Court and Federal Circuit decisions has restricted patent rights through *KSR* and *MedImmune*).

92. Castanias et al., *supra* note 88, at 798 ("As 2006 ends, we appear to be in the midst of a 'third wave' in the ongoing dialogue between the Supreme Court and the Federal Circuit over the content of U.S. patent law—a wave marked by more aggressive Supreme Court review of the substance of patent law and patent pro-

Court sends certain messages to the Federal Circuit and the patent bar.⁹³ The Federal Circuit responds by tailoring its decisions to address the Court's concerns.⁹⁴ The Federal Circuit has thus begun to pay close attention to Supreme Court precedent,⁹⁵ and even to overturn some of its own precedents in the process.⁹⁶ In fact, the Federal Circuit may have taken *Bilski* en banc in response to the Supreme Court's concerns with its Section 101 jurisprudence,⁹⁷ and also to address the general criticism of *State Street*.⁹⁸ Although the Federal Circuit's decision in *Bilski* paid "detailed attention to numerous Supreme Court precedents,"⁹⁹ it misapplied those precedents by making the machine-or-transformation test into a rigid categorical rule.¹⁰⁰ The Court would have preferred that the Federal Circuit refine the formu-

cedure and less deference to the Federal Circuit's views of what the content of U.S. patent law should be.").

93. See Darin Snyder & Mark Davies, *The Federal Circuit and the Supreme Court (Circa 2009)*, 19 FED. CIR. B.J. 1, 1 (2010) (arguing that the Federal Circuit is paying close attention to the Supreme Court).

94. See, e.g., Castanias et al., *supra* note 88, at 853 (The decision to grant certiorari in *KSR* prompted the Federal Circuit to defend its "motivation-teaching-suggestion" test in several of its 2006 decisions, and "engage in a remarkable conversation with the Supreme Court . . . on this issue."); Fusco, *supra* note 74, at 137 (arguing that the Federal Circuit responded to the grant of certiorari in *KSR* with two decisions that limited patent rights).

95. Snyder & Davies, *supra* note 93, at 1 (arguing that the Federal Circuit is now "paying extraordinarily close attention to Supreme Court precedent" and even revising critical aspects of Federal Circuit law in light of it).

96. *Id.* at 2 (citing cases overturning Federal Circuit precedent in favor of Supreme Court precedent).

97. See Fusco, *supra* note 74, at 143 (suggesting that the Federal Circuit reheard *Bilski* en banc because the Supreme Court was displeased with Section 101 jurisprudence and was being more restrictive of patent grants).

98. *Id.* at 146 (indicating that in the Federal Circuit's decision in *Bilski* the court tried to "revert[] to older, more stringent, standards" because the Federal Circuit perceived the Supreme Court's dissatisfaction with the system); see *State St. Bank & Trust Co. v. Signature Fin. Grp., Inc.*, 149 F.3d 1368 (Fed. Cir. 1998).

99. See, e.g., Fusco, *supra* note 74, at 145 (stating that certiorari in *Bilski* was thought to be unlikely because the Federal Circuit was "once again applying the Supreme Court's law to the letter" "[even though] the Supreme Court's tests were failures"); Snyder & Davies, *supra* note 93, at 7 (asserting that the Federal Circuit's *Bilski* opinion paid "detailed attention to numerous Supreme Court precedents," and purported to adopt the Supreme Court's test).

100. Snyder & Davies, *supra* note 93, at 11 (arguing that the Federal Circuit's *Bilski* decision failed to follow Supreme Court precedent because it "convert[ed] a 'helpful insight' into a 'rigid and mechanical test'").

lation of patent laws on a case-by-case basis.¹⁰¹ This approach would allow the Federal Circuit flexibility to deal with emerging technological achievements,¹⁰² but is not without its problems.

The Court's decision in *Bilski* will likely produce protracted uncertainty regarding the limits of patentable subject matter because it fails to give clear guidance to lower courts and seemingly inhibits the Federal Circuit from doing so. Justice Kennedy failed to articulate a clear abstract ideas test, and provided no coherent explanation for why the *Bilski* application claimed an abstract idea.¹⁰³ And although the Court purported to leave open the option of the Federal Circuit creating a categorical rule,¹⁰⁴ the authorities to which it directed lower courts—the Court's abstract ideas precedents, and the text and purposes of the Patent Act¹⁰⁵—do not lend themselves well to the development of clear rules.¹⁰⁶ Furthermore the language of the Court's opinion and its rejection of the bright-line rules that the Federal Circuit had adopted in *Bilski* send a forceful signal to the Federal Circuit that it should prefer flexible standards to rigid criteria.¹⁰⁷ Not only should patentable subject matter policy not be left to the unfet-

101. *Id.* at 3 (asserting that the Supreme Court before 1992 “largely approved of the Federal Circuit’s case-by-case approach,” such as in *Warner-Jenkinson*, where the Court explained that the Federal Circuit would refine the formulation for equivalents in the orderly course of case-by-case differentiation and refinement through its special expertise).

