

METHOD IN THE MADNESS: DEFINING
SUBJECT MATTER ELIGIBILITY FOR METHOD
PATENTS AMIDST BILSKI’S MUDDIED
INTERPRETATION

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I. INTRODUCTION

When asked with whom he would he would prefer to be stranded on a desert island, Justice Scalia, evoking audience laughter, replied, “Ruth Bader Ginsburg.”¹ Unlikely friends outside of the courtroom, Scalia and Ginsberg often clash ideologically inside the courtroom.² While he is a textualist who is more hesitant to consider current societal needs when interpreting a statute,³ she is more likely to consider changing legal and social trends with statutory interpretation.⁴ Their differing styles of statutory interpretation, accompanied by those of the other Justices of the Roberts Court, should coalesce into vital and dazzling interplay when the Court re-reviews the watershed decision in *In re Bilski*.⁵ The Federal Circuit should have decided *In re Bilski* with a perspective more in line with Ginsberg’s style of decision-making, connecting the decision to “the diverse society law exists to serve.”⁶ *In re Bilski* should not have been decided on a desert island, with such little consideration of modern views of technology; harmony between *In re Bilski* and current societal needs must be forged.

In re Bilski concerns subject matter eligibility, which addresses the most fundamental question in patent law: what can be patented?⁷ In answering the question, *In re Bilski* extracted out of the Federal Circuit the fractured ruling that patents must either be tied to a particular machine or involve a

1. Joan Biskupic, *Ginsburg, Scalia Strike a Balance*, USA TODAY, Dec. 25, 2007, available at http://www.usatoday.com/news/washington/2007-12-25-ginsburg-scalia_N.htm?loc=interstitialskip.

2. *Id.*

3. Horace E. Johns, *Nine Means to an End: The Members of the U.S. Supreme Court, Part I*, 39 TENN. B.J. 26, 31 (2003). A formalist theory of statutory interpretation, textualism holds that a statute’s ordinary meaning should govern its interpretation and thus subverts the significance of inquiries into the legislature’s intent in passing the law, the problem the law intended to remedy, and justice and rectitude of the law. See ANTONIN SCALIA, *A MATTER OF INTERPRETATION* 17, 18 (Princeton Univ. Press 1998); see also John F. Manning, *Textualism as a Nondelegation Doctrine*, 97 COLUM. L. REV. 673, 685 (1997).

4. Horace E. Johns, *Nine Means to an End: The Members of the U.S. Supreme Court, Part II*, 39 TENN. B.J. 27, 30 (2003); see Ed Whelan, *Ginsburg’s Disregard for Precedent*, NATIONAL REVIEW ONLINE, Jan. 8, 2008, <http://bench.nationalreview.com/post/?q=MDION2>

I3NmNkZmVmZTJkNGIwNGViYWYWRkZmEwZTI0ZGI=. Ginsburg said she “recogniz[ed] the propriety of revisiting a [statutory] decision when ‘intervening development of the law’ has ‘removed or weakened [its] conceptual underpinnings.’” *Id.*

5. See *In re Bilski*, 545 F.3d 943 (Fed. Cir. 2008), cert. granted, 129 S. Ct. 2735 (2009).

6. Johns, *supra* note 4.

7. *In re Bilski*, 545 F.3d at 951.

transformation of articles or material to a different state or thing (hereinafter “machine-or-transformation test”).⁸ Disrupting “settled and wise principles of law,”⁹ *In re Bilski* not only seized the interest of the patent law community¹⁰, but also arrested the attention of the financial and technology industries.¹¹ Global media coverage hovered over the case.¹² Why? *In re Bilski* possibly emasculated the validity of thousands¹³ of method patents upon which the legal and corporate spheres have relied.¹⁴ “The U.S. patent system is at a crossroads,”¹⁵ and the time is ripe for the Supreme Court to re-define what is eligible subject matter for method patents. Because of *In re Bilski*, the Federal Circuit definitively solidified¹⁶ a seemingly improper standard for determining patent-eligible subject matter. With its holding, the majority appears to crystallize an incorrect statutory interpretation, create unanswered questions, and conjure many business difficulties.

This casenote attempts to address the inaccuracies of the majority’s statutory interpretation and argue that the Supreme Court should overturn the decision. Part II of the casenote provides the legal context for *In re Bilski*, discussing the state of subject matter eligibility pre-Bilski and summarizing the cases and tests that the Federal Circuit had to consider when deciding *In re Bilski*. Part III provides a summary of the facts and holding of *In re Bilski*. Part IV delves into the background law, facts, and issues pertinent to the statutory interpretation of subject matter eligibility. Part V discusses the significant impact of *In re Bilski*, highlighting important unanswered questions and

8. *Id.* at 956.

9. *Id.* at 1011 (Rader, R., dissenting).

10. See Brad Stone, *A Patent Ruling May Be Revisited*, N.Y. TIMES, Mar. 10, 2008, at C5.

11. See Andrew G. Simpson, *Insurers Urged to Check Business Process Patents after Bilski Ruling*, INS. J., Nov. 18, 2008, <http://www.insurancejournal.com/news/national/2008/11/18/95589.htm>.

12. See Harsimran Singh, *US Court Verdict on Process Patent Stirs Debate in India*, THE ECONOMIC TIMES, Nov. 1, 2008, <http://economictimes.indiatimes.com/articleshow/msid-3660219,prtpage-1.cms>; see also Ilya Musabirov, *As a Software Patent Torpedoed*, CNEWS RUSSIA, Nov. 1, 2008, <http://translate.google.com/translate?u=http%3A%2F%2Fwww.cnews.ru%2Fnews%2Ftop%2Findex.shtml%3F2008%2F11%2F01%2F325864&hl=en&ie=UTF-8&sl=ru&tl=en>.

13. Erick Schonfeld, *Your Business Method Patent Has Just Been Invalidated*, WASH. POST, Oct. 30, 2008, available at <http://www.washingtonpost.com/wpdyn/content/article/2008/10/30/AR2008103003751.html>.

14. Simpson, *supra* note 11.

15. Kevin R. Davidson, Comment, *Retooling Patents: Current Problems, Proposed Solutions, and Economic Implications for Patent Reform*, 8 HOUS. BUS. & TAX L.J. 425, 426 (2008).

16. *In re Bilski*, 545 F.3d 943, 954 (Fed. Cir. 2008).

the timeliness and relevance of the issues. Part VI addresses the need for the machine-or-transformation test to be clarified or invalidated, focusing on the business ramifications and public policy concerns animating the need.

II. CONTEXTUALIZING *IN RE BILSKI*: THE LAW *BILSKI* HAD TO CONSIDER

35 U.S.C. § 101 enumerates the four categories of patent-eligible subject matter by stating, “[w]hoever 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, subject to the conditions and requirements of this title.”¹⁷

To assist examiners in interpreting § 101, the United States Patent and Trademark Office (USPTO) issued interim guidelines in November 2005 stating that a process must produce a “useful, concrete, and tangible result,” in order to satisfy subject matter eligibility.¹⁸ In contrast, although the Supreme Court addressed the issue of patent eligibility of processes through the landmark cases of *Gottschalk v. Benson*, *Parker v. Flook*, *Diamond v. Chakrabarty*, and *Diamond v. Diehr*, it has not yet formulated a definitive test to distinguish between patentable and unpatentable subject matter.¹⁹ In the meantime, experts disagree as to whether *In re Bilski*’s machine-or-transformation test can be distilled from the facts and holdings of these four landmark cases.²⁰

A. *Brief Overview of The Four Pivotal Precedential Supreme Court Cases*

First, in *Gottschalk*, the Court addressed the patent eligibility of a process for using an algorithm programmed into a general use computer to convert binary-coded decimal data to

17. 35 U.S.C. § 101 (2006) (emphasis added).

18. USPTO, INTERIM GUIDELINES FOR EXAMINATION OF PATENT APPLICATIONS FOR PATENT SUBJECT MATTER ELIGIBILITY 2 (2005), <http://www.uspto.gov/go/og/2005/week47/patgupa.htm> (quoting *State St. Bank & Trust Co. v. Signature Fin. Group, Inc.*, 149 F.3d 1368, 1373 (Fed. Cir. 1998)).

19. See Craig E. Groeschel, *Tax Strategy Patents Considered Harmful*, 8 HOUS. BUS. & TAX L.J. 271, 276-77 (2008).

20. See Eileen McDermott, *Patent Community Has Its Say in In re Bilski*, MANAGING INTELLECTUAL PROPERTY, Apr. 10, 2008, <http://www.managingip.com/Article/1904841/Patent-community-has-its-say-in-In-re-Bilski.html>. More than 25 amicus briefs have been filed in this case advocating various approaches to redefine the scope of patentable subject matter. *Id.*

pure binary data.²¹ The Court found that the algorithm could be performed using a mathematical table and held that the process was not patent eligible because it was merely an abstract idea drawn to the algorithm itself and would have preempted all uses of the algorithm.²²

The second case was *Flook*, where the Court addressed the patent eligibility of using a mathematical formula for updating alarm limits during catalytic conversion processes.²³ The Court held the claim was not patent eligible because it did not include the use of a machine.²⁴

In the third case, *Chakrabarty*, the Court reviewed the patent eligibility of a new bacterial “life form.”²⁵ The Court zoned in on the use of the word “any” in § 101 and stated that the statutory language suggests that Congress “plainly contemplated that the patent laws would be given wide scope.”²⁶ Moreover, the Court held that there cannot be a “rule that unanticipated inventions are without protection [because it] would conflict with the core concept of the patent law that anticipation undermines patentability.”²⁷

In the fourth case, *Diehr*, the Court addressed the patent eligibility of a process, which uses a mathematical algorithm to calculate the times for curing synthetic rubber products via temperature readings.²⁸ The Court held that the process involved the transformation of an article and thus was patent eligible.²⁹

21. *Gottschalk v. Benson*, 409 U.S. 63, 64 (1972).

