



# PATENT, TRADEMARK & COPYRIGHT



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### PATENTS

*The new legal requirements for patentable subject matter were established under 35 U.S.C. § 101 in the Oct. 30 In re Bilski decision by the U.S. Court of Appeals for the Federal Circuit. The case is now before the Supreme Court. As attorneys and organizations try to navigate this brave new world of patentability, the following article provides some practical tips for obtaining and enforcing patents in this interim period while we await the Supreme Court decision, which is being watched by patent attorneys and agents, corporations, and business entities from almost all corners of the world.*

## The Supreme Court Has Granted Certiorari in the Uber-Important *Bilski* Case—Now What?

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### Overview of the United States Code and the *Bilski* Decision

#### Status of the *Bilski* Case

**O**n June 1, the U.S. Supreme Court granted Bilski's petition for certiorari to hear the appeal of the Federal Circuit's decision in the *In re Bilski* case. *Bilski v. Doll*, No. 08-964 (U.S. cert. granted, June 1,

2009) (78 PTCJ 145, 6/5/09). Thus, the matter is currently pending before the Supreme Court.

*In re Bilski*, which was decided by the Federal Circuit on Oct. 30, held that process claims are subject to the “machine-or-transformation” test for determination of patentable subject matter, as explained in greater detail below. 545 F.3d 943, 88 USPQ2d 1385 (Fed. Cir. 2008) (77 PTCJ 4, 11/7/08). The Federal Circuit held that Bilski’s claims had failed this test. On Jan. 28, Bilski petitioned for certiorari to the Supreme Court to reconsider the Federal Circuit’s decision (77 PTCJ 312, 1/30/09).

The questions to be considered by the Supreme Court include:

1. Did the Federal Circuit make an error by holding that a claimed “process” must be tied to a particular machine or apparatus, or transform a particular article into a different state or thing, also known as the “machine-or-transformation” test, to be eligible for patenting under 35 U.S.C. § 101, in spite of Supreme Court precedent that had declined to limit patentable subject matter for “any” new and useful process except for “laws of nature, physical phenomena, and abstract ideas”?

2. Does the Federal Circuit’s “machine-or-transformation” test for patent eligibility, which effectively forecloses meaningful patent protection to many business methods, contradict the congressional intent for patents to protect “method[s] of doing or conducting business” under 35 U.S.C. § 273?

Looking forward, the next steps include the filing of briefs by the parties (Bilski and the PTO) and the amicus briefs, all of which should be finished by late summer 2009. After the briefs have been filed, oral arguments may be made by the parties before the Supreme Court in the next session (probably in October or November). Once the oral arguments have been heard by the Supreme Court, the decision should come in early to mid-2010.

While it is impossible to know how the court will decide the case, some possible scenarios include the following:

- The Supreme Court agrees with the Federal Circuit, and the machine-or-transformation test stays. If this is the result, then it is likely that the strict examination of claims under 35 U.S.C. § 101 will continue, and the courts will continue to restrict or invalidate patent claims, particularly in the areas of business process patents and software patents. The application of the test may also be extended beyond processes, and to products, articles of manufacture, and compositions of matter as well (e.g., the Board of Patent Appeals and Interferences has extended the application of the *Bilski* machine-transformation test beyond processes).<sup>1</sup>
- The Supreme Court disagrees with the Federal Circuit, and the “useful, concrete, tangible” result test of *State Street Bank* and *AT&T* is the test. If this is

<sup>1</sup> After the Federal Circuit’s *Bilski* decision, the BPAI began to interpret and apply the machine-or-transformation test. Between November 2008 and March 2009, in at least ten decisions, the BPAI has upheld PTO rejections by patent examiners, and has also issued sua sponte (new) rejections by applying this test to process claims as well as claims that include software on a computer readable medium (previously held by the Federal Circuit to be “article” claims), computer systems, and programmed computers.

the result, then it is possible that the rejections under 35 U.S.C. § 101 by patent examiners might be lessened, and the courts may take a less strict approach with respect to patentable subject matter. However, the PTO and the courts may instead turn to prior art as the basis for rejections and invalidity, especially in view of *KSR International Co. v. Teleflex Inc.*, 127 S. Ct. 1724, 82 USPQ2d 1385 (2007) (74 PTCJ 5, 5/4/07).

