U.S. Patent Office Puts Its Own Mark on the Patentable Subject Matter Test in New Interim Guidelines for Examiners

Programmed Computers and Beauregard Claims Supported

The U.S. Patent and Trademark Office (USPTO) recently provided patent examiners with new “Interim Examination Instructions for Evaluating Subject Matter Eligibility Under 35 U.S.C. § 101” (“interim guidelines”). These interim guidelines should result in more uniform examination of software and business method claims under the machine/ transformation test of the Federal Circuit’s *Bilski* decision, until the Supreme Court decides the pending appeal of that decision. Additionally, the USPTO has rejected aspects of a controversial Federal District Court decision that threatened the validity of hundreds of previously patented computer readable storage medium claims, and has at least partly lifted a cloud from over claims to computer systems and computer implemented methods.

Although the Federal Circuit Court of Appeals, in *In re Bilski*, 545 F3d 943 (Fed. Cir. Oct. 30, 2008) (en banc), cert. granted, *Bilski v. Doll*, No. 08-964, June 1, 2009, set out a two-part machine-or-transformation test for determining when a claimed process is patent-eligible under §101, patent drafters have struggled to come to grips with unresolved issues and inconsistent post-*Bilski* rulings. The *Bilski* test for method claims requires that the claimed process either (1) is tied to a particular machine or apparatus or (2) transforms a particular article into a different state or thing. The use of a specific machine or transformation of an article must impose meaningful limits on the claim’s scope to impart patent-eligibility. Likewise, involvement of the machine or transformation in the claimed process must be more than insignificant extra-solution activity. Applying this test to Bilski’s method for identifying market participants and initiating balancing commodity transactions to hedge risk, the court found no tie to a machine and no transformation of a physical article.

Despite the Federal Circuit’s decision, interpretation of subject matter eligibility has varied among examining groups, in decision of various panels of the Board of Patent Appeals and Interferences and in lower court rulings. In the face of serious inconsistencies, examiners at the USPTO must confront the full range of subject matter eligibility issues on a regular basis. They must decide whether to allow or reject applicants’ claims under Section 101 without waiting for clarification from the courts. In the interim guidelines, the USPTO applied the *Bilski* machine/transformation test to the extent the Federal Circuit deals with subject matter eligibility, but also clarifies additional areas, such as machine and product claims to programmed computers and computer readable storage media, as well as method claims involving data transformation.

In summary, the USPTO’s interim guidelines prescribe a two-step analysis for subject matter eligibility: (1) determining whether the claim is directed to one of the four patent-eligible subject matter categories (process, machine, manufacture or composition of matter); and (2) determining whether the claim wholly embraces a judicially recognized exception to eligible subject matter—namely, abstract ideas, mental processes, laws of nature and natural phenomena (including physical phenomena, scientific principles, systems that depend on human intelligence alone, disembodied concepts, and disembodied mathematical algorithms and formulas), given the courts’ view that “the basic tools of scientific and technological work are not patentable.”

According to the interim guidelines, “[w]hen subject matter has been reduced to a particular practical application having a real world use, the claimed practical application is evidence that the subject matter is not abstract, not purely mental and does not encompass substantially all uses (pre-emption) of a law of nature or a natural phenomenon.”

The interpretations now provided to examiners across the USPTO will provide a level of consistency upon which applicants hopefully will be able to rely. Ambiguities remain, but in some cases, the interim guidelines support approaches to claiming software and business methods that have been in doubt in light of decisions applying the Bilski test, and may dampen fears that certain types of patented claims could be found invalid under Section 101. The following discussion highlights some particular subject matter areas the USPTO has addressed in the interim guidelines.

**Beauregard Claims**

The interim guidelines note specifically that “a claim to a non-transitory, tangible computer readable storage medium *per se* that possesses structural limitations under the broadest reasonable interpretation standard to qualify as a manufacture would be patent-eligible subject matter.” Adding executable instructions or stored data to such a statutory-eligible claim would not render the medium non-statutory, so long as the claim as a whole has a real world use and the medium does not preempt all practical uses of a judicial exception. Thus, a computer readable storage medium can be a tangible embodiment rather than an abstract concept having no practical application.