22. *Id.* at 67, 71-72. (“The mathematical formula involved here has no substantial practical application except in connection with a digital computer, which means that if the [patent is granted], the patent would wholly pre-empt the mathematical formula and in practical effect would be a patent on the algorithm itself.”).

23. *Parker v. Flook*, 437 U.S. 584, 585 (1978).

24. *Id.* at 594. The Court elaborated that “[a]n argument can be made, however, that this Court has only recognized a process as within the statutory definition when it either was tied to a particular apparatus or operated to change materials to a ‘different state or thing.’” *Id.* at 589 n.9.

25. *Diamond v. Chakrabarty*, 447 U.S. 303 (1980).

26. *Id.* at 308.

27. *Id.* at 315-316.

28. *Diamond v. Diehr*, 450 U.S. 175, 177-79 (1981).

29. *Id.* at 184-85; *see also id.* at 187 (highlighting the importance of distinguishing claims seeking to pre-empt the use of a fundamental principle from claims seeking to prevent others from using a specific “application” of that fundamental principle).

B. *Alternative Tests from The Federal Circuit on Subject Matter Eligibility Before and After Bilski*

Before it formulated *In re Bilski's* machine-or-transformation test, the Federal Circuit also had cobbled other tests for subject matter eligibility. *In re Bilski* had to consider all of these tests. In addition, it also had to rationalize why the machine-or-transformation test is superior.

1. Useful, Concrete, and Tangible Result Test

Some Federal Circuit panel decisions, notably *State Street Bank & Trust Co. v. Signature Financial Group, Inc.*³⁰ and *AT&T Corp. v. Excel Communications, Inc.*,³¹ have held that a process is patent-eligible if it produces “a useful, concrete, and tangible result.”³² The holding from *State Street* ushered in the eligibility of business methods for patent protection.³³ *State Street* involved a process claim whereby mutual funds could pool their assets in an investment portfolio via an investment structure, while *AT&T* involved a process claim for routing long distance phone calls via the generation of a primary inter-exchange carrier indicator added to the message records.³⁴ The Federal Circuit held that both claims had patent-eligible subject matter under 35 U.S.C. § 101 and appeared to focus only on whether the claim satisfied the “useful, concrete, and tangible result test.”³⁵ The useful, concrete, and tangible result test is an arguably lower threshold for patentability than *Gottschalk, Flook*, and *Diehr* because a claim satisfying the machine-or-transformation test would also satisfy the “useful, concrete, and tangible result” test due to the

30. *State St. Bank & Trust Co. v. Signature Fin. Group*, 149 F.3d 1368 (Fed. Cir. 1998).

31. *AT&T Corp. v. Excel Commc'ns Inc.*, 172 F.3d 1352 (Fed. Cir. 1999).

32. *In re Alappat*, 33 F.3d 1526, 1544 (Fed. Cir. 1994) (“This is not a disembodied mathematical concept which may be characterized as an ‘abstract idea,’ but rather a specific machine to produce a useful, concrete, and tangible result.”); *State St.*, 149 F.3d at 1373 (“Today, we hold that the transformation of data, representing discrete dollar amounts, by a machine through a series of mathematical calculations into a final share price, constitutes a [patent-eligible invention] because it produces ‘a useful, concrete and tangible result’ . . .”).

33. Brad Blanche, *Are Business Method Patents Still Protectable?*, ORANGE COUNTY BUS. J., Nov. 24, 2008, available at <http://www.allbusiness.com/legal/intellectual-property-law-patent/11732233-1.html>. Applications for computer software and business method patents flooded the Patent Office following the decision in *State Street*. Kristen Osenga, *Ants, Elephant Guns, and Statutory Subject Matter*, 39 ARIZ. ST. L.J. 1087, 1088-90 (2007).

34. *State St.*, 149 F.3d at 1370; *AT&T*, 172 F.3d at 1353-54.

35. See *State St.*, 149 F.3d at 1375 (stating that analysis should focus on “practical utility”); *AT&T*, 172 F.3d at 1357 (stating that analysis should focus on whether there is a “useful” practical application of the fundamental principle); 35 U.S.C. § 101 (2006).

fact that it would likely produce a concrete or tangible product. However, the Federal Circuit in *In re Bilski* concluded that the “useful, concrete, and tangible result” test is useful, but “inadequate.”³⁶ Yet, the Federal Circuit in *In re Bilski* never explicitly overrules *State Street* or *AT&T*; rather, the Federal Circuit highlights the insufficiency of the “useful, concrete, and tangible result” test by declaring in a footnote that it “should no longer be relied on.”³⁷

2. Freeman-Walter-Abele Physical Element or Process Test

The Freeman-Walter-Abele test consisted of two parts: “(1) determining whether the claim recites an ‘algorithm’ . . . [and] then (2) determining whether that algorithm is ‘applied in any manner to physical elements or process steps.’”³⁸ The Federal Circuit dismissed this test in *In re Bilski*, holding that it appears to conflict with the Supreme Court’s requirement to analyze a claim as a whole.³⁹ The Federal Circuit has already recognized patent-eligibility in claims failing the Freeman-Walter-Abele test.⁴⁰ Accordingly, the Federal Circuit in *In re Bilski* stated that the Freeman-Walter-Abele test “should no longer be relied on.”⁴¹

3. Technological Arts Test

The technological arts test provides patents only for “technological inventions that involve the application of science or mathematics, thereby excluding non-technological inventions such as activities whose ability to achieve their claimed goals depended solely on contract formation.”⁴² The Supreme Court, the Federal Circuit, and the predecessor of the Federal Circuit have never expressly adopted the technological arts test probably because ambiguity and burgeoning dispute complicate the meanings of “technological arts” and “technology.”⁴³ For example, are business, finance, or economic inventions technological because they are characterized by the practical

36. *In re Bilski*, 545 F.3d 943, 959-60 (Fed. Cir. 2008).

37. *Id.* at 960 n.19.

38. *Id.* at 959 (quoting *In re Abele*, 684 F.2d 902, 905-07 (C.C.P.A. 1982)).

39. *Id.* For evidence of how the Freeman-Walter-Abele test conflicts with the Supreme Court’s mandate for a claim to be considered as a whole rather than dissected into individual limitations, see *Parker v. Flook*, 437 U.S. 584, 594 (1978). See also *AT&T*, 172 F.3d at 1359; *State St.*, 149 F.3d at 1374.

40. See *In re Grams*, 888 F.2d 835, 838-39 (Fed. Cir. 1989).

41. *In re Bilski*, 545 F.3d at 959 n.17.

42. *Id.* at 960 n.21 (internal quotations omitted).

43. *Id.* at 960.

application of knowledge in a particular field?⁴⁴ No clear answer exists. Consequently, *In re Bilski* refuses to adopt the technological arts test.⁴⁵ Correspondingly, *In re Bilski* also rejects categorical exceptions of eligible subject matter, such as banning business method patents.⁴⁶

4. New *Comiskey* Physical Steps Test

Although the court in *In re Bilski* expressly disagreed, some have argued that *In re Comiskey*⁴⁷ possibly heralded a new test for patent-eligible subject matter under 35 U.S.C. § 101.⁴⁸ The test would have barred any claim with a mental process if it lacks significant “physical steps.”⁴⁹ The Federal Circuit addressed the patent eligibility of a process for “mandatory arbitration resolution regarding one or more unilateral documents” and held that a mental process alone could not be patentable even if the process involves a practical application.⁵⁰ Nevertheless, *In re Bilski* insists that the Federal Circuit simply recognized that mental processes were a subset of fundamental principles in *In re Comiskey*.⁵¹ Therefore, *In re Comiskey* applied the machine-or-transformation test, rather than the altered physical steps test, when it held,

[A] claim reciting an algorithm or abstract idea can state statutory subject matter only if, as employed in the process, it is embodied in, operates on, transforms, or otherwise involves another class of statutory subject matter, i.e., a machine, manufacture, or composition of matter.⁵²

In re Bilski labeled *In re Comiskey*'s utilization of the machine-or-transformation test as consistent with earlier decisions in the Federal Circuit, as the Federal Circuit not only

44. *Id.* at 960 n.21.

45. *Id.* at 960.

46. *Id.* (reaffirming the Federal Circuit's decision in *State Street*, which labeled the “business method exception” as unlawful and held that business method claims are “subject to the same legal requirements for patentability as applied to any other process or method” (quoting *State St. Bank & Trust v. Signature Fin. Group, Inc.*, 149 F.3d 1368, 1375-76 (Fed. Cir. 1998))).

47. *In re Comiskey*, 499 F.3d 1365 (Fed. Cir. 2007).

48. *In re Bilski*, 545 F.3d 943, 960 (Fed. Cir. 2008).

49. *Id.*

50. *In re Comiskey*, 499 F.3d at 1368, 1377-78.

51. *In re Bilski*, 545 F.3d at 960.