- The Supreme Court decides that neither *Bilski* or *State Street Bank/AT&T* is the test, and makes a new test. If this is the result, then the new test must be applied to pending applications and existing patents. The validity of current patents may be thrown into question, and the amendment of pending claims in applications might be required. Further, examiners will have to learn, and the PTO will have to issue, new guidelines related to examining claims under 35 U.S.C. § 101.
- The Supreme Court decides that neither *Bilski* or *State Street Bank/AT&T* is the test, but does not adopt a new test, and simply cites to a test from a previous Supreme Court case, such as *Diamond v. Diehr* or *Diamond v. Chakrabarty* as explained below. Such a result might be similar to Judge Rader’s dissent at the Federal Circuit level. For example, the Supreme Court may decide that “anything under the sun made by man” is patentable subject matter, with the exception of natural laws, mathematical algorithms, and abstract ideas.

In any of the above outcomes, it does not appear likely that Bilski’s claims will actually be held to be patentable subject matter. Key issues include the exact procedure that will be used to reject Bilski’s claims, how the general rule will be developed for patentable subject matter, and whether that general rule will be applied to claims other than process claims.

Whatever the Supreme Court decides, the test will be applied to pending applications as well as issued patents. Unfortunately, it appears that the PTO will continue to apply the machine-or-transformation test until the Supreme Court decision, likely in early 2010. Therefore, currently pending applications may pass to issue under the machine-or-transformation test before the Supreme Court decision, and then be subject to a new Section 101 test after the Supreme Court decision.

Below, we discuss the historical development of the law leading up to the present situation, as well as the details of the *In re Bilski* case.

#### *Overview of the Law of 35 U.S.C. § 101*

A basic requirement for obtaining a patent is that the claims of the patent application must include patentable subject matter, as set forth in 35 U.S.C. § 101:

Whoever 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.

Accordingly, Section 101 defines four basic classes of statutory subject matter: process, machine, manufacture, and composition of matter. U.S. courts have further defined the extent and meaning of these terms.

Four exemplary cases are discussed below:

In *Diamond v. Chakrabarty*, 447 U.S. 303, 206 USPQ 193 (1980), the Supreme Court held that it is possible to

obtain a patent on genetically-altered microorganisms. The Supreme Court cited the intent of Congress when passing 35 U.S.C. § 101 into law, holding that “anything under the sun made by man” should be considered patentable subject matter. The Supreme Court held that laws of nature, abstract ideas and natural phenomena should not be eligible for patent protection.

In *Diamond v. Diehr*, 450 U.S. 175, 205 USPQ 488 (1981), the Supreme Court held that it is possible to patent a computer program that applies a mathematical equation to the control of an industrial processing system for controlling the curing of rubber. The court held that while the software *alone* is not patentable subject matter, the software controls a *physical process or machine* and is thus patentable.

In *State Street Bank & Trust Co. v. Signature Financial Group Inc.*, 149 F.3d 1368, 47 USPQ2d 1596 (Fed. Cir. 1998) (56 PTCJ 346, 7/30/98), the Federal Circuit held that a data processing system for implementing an investment structure, as well as for performing administering and accounting functions, should be patentable subject matter as a “machine.” In the holding, the Federal Circuit established that the transformation of dollar amounts, by mathematical calculation, into a final share price, is patentable subject matter because it produces a useful, concrete and tangible result. This case is widely regarded as establishing the patentability of “business methods.”

In *AT&T Corp. v. Excel Communications Inc.*, 172 F.3d 1352, 50 USPQ2d 1447 (Fed. Cir. 1999) (57 PTCJ 510, 4/22/99), the Federal Circuit applied the holding of *State Street Bank* to a “process” claim that included a method of calculating long-distance telephone call billing where multiple service providers are involved. The Federal Circuit held that so long as the claim does not pre-empt other uses of the basic mathematical principle, an algorithm may be patentable as a process.

### ***Bilski*—A New Era of Patentability?**

In 1997, *Bilski* filed a patent application directed to a method of hedging risk for commodity trading. Claim 1 recited the following:

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 transactions

The patent examiner and the Board of Appeals rejected the claim as not being directed to patentable subject matter. *Bilski* appealed and the case was heard by the Federal Circuit en banc.

In addition to considering whether Claim 1 constituted patentable subject matter, the Federal Circuit con-

sidered the general question as to the appropriate test for “process” claims, including whether a process must result in a physical transformation of an article or be tied to a machine in order to be patentable under 35 U.S.C. § 101. Further, the Federal Circuit considered whether the above-noted *State Street Bank* and *AT&T* cases should be overruled. The court also considered how to examine a claim that included some patentable subject matter and some subject matter that is not patentable.

