

1-1-2009

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Kali Murray, What Must an Inventor Show in Order to Demonstrate That His Method is Patentable?, 37 Preview U.S. Sup. Ct. Cas. 108 (2009). © 2009 American Bar Association. This information or any portion thereof may not be copied or disseminated in any form or by any means or downloaded or stored in an electronic database or retrieval system without the express written consent of the American Bar Association.

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## Repository Citation

Murray, Kali, "What Must an Inventor Show in Order to Demonstrate That His Method is Patentable?" (2009). *Faculty Publications*. Paper 467.

<http://scholarship.law.marquette.edu/facpub/467>

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## What Must an Inventor Show in Order to Demonstrate that His Method Is Patentable?

### CASE AT A GLANCE

In this case the Supreme Court has agreed to decide which test the United States Patent and Trademark Office should use when determining whether an inventor's new method or process constitutes patentable subject matter under Section 101 of the Patent Act.

***Bilski and Warsaw v. Kappos***  
**Docket No. 08-964**

**Argument Date: November 9, 2009**  
**From: The Federal Circuit**

by Kali Murray  
 Marquette University in Milwaukee, Wisconsin

#### ISSUE

Must a “process,” such as a method for hedging risk, be embodied in a particular machine or transform a particular article into a different thing, to be patentable under Section 101 of the Patent Act of 1952?

#### FACTS

Petitioners Bernard Bilski and Rand Warsaw filed U.S. Patent Application No., 08/833,892 entitled Energy Risk Management Method in April 1997. The patent application disclosed a method that sought to manage weather-related risks associated with buying energy commodities. Claim One, the key claim in the disputed patent application, disclosed:

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

- (a) initiating a series of transactions between said commodity provider and consumers of said commodity wherein said consumers purchase said commodity at a fixed rate based upon historical averages, said fixed rate corresponding to a risk position of said consumer;
- (b) identifying market participants for said commodity having a counter-risk position to said consumers; and
- (c) initiating a series of transactions between said commodity provider and said market participants at a second fixed rate such that said series of market participant transactions balances the risk position of said series of consumer transaction.

The method disclosed in Claim One, notably, was not linked to the use of a computer or any other device.

The United States Patent and Trademark Office (USPTO) rejected the application due to the lack of eligible subject matter under Section 101. The patent examiner rejected the disclosed invention under the previously discarded “technological arts” test. The disclosed claims

were not tied to a particular machine, thus indicating that the invention was an abstract idea since it solved a mathematical problem. On appeal, the Board of Patent Appeals and Interferences (BPAI), in *Ex Parte Bernard Bilski and Rand Warsaw*, Appeal No. 2002-2257, 2006 WL 5738364 (Bd. Pat. App. Int. 2006), held that the examiner erred by applying the “technological arts” test.

The BPAI, however, still denied the applicants’ patent. The BPAI initially held that the applicants’ claims, which involved “non-physical risks,” did not transform anything into patentable material. The board next held that the applicants’ claims were “abstract ideas” because they preempted every possible way of performing the steps of the claimed process. Finally, the board held that the applicants’ claimed process did not produce a “useful, concrete and tangible result” under *State Street Bank and Trust Co. v. Signature Financial Group*, 149 F.3d 1368, 1370 (Fed. Cir. 1998), and thus was not a patentable subject under Section 101.

The Federal Circuit, sitting en banc, affirmed the BPAI’s rejection of the patent application by a 9-3 vote. The majority opinion, authored by Chief Judge Paul Michel and joined by Judges Lourie, Schall, Bryson, Gajarsa, Linn, Dyk, Prost, and Moore, focused on whether the method disclosed in Claim One was an eligible process under Section 101 of the Patent Act.