52. *See In re Comiskey*, 499 F.3d at 1376.

has never relied on the physical steps test, but also has never criticized it.⁵³

III. SUMMARY OF *IN RE BILSKI*

In 2007, Bernard Bilski and Rand Warsaw (collectively, “Applicants”) appealed to the Federal Circuit after the USPTO and Board of Patent Appeals and Interferences (“Board”) rejected their patent application for lacking patent-eligible subject matter under 35 U.S.C. § 101.⁵⁴ The Applicants sought a patent for a method of hedging risk associated with the sale of commodities, such as coal.⁵⁵ Under the claimed method, an intermediary, the “commodity provider,” buys the commodity at a fixed price in order to protect them from lower coal prices due to unusually warm weather.⁵⁶ The same intermediary also sells the coal to consumers at a fixed price to protect them from higher coal prices due to unusually cold weather.⁵⁷ Thus, through offsetting positions, the intermediary hedges its risk against an unusual demand for coal.⁵⁸

In response to the Applicants’ appeal, and perhaps in light of the topic’s timely relevance,⁵⁹ the Federal Circuit made an unusual⁶⁰ *sua sponte* decision to rehear the case en banc.⁶¹ By a 9-3 vote, the en banc Federal Circuit upheld the rejection of the

53. See *In re Bilski*, 545 F.3d at 960-61. The majority in *AT&T* reaches this conclusion by explaining that the Federal Circuit rejected the physical limitations test, holding that “the mere fact that a claimed invention involves inputting numbers, calculating numbers, outputting numbers, and storing numbers, in and of itself, would not render it nonstatutory subject matter” *AT&T Corp. v. Excel Commc’ns Inc.*, 172 F.3d 1352, 1359 (Fed. Cir. 1999) (quoting *State St.*, 149 F.3d at 1374).

54. *In re Bilski*, 545 F.3d at 949; see *Ex parte Bilski*, No. 2002-2257, slip op. at 3 (B.P.A.I. Sept. 26, 2006), available at <http://www.uspto.gov/web/offices/dcom/bpai/its/fd022257.pdf>.

55. *In re Bilski*, 545 F.3d at 949; see U.S. Patent No. 08/833,892 cl.1 (filed Apr. 10, 1997) (explaining the invention as a method for managing the risk associated with spikes and drops in commodity prices resulting from the need to use more or less energy than anticipated because of unexpected weather).

56. *In re Bilski*, 545 F.3d at 949-50.

57. See *id.*

58. *Id.* at 950.

59. Michael Orey, *A Pending Threat to Patents: A Case before an Appeals Court Could Make It Harder to Win Legal Protection for Business Methods*, BUSINESSWEEK, Feb. 21, 2008, available at http://www.businessweek.com/magazine/content/08_09/b4073068471067.htm (stating that the Federal Circuit’s actions follow a string of recent prominent Supreme Court decisions narrowing the scope of protections for patent holders).

60. *Id.*

61. *In re Bilski*, 545 F.3d 943 (Fed. Cir. 2008).

Applicants' patent on October 30, 2008.⁶² The majority opinion, written by Chief Judge Paul R. Michel, noted the Supreme Court "foreclose[d] a purely literal reading of" 35 U.S.C. § 101 based on dictionary definitions.⁶³ Moreover, the majority stated that the Supreme Court had narrowed the statutory definition of patentable process under 35 U.S.C. § 101 so that a process would lack patent-eligible subject matter if it claimed "laws of nature, natural phenomena, and abstract ideas," which the majority opinion referred to as fundamental principles.⁶⁴ Accordingly, the Federal Circuit characterized the issue in the case as whether the Applicants' claim "recites a fundamental principle and, if so, whether it would pre-empt substantially all uses of that fundamental principle if allowed."⁶⁵

A. *Machine-Or-Transformation Test*

To address the issue, the majority drew from previous Supreme Court cases and held that the Supreme Court had developed a definitive test, which the majority referred to as the "machine-or-transformation test",⁶⁶ to determine whether a process meets the subject matter requirement of 35 U.S.C. § 101.⁶⁷ Specifically, a claim is a patent-eligible process under § 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."⁶⁸ The majority reasoned that a machine-or-transformation requirement would ensure that the process claimed is patent-eligible, encompassing a particular application of a fundamental principle rather than being drawn to the fundamental principle itself and pre-empting it.⁶⁹ In distilling its definitive test, the majority acknowledged the tension between *Diamond v. Diehr*, which applied the machine-or-transformation test without caveat,⁷⁰ and *Gottschalk v. Benson*,⁷¹ which suggested that the machine-or-transformation test was not the exclusive way to

62. *Id.*

63. *See id.* at 951-52 (quoting *Parker v. Flook*, 437 U.S. 584, 588 (1978)).

64. *See id.* at 952 (quoting *Diamond v. Diehr*, 450 U.S. 175, 185 (1981)).

65. *Id.* at 954.

66. *Id.* at 954 n.7.

67. *In re Bilski*, 545 F.3d 943, 954 (Fed. Cir. 2008).

68. *Id.* In formulating this test, the Federal Circuit primarily relied on its decision in *Gottschalk*. *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972); *Diamond v. Diehr*, 450 U.S. 175, 192 (1981); *Flook*, 437 U.S. at 589, and *Cochrane v. Deener*, 94 U.S. 780, 788 (1876). *See In re Bilski*, 545 F.3d at 954-55.

69. *See In re Bilski*, 545 F.3d at 954-55.

70. *See id.* at 956; *Diehr*, 450 U.S. at 184.

71. *Gottschalk*, 409 U.S. at 63.

establish patentability.⁷² The majority in *In re Bilski* reconciled this tension by emphasizing the use of the definite article preceding “clue” in *Diehr* and concluding that the Supreme Court intended the machine-or-transformation test to be the sole test governing analyses of process patentability under 35 U.S.C. § 101.⁷³ At the same time, the majority recognized that the machine-or-transformation test may need to be modified by the Supreme Court one day to accommodate future technological or scientific developments.⁷⁴

B. *Machine-Or-Transformation Test As Applied to Applicants*

The Federal Court held that Applicants’ claimed method does not satisfy the machine-or-transformation test.⁷⁵ For one, the Applicants’ claim does not involve the use of any machine.⁷⁶ Secondly, the Applicants’ claim failed the transformation requirement of the machine-or-transformation test because the claimed process transformed merely “public or private legal obligations or relationships, business risks, or other such abstractions”⁷⁷ To satisfy the transformation requirement, the Applicants’ claim needed to have involved the “transformation of any physical object or substance, or an electronic signal representative of any physical object or substance.”⁷⁸ Because their claim failed the machine-or-transformation test, it is not drawn to patent-eligible subject matter.⁷⁹

C. *Concurring and Dissenting Opinions*

In *In re Bilski*, Judge Dyk concurred and emphasized Judge Mayer’s statutory interpretation analysis, agreeing that the framers of the Constitution intended to exclude “methods for

72. See *In re Bilski*, 545 F.3d at 956; *Gottschalk*, 409 U.S. at 71 (“It is argued that a process patent must either be tied to a particular machine or apparatus or must operate to change articles or materials to a ‘different state or thing.’ We do not hold that no process patent could ever qualify if it did not meet the requirements of our prior precedents.”).

73. See *In re Bilski*, 545 F.3d at 955-56 (citing *Gottschalk*, 409 U.S. at 70); 35 U.S.C. § 101 (2006).

74. *In re Bilski*, 545 F.3d at 956.

75. *Id.* at 966.

76. *Id.* at 962.

77. See *id.* at 963.

78. *Id.* at 964.

79. *Id.* (noting that the Applicants also did not cater any of their arguments toward the application of the machine-or-transformation test, so the failure is clearly fatal).

organizing human activity that do not involve manufactures, machines, or compositions of matter” from the U.S. patent system.⁸⁰

Judge Mayer had a narrow statutory and Constitutional interpretation of § 101, as he endorsed a categorical exclusion of business method patents.⁸¹ According to Judge Mayer, business methods do not promote the “useful arts,” which is contrary to Constitutional requirements, because they are not directed to scientific or technological innovation.⁸² Moreover, Judge Mayer discusses how business patents remove, rather than encourage, entrepreneurial innovation by limiting competitors from using and improving upon patented business method ideas.⁸³ Consequently, the existence of business method patents restricts competition, “distorts the operation of the free market system[,] and reduces the gains from the operation of the market.”⁸⁴ Harnessing these beliefs, Judge Mayer concluded that the machine-or-transformation test insufficiently hinders the growth of non-technological method patents because clever draftsmanship can too easily circumvent its purpose.⁸⁵

On the other hand, Judge Newman’s dissent focuses largely on dispelling the validity of Judge Dyk’s statutory interpretation analysis.⁸⁶ Judge Newman disputes that England’s Statute of Monopolies and common law precedents led to a ban on business-method patents in the U.S.⁸⁷ and concludes that the majority “usurp[ed] the legislative role” by mishandling statutory interpretation analysis and contravening *stare decisis*.⁸⁸ Judge Newman’s dissent suggests that not only did the majority fail to give enough weight to the purpose that patent law seeks to attain and the mischief that it seeks to remedy, but it also inappropriately analyzed the history of patentable subject matter.⁸⁹ According to Judge Newman, the Supreme Court and Congress have consistently confirmed that the purpose of patent

80. See *In re Bilski*, 545 F.3d 943, 974 (Fed. Cir. 2008) (Dyk, J., concurring).

81. See *id.* at 998 (Mayer, J., dissenting).

82. See *id.* at 1001-02.

83. *Id.* at 1006.

84. See *id.* at 1006 (Mayer, J., dissenting) (quoting James S. Sfekas, *Controlling Business Method Patents: How the Japanese Standard for Patenting Software Could Bring Reasonable Limitations to Business Method Patents in the United States*, 16 PAC. RIM L. & POL’Y J. 197, 214 (2007)).

85. *Id.* at 1008.