Permitting a Beauregard claim to a manufacture has long been the USPTO position, in contrast to the recent decision in *Cybersource Corp. v. Retail Decisions Inc.*, No. C 04-03268, 2009 U.S. Dist. LEXIS 26056, at 20-21 (N.D. Cal. Mar. 26, 2009), and the position of the Board of Patent Appeals and Interferences. In the *Cybersource* decision, Judge Patel found that a claim to a “computer readable medium containing program instructions . . .” was subject to the Bilski test, and further found that, “[f]ollowing Bilski, the Board has rightly held that simply appending ‘A computer readable media including program instructions . . .' to an otherwise nonstatutory process claim is insufficient to make it statutory. See *Ex parte Cornea-Hasegan*, 89 U.S.P.Q.2d 1557, 1561 (B.P.A.I. 2009).” The USPTO has chosen not to follow this approach in the interim guidelines.
General Purpose Computers

Similarly, when dealing with machine claims, the interim guidelines state that “a computer programmed with executable instructions is typically construed as a base structure combined with functional descriptive material that could create a patentable distinction over the prior art.” This approach wisely avoids having examiners determine whether a claim to a computer system is actually a claim to a method. As discussed below, a general purpose computer becomes a special purpose computer when the computer is programmed to perform particular functions pursuant to instructions from program software.

Computer-Implemented Processes

An outstanding question of great importance following *Bilski* is as follows: when can a programmed general purpose computer provide sufficient machine implementation of a method to satisfy the *Bilski* test? The interim guidelines answer generally this question by focusing on the requirement that a process be “tied to a particular machine or apparatus.” Programming of a general purpose computer can create a sufficiently “particular” new machine—in effect, a special purpose computer—when the computer is programmed to perform particular functions pursuant to instructions from program software. The claim must be limited to the particularly claimed combination of programmed instructions performing the particularly claimed combination of functions.

Furthermore, (1) the use of the particular machine or the transformation of the particular article must impose a meaningful limitation on the claim’s scope by, for example, being present in more than a mere field-of-use limitation and (2) the use of the particular machine or the transformation of the particular article must involve more than insignificant extra-solution activity. And, overall, the method must not be so abstract and sweeping as to have no real-world application or preempt substantially all practical uses of a mathematical algorithm, a law of nature or a natural phenomenon.

The interim guidelines provide only limited explanation of how to apply these requirements. In fairness, each claim will present its own limitations for review, but it would be helpful for the USPTO to publish several examples of claims, from or based on published applications, that have met the test of the interim guidelines in the case of software and business method processes, as well as examples of claims that did not.

Data Transformation

The interim guidelines adopt the data transformation exception of the *Bilski* decision in a broad form. Whereas the *Cybersource* decision limited this exception to data that “visually depict[s]” a physical object or substance, the USPTO takes the view that an article can be electronic data that represents a physical object or substance if the data is more than an abstract value and is identified by indicating what the data represents, the particular type or nature of the data and/or how or from where the data was obtained.

Transformation of such data must be more than mathematical manipulation *per se*. Transformation of electronic data may occur when the nature of the data has been changed such that it has a different function or is suitable for a different use.
Arguably this approach would treat data representative of a physical object (for example, a grade 9 asphalt roof) transformed by use in a business algorithm (for example, an insurance algorithm using the roof grade for setting a property insurance premium) as meeting the transformation test. The roof grade data, which represents the compositional quality of part of a structure, is transformed by combination with other relevant underwriting data so that it has a different function—namely, an ability to represent the risk of insuring the structure. The data as transformed still is representative of the structure, in that it represents the cost of insuring the structure. If this sort of transformation is not sufficient, then the applicant is penalized for claiming too much transformation, a result that would not make sense in the case of the physical object itself.2

**Conclusion**

Overall, the interim guidelines should help to reduce the chaos surrounding the post-*Bilski* treatment of process claims, as well as claims in other statutory classes that some would treat as process claims. If patent drafters provide good technical support in patent application specifications and write claims carefully, the interim guidelines suggest that Beauregard claims, claims to programmed computers, computer-implemented processes and process claims based on data representative of physical objects or substances should all be available options for protection of inventions.

Time will tell how closely the Solicitor’s brief in *Bilski v. Doll* tracks the interim guidelines and, ultimately, whether the Supreme Court adopts the machine/transformation test.

*This article by Jeff Young, partner in the firm’s Intellectual Property Group, was originally published in the September 8, 2009, edition of IP Law360.*

---

If you would like to receive future *Intellectual Property Advisories* electronically, please forward your contact information including e-mail address to ip.advisory@alston.com. Be sure to put “subscribe” in the subject line.

For further information, please contact any of the attorneys in Alston & Bird’s Intellectual Property and Technology Transactions or Intellectual Property Litigation Groups.