The key inquiry, according to the majority, was whether the claimed method was seeking to claim a fundamental principle, such as an abstract idea or a mental process. In doing so, the majority analyzed a number of cases, previously decided by the Supreme Court, such as *Gottschalk v. Benson*, 409 U.S. 63 (1972), *Parker v. Flook*, 437 U.S. 584 (1978) and *Diamond v. Diehr*, 450 U.S. 175 (1981), which indicated Section 101 does not protect fundamental principles such as nature, physical phenomena, and abstract ideas. Despite some significant divergences in the outcomes of these cases, the majority was able to distill from them a two-part test for determining whether a process is eligible for a patent.

This “machine-or-transformation” test stated that an applicant can show that a process claim is eligible patent subject matter under Section 101: (1) by showing that a claim is tied to a particular machine or (2) by showing that a claim transforms an article. The majority then applied its test to the disputed claim at issue and concluded that it did not involve eligible subject matter under Section 101 because it was not tied to a specific machine or apparatus and did not transform any article to a different state or thing, due to its failure to be embodied in or represented by a physical object.

The majority’s opinion prompted three dissents. Judge Newman contended that treating patentable subject matter under Section 101 as a “threshold” inquiry would prevent the development of innovative technologies and was not supported by previous historical practice, the statutory text, or legislative history of the Patent Act of 1952. Judge Mayer argued that the inquiry should have been whether the U.S. Court of Appeals for the Federal Circuit had correctly held in *State Street* and *AT&T Corp. v. Excel Communications, Inc.*, 172 F.3d 1352 (Fed. Cir. 1998), that no business method exception existed in patent law. He criticized the majority’s adoption of the “machine-or-transformation” test since creative drafting of claims could circumvent the test. Judge Rader, like Judge Newman, asserted that the standard articulated by the majority would negatively impact new technologies, and moreover, could have been addressed by finding that the method outlined in Claim One was an abstract idea and thus ineligible patent subject matter under Section 101.

As these dissents indicate, the new standard set out by the Federal Circuit is highly contested. The Supreme Court granted certiorari to resolve the dispute.

## CASE ANALYSIS

The fragmented decision by the Federal Circuit indicates the importance of *Bilski* in defining what kind of process can be patented. Section 101 states in crucial part, “[w]hoever invents or discovers any new and useful process . . . may obtain a patent . . . subject to the conditions and requirements of this title.” The Supreme Court in *Diamond v. Chakrabarty*, 447 U.S. 303 (1981), construed the patentable-subject matter requirement under Section 101 in a broad manner, stating that the legislative history of the Patent Act of 1952 indicated that patentable subject matter could “include anything under the sun that is made by man.” The Federal Circuit in *State Street* and *AT&T* adopted this broad reasoning and rejected the so-called business method exception to allow any process to be considered patentable under Section 101 when it produced “a useful, concrete and tangible result.” The Federal Circuit’s majority holding in *Bilski*, however, represents a retreat from this broad precedent. This raises key questions as to whether the Supreme Court will reemphasize its broad holding in *Chakrabarty* or adopt a narrower approach similar to the one adopted by the Federal Circuit in this case.

The petitioners raise three key claims. First, they claim that the statutory text of Section 101—in particular, the term *any*—demonstrates that the patentable subject matter requirement should be construed broadly. Under this reading, the Federal Circuit’s “machine-or-transformation” test conflicts with precedent (such as *Chakrabarty* and *Gottschalk*) that suggests that Supreme Court has rejected rigid tests within the context of Section 101. Second, the petitioners contend the recent congressional amendments related to Section 273 of the

Patent Act, which allowed prior users to raise certain defenses when confronted with an infringement claim on the part of a “business method” patent owner, suggest that process patents could constitute patentable subject matter under the Patent Act. The petitioners further emphasize that the congressional intent in passing Section 273 could be thwarted by applying the “machine-or-transformation” test, since that test would render most “business method” patents nonpatentable. Third, the petitioners argue that the Federal Circuit’s “machine-or-transformation” test constitutes an improper foray into policy-making by the Federal Circuit. In stepping into these waters, the petitioners assert, the Federal Circuit unsettled the parties’ property expectations.

