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LEGAL ALERT

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The Supreme Court Adopts Machine-or-Transformation Test as One Test for Patenting Business Methods

In *Bilski, et al. v. Kappos*, the United States Supreme Court affirmed the use of the Federal Circuit's "machine-or-transformation" test as one test for patentability of processes, but held that it is not the only test for patentability under 35 U.S.C. §101.[1] Rather than endorsing a single bright-line rule for patentability of business methods and other processes, the Court reiterated that the patenting of abstract ideas is prohibited under §101. The Court acknowledged that the "machine-or-transformation" test is a valid test for determining whether processes are patentable subject matter under §101. However, the Court left open the possibility for new tests to be defined to determine whether business methods and other processes are patent eligible subject matter.

The Supreme Court decision confirms that, in some instances, business methods can be patentable subject matter. While other processes embodied by software, diagnostic medical techniques, and medical treatment claims were not specifically analyzed by the Court's decision, these processes also will be subjected to the "machine-or-transformation" test, or future tests defined by the courts to evaluate subject matter for patentability.

The majority decision, delivered by Justice Kennedy, joined in full by Chief Justice Roberts, and Justices Thomas and Alito, and in part by Justice Scalia, broadly interpreted section §101's scope of patent eligible subject matter, and reasoned that the term "process" was intended to be broadly defined with only a limited number of exceptions, such as the laws of nature, physical phenomena, and abstract ideas.[2] Emphasizing that satisfying §101 is only a threshold test, the majority stated that even if a process is patent eligible subject matter, all other requirements under patent law including §102 (novelty), §103 (non-obviousness), and §112 (fully and particularly described) must be satisfied to receive patent protection.[3] The majority also emphasized that the "machine-or-transformation" test is "a useful and important clue" but "not the sole test" for determining the patentability of process claims under §101.[4]

A plurality of the Court, in which Justice Scalia did not join, further stated that prior Court precedents on the unpatentability of abstract ideas can provide "useful tools" for determining patentability of business methods under §101.[5] In adopting a more flexible approach to evaluating patentability under §101, the majority avoided any "categorical rules that might have wide-ranging and unforeseen impacts," and resolved the case narrowly.[6]

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[1] 561 U.S. ___ (2010), No. 08-964, slip. op. at 2 (June 28, 2010).

[2] *Id*. at 7.

[3] *Id.* at 5.

[4] *Id.* at 8.

[5] *Id.* at 12.

[6] *Id.* at 13.

By unanimous decision, the Court held that a risk hedging process claimed by the *Bilski* petitioners was not patentable. Claim 1 of the *Bilski* patent reads:

> A method for managing the consumption risk costs of a commodity sold by a commodity provider at a fixed price comprising the steps of:
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> (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;
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> (b) identifying market participants for said commodity having a counter-risk position to said consumers; and
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> (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 transactions.

Using Court precedents in *Gottschalk v. Benson* (held converting numbers to binary numbers unpatentable), *Parker v. Flook* (held monitoring conditions during petrochemical process using mathematical algorithm unpatentable), and *Diamond v. Diehr* (held application of law of nature or mathematical formula to be patentable), the Court determined that the risk hedging process claims at issue broadly described the concept of hedging and reduced the concept to a mathematical formula.[7] Thus, the Court held that the *Bilski* hedging process claims were not patentable since the concept of risk hedging is an abstract idea, and allowing a patent on the broad concept of risk hedging would monopolize uses of the idea in all fields.[8]

In one of two concurring opinions, the first authored by Justice Stevens and joined by Justices Ginsburg, Breyer, and Sotomayor, the concurring justices expressed caution against the majority approach of broadly interpreting the term "process" to include business methods as patent eligible subject matter under §101, and instead advocated reading §101 to exclude business methods.[9] The other concurring opinion, authored by Justice Breyer and joined by Justice Scalia, advised that the "useful, concrete, and tangible result" test initially defined by the Federal Circuit, and disapproved in the underlying decision, should not be relied upon as a basis for patentability.[10] Both concurring opinions agreed with the majority that the "machine-or-transformation" test is not the exclusive test for patentability.

Perhaps reflecting the Court's cautious approach and self-restraint, the Court's plurality acknowledged that patent law is challenged to find a balance between "protecting inventors and not granting monopolies over procedures that others would discover by independent, creative application

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[7] *Id.* at 15.

[8] *Id.*

[9] 561 U.S. ___ (2010), No. 08-964, slip. op. at 13 (June 28, 2010) (Stevens, J., concurring).

