



September 27, 2010

The Honorable David J. Kappos
Under Secretary of Commerce for Intellectual Property and
Director of the United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

Re: Response to Request for Comments on the Interim Guidance for Determining
Subject Matter Eligibility for Process Claims in View of *Bilski v. Kappos*
75 Federal Register 43922 (June 27, 2010)

Dear Under Secretary Kappos:

The American Intellectual Property Law Association (AIPLA) appreciates the opportunity to offer comments in response to the Request for Comments on Interim Guidance for Determining Subject Matter Eligibility for Process Claims in View of *Bilski v. Kappos* (the “Bilski Interim Guidance”).

AIPLA is a national bar association whose more than 15,000 members are primarily lawyers and other patent practitioners in private and corporate practice, in government service, and in the academic community. Our members represent both owners and users of intellectual property.

Introduction and General Remarks

AIPLA commends the PTO for the initiative in preparing the Bilski Interim Guidance within one month of the publication of the decision in *Bilski v. Kappos*, 561 U.S. ____ (2010), and for the creativity in developing the sets of factors for examiners to apply in determining the patent eligibility of a particular claim. AIPLA also commends the PTO for reemphasizing that each claim must be analyzed as a whole, and that, under the principles of compact prosecution, all grounds for rejection under 35 U.S.C. §§ 101, 102, 103 and 112 should be raised in the first Office Action. We particularly agree with the statement in the Bilski Interim Guidance that “examiners should avoid focusing on issues of patent-eligibility under § 101 to the detriment of

considering an application for compliance with the requirements of §§ 102, 103, and 112, and should avoid treating an application solely on the basis of patent-eligibility under § 101 except in the most extreme cases.”

We are, however, concerned that another statement in the *Bilski* Interim Guidance may undermine this principle, in particular, the statement in section V that, “[s]ection 101 is merely a coarse filter and thus a determination of eligibility under Sec. 101 is only a threshold question for patentability.” This statement appears to allow an examiner to reject a claim on 101 grounds without analyzing the claim under sections 102, 103 and 112.

Rather than a “threshold question of patentability,” we believe that the analysis of a claim in considering the judicially created exceptions under section 101 should be viewed as a safeguard to prevent the patenting of a claim for an abstract idea, law of nature or natural phenomenon, even though the claim passes the tests