According to the petitioners, these three basic claims ultimately suggest that Supreme Court should adopt a “practical application” test to determine whether a method is patentable subject matter under Section 101. This practical application test would require that if an inventor is claiming a fundamental principle, like an abstract idea, then that principle must be embodied in a practical application for it to be considered patentable under Section 101.

In its response, the government (the solicitor general is representing the respondent David Kappos, the current undersecretary of USPTO) emphasizes that the patent regime historically sought to protect defined technological innovation. First, the government claims that Section 101, while broad, has discrete limits on what can be patented. According to the government, narrow reading of Section 101 is supported by reference to historical practice and a circumscribed statutory reading. The government relies on historical evidence from both early English and American patent practice to claim that Section 101 does not extend patent-eligibility to “economic, social or legal” tasks. These tasks fall outside the “useful arts” protected in the Constitution. The government then claims these historical limits are supported by the statutory text of Section 101. Specifically, Section 101, in its other enumerated categories—machine, composition of matter, and manufacture—protects only “things made by man” or “involving technology.” Thus, the Federal Circuit’s “machine-or-transformation” test successfully captures this preexisting preference for a patented subject matter that reflects technological innovation. Moreover, this “machine-or-transformation” test does not limit evolving technologies (like software) because such technology will often satisfy the test. For instance, software process claims could be embodied in a machine or use technological means to transform the relevant data into a new state.

The government next rejects the premise that the Patent Act’s general reference in Section 273 to a “method of doing or conducting business” demonstrated a congressional intent to extend patent eligibility to all processes that could be patentable subject matter under Section 101. The government further contends that the “machine-or-transformation” test does not undermine Congress’s intent in passing Section 273. The test does not eliminate the possibility of all business methods; rather, it merely requires a patent that claims a business method to fulfill the requirements of the proposed “machine-or-transformation” test.

The government concluded its respondent’s brief by stressing the petitioners’ claims cannot be sustained if the Federal Circuit’s “machine-or-transformation” test is adopted. The petitioners’ claims are a method for hedging risk in the purchase and sale of com-

modities and thus are directed toward organizing human economic activity. Therefore, the USPTO correctly denied the patent application since those claims are not eligible subject matter under Section 101.

## SIGNIFICANCE

*Bilski v. Kappos* demonstrates the Supreme Court's ongoing interest in providing guidance to the patent community. *Bilski* will be the first significant statement on patentable subject matter under Section 101 since *Chakrabarty*. A broad standard of patentable subject matter is often seen as prompting significant economic innovation. For instance, the Supreme Court's broad statement of patentable-subject matter under Section 101 in *Chakrabarty* has often been understood as prompting the innovative field of biotechnology within the United States.

Recently, however, the usefulness of a broad standard of patentability under Section 101 has come into question. In particular, critics have pointed to the problems associated with granting too many patents, such as the costs of avoiding patent infringement within a given field, overly aggressive patent holders, and substantial licensing thickets. "Process patents" have been subject to particular complaints, given their potential breadth. Thus, narrowing patent-eligible subject matter under Section 101 would provide a key threshold inquiry into whether a patent should issue in the first place. Section 101 would thus be considered a key analytical inquiry that would be undertaken to assess the validity of a patent, along with the other conditions of patentable subject matter contained in Section 101 (utility), Section 102 (novelty), and Section 103 (nonobviousness) of the Patent Act.

Thus, the Supreme Court in *Bilski* confronts a key issue with significant policy consequences. A broad standard of patentable subject matter under Section 101 does much to spur innovative technologies, an issue of considerable interest in a struggling economy. A narrow standard of patentable subject matter may prevent the issuance of patents that could negatively impact the public domain. Thus, the Supreme Court once again is in an ideal position to resolve this tension by crafting a standard that will provide clarity to the patent community.

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*PREVIEW of United States Supreme Court Cases*, pages 108–111.  
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