86. See *In re Bilski*, 545 F.3d 943, 997-98 (Fed. Cir. 2008) (Newman, J., dissenting).

87. See *id.* at 990-91.

88. See *id.* at 997.

89. See *id.* at 997-98 (Newman, J., dissenting).

law is to “provid[e] a broadly applicable incentive to commerce and creativity, through this system of limited exclusivity.”⁹⁰

Lastly, Judge Rader agreed with the majority’s conclusion that *Bilski*’s claims recited ineligible subject matter, but criticized their reasoning to reach that conclusion.⁹¹ Judge Rader felt that the majority should have condensed their elliptical and belabored explanations into a simple statement: if the claims are directed to an abstract idea, then they are unpatentable subject matter.⁹² Furthermore, Judge Rader discusses how the machine-or-transformation test is based on faulty statutory interpretation,⁹³ relying instead on Supreme Court “dicta from an industrial age decades removed from the bleeding edge.”⁹⁴

IV. STATUTORY INTERPRETATION OF 35 U.S.C. § 101

Even before *In re Bilski* commandeered the national spotlight, debate and calls for reform have been vigorously churning at the United States Patent Office over recent years regarding whether certain types of processes, such as business methods, should be excluded as ineligible subject matter under 35 U.S.C. § 101.⁹⁵ In interpreting § 101, the courts may look beyond the plain language of § 101 because the word “process” is ambiguous,⁹⁶ and statutes are subject to statutory interpretation only when they are of ambiguous meaning.⁹⁷ The courts “can look to the legislative history to determine whether there is an expressed legislative intention” controlling the statute.⁹⁸ Moreover, in deciding legislative intent, the courts must consider the history of patentable subject matter, the purpose that patent law seeks to attain, and the mischief to be remedied.⁹⁹

90. *Id.* at 977.

91. *See In re Bilski*, 545 F.3d at 1011 (Rader, J., dissenting).

92. *See id.*

93. *See id.* at 1012-13.

94. *Id.* at 1011.

95. *See Blanche*, *supra* note 33.

96. *See* NORMAN J SINGER & J.D. SHAMBIE SINGER, SUTHERLAND STATUTES AND STATUTORY CONSTRUCTION § 46:1 (7th ed. 2008) [hereinafter SUTHERLAND]. In *A Matter of Interpretation*, Justice Scalia wrote, “There is to my knowledge only one treatise on statutory interpretation that purports to treat the subject in a systematic and comprehensive fashion. That treatise is Sutherland’s *Statutes and Statutory Construction*.” ANTONIN SCALIA, *A MATTER OF INTERPRETATION* 15 (Amy Gutmann ed., 1997).

97. *See* SUTHERLAND, *supra* note 96, at § 45:2.

98. *Id.* at § 46:3; *see also id.* at § 48:1 (“Generally, a court would look to the legislative history for guidance when the enacted text was capable of two reasonable readings or when no one path of meaning was clearly indicated.”).

99. *See id.* at § 45:5.

With this in mind, the *In re Bilski* majority's interpretation of § 101, which culminated in the machine-or-transformation test,¹⁰⁰ appears to be incorrect. A close analysis of statutory language and intent reveals that Congress likely intended the category of patentable subject matter to be much broader than that defined by the majority,¹⁰¹ encompassing patents that the machine-or-transformation test excludes.¹⁰² The majority's statutory interpretation relied too heavily on out-of-context case law and definitions, resulting in a test that is out of touch with reality.¹⁰³

A. Defining "Process" and "Useful Arts"

1. The Source of Legislative Intent

Congress draws its power to establish intellectual property laws from Article I, Section 8 of the Constitution,¹⁰⁴ which provides Congress with authority "[t]o promote the Progress of Science and useful Arts by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries."¹⁰⁵ The Supreme Court has noted that this clause limits Congress's power to promoting advances in the "useful arts."¹⁰⁶ Congress's first draft of the patent bill centered on the terms "art, manufacture, engine, machine, invention or device, or any improvement upon" in regard to subject matter eligibility.¹⁰⁷ The current version of § 101 is rooted in the Patent Act of 1793,¹⁰⁸ which defined patentable subject matter as "any new and useful art, machine, manufacture or composition of matter or any new and useful improvement on any art, machine, manufacture or composition of matter."¹⁰⁹

Lastly, in 1952, Congress laid the foundation for modern patent law by replacing the word "art" with "process" in 35

100. See *In re Bilski*, 545 F.3d 943, 959 (Fed. Cir. 2008).

101. See *id.* at 977-78 (Newman, J., dissenting).

102. See *id.* at 976.

103. See *id.* at 1011 (Rader, J., dissenting).

104. See Edward C. Walterscheid, *To Promote the Progress of Science and Useful Arts: The Anatomy of a Congressional Power*, 43 IDEA 1, 2 (2003).

105. U.S. CONST. art. I, § 8, cl. 8.

106. *Graham v. John Deere Co. of Kan. City*, 383 U.S. 1, 5 (1966); see also *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 427 (2007) (corroborating the purpose of patents to promote the progress of useful arts).

107. See EDWARD C. WALTERSCHEID, *TO PROMOTE THE PROGRESS OF USEFUL ARTS: AMERICAN PATENT LAW AND ADMINISTRATION, 1798-1836*, at 92 (1998).

108. See *In re Bilski*, 545 F.3d 943, 966 (Fed. Cir. 2008) (Dyk, J., concurring).

109. Patent Act of 1793, ch. 11, 1 Stat. 318, 319 § 1 (1793).

U.S.C. § 101.¹¹⁰ Congress also provided a definition for “process” in 35 U.S.C. § 100(b)¹¹¹: “The term ‘process’ means process, art or method, and includes a new use of a known process, machine, manufacture, composition of matter, or material.”¹¹² Historians believe that the inclusion of “art” or “process” in the American patent system constituted a deliberate clarification of the English system.¹¹³ The Supreme Court explained that the amendment from 1793 to 1952 did not change the substantive meaning of § 101.¹¹⁴

To look at the legislative intent behind the definition of “process” in § 101, the judges of the Federal Circuit examined the English Statute of Monopolies and English common law.¹¹⁵ The majority, bolstered by Judge Dyk’s concurrence, concluded that the machine-or-transformation test was implicit in American law as early as the Act of 1790 because of Congress’s informed importation of English common law and the English Statute of Monopolies in 1623.¹¹⁶ However, neither the majority nor Judge Dyk had any response to Judge Newman’s argument that the Statute of Monopolies had nothing to do with defining the categories of patentable subject matter; it only dealt with the prevention of monopolies and royal favors.¹¹⁷

Furthermore, a divide nourished by many differences between American and English patent law existed between American and British intellectual property jurisprudence at the time of America’s founding.¹¹⁸ Consequently, Judge Newman is

110. *In re Bilski*, 545 F.3d at 966 (Dyk, J., concurring).

111. *Id.*

112. 35 U.S.C. § 100(b) (2006).

113. EDWARD C. WALTERSCHEID, TO PROMOTE THE PROGRESS OF USEFUL ARTS: AMERICAN PATENT LAW AND ADMINISTRATION, 1798-1836, at 92-93 (1998). Correspondingly, England recognized that the phrase “new manufactures” was an unduly limited object, as it excluded new processes, in 1787. Karl B. Lutz, *Patents and Science: A Clarification of the Patent Clause of the U.S. Constitution*, 18 GEO. WASH. L. REV. 50, 53-54 (1949-50).

114. *See In re Bilski*, 545 F.3d at 966 (Dyk, J., concurring).

115. *See id.* at 968 (Dyk, J., concurring).

116. *See id.* at 966 (Dyk, J., concurring). The concurrence primarily relies on the Statute of Monopolies, which the English government enacted in response to the monarchy’s indiscriminate grant of monopolies. *Id.* at 968.

117. *See id.* at 985 (Newman, J., dissenting); *see also* Edward C. Walterscheid, *To Promote the Progress of Science and Useful Arts: The Anatomy of a Congressional Power*, 43 J.L. & TECH 1, 21 (2002).

118. *In re Bilski*, 545 F.3d at 986 (Newman, J., dissenting). In England, unlike in America, a person could receive a patent for importing something that was new to England, regardless of whether the import was previously known. *Id.* Moreover, the American Revolution dissolved the long-held customs and similarities between America and England, engendering a “sweeping reorientation of patent law, with new forms, new

probably correct in asserting that the majority incorrectly selected the English Statute of Monopolies as the primary source to examine when parsing out legislative intent for American patent law. Rather, “the language selected by Congress [should occupy] center stage” and be the main source for examination in statutory interpretation.¹¹⁹

2. Using Technology of the Period to Define “Useful Arts”

The *In re Bilski* majority focused on the relevance of “technology of the period” in formulating the machine-or-transformation test, but it failed to also consider modern views of technology.¹²⁰ Scholars following Judge Mayer’s dissent would argue that the term “useful arts” as described by the Framers is equivalent to what we call “technology” today.¹²¹ *Comiskey* validated this view, holding that “[t]he Constitution explicitly limited patentability to . . . ‘the process today called technological innovation.’”¹²² Hence, the majority can support its holding with the reasoning that business methods like *Bilski*’s do not promote the useful arts through technological or scientific innovation despite its use of technology such as computers to reach desired results.¹²³ In other words, “the innovative aspect of the claimed method is an entrepreneurial rather than a technological one.”¹²⁴

However, in modern times, has the definition of “technology” expanded to include social sciences like economics or business?¹²⁵ Judge Mayer would probably answer “no,” arguing that technology applies to the “laws of nature,” which are those pertaining to the “natural sciences,” such as biology, chemistry, or physics.¹²⁶ Furthermore, business methods do not apply the

rules, new concepts, and new ideals.” Frank D. Prager, *Historic Background and Foundation of American Patent Law*, 5 AM. J. LEGAL HIST. 309, 309 (1961).

119. *In re Bilski*, 545 F.3d at 987 (Newman, J., dissenting).

120. *See id.* at 1011 (Rader, J., dissenting).

121. *See id.* at 1001 (Mayer, J., dissenting) (citing *Paulik v. Rizkalla*, 760 F.2d 1270, 1276 (Fed. Cir. 1985)).

122. *In re Comiskey*, 499 F.3d 1365, 1375 (Fed. Cir. 2007) (quoting *Paulik*, 760 F.2d at 1276); *see also In re Foster*, 438 F.2d 1011, 1014-15 (C.C.P.A. 1971) (“All that is necessary . . . to make a sequence of operational steps a statutory ‘process’ within 35 U.S.C. § 101 is that it be in the technological arts.”).