In its Oct. 30 decision, the Federal Circuit held that *Bilski*’s claim was not patentable. Further, the court decided that process claims should be examined based on a “machine-or-transformation” test, in which a process would be considered patentable if the process is tied to a particular machine, or if the process transforms an article into a different state or thing.

While the Federal Circuit did not give any explanation of the definition of “machine,” the “transformation” portion of the test was explained. More specifically, the transformation may be physical (as in the case of *Diamond v. Diehr*) or electronic (as in the case of data that represents a physical object). However, the Federal Circuit held that insignificant limitations such as post-solution activity (adding something well-known or obvious into the claims, such as data-gathering) would not rescue an otherwise unpatentable process claim. Thus, for process claims, the machine-or-transformation test replaced all other prior tests, including the “useful, concrete, tangible” test set forth in *State Street Bank* and *AT&T*.

### **Life After Federal Circuit Decision but Before Supreme Court Decision**

As explained above, *Bilski* is pending before the Supreme Court. Although the final result is unknown, we must consider how to conduct our patent activities in view of the current machine-or-transformation test, at least until the issue is finally decided by the Supreme Court. Further, we also need to consider how to prepare for a possible holding of the Supreme Court.

The remainder of this article focuses on the practical tips that should be followed to in an effort to avoid trouble under 35 U.S.C. § 101 based on the present state of the law under *Bilski* and taking into account some of the possible outcomes of the Supreme Court’s decision as set forth above.

Of course, we cannot account for a holding that totally and dramatically changes the law under 35 U.S.C. § 101 as we know it today. However, we do not anticipate a decision that goes drastically beyond the tests that have been applied in the past since such a drastic change could resurrect the prosecution of numerous patents that, heretofore, satisfied Section 101.

We offer below some suggestions for navigating this interim period between now and the Supreme Court’s decision.

#### *Practical Tips for Drafting Patent Applications, Prosecution, and Practice*

The months leading up to the Federal Circuit’s *Bilski* decision were replete with speculation about the potential effects of the decision on patent application drafting, prosecution, and post-issuance practice. Immediately after the decision, there was also significant speculation about how much the decision would practically factor into the analysis of the examiners at the

PTO when considering patentable subject matter under 35 U.S.C. § 101.

Several months have passed since the *Bilski* decision and patent attorneys and agents have had a chance to observe how the examiners are applying the decision. Based on observations and, more importantly, interviews with examiners regarding their recent rejections of method claims as allegedly failing the *Bilski* machine-or-transformation test, provided below are some practical tips to responding to and preemptively addressing the PTO's apparent stricter application of the machine-or-transformation test. Also, there is provided below forward looking suggestions in anticipation of the Supreme Court decision in this case.

Back in the spring of 2008, prior to the Federal Circuit *Bilski* decision, there was an internal PTO memorandum that encouraged the examiners to apply a machine-or-transformation test when determining patent eligibility under 35 U.S.C. § 101. Between spring 2008 and the *Bilski* decision, there only appeared to be a small increase in the number of rejections in which the examiner rejected process claims as failing to satisfy the machine-or-transformation test.

The examiners may have been at a loss as to how strictly to apply the test. For example, a process claim that did not satisfy the transformation part of the test, but could at least *implicitly* be tied to a particular machine, may have passed muster under 35 U.S.C. § 101 prior to the *Bilski* decision, as some examiners recognized that certain operations of a process claim had to inherently be performed by an apparatus (and could not be performed as a mental process). However, the period has passed when examiners will allow process claims to pass muster under the machine part of the machine-or-transformation test even when it is inherent or implied that the operations of the relevant method claim are performed by a machine.

Examiners now require that there be *explicit* tying of a specific apparatus to a process claim to satisfy the machine part of the test. Thus, it is clear that the examiners have taken a stricter approach to application of the machine-or-transformation test as announced in *Bilski*. In view of the examiners' newfound zeal in applying the test, below are some practice tips on ways to respond to and proactively deal with the examiners' new enthusiasm related to this test:

The examiners' eagerness to apply the *Bilski* test has manifested itself in rejections that resemble the following, which was recited in a recent Office Action:

6. Claims 10-17 and 20 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

In view of MPEP 2106.IV.B, a 35 USC § 101 process must:

- 1) Be tied to another statutory class (such as a particular apparatus) (*Diamond v. Diehr*, 450 US. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584 n.9[, 198 USPQ 193] (1978); *Gottschalk v. Benson*, 409 US. 63, 70[, 175 USPQ 673] (1972); *Cochrane v. Deener*, 94 U.S. 780, 787-88 (1876)); or
- 2) Transform underlying subject matter (such as an article or materials) to a different state or thing (*Gottschalk v. Benson*, 409 U.S. 63 (1972); and *In re Bilski*).

