BILSKI V. KAPPOS RULING

SCOTUS (DARA ADIB)

Bernard L. Bilski and Rand A. Warsaw (collectively, "Applicants") appeal from the final *en banc* decision of the Court of Appeals for the Federal Circuit (CAFC) in *In re Bilski* against David Kappos ("Respondent"), Director of the Patent and Trademark Office (USPTO). Specifically, Applicants argue that the patent examiner erroneously rejected the patent claims as not referring to patent-eligible subject matter, and that the Board of Patent Appeals and Inferences and CAFC erred in upholding those rejections. The CAFC decision in *Bilski* involves selecting the ideas and implementations that consist of patentable subject matter, including what applicable series of tests can be used to determine patent eligibility.

Title 35 of the United States Code (35 U.S.C) respectively concerns patent law. The patent statute (35 U.S.C. § 101) defines patent eligibility as a "process." The literal definition of "process" is not only ambiguous, but also misleading, as the statuary meaning of § 101 is much narrower.

Since § 101 does not specifically and conclusively define patentable subject matter, the issue has traditionally been left to the judicial system from the nineteenth century onward. In *Gottschalk v. Benson* (1972), one of three significant modern Supreme Court (SCOTUS) cases concerning patent law, the majority ruling stated

> Phenomena of nature, though just discovered, mental processes, and abstract intellectual concepts are not patentable, as they are the basic tools of scientific and technological work.

SCOTUS precedent has explicitly excluded laws of nature, natural phenomena, and abstract ideas from patentable subject matter. However, as these categories are themselves ambiguous, the USPTO and courts necessitate an applicable test for patent-eligible subject matter. The CAFC ruling in *Bilski* states

> Rather, the machine-or-transformation test is the only applicable test and must be applied, in light of the guidance provided by the Supreme Court and this court, when evaluating the patent-eligibility of process claims.

The justification for a wide-reaching blanket assumption is construed by the selective combination of ideas from SCOTUS precedent. The SCOTUS ruling in *Gottschalk v. Benson* (1972) claimed that the machine-or-transformation test was used in nineteenth-century cases concerning patent law and eligibility, namely *Corning v. Burden* (1853), *Cochrane v. Deener* (1876), and *Tilghman v. Proctor* (1880). SCOTUS used this argument in Gottschalk v. Benson to deny patentability to process claims directed towards numerical algorithms. In effect, the majority decision barred all patents involving computer software functionality because the respective patent would in practical effect patent mathematical formulas or algorithms—abstract ideas.

In basing justification on the reasoning of *Benson*, CAFC practiced selective reasoning in *Bilski*. The decision neglects to mention that more recent court precedent was in effect overturned to reach the case reasoning. The ruling in *Diamond v. Chakrabarty* (1980) and later CAFC rulings in *State Street Bank v. Signature Financial Group* (1998) and *AT&T v. Excel Communications* (1999) had already overturned the SCOTUS ruling in Benson. This had been done under the claim of adapting patent law for the revolution in information technology and availability of the Internet ("How The 'Machine-Or-Transformation' Test In Bilski Is Failing"). By rejecting the machine-or-transformation test, SCOTUS and CAFC had confirmed the patentability of so-called "business method" patents in order to allow the patentability of computer software functionality which had been denied by *Benson*.

Though the CAFC reasoning in Bilski is not considerate of more recent court precedent, the decision to overturn court precedent in cases concerning patentability after 1998 is upheld. Because of the inconsistency of court precedent concerning patentability after *Benson*, *Parker v. Flook* (1978), and *Diamond v. Diehr* (1981), CAFC could exercise discretion in selective reasoning.

Prior SCOTUS and CAFC decisions were not effective precedent for guides in rulings because they were inconsistent. These case rulings represented opposing views on the patentability of

ideas of different levels of abstraction. The CAFC ruling in *State Street* was overturned in order to establish the *Benson* as the correct benchmark.

There have been several attempts to consolidate and simplify an applicable test for patent-eligible subject matter. The most modern attempt is the "technological arts" test, which specifies that a patent-eligible process is technological in nature. Unfortunately, the precise meaning of "technological" is disputed and ambiguous. A legal loophole allows any abstract idea to become patent-eligible subject matter if a trivial "technological" aspect is added (EFF *amicus curiae* brief). More importantly, with no court precedent, it lacks legal merit. It cannot replace or be used in lieu of another test.

The patent examiner rejecting the patent application in 1997 by Applicants (08/833,892) for a method of hedging risks in commodities trading incorrectly used the "technological arts" test when the patent was rejected under the grounds that

> . . . the invention is not implemented on a specific apparatus and merely manipulates abstract idea and solves a purely mathematical problem without any limitation to a practical application, therefore, the invention is not directed to the technological arts

The Board of Patent Appeals correctly rejected the reasoning behind the patent examiner's rejection of the patent law case. However, it replaced the reasoning with another flawed reasoning based on CAFC precedent. CAFC decisions, beginning with *State Street*, claimed that a process was patent-eligible if it produced a "useful, concrete and tangible result". The Board incorrectly used this reasoning to support the rejection of the Applicants claims.