[10] 561 U.S. ___ (2010), No. 08-964, slip. op. at 3 (June 28, 2010) (Breyer, J., concurring) (citing *State Street Bank & Trust Co. v. Signature Financial Group, Inc.*, 149 F.3d 1368, 1373 (Fed. Cir. 1998)).

of general principles," and further stated that the Court did not want to upset the balance by clarifying that "[n]othing in this opinion should be read to take a position on where that balance should be struck."[11] The Court's majority concluded its opinion by leaving the door open for the development of future tests by the Federal Circuit, but cautioned that "nothing in today's opinion should be read as endorsing interpretations of §101 that the … Federal Circuit has used in the past."[12]

While business methods were the only type of process claims analyzed by the Supreme Court in this case, this decision will impact all process claims, including software, diagnostic medical techniques, and medical treatment claims. One non-exclusive test and three Court precedents were addressed by the Court to provide guidance for determining patent eligible subject matter in process claims. The non-exclusive test and Court precedents are as follows:

> Machine-or-Transformation Test (*In re Bilski*): The Federal Circuit held that a patent eligible process either (A) be tied to a particular machine or apparatus, or (B) transform an article into a different state or thing.
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> *Gottschalk v. Benson*: The Supreme Court held that a method for converting numerical information from binary-coded decimal numbers into pure binary numbers, for use in programming conventional general purpose digital computers, is merely a series of mathematical calculations or mental steps, and does not constitute a patentable "process." Transformation and reduction of an article to a different state or thing is the clue to the patentability of a process claim that does not include particular machines.
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> *Parker v. Flook*: The Supreme Court held that updating alarm limits during a catalytic conversion process, in which the only novel feature is a mathematical formula, is not patentable. The process, which contains a mathematical algorithm as one component, is not patentable under §101 because once the algorithm is assumed to be within the prior art, the application, considered as a whole, contains no patentable invention. Even though a phenomenon of nature or mathematical formula may be well-known, an inventive application of the principle may be patented. Conversely, the discovery of such a phenomenon cannot support a patent unless there is some other inventive concept in its application.
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> *Diamond v. Diehr*: The Supreme Court held that a process for curing synthetic rubber, which includes in several of its steps the use of a mathematical formula and a programmed digital computer, is patentable subject matter under §101. The process employed a well-known mathematical equation, but the claims did not preempt the use of that equation, rather, they sought only to foreclose others from the use of that equation in conjunction with all of the other steps in the claimed process.

Care in applying these Court precedents should be taken since only a plurality of the Court, not a majority, described these precedents as "useful tools" for determining patentability of business methods under §101. Furthermore, even though the Court appears to adopt a flexible approach

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[11] 561 U.S. ___ (2010), No. 08-964, slip. op. at 10.

[12] *Id.* at 16.

to evaluating patent eligible subject matter under §101, the viability of the "useful, concrete, and tangible result" test established by the Federal Circuit in the *State Street Bank* decision appears to be in doubt and was disapproved by one of the Court's concurring opinions. The "useful, concrete, and tangible result" test held that a machine programmed with software that produced a useful, concrete, and tangible result is patentable.

With the above test and guidepost decisions in mind, patent applicants considering protection for process-type claims should continue to prepare an appropriate disclosure which supports their patent claims under at least one approved test.[13] For now, the "machine-or-transformation" test is the only approved test, but future court decisions should provide further guidance. Patent applicants should also consider filing, within the same application or family of related applications, different claim sets covering a variety of statutory subject matter (for example, filing system, method, composition of matter and machine or apparatus claims covering the same invention). Finally, patent applicants and owners should be mindful that the Court's decision, as well as future decisions by the Federal Circuit, may lead to additional tests to evaluate the patentability of processes and the validity of patented processes under §101.

In conclusion, the Supreme Court's decision is unlikely to affect how patent applications are currently prepared and examined. The decision's most significant effect will likely be in the examination of processes for patent eligible subject matter given the Court's greater latitude for the Federal Circuit to apply other tests to determine patentability of processes during patent examination and challenges to validity during reexamination or litigation. Additional guidance from the Federal Circuit in future cases involving the patentability of certain types of processes, such as diagnostic medical techniques and medical treatment claims, may provide patent applicants and owners with additional tests to evaluate processes for patent eligible subject matter.

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If you have any questions about this Legal Alert, please feel free to contact the attorneys listed below or the Sutherland attorney with whom you regularly work.

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[13] *See* United States Patent and Trademark Office, Memorandum to Patent Examining Corps re: Supreme Court Decision in *Bilski v. Kappos* (June 28, 2010) (instructing examiners to continue using the machine-or-transformation test as a tool for examining processes under §101).