123. *In re Bilski*, 545 F.3d at 1002 (Mayer, J., dissenting).

124. *Id.*

125. Note that “the term ‘useful arts’ was commonly used in contrast to the ideas of the ‘liberal arts’ and the ‘fine arts,’ at the time the Patent Clause was enacted.” Sfekas, *supra* note 84, at 214.

126. *In re Bilski*, 545 F.3d at 1003 n.6.

“law of nature to a new and useful end” because its innovative aspect is entrepreneurial rather than technological.¹²⁷ The Chambers’ Science and Technology Dictionary corroborates such a view, defining “technology” as “[t]he practice, description and terminology of any or all of the applied sciences which have practical value and/or industrial use.”¹²⁸

Yet, broader definitions of “technology” exist. Technology only came to be associated with applied science in the nineteenth century,¹²⁹ so the nucleus of the definition probably does not hinge on the involvement of applied science. Some scholars even argue that the notion of technology should not be limited to successful technology.¹³⁰ Cavemen certainly utilized technology, creating primitive tools to influence the environment around them. Even in the present time, some individuals still create useful technology without much understanding or application of science.¹³¹ Contrary to the views of Judge Newman, one writer summarizes:

It would be ridiculous to suppose that invention has to wait humbly, cap in hand, for science to open the door before it can proceed. Technology is purposive and it tends . . . to be positivist. The criterion is simply does it work?¹³²

Thus, a field does not necessarily need to have a foundation in applied science in order to be technological.

Moreover, the terms “science” and “art” have blurred in recent years.¹³³ Whereas “science” would have been equated with

127. *Id.* at 1003.

128. CHAMBERS’ SCIENCE AND TECHNOLOGY DICTIONARY 888 (1988).

129. See Alan L. Durham, “Useful Arts” in the Information Age, 1999 BYU L. REV. 1419, 1445 (1999) (citing CHARLES SINGER ET AL., PREFACE TO A HISTORY OF TECHNOLOGY vii (Charles Singer et al. eds., 1954)).

130. See *id.* (citing Melvin Kranzberg & Carroll W. Pursell, Jr., *The Importance of Technology in Human Affairs*, 1 TECHNOLOGY IN WESTERN CIVILIZATION 5 (Melvin Kranzberg & Carroll W. Pursell, Jr. eds., 1967)). Kranzberg and Pursell argue that the definition of technology can even expand to include magic as a primitive technology because primitive man attempted to control or at least influence his environment with magic. *Id.*

131. See *Newman v. Quigg*, 877 F.2d 1575, 1581 (Fed. Cir. 1989) (“[I]t is not a requirement of patentability that an inventor correctly set forth, or even know, how or why the invention works . . .”) (citation omitted).

132. Durham, *supra* note 129, at 1445 n.133. Interestingly, patent law appears to take the same position, requiring that an invention have utility but not requiring that the inventor comprehensively understand the scientific principles behind the invention. *Id.* at 1452-53.

133. See *id.* at 1424-25.

“natural philosophy” in the eighteenth century,¹³⁴ it now refers to the “investigation of the natural world through observation, experimentation, and application of the ‘scientific method.’”¹³⁵ The creation of a business method like Bilski’s can involve observation and experimentation via the scientific method, so business methods can be “scientific” and thus patent eligible. Also, the innovations in business and finance today often involve the practical application of the study of economics. Economists themselves now characterize their field as constituting a “mathematical science,” implying that it is more similar to engineering than to liberal arts.¹³⁶ Correspondingly, the Royal Swedish Academy of Sciences, the same group responsible for selecting the Nobel Prizes in Physics and Medicine, select the winners of the Nobel Prize for “Economic Sciences.”¹³⁷ In contrast, the Swedish Academy, a “cultural institution,” selects the Nobel Prize for Literature.¹³⁸

Along the same vein, business processes focus on applying useful, concrete methods to affect the activities of people and organizations, directing them to achieve their goals much in the same way that electrical engineering methods direct electron activity in circuits.¹³⁹ In fact, the unfurling of innovation with business methods parallels and is analogous to the development of industrial engineering. Industrial engineers focus their applied scientific improvements upon systems of human

134. See *id.* at n.22 (citing Giles S. Rich, *Principles of Patentability*, 28 GEO. WASH. L. REV. 393, 396-97 (1960)) (“A reference to Dr. Johnson’s definition of ‘scientific’ will show . . . that the natural science which the present connotation of the word calls to mind was, in the days when the Constitution was written, referred to as ‘natural philosophy.’”).

135. Durham, *supra* note 129, at 1424-25.

136. Brief for Regulatory Datacorp, Inc. as Amici Curiae Supporting Neither Party, In re Bilski, 545 F.3d 943 (2008) (No. 2007-1130), 2008 WL 1842273 (referring to Giorgio Israel, *How Economics Became a Mathematical Science*, 114 ECON. J. F. 369 (2004)).

137. *Id.* (referring to NoblePrize.org, The Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel, http://nobelprize.org/nobel_prizes/economics/ (last visited Mar. 19, 2010) (noting creation of economics prize)).

138. *Id.* (citing The Swedish Academy, <http://www.svenskaakademien.se/Templates/StartPage2.aspx?PageID=ca2da03d-4623-48a1-9b01-7f450c1b59c7> (last visited Mar. 19, 2010)).

139. Corrected Brief for Accenture as Amicus Curiae Supporting Appellants at 9-10, In re Bilski, 545 F.3d 943 (Fed. Cir. 2008) (No. 2007-1130) (citing Nicholas A. Smith, *Business Method Patents and Their Limits: Justifications, History, and the Emergence of a Claim Construction Jurisprudence*, 9 MICH. TELECOMM. & TECH. L. REV. 171, 184 (2002) (“The only remaining reason to set aside business method patents as somehow different and undesirable requires one to embrace the untenable (and rather insulting) proposition that business persons are incapable of drawing from the innovations of others when innovating for themselves, even though chemists, biologists, and engineers are fully capable of doing so”)).

organizations, or enterprises.¹⁴⁰ “[T]he systems designed by industrial engineers involve people as basic components.”¹⁴¹ The field of industrial engineering includes Charles Babbage’s systematic measurement and analysis of factory operations in the nineteenth century, the development of the first mass production system by Eli Whitney in 1798, and the development of early scientific techniques for managing industry.¹⁴² Naturally, the USPTO has been accepting “industrial engineering” as a “recognized technical subject” with patentable subject matter.¹⁴³ Accordingly, the application of economic principles to a business method probably still constitutes technology even within a narrow definition of “technology.”

In addition, the Framers also equated “science” from Article I, Section 8 with something broader like “knowledge” or “learning.”¹⁴⁴ Therefore, some scholars view the purpose of the patent system as promoting “Science and useful Arts.”¹⁴⁵ Less extreme, other scholars view the term “science” as logically related to the terms “authors” and “writings” in the patent clause; correspondingly, “useful arts” is related, in a parallel fashion, to “inventors” and “discoveries.”¹⁴⁶ At any rate, it appears that Congress likely intended for § 101 patent-eligible subject matter to be broader than the boundaries of the machine-or-transformation test.

Overall, the *In re Bilski* majority should have factored in more modern definitions of “technology” and “science” when interpreting § 101. If it had done so, it would have probably recognized that the machine-or-transformation test is too restrictive, excluding subject matter that the language of § 101 deems patent-eligible. A correct statutory interpretation of § 101 might have lead the majority to adopt a test like Judge Rader’s. Judge Rader stated that the original Patent Act focused patentability on a claim’s novelty and utility rather than on its

140. *Id.* at 11.

141. *Id.*

142. *Id.* at 12.

143. *Id.* at 11-12 (referring to U.S. Patent & Trademark Office, General Requirements Bulletin for Admission to the Examination for Registration to Practice in Patent Cases Before the United States Patent and Trademark Office, Jan. 2008, available at <http://www.uspto.gov/web/offices/dcom/olia/oed/grb.pdf>).

144. Durham, *supra* note 129, at 1425 n.23 (quoting Karl B. Lutz, *Patents and Science: A Clarification of the Patent Clause of the U.S. Constitution*, 18 GEO. WASH. L. REV. 50, 51 (1948)) (“The word science, which comes from the Latin, *scire*, to know, at the writing of the Constitution meant learning in general.”) (internal citations omitted).

145. See, e.g., *Great Atl. & Pac. Tea Co. v. Supermarket Equip. Corp.*, 340 U.S. 147, 154-58 (1950) (Douglas, J., concurring).

146. Durham, *supra* note 129, at 1425-26.

subject matter category.¹⁴⁷ By itself, § 101's term "process" does not imply the exclusion of any specific types of methods.¹⁴⁸ The word "any" in § 101 modifies the term "process," suggesting that the Act extends patent protection to all subcategories of processes.¹⁴⁹ Moreover, the Patent Act defines "process" without any hints of excluding certain types of methods. Hence, per *Diehr*, the Federal Circuit "should not read into the patent laws limitations and conditions which the legislature has not expressed."¹⁵⁰ According to Rader, the only limitation that ought to be read into § 101 are inventions that embrace natural laws, natural phenomena, and abstract ideas.¹⁵¹ Natural laws and phenomena cannot be invented, so they cannot qualify for patent protection.¹⁵² An abstract idea cannot qualify for patent protection because the Act intends to provide "useful technology," and an abstract idea must be applied or transformed before it has a practical use.¹⁵³

B. *Factoring Caselaw Into Statutory Interpretation*

Certainly, § 101 is ambiguous, as the different permutations of *stare decisis* show that there are many different interpretations of it.¹⁵⁴ For example, while the majority in *In re Bilski* believed that *Gottschalk v. Benson* established the validity of the machine-or-transformation test as the chief "clue" to patent-eligibility,¹⁵⁵ Judges Newman¹⁵⁶ and Rader¹⁵⁷ point out that the majority cultivated their understanding of *Gottschalk* out of context. The majority seemingly chooses to gloss over the Court's explicit insistence that it does "*not hold* that no process patent could ever qualify if it did not meet [the Court's] prior precedents."¹⁵⁸ Similarly, the majority glosses over the Court's reiteration that "qualifications of [its] earlier precedents" does

147. *In re Bilski*, 545 F.3d 943, 1011 (Fed. Cir. 2008) (Rader, J., dissenting) (referring to the Patent Act of 1973).