The *State Street* test conflicts with the SCOTUS machine-or-transformation test because it allows for certain patents that were previously ineligible under SCOTUS precedent in *Benson*, *Flook*, and *Diehr*, including patents on "business methods" and computer software functionality. The incorrect justification of court decisions on the CAFC test is the principle cause of current conflicts in patent eligibility. However, since CAFC never claimed in *State Street* explicitly to overturn the SCOTUS precedent in *Benson*, *Flook*, and *Diehr*, precedent set by CAFC cases after *State Street* can be safely ignored.

The CAFC ruling in *Bilski* states

> A claimed process is surely patent-eligible 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.

This machine-or-transformation test, though not encompassing of all court precedent, represents the best summation of consistent court precedent. Furthermore, we find the machine-or-transformation test, with corollaries, to be the only applicable test for patent-eligible subject matter.

The corollaries, based off the decision in *Flook*, concern the ineffectiveness of the machine-or-transformation test at the patent ineligibility of subject matter that represents insignificant pre-solution or post-solution activity, or an insignificant step in the middle of a process. Data gathering and recording results are examples of subject matter prohibited from patent eligibility by the corollaries. Other unusual outliers may also satisfy the test despite patent ineligibility or may not not satisfy the test despite patent eligibility.

We recognize that the machine-or-transformation test is not a perfect test. This is a partial reason for allowing corollaries that otherwise complicate an already-simplified test. But even the machine-or-transformation test, with corollaries, is not without problems.

Important details about the machine-or-transformation test have still been left unexplained ("Is In re Bilski a Deja Vu?"). It is not unambiguous what explicit transformations are sufficient to denote patent eligibility. It is not clear what constitutes an article that can be transformed. It is not clear whether the addition of a computer to an otherwise patent-ineligible process allows the process to be patented by passing the machine-or-transformation test. The closest court precedent is *CyberSource Corp. v. Retail Decisions Inc.* (2009), with which the court held that an implementation of a process "over the Internet" is not patent eligible because it fails to meet the machine-or-transformation test. We therefore only recognize transformations of physical objects or substances. The machine-implementation part of the test is even less specific, but is ignored for now as it was not an issue in *Bilski*.

Nonetheless, because the machine-or-transformation test has the deepest-rooted court precedent, from nineteenth century cases, and provides reliable results, it is considered, with corollaries, to

be the only applicable test for patent-eligible subject matter. Over a hundred years ago SCOTUS in *Cochrane v. Deener* defined a patent-eligible process as "an act, or a series of acts, performed upon the subject matter to be transformed and reduced to a different state or thing."

The test described in *State Street* is no longer considered a reliable test and is deemed unconstitutional according to the dissenting arguments given by Judge Mayer in *Bilski*,

> The patent system is intended to protect and promote advances in science and technology, not ideas about how to structure commercial transactions... Affording patent protection to business methods lacks constitutional and statutory support, serves to hinder rather than promote innovation and usurps that which rightfully belongs in the public domain. *State Street* and *AT&T* should be overruled.

Art. 1 sec. 8 cla. 8 of the Constitution provides the constitutional basis for the granting of copyright and patents,

> To 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;

Since the Constitution does not necessitate patent law but rather only permits it, patents are clearly not natural rights. They are instead "exclusive rights," or in effect government-granted monopolies. They need not be granted, and can only be granted to "promote the progress of science and useful arts." We agree with Judge Mayer that the commercial and financial transactions supported by "business method" patents, including those applications submitted by Applicants, fail to "promote the progress of science and useful arts." We also fail to recognize the public benefit of granting "exclusive rights" for methods of commercial transactions which would otherwise be in the public domain.

We find that the approval of a "business method" is unconstitutional. Even if a "business method" could be interpreting as promoting "the progress of science and useful arts," it would still contradict the First Amendment (ACLU *amicus curiae* brief). A "business method" patent does not even require a transaction to take place; a simple thought can trigger legal liability.

A constitutionally-valid test for patent-eligible subject matter must reject unconstitutional patents, therefore the *State Street* test which permitted "business method" patents is unconstitutional. An analysis of the applications of First Amendment rights is discussed on the following page.

We deem the superiority of the machine-or-transformation test. SCOTUS upholds the CAFC decision on the patenting of method claims, particularly business methods.

The eleven patent claims made by Applicants are hereby evaluated under the machine-or-transformation test as they fail to qualify for any of the corollaries. The eleven patent claims involve a method of hedging risks in the trading of commodities and can be considered "business method" patents. Their patent application describes a method to provide energy to consumers in the form of a fixed bill contract. Consumers pay their monthly bills in advance of energy consumption, with the applicable algorithm estimating future energy use from past months. In effect, consumers are "insured" against spikes in energy usage because they have paid a fixed price in advance. Consumers save money if they use more energy relative to other consumers, or pay more if they use less energy relative to other consumers.