In view of the above reasons, Claim 10 failed to comply to the above 35 USC § 101 requirements and therefore is directed to non-statutory subject matter. Dependent Claims 11-17 and 20 are also rejected.

In view of the numerous method claim rejections many applicants have been receiving and will continue to receive into the foreseeable future, the following are some recommendations regarding *Bilski*-related rejections.

## Drafting Patent Applications

Of course, it is always best to be proactive. If applicants can draft their patent applications to avoid challenges from the examiners, that is the best course of action. In view of the *Bilski* machine-or-transformation test, when drafting a new patent application, an applicant should consider at least the following:

- The specification should clearly set forth the technical aspects of the invention in detail so that one of ordinary skill in the art would understand how to make and implement the invention; including any technical details related to the transformation of data. That is, to the extent that the patent application explicitly supports or could possibly support process claims, include significant detail on the technical transformation of data via the processes.
- As appropriate, describe in the specification the specific machines/devices (e.g., router, mobile device) that can perform the operations of any processes. Ensure that multiple examples and embodiments are included in the specification.
- Based on interviews with examiners, our experience has been that applicants only need to tie a particular machine to one operation of the process claim. However, ensure that the machine or apparatus is not included in the claim as mere *extra/post-solution* activity.
- Include systems and Beauregard style claims in application. However, note that at least one recent BPAI decision and new PTO guidelines may make it more difficult to obtain allowance of Beauregard claims (77 PTCJ 637, 4/10/09).

Even if the Supreme Court does not affirm the Federal Circuit's holding in *Bilski*, the suggestions above may still be helpful in maintaining a broad scope of protection, regardless of the rule to be applied.

## Prosecuting Previously Filed Applications

For patents that have already been filed, there are other tips that applicants can, and should, employ. To overcome the "machine" part of the machine-or-transformation test while prosecuting an application, consider the following:

- Tie a particular machine/apparatus *that is supported by the specification to one of the operations of the process claim in question*. Do not unnecessarily add additional limitations to several operations of a process claim as most examiners are only requiring that one operation be tied to a particular machine to satisfy the machine part of the machine-or-transformation test.
  - Ensure that the operation does not represent *post- or extra-solution* activity.
  - Some examiners initially required that each operation be tied to a particular machine/apparatus; however these examiners were able

to be persuaded that only one operation needs to be tied to a specific apparatus/machine.

- Use as broad language as possible to reflect a particular machine that is being tied to the operation of the claim at issue. For example, “mobile device” may be sufficient to use instead of “cell phone.”
- Before amending claims to tie a particular machine to an operation of a process claim, determine whether the claim as currently drafted at least arguably *transforms* an article into a state or thing. If it is arguable that some form of data is being transformed, applicant may want to make this argument without amending, to avoid unnecessarily narrowing the claim.
- Interview the examiner with respect to *Bilski*-related rejections, as we have found that there are different interpretations of the machine-or-transformation test among the examiners, which is often the case when new case law is implemented at the PTO.
- Note that simply amending the preamble to tie the method to a computer or machine may not suffice to satisfy the machine part of the *Bilski* test. For example, “apparatus-implemented method” or “computer-implemented method” may not satisfy the test. See *Ex parte Halligan*, App. No. 2008-1588 (B.P.A.I. Nov. 24, 2008) (77 PTCJ 130, 12/5/08).<sup>2</sup>
- Lastly, in view of the possibility that the Supreme Court may announce a new test for patent eligibility under 35 U.S.C. § 101, if an application is allowed between now and the Supreme Court decision, an applicant may want to consider filing a continuation application in order to prosecute different claims if necessary if there is a new Supreme Court test. This should especially be considered in important cases where the applicant is particularly concerned about a new rule and/or where

<sup>2</sup> The recommendations above mostly relate to how to satisfy the “machine” part of the *Bilski* test. Satisfying the “transformation” part of the test will largely depend on an applicant’s ability to argue whether there is transformation of some article into a state or thing in a particular claim. Thus, this aspect of the *Bilski* test is much more subjective and subject-matter specific and the likelihood of success will substantially depend on how well the original specification was written to set forth the technical details of how an article is transformed into a state or thing.

These considerations are based on analysis of the Federal Circuit *Bilski* decision and interviews with the examiners and their supervisors about their expectations of how to satisfy the machine-or-transformation test. Since the examiners are not concerned about maximizing the scope of the claimed invention, when attempting to overcome *Bilski*-related rejections, do not automatically implement the examiners’ suggestions without independent consideration, to avoid unnecessarily narrowing the claim scope.