148. *Id.* at 1012; 35 U.S.C. § 101 (2006).

149. *In re Bilski*, 545 F.3d at 1012 (Rader, J., dissenting); 35 U.S.C. § 101 (2006).

150. *In re Bilski*, 545 F.3d at 1012 (Rader, J., dissenting) (quoting *Diamond v. Diehr*, 450 U.S. 175, 182 (1981)).

151. *See id.* at 1012-13 (referencing *Diehr*, 450 U.S. at 182).

152. *Id.* at 1013.

153. *See id.* at 1013.

154. *See supra* Part II (discussing the evolution of the patent process standard).

155. *See In re Bilski*, 545 F.3d at 954-956; *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972).

156. *See In re Bilski*, 545 F.3d at 976-83 (Newman, J., dissenting).

157. *See id.* at 1011-15 (Rader, J., dissenting).

158. *Gottschalk*, 409 U.S. at 71 (emphasis added).

not control the patent eligibility of computer-directed processes.¹⁵⁹

Significantly, the Court stated:

The statutory definition of “process” is broad. An argument can be made, however, that this Court has only recognized a process as within the statutory definition when it either was tied to a particular apparatus or operated to change materials to a “different state or thing.” As in *Benson*, we assume that a valid process patent may issue even if it does not meet one of these qualifications of our earlier precedents.¹⁶⁰

Hence, the majority most likely mistook what can qualify for patent eligibility with what is necessary for patent eligibility, ignoring the qualifying words, “an argument can be made.” Moreover, according to Judge Newman, the majority also based the necessity of the machine-or-transformation test in an out-of-context reading of *Diehr*, relying solely on a parenthetical.¹⁶¹ As a result, the majority, in its interpretation of § 101, relied too heavily on dicta taken out of context from Supreme Court decisions.¹⁶²

V. IMPACT OF *IN RE BILSKI*

The profound impact of the *In re Bilski* holding extends into industries as diverse as software, data management, security, insurance, and financial services.¹⁶³ Because *In re Bilski* possibly jeopardizes the validity of already-existing patents in these industries, previously protected methods could now potentially be borrowed or stolen.¹⁶⁴ The individual value of a patent centers on the inventor’s right to protect his or her own innovations.¹⁶⁵ Therefore, if these industries cannot protect their work via patents, “investors won’t invest, innovators won’t invent, and . . . full economic potential” cannot be achieved.¹⁶⁶ U.S. companies

159. *Parker v. Flook*, 437 U.S. 584, 589 (1978).

160. *Id.* at n.9 (quoting *Cochrane v. Deener*, 94 U.S. 780, 787 (1876)) (citations omitted).

161. *See In re Bilski*, 545 F.3d at 982 (Newman, J., dissenting) (quoting *Diamond v. Diehr*, 450 U.S. 175, 192 (1981)).

162. *Id.* at 1011 (Rader, J., dissenting).

163. *See Simpson*, *supra* note 11.

164. *See id.*

165. Davidson, *supra* note 15, at 428.

166. JOHN GANTZ, ENABLING TOMORROW’S INNOVATION: AN IDC WHITE PAPER AND BSA CEO OPINION POLL 12 (2003).

could now face a heightened risk for increased competition from overseas companies that are protected by more favorable patent laws.

Moreover, *In re Bilski* engenders administrative problems for the already-inundated USPTO.¹⁶⁷ Although *In re Bilski* seemingly creates a bright line § 101 test for process claims, it does not provide much guidance on defining the requirements of the test. Unanswered questions arise over the parameters of the “machine” prong of the machine-or-transformation test. Because the *In re Bilski* claim did not include a machine, the Federal Circuit did not address the definition of what type of “machine” can sufficiently tie a process into the satisfaction of the machine-or-transformation test.¹⁶⁸ The holding of the majority is wrought with undefined loaded qualifiers like “tied to a machine,” “meaningful limits,” and “insignificant extra-solution activity.”¹⁶⁹ Therefore, in his dissent, Judge Mayer wrote that *In re Bilski* leaves unresolved “the thorniest issues in the patentability thicket.”¹⁷⁰

Despite the questions left unanswered, it is safe to assume that *In re Bilski* does significantly preclude the patentability of business method patents that are purely mental processes.¹⁷¹ However, business method patents as a whole are not excluded from patentable subject matter.¹⁷² The machine-or-transformation test also solidifies the patentability of business methods that are implemented in technology, such as in the e-commerce or financial services industries.¹⁷³

Tax strategy patents, a subset of business method patents, logically face a similar fate. Tax strategy claims now need to

167. See Davidson, *supra* note 15, at 426.

168. See *In re Bilski*, 545 F.3d 943, 962 (Fed. Cir. 2008) (leaving the issue of “whether or when recitation of a computer suffices to tie a process claim to a particular machine” to be addressed by another court).

169. See *id.* at 994 (Newman, J., dissenting).

170. *Id.* at 1010 (Mayer, J., dissenting).

171. See Blanche, *supra* note 33. In particular, the majority in *In re Bilski* held that “transformations or manipulations simply of public or private legal obligations or relationships, business risks, or other such abstractions cannot meet the test because they are not physical objects or substances, and they are not representative of physical objects or substances.” *In re Bilski*, 545 F.3d at 963. Hence, purely mental processes cannot meet the machine-or-transformation test. *Id.*

172. See *In re Bilski*, 545 F.3d at 960 (where the Federal Circuit assured that it “further reject[s] calls for categorical exclusions beyond those for fundamental principles already identified by the Supreme Court”).

173. Michael D. Bednarek, Amy E. Simpson & Ryan B. Hawkins, *In Re Bilski: The Good, The Bad and The Unanswered—Establishing a Framework for Order in the Patent World*, INTELLECTUAL PROPERTY TODAY, Dec. 19, 2008, available at <http://www.iptoday.com/articles/2008-12-bednarek.asp> (last visited Mar. 19, 2010).

emphasize their connection to computers, “particular machines,” in furnishing tax assistance. To ensure that the “particular” prong is satisfied, the claim should cite to specific portions of the computer to guarantee that the tied machine is sufficiently “particular.” In regard to the “transformation” prong, it is unclear whether transformation of money will be sufficiently representative of physical objects or substances.

Meanwhile, the fate of software patents remains unclear. To satisfy the “machine” prong, the computer would probably have to perform more functions than storing, displaying, and/or retrieving data.¹⁷⁴ Because the Board of Patent Appeals and Interferences views software claims as directed to product subject matter and not as process subject matter invoking the machine-or-transformation test, clever patent lawyers may attempt to portray software claims as “computer program products” involving a process to circumvent the machine-or-transformation test altogether.¹⁷⁵

Moreover, for all industries (e.g., software, data management, security, insurance, and financial services) affected by *In re Bilski*, new applications for method patents can also be angled to make them appear to involve a physical transformation.¹⁷⁶ Judge Mayer highlights how problematic the transformation test can be, noting that every process will cause some sort of transformation in our material world, “if only at the microscopic level or within the human body, including the brain.”¹⁷⁷ Correspondingly, the court has unsuccessfully wrestled with the definition of “physical” for years, tangling itself in “esoteric and metaphysical” inquiry.¹⁷⁸

Judge Mayer notes that *Bilski* could simply introduce into his claim the requirement that the commodity consumer utilize a

174. *Id.*

175. *See Ex parte Bo Li*, 2008 Pat. App. LEXIS 27, at *5-7, 14-15 (B.P.A.I. Nov. 6, 2008). This was the first USPTO decision following *Bilski* and it held that a method for generating a report using software modules adapted for easy updating and modification was directed to statutory patent-eligible subject matter. *Id.*

176. *See* Brad Blanche, *Are Business Method Patents Still Available?* ORANGE COUNTY BUS. J., Nov. 24, 2008, available at <http://www.allbusiness.com/legal/intellectual-property-law-patent/11732233-1.html>.

177. *In re Bilski*, 545 F.3d at 1008 (Mayer, J., dissenting) (quoting Thomas F. Cotter, *A Burkean Perspective on Patent Eligibility*, 22 BERKELEY TECH. L.J. 855, 880-82 (2007) (arguing that overly broad patent eligibility standards may lead to patents that threaten constitutionally-protected rights)).

178. *See In re Nuijten*, 500 F.3d 1346, 1353 (Fed. Cir. 2007) (holding that a signal with a digital watermark encoded according to a given encoding process does not constitute patent-eligible subject matter even though the claims included “physical but transitory forms of signal transmission such as radio broadcasts, electrical signals through a wire, and light pluses through a fiber-optic cable”).

meter to record commodity consumption.¹⁷⁹ Then, Bilski can argue that a physical transformation occurred when the meter was installed, and thus satisfy the majority's machine-or-transformation test.¹⁸⁰ Moreover, the transformation test can be viewed even more broadly.¹⁸¹ Bilski's method causes providers and consumers to enter into a series of transactions, and entering into a transaction is a physical process.¹⁸² Market participants transform from a state of not being in a commodity transaction to a state of being in a commodity transaction. Presently, the majority does not articulate any argument as to why Mayer's examples do not satisfy the transformation prong of the machine-or-transformation test.¹⁸³ Similarly, patent drafters will be eager to find loopholes themselves via their patent applications. Overall, whether the machine-or-transformation test is just an easy obstacle to be hurdled by clever wording remains to be seen.