The first patent claim describes a method for a broker to hedge risks for consumers of a commodity. The claim states an example of an electric coal power plant utility engaging in hedging transactions to "insure" itself against spikes in the cost of coal. The process which is patented comprisea three steps: first, the initiation of hedging transactions between a broker and consumer to purchase a future commodity at a fixed rate based on historical levels; second, the identification of the producers of the commodity; and third, the initiation of hedging transactions between a broker and producer at a second fixed rate.

Because none of the eleven patent claims are particular to any specific machine, the machine-implementation part of the test can be safely ignored. We do not provide any specifics other than the validity of the machine-implementation part of the test.

The question then arises whether any of the patent claims transform a specific article into a different state or thing. What constitutes transformation? SCOTUS precedent using the machine-or-transformation test has only dealt with a physical substance transformed into another physical

substance. None of the claims of the Applicants concern physical substances. We have considered amicus curiae briefs submitted in favor of the Applicants, which claim electronic signals and electrically-manipulated data to be examples of articles. Nonetheless, we reject these claims, recognizing only the SCOTUS precedent in which physical substances were involved. The concurring opinion by Judges Dyk and Linn in *Bilski* is a supporting factor,

> ...the unpatentability of processes not involving manufactures, machines, or compositions of matter has been firmly embedded in the statute [35 U.S.C] since the time of the Patent Act of 1793, ch. 11, 1 Stat. 318 (1793).

The transformation of non-physical objects, including signals and data, are ineligible patent subject matter. By doing so, we overturn recent CAFC decisions in *State Street*, *AT&T*, and *In re Abele* (1982).

We consider the rejection of the patent eligibility of the transformation of non-physical substances to be the most significant difference between the *State Street* test and the machine-or-transformation test. Under the machine-or-transformation test, with corollaries, nearly all "business method" and computer software functionality transformation processes are ineligible patent subject matter. We direct USPTO to review "business method", computer software functionality, and other patents which may fail the machine-or-transformation test, with corollaries, and reject respective patent applications.

As discussed on page 5, the *State Street* test violates First Amendment rights by allowing "business method" patents. Non-physical objects, unlike physical objects, are often legally equivalent to speech. For example, computer software is written as source code: text intended for a computer to interpret. Computer software can be copyrighted because it is legally equivalent to speech/text. The patenting of computer software functionality restricts free speech rights by taking away the right of programmers to write original source code. Allowing patents would be an unnecessary burden on the public domain when copyright is already applicable. As lately reinforced by SCOTUS in *Citizens United v. FEC* (2010), financial transactions are also legally-equivalent to speech. "Business method" patents, by restricting certain kinds of financial transactions, conflict with the First Amendment. These rights apply to corporations as well as people.

The patenting of non-physical objects has universal effects. While patents on physical objects are restricted to a particular industry, the patents of a non-physical object transformation, like an information process, affect the entire economy because virtually every industry and most personal users use computers or electronics in one way or another (FSF *amicus curiae* brief).

Patents on computer software functionality have become a legal minefield that threatens the entire economy with legal liability. It is impossible to design software that meets certain information technology standards without infringing on patents, even if done for non-commercial purpose, often without even knowing the nature of the patents infringed. Walgreens, the Green Bay Packers, and the Weather Channel have all been sued as simply users of patent infringing computer software written by other companies. Recognizing the long-term threats for interstate commerce in information technology, we fail to see how patents on electronic transformations promote "progress of science or the useful arts."

"Business methods" and computer software functionality patents, as patents of non-physical object transformations lower the bar for obviousness. While adapting and implementing physical object transformations takes considerable time and investment in research and development, modifying non-physical object transformations is often a trivial task with modern computing. Instead of promoting innovation, "business methods" and computer software functionality patents stifle it by guaranteeing the first observer of an obvious idea "exclusive rights" without actually involving an invention.

Smaller companies are in effect prevented from entering the information technology or business markets, that is the entire economy, because they do not have the resources to file and receive grants for patent applications as effectively as larger companies. We find the pattern of cross-licensing patent portfolios between large companies to be disturbing because it singles out specific competitors, especially smaller or newer ones. The threat of legal liabilities, even if false, have driven companies out of business. We find cross-licensing patent schemes to be in violation of 15 U.S.C. § 1–7, the Sherman Antitrust, as amended.

All eleven patent claims made by Applicants involving a method of hedging risks in the trading of commodities fail to either describe a machine-implementation or "transform any article to a

different state or thing," where such a transformation is done on physical objects. Legal options, future contracts, other obligations, and business risks are not physical objects or substances, nor are they representative of physical objects or substances. As abstract ideas, the patent claims wholly fail the machine-or-transformation test.

We sustain the rejection of all eleven claims in Patent Application Serial No. 08/833,892 by CAFC under modified reasoning. We affirm the CAFC decision because of the conclusion that the claims made by Applicants are not directed to patent-eligible subject matter, and in doing so provide clarifications on the nature of what methods constitute a patent-eligible process as specified in 35 U.S.C. § 101.