

Bilski et al. v. Kappos, Under Secretary of Commerce for Intellectual Property and Director, Patent and Trademark Office 130 S.Ct. 3218 (28 June 2010)

Prepared by UNCTAD's Intellectual Property Unit

Case summary

The U.S. Supreme Court (hereinafter: "the Court") affirmed on 28 June 2010 the rejection by the Federal Circuit of a patent application concerning a claimed invention which explains a hedging and investment strategy in an energy market. It held that the abstract strategy was not patentable subject matter.

The facts

Petitioners Bernard L. Bilski and Rand Warsaw filed a patent application including eleven claims on 10 April 1997 for a method of hedging risks in commodities trading on the energy market. They proposed a fixed bill system for consumer energy contracts. Under this type of contract, consumers pay a fixed price for their future energy consumption based on their past energy use.

The key claims at issue were claim 1, describing the method of how to hedge risks and claim 4, which reduces claim 1 into a simple mathematical formula.¹ The patent examiner rejected all eleven claims on the grounds that "the invention is not implemented on a specific apparatus and merely manipulates (an) abstract idea and solves a purely mathematical problem without any limitation to a practical application".

The Board of Patent Appeals and Interferences affirmed the rejection, holding that the application "involved only mental steps that do not transform physical matter and was directed to an abstract idea" and therefore not eligible subject matter.

The Federal Circuit heard the cases en banc and, in 2008, affirmed the rejection as well.

The Supreme Court, in turn, affirmed in 2010 the judgment in its outcome but revised the aspects of the Federal Circuit's decision concerning the test assessing process patentability and the exemption of business methods from patentable subject matter (see below). It delivered one majority opinion and two concurring opinions. While all the judges agreed that Bilski's invention was a patent- ineligible abstract idea, some

¹ Claim 1 explains in three steps a method for a commodity provider to hedge risks of a commodity. These three steps laid out in the application namely are:

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

would have preferred to hold that business methods in general are exempt from patentable subject matter.

The legal issues

In its opinion, the Federal Circuit ruled on three important aspects:

- (1) It affirmed that a “claimed process was only patent-eligible under §101 of the U.S. Patent Act if: (1) it is tied to a particular machine or apparatus, or (2) it transforms a particular article into a different state or thing”. This so-called “machine-or-transformation test” was to be the sole applicable test to determine patent eligibility of processes under §101.
- (2) It confined the definition of the word “process” to the two categories in the above test, machine or transformation, by using the doctrine of *noscitur a sociis*. Following this doctrine "an ambiguous term may be given more precise content by the neighboring words with which it is associated." (*United States v. Stevens*, 559 U.S., 2010).
- (3) By strictly applying the above test, it exempted many business methods from patentable subject matter.

The Supreme Court, affirming the opinion of the Federal Circuit in its outcome, rejected the above rulings.

- (1) All nine judges agreed that the machine-or-transformation test could not be a sufficient or sole test for patent eligibility of processes, especially so in the Information Age as opposed to the Industrial Age.² The Court established that "new technologies may call for new inquiries" and found that basing the analysis solely on this test would "create uncertainty as to the patentability of software, advanced diagnostic medicine techniques, and inventions based on linear programming, data compression, and the manipulation of digital signals".³ Nonetheless, according to the majority opinion, the test should still be used as an important indicator in the analysis of the patentability of a process.⁴ The Court did, however, not define any further the elements or application of the test.
- (2) The Court further ruled that the doctrine of *noscitur a sociis* was not applicable to the term “process” as it is legally defined in §100(b).⁵ § 100(b) holds that a process is a "process, art or method, and includes a new use of a known process, machine, manufacture, composition of matter, or material." The Court did not further describe how to apply this definition, but simply stated that the invention at hand constitutes a process.⁶
- (3) The Court finally rejected the categorical exemption of business methods from patent eligible subject matter. It found that § 101 does not support the

² See pages 6, 7 and 9, 10 of the judgment.

³ P. 9.

⁴ It referred to its earlier judgments in *Gottschalk v. Benson* and *Parker v. Flook* in which it already held the test to not be the sole criterion (The judgments in *Benson*, *Flook* and *Diehr* form the "patent eligibility trilogy"). P. 8.

⁵ It quotes its earlier decision in *Burgess v. United States* 553 U.S. 124, 130 (2008): “When a statute includes an explicit definition, we must follow that definition”. P.7.

⁶ Justice Stevens, however, writes in his concurring opinion: "the wiser course would have been to hold that petitioner's method is not a 'process' because it describes only a general method of engaging in business transaction”. See p. 2 of Judge Steven's concurring opinion.

categorical exemption since the term "method" figures in the definition of "process" in §100(b). It further supported its decision by pointing to §273(b)(1) which allows the defense of prior use in case of a claimed patent infringement based on a method in a patent. By allowing this defense, the statute implicitly acknowledges the possibility of business method patents.⁷ The Court held, however, that these statutory bases for business method patents do "not suggest broad patentability of such claimed inventions". The majority opinion found that the exemption of some types of business methods was conceivable when based on the rule that abstract ideas are not patentable.⁸

Points of significance

- Under US patent law business methods can be patentable. The Supreme Court judgment suggests that business methods mainly based on an abstract idea will be excluded from patentable subject matter, however.
- The machine-or-transformation test is not the sole test for the patentability of processes, but rather an important clue in the analysis.
- However, the Court left open the details of this test: it did not clarify what exactly constitutes a "transformation", what kind of transformation would be necessary or sufficient for patent-eligibility or what could constitute a "particular machine or apparatus". This uncertainty leaves room for interpretation.
- The definition of "process" as it stands in §100(b) is exhaustive and applicable.
- The majority opinion establishes once again that the patent eligibility under US law (§101 of section 35 U.S.C.) is "only a threshold test". In lack of any further guidance concerning the application of this test, the relevant criteria may just remain those laid out in the U.S. code under novelty (§102), non-obviousness (§103) and full and particular description (§112).

Key words

Patent, patentable subject matter, patentability, U.S. Supreme Court, Federal Circuit, machine-or-transformation test, abstract idea, 35 U.S.C. §101, process, method, business method, 35 U.S.C. §273, transformation, machine, 35 U.S.C. §100(b), software.

Available at: <http://www.supremecourt.gov/opinions/09pdf/08-964.pdf>

⁷ See p. 11. 35 U.S.C. §273 has since been amended (effective as of 16 September 2011). The new version does not mention the term "method" anymore.

⁸ See pp. 11, 12.