VI. THE NEED TO RE-DEFINE SUBJECT MATTER ELIGIBILITY FOR METHOD PATENTS

A. *Why The Supreme Court or Other Appellate Courts Should Intervene*

The current Supreme Court, under the helm of Chief Justice Roberts, distinguishes itself from its predecessors with its willingness to grant certiorari to sophisticated patent cases that have the potential to reformat the practice of patent law.¹⁸⁴ According to some scholars, the Supreme Court's newfound interest is rooted in the increasing importance of intellectual property, particularly in patents, to the American economy.¹⁸⁵ With approximately eighty percent of the value of American

179. *In re Bilski*, 545 F.3d at 1008 (Mayer, J., dissenting).

180. *See id.* at 1008–09.

181. *See id.*

182. *Id.* Judge Mayer explains that entering into a Bilski transaction is a physical process because it involves holding meetings, executing contracts, and making telephone calls. *Id.*

183. *Id.*

184. Robert C. Scheinfeld & Parker H. Bagley, *The Roberts Supreme Court Takes on Patent Cases*, 236 N.Y. L.J. 3 (2006). For instance, in the first ten years after the Federal Circuit was created in 1982, the Supreme Court agreed to review only three Federal Circuit patent decisions. Timothy B. Dyk, *A Review of Recent Decisions of the United States Court of Appeals for the Federal Circuit: Forward: Does the Supreme Court Still Matter?* 57 AM. U. L. REV. 763, 764 (2008). In contrast, the Supreme Court granted certiorari in eight patent cases in the last five years. *Id.*

185. *See Dyk, supra* note 184, at 765–66.

corporate enterprises attributable to intellectual property, and America's growing dependence on intellectual property for success in global markets, the corporate landscape directs the courts' attention to patent protection.¹⁸⁶ At present, the time is ripe for the Supreme Court to intervene and either elucidate the machine-or-transformation test to make it easier to apply¹⁸⁷ or, preferably, to establish another test in its place. A distinction needs to be made between patent law forged "from an industrial age decades removed from the bleeding edge"¹⁸⁸ and patent law that applies to today's world "of subatomic particles and terabytes."¹⁸⁹ The business method is emblematic of this "new technology." To maintain their competitive edge, companies and government rely on new, useful business processes, whether as methods for organizing personnel, as processes that software, internet, and computer interfaces provide, or as other unique methods of promoting business.¹⁹⁰ Accordingly, the issues accompanying *In re Bilski* are so vitally relevant that the Federal Circuit responded to the pleas of the patent community and took the case en banc "in a long-overdue effort to resolve primal questions on the metes and bounds of statutory subject matter."¹⁹¹

B. *The Courts' Potential Responses to In re Bilski*

Though the Supreme Court will acknowledge the Federal Circuit's useful expertise in patent law¹⁹² and might revert to its tradition of cobbling a general principle to guide the Federal Circuit in its decisions for future cases,¹⁹³ it is important to keep in mind that "the Supreme Court is a policy-oriented court."¹⁹⁴ The Court focuses on the purposes and policy concerns

186. *Id.*

187. *See In re Bilski*, 545 F.3d 943, 1010 (Fed. Cir. 2008) (Mayer, J., dissenting). Mayer described the machine-or-transformation test as "exceedingly difficult to apply."*Id.*

188. *See id.* at 1011 (Rader, J. dissenting).

189. *See id.*

190. *See* Steven Anderson, *IP Management Outgrows the Legal Department*, CORP. LEGAL TIMES, Dec. 3, 2003, at 18 (stating that "[b]ut for most traditional companies, the new frontier lies in innovation of business methods, not in the technology itself").

191. *In re Bilski*, 545 F.3d at 1010.

192. *See, e.g., KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 422 (2007); *Warner-Jenkinson Co. v. Hilton Davis Chem. Co.*, 520 U.S. 17, 40 (1997); *Dennison Mfg. Co. v. Panduit Corp.*, 475 U.S. 809, 811 (1986).

193. *See, e.g., eBay Inc. v. MercExchange, L.L.C.*, 547 U.S. 388, 394 (2006); *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 535 U.S. 722, 741 (2002); *Warner-Jenkinson*, 520 U.S. at 40-41.

194. Dyk, *supra* note 184, at 772.

accompanying the rules and weighs the consequences of the rules.¹⁹⁵ Thus, the Supreme Court's approach deviates from the approach that has historically shaped patent litigation.¹⁹⁶ Therefore, scholarship suggests that the Court's "initial deference to the Federal Circuit has since been replaced by a critical view of the Federal Circuit's decisions and its decision-making processes."¹⁹⁷

Accordingly, the Supreme Court may eventually overturn the Federal Circuit's definition of the word "process" in the patent statute to exclude all processes that are not performed by a machine or do not transform physical matter. Weighing the public policy behind § 101, which encourages innovation, the rising value of the patent in today's economy, and the harsh consequences of the Federal Circuit's decision on those who have heavily relied on the law as it had existed, the Supreme Court will probably set forth a view very similar to that of Judge Newman's¹⁹⁸ or Judge Rader's¹⁹⁹ dissents.

Judge Newman argues for a broad definition of process and a distrust of revising the relied-upon definition because patents provide an incentive for innovation, which was highly valued by the drafters of the statute.²⁰⁰ Some might find Newman's views contradictory because he writes, "uncertainty is the enemy of innovation,"²⁰¹ while insisting that "the subject matter of the 'useful arts' [be] stated broadly, lest advance restraints inhibit the unknown future."²⁰² Will a broad, general definition of process ignite ambiguity and uncertainty and thus inhibit innovation?²⁰³ Judge Newman's statements can be reconciled because it is not necessary to pick clarity and discreteness over accuracy: when congressional objectives mandate broad terms, general and broad language is not necessarily ambiguous.²⁰⁴

195. *Id.*

196. *Id.*

197. Debra D. Peterson, Abstract, *Can This Brokered Marriage Be Saved? The Changing Relationship Between The Supreme Court and Federal Circuit in Patent Law Jurisdiction*, 2 J. MARSHALL REV. INTELL. PROP. L. 201, 201 (2003).

198. *In re Bilski*, 545 F.3d 943, 976-98 (Fed. Cir. 2008) (Newman, J., dissenting).

199. *Id.* at 1011-15 (Rader, J., dissenting).

200. *See id.* at 997-98 (Newman, J., dissenting).

201. *Id.* at 977.

202. *Id.*

203. Vague or ambiguous wording and an insistence on clarity with statutory interpretation have significant consequences; they will lead Justices like Scalia to limit the applicability of statutes. Paul Killebrew, *Where Are All the Left-Wing Textualists?*, 82 N.Y.U. L. REV. 1895, 1900 (2007).

204. *Diamond v. Chakrabarty*, 447 U.S. 303, 315 (1980) (finding that the subject matter provision in patent law is not ambiguous because it had "been cast in broad terms to fulfill the constitutional and statutory goal of promoting 'the Progress of Science and

Moreover, the argument that a broad definition of process would inundate the courts and USPTO with a deluge of patent reviews can be subverted by the final clause of § 101, which states that a claimed invention must still satisfy the other “conditions and requirements” of title 35 in addition to having patentable subject matter.²⁰⁵ Furthermore, a failure to establish an unambiguous test that decreases the need to go to court is not necessarily a failure of the Federal Circuit.²⁰⁶ Economists and scholars may suggest and bemoan that the cost of administering and interpreting “low quality” patents undermines innovation and dampens entry into new enterprises,²⁰⁷ but the sweeping, practically-categorical preclusion of patents by the machine-or-transformation test, such as with software and business method patents, does not necessarily apply to the “low quality” patents which the economists studied.²⁰⁸

More importantly, the focus should be placed on “the legislative intent[] to accommodate not only known fields of creativity, but also the unknown future,” which is the spirit driving the decision of *Chakrabarty*.²⁰⁹ Thomas Jefferson emphasized that “[t]he Patent Law of the United States has always embodied the philosophy that ‘ingenuity should receive a liberal encouragement.’”²¹⁰ Though opponents argue that it is the legislature’s job to change the law to conform to the needs of public interest, an argument can be made that generally, according to rules of statutory interpretation, it appears that the legislature tacitly approves a court decision if it is silent.²¹¹

the useful Arts’ with all that means for the social and economic benefits envisioned by Jefferson”).

205. 35 U.S.C. § 101 (2006).

206. See Rochelle Cooper Dreyfuss, *In Search of Institutional Identity: The Federal Circuit Comes of Age*, 23 BERKELEY TECH. L.J. 787, 793 (2008). “The increase in judicial business should not necessarily be taken as a sign of failure. To the contrary, it may well demonstrate success: if the court makes patent law more stable, patents increase in value; if patents become more valuable, innovation becomes a more attractive investment and more innovators will choose to rely on patents to protect their competitive positions. The upsurge in patenting translates into an expansion of the base from which litigation emerges.” *Id.*

207. See ADAM B. JAFFE & JOSH LERNER, *INNOVATION AND ITS DISCONTENTS: HOW OUR BROKEN PATENT SYSTEM IS ENDANGERING INNOVATION AND PROGRESS AND WHAT TO DO ABOUT IT* 175 (Princeton Univ. Press) (2004).

208. See *id.* The study is misleading and perhaps marred because the economists did not divulge the traits of a “low quality” patent. *Id.*

209. *In re Bilski*, 545 F.3d 943, 978 (Fed. Cir. 2008) (Newman, J., dissenting).

210. *Id.* at 1011 (Rader, J., dissenting) (quoting WRITINGS OF THOMAS JEFFERSON 75-76 (1871)).