102. *Id.* at 13 (concluding that “[o]ver time, the common law approach will provide guidance for inventors that best promote innovation” as the Federal Circuit makes context-specific judgments about true innovation case-by-case).

103. See *supra* text accompanying notes 75–79.

104. *Bilski v. Kappos*, 130 S. Ct. 3218, 3231 (2010) (“In disapproving an exclusive machine-or-transformation test, we by no means foreclose the Federal Circuit’s development of other limiting criteria that further the purposes of the Patent Act and are not inconsistent with its text.”).

105. *Id.*; see also *id.* at 3229 (“In searching for a limiting principle, this Court’s precedents on the unpatentability of abstract ideas provide useful tools.”).

106. See A. Samuel Oddi, *Regeneration in American Patent Law: Statutory Subject Matter*, 46 IDEA 491, 497 (2006) (arguing that patentable subject matter categories “constitute terms without further definition, thus requiring the courts to provide definitions in essentially a common law manner virtually unrestrained by statutory language and rules of statutory construction”); cf. Ryen, *supra* note 73, at 981 (“[T]he *Grain Processing* court left the ultimate determination of whether a claim is nonstatutory to the subjective discretion of the PTO and the courts. In so doing, the *Grain Processing* court implied that this analysis should be conducted on a case-by-case basis.”).

107. See *supra* note 101; see also *Bilski*, 130 S. Ct. at 3228 (emphasizing that the patentability requirements serve a critical role in adjusting the tension between stimulating innovation and impeding progress, but “[n]othing in this opinion should be read to take a position on where that balance ought to be struck”).

tered discretion of the courts,¹⁰⁸ but such ad hoc development of discretionary standards is especially problematic because it creates neither predictability nor uniformity.¹⁰⁹ Recent history suggests this is no idle concern. Unsurprisingly, increased Supreme Court review of Federal Circuit patent cases has led to greater uncertainty as the Federal Circuit takes fewer cases en banc.¹¹⁰ In all likelihood, *Bilski* will only magnify this problem.

In the interest of the uniformity and predictability envisioned by Congress in creating the Federal Circuit, the Court in *Bilski* should have clearly articulated an abstract ideas test for patentable subject matter.¹¹¹ Instead, it consigned the issue to the vagaries of discretionary case-by-case analysis. The Court in *Bilski* took a laudable step towards clarity by rejecting the Federal Circuit's substantial innovation in its patentable subject matter jurisprudence. However, by sending the Federal Circuit the signal that it should develop the doctrine on an ad hoc basis and with a strong preference for standards over rules, the Court unnecessarily inserted greater uncertainty into the already convoluted patentable subject matter jurisprudence.

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108. Ghosh, *supra* note 71, at 1367 ("The problem is that the authors are assuming that patent policy is a matter for the courts rather than for legislative and administrative bodies.").

109. See Ryen, *supra* note 73, at 981 (arguing that a discretionary patentable subject matter standard implies that the analysis should be conducted on a "case-by-case basis" and thus leaves the determination "within the reviewing body's sole discretion"); *id.* at 982 (predicting that a discretionary standard for statutory patentable subject matter will "probably result in uncertain and inconsistent decisions in the PTO" because the decision "will be left to the subjective discretion of each examiner"); *cf.* Reichman, *supra* note 79, at 2444 (arguing that ad hoc efforts to expand protection "strain the international intellectual property system to the breaking point"); *id.* at 2518–19 (asserting that, instead of gradual development, "[a]n integrated, more empirically based approach is needed to . . . stabilize [our] discredited intellectual property system").

110. See Castanias et al., *supra* note 88, at 797–98 ("[I]n light of the Supreme Court's much more muscular review of the Federal Circuit's patent cases . . . the relative paucity of en banc decisions in 2006 is understandable.").

111. *Cf.* Ryen, *supra* note 73, at 982 ("[The] *Grams* court should have provided lower courts and the PTO with a more concrete and objective standard for analyzing claims containing mathematical algorithms.").