Interviewing the examiners regarding the *Bilski*-type rejections can be an effective and efficient way to understand and respond to the examiner’s position. Moreover, in view of the somewhat unclear scope of the *Bilski* test to be applied by examiners, this issue can be more easily resolved by speaking with the examiner. On more than one occasion, an interview has resulted in the examiner agreeing to withdraw the rejection after the patent attorney explained to the examiner how and why the machine-or-transformation test was satisfied. Thus, one can avoid unnecessary correspondence with the examiner and adding unnecessary limitations by interviewing the examiners with respect to the new *Bilski*-related rejections.

an applicant has made narrowing amendments to claims in order to satisfy the current machine-or-transformation test. If the Federal Circuit *Bilski* decision is affirmed, then the continuation application could simply be abandoned. Of course, there is a cost-benefit analysis that the applicant must undergo to determine whether this strategy would be a viable option.

### Post Issuance Practice Tips

Once a patent is granted, it is presumed to be valid. However, when a legal standard changes, all existing patents must be interpreted based on the new legal standard—even if they were granted under the old legal standard. Therefore, a process claim that was allowed and patented based on the *State Street Bank* test of a “useful, concrete and tangible” result or the “machine-or-transformation” test, must be reconsidered in view of whichever test the Supreme Court finally adopts. Thus, the following tips apply at present for the machine-or-transformation test, but might also be applicable in the same manner if the Supreme Court adopts a different rule.

If an accused party believes that the claims do not pass the *Bilski* test, validity may be challenged. For example, a defendant in patent infringement litigation may allege the claim is invalid under 35 U.S.C. § 101. Alternatively, the non-patentee may file a declaratory judgment action, requesting the patent to be declared invalid under 35 U.S.C. § 101. The patent may be held invalid by the court if it fails the machine-or-transformation test.

If a patentee believes that its claims are not valid, there are several options for enforcement. First, if the patent contains apparatus or system claims as well as process claims, the patentee may choose to only enforce the non-process claims, which the Federal Circuit held would not be examined under the *Bilski* test, thus depriving the accused party of the invalidity defense based on *Bilski*.

Second, if the patent only includes process claims and if there is a pending continuation or other related application that has not yet been granted, the claims of that application may be modified to comply with *Bilski*.

Third, if there are no non-process claims in the patent, and there are no related applications pending before the PTO, the options are somewhat more limited. Unfortunately, reexamination is only available to consider prior art publications that raise a substantial new issue of patentability. Because 35 U.S.C. § 101 is not directed to consideration of prior art issues, determination of patentable subject matter alone would not be a sufficient basis for reexamination.

On the other hand, it may be possible to file a reissue application, if there was an error that resulted in the patent having more or less claim scope that the applicant was entitled to. However, it should be noted that there are restrictions on the filing of a reissue application, such as the prohibition on filing a reissue application that broadens the claim scope more than two years after the issue date, as well as the prohibition on filing a reissue directed to recapture of subject matter previously surrendered during the prosecution of the original patent. With these considerations in mind, in some cases, reissue may still be a viable option to correct the claims, if the conditions for filing the reissue application are met.

## Conclusion

The legal standard for judging the patentability of a process claim under 35 U.S.C. § 101 has been changed from the “useful, concrete, tangible” test to the “machine-or-transformation” test as a result of the Federal Circuit’s *In re Bilski* decision, and may be changed again once the Supreme Court renders its decision. The recommendations above present options to help obtain and enforce process claims.

Needless to say, there is going to be much commentary, speculation, and conjecture about the direction the Supreme Court will go in making a decision in this widely-watched case. Many, including the authors of this article, feel that the court will not simply affirm the *In re Bilski* decision of the Federal Circuit, as that decision heavily cited to the Supreme Court’s past deci-

sions. The court seemingly would have denied the petition for certiorari had it believed that the Federal Circuit properly applied the past Supreme Court decisions to arrive at the “machine-or-transformation” test as the test for determining patent eligibility of process claims.

The anticipation is already starting to build as amici are starting to draft their briefs in preparation for what will surely resemble an old school heavyweight boxing match to unify all of the championship belts. However, as the battle plans are being made and as the fate of patent eligibility of process claims exists in the not-so-distant future, applicants and soon-to-be applicants must now formulate a strategy for proceeding such that the strategy takes into account the different possible outcomes of the Supreme Court decision. Some of the tips above may help in developing such a strategy!