211. See SUTHERLAND, *supra* note 96, at § 48A:11 (“In many other cases, the Court presumes from Congress’ silence over time that Congress ‘acquiesces’ in judicial or agency interpretations of a statute, or presumes from Congress’ silence when reenacting or

Here, the legislature has heretofore remained silent on the stare decisis of case law up until *In re Bilski*.

A test that fits Judge Newman's views and would be fitting for the Supreme Court's adoption is the fundamental principle or abstract idea test that Judge Rader also advocates.²¹² The test states that, if a new and useful process is not clearly a "fundamental truth, law of nature, or abstract idea," it is then eligible for patentability (hereinafter the "fundamental truth test").²¹³ A broader test than the majority's machine-or-transformation test, the fundamental truth test not only gets to the essence of the machine-or-transformation test, but allows for the broader reading of § 101 to promote industry and innovation.

Patents are vital in promoting industry and innovation, giving inventors incentives to capitalize on their craft.²¹⁴ Furthermore, the public disclosure involved in applying for a patent advances knowledge by reducing the need for future inventors to replicate old discoveries — the proverbial "reinvention of the wheel."²¹⁵ For instance, before the great flood of business methods that accompanied the ruling in *State Street*, the computer software and financial service innovators encountered a dearth of prior art.²¹⁶ Therefore, even when the USPTO receives a big wave of patent applications, certain industries, such as the software industry, still benefit from the disclosure of previously held industry secrets.²¹⁷

amending a statute that Congress wants to carry forth previous interpretations into the new statute."); *but see* SUTHERLAND, *supra* note 96, at § 48A:19 ("Congress should not be deemed to have chosen this 'path of error' when it failed to amend the law, and 'congressional silence [should not bind] this Court to follow the erroneous decisions.'").

212. *See In re Bilski*, 545 F.3d at 997 (Newman, J., dissenting); *see also id.* at 1011 (Rader, J., dissenting).

213. *See id.* at 997 (Newman, J., dissenting).

214. *Cf.* Lee A. Hollaar, *Justice Douglas Was Right: The Need for Congressional Action on Software Patents*, 24 AIPLA Q.J. 283, 286 (1996) (pointing out the correlation of a lack of patent protection with a lack of innovation in the software industry).

215. *Id.*

216. *See* Julie E. Cohen & Mark A. Lemley, *Patent Scope and Innovation in the Software Industry*, 89 CAL. L. REV. 1, 12-13 (2001) ("Finally, prior art in this particular industry may simply be difficult or, in some cases, impossible to find because of the nature of the software business. Unlike inventions in more established engineering fields, most software inventions are not described in published journals. Software innovations exist in the source code of commercial products and services that are available to customers. This source code is hard to catalog or search for ideas."). Congress addressed this void when it enacted 35 U.S.C. § 273 to provide a prior user right for patents which cover "a method of doing or conducting business" because these industries did not disclose information on what they did and the method they chose prior to this time. 35 U.S.C. § 273 (2006).

217. *See* Cohen & Lemley, *supra* note 216, at 12-13.

Even if the majority's statutory interpretation of § 101 were equally plausible, the court's decision ought to still hinge on public policy.²¹⁸ In contrast, the majority's statutory interpretation of § 101 reflects formalistic case-parsing and a stubborn refusal to consider policy arguments, which is "particularly inappropriate in a court established for the express purpose of orchestrating the development of patent jurisprudence."²¹⁹

On the other hand, even by focusing on the public policy behind § 101, some may argue that the Supreme Court could also possibly find for Judge Mayer's dissent. Judge Mayer believes that Congress never intended for § 101 to promote the innovation of "commercial transactions."²²⁰ Judge Mayer further adds that the Framers of the Constitution did not intend for the constitutional intellectual clause to grant patent protection for business methods.²²¹ Congress had ample opportunity to direct the early patent statutes to the protection of business method patents, but it chose not to take any action.²²² Yet, Judge Mayer gives no evidence on whether intellectual property and business method patents played as vital a role in the eighteenth and early nineteenth century as they do today.²²³ Hence, a logical flaw exists in the reasoning that Congress's lack of action in a non-existing entity equals an affirmative decision to preclude that entity.²²⁴ The same applies to the time after the passing of the 1952 Act; just because business method patents were unforeseen by Congress does not mean that Congress had intent and acted consciously to bar business method patents from patent-eligible subject matter.

Another argument some may use to further Judge Mayer's views and defeat Justice Newman's views is that business

218. See SUTHERLAND, *supra* note 96, at § 45:12. Sutherland explains, "[w]here the court must choose between equally plausible interpretations of ambiguous statutory language, the court will consider the effect on the parties involved and choose the interpretation that avoids a patently unjust result." *Id.* But see *id.* at § 45:9, which reads, "Courts are not free to read unwarranted meanings into an unambiguous statute even to support a supposedly desirable policy not effectuated by the act as written." *Id.*

219. Rochelle C. Dreyfuss, *In Search of Institutional Identity: The Federal Circuit Comes of Age*, 23 BERKELEY TECH L.J. 787, 791 (2008).

220. See *In re Bilski*, 545 F.3d 943, 998 (Fed. Cir. 2008) (Mayer, J., dissenting) ("The patent system is intended to protect and promote advances in science and technology, not ideas about how to structure commercial transactions.").

221. *Id.*

222. See *id.* at 999.

223. See *id.* at 998-99; see also SUTHERLAND, *supra* note 96, at § 45:5 (in deciding legislative intent, courts must also consider the mischief to be remedied in addition to the history of patentable subject matter).

224. See *In re Bilski*, 545 F.3d at 999-1000 (Mayer, J., dissenting).

methods are not socially valuable and thus should not be patentable. Thomas Jefferson wrote that “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.”²²⁵ Judge Mayer explains that business method patents are not socially valuable because the United States economy has never suffered from a lack of innovation in business methods.²²⁶ Yet, just because there has always been a healthy output of innovative business methods does not mean that patentability has not increased the innovation even more, leading to greater social value. Next, Judge Mayer states that business method patents disproportionately reward their inventors because “business innovations frequently involve little or no investment in research and development.”²²⁷ Nevertheless, ease of invention has never been a factor that Congress intended the USPTO to weigh in granting a patent.²²⁸ For example, a patent would not be denied to a biologist who accidentally stumbles upon a miracle drug in the rain forest instead of investing funds into its chemical creation.

Then, Judge Mayer subverts business method patents by discussing how they stifle innovation by “removing building blocks of commercial innovation from the public domain.”²²⁹ On the contrary, a patent does not prevent disclosure of the business method, so other corporations can always harness business innovations by inventing a different business method that achieves the same goal. Moreover, through licensure, American corporations can still tap into the benefits of the patented business methods and thrive in the global marketplace.²³⁰ Consumers might suffer when business methods are patented because they have to pay higher prices for goods,²³¹ but

225. *Graham v. John Deere Co.*, 383 U.S. 1, 10-11 (1966) (quoting a letter Thomas Jefferson wrote to Isaac McPherson (Aug. 1913)).

226. *See In re Bilski*, 545 F.3d at 1005 (Mayer, J., dissenting) (quoting Leo J. Raskind, *The State Street Bank Decision: The Bad Business of Unlimited Patent Protection for Methods of Doing Business*, 10 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 61 (1999)).

227. *In re Bilski*, 545 F.3d at 1006 (Mayer, J., dissenting) (quoting Joy Y. Xiang, *How Wide Should the Gate of “Technology” Be? Patentability of Business Methods in China*, 11 PAC. RIM L. & POL’Y J. 795, 813 (2002)).

228. *See Newman v. Quigg*, 877 F.2d 1575, 1581 (Fed. Cir. 1989) (“While it is not a requirement of patentability that an inventor correctly set forth, or even know, how or why the invention works . . .”) (citation omitted), *modified*, 886 F.2d 329 (Fed. Cir. 1989).

229. *In re Bilski*, 545 F.3d at 1006.

230. *But see In re Bilski*, 545 F. 3d at 1007 (“Patenting business methods makes American companies less competitive in the global marketplace.”).

231. *Id.* at 1006.

consumers can always prevent monopolistic practices by threatening to take their business overseas.

Undoubtedly, faulty, poor-quality business method patents exist, occasionally flooding the USPTO.²³² Yet, the solution to this problem need not reach the drastic proportions of categorically banning business method patents altogether. A more definitely-worded test, like the one set forth by Justice Newman, and more stringent guidelines for the USPTO in granting business method patents would better limit the amount of business method patents with poor quality without sacrificing the innovative spirit buoying Justice Newman's test.

VII. CONCLUSION

Familiar and well-established rules of statutory construction show that a reliance on mere dicta and outdated, out-of-context definitions of "science" and "technology" spawned the Federal Circuit's machine-or-transformation test. Moreover, it seems like the Federal Circuit failed to consider significant business implications and societal needs in their statutory construction. Perhaps in the future, the Supreme Court will broaden the scope of patentable subject matter and harmonize precedent with information age innovations. Perhaps the Court will re-define the scope of eligible § 101 subject matter and conclude that a fundamental truth test is appropriate. The Framers and their subsequent legislators could not possibly have intended for § 101 to subvert innovation, as the machine-or-transformation test does. The machine-or-transformation test causes business hardships for the software industry and business world, which were relying on the broader, old definition of process patents. Hence, the issue of the scope of patentable subject matter awaits a more comprehensive analysis, done in the correct context and with the correct consideration of the financial impact of patents in the modern world.

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232. *See id.* at 1007. Justice Kennedy noted the "potential vagueness and suspect validity" of some of "the burgeoning number of patents over business methods." *Ebay Inc. v. MercExchange, L.L.C.*, 126 S. Ct. 1837, 1842 (2006) (Kennedy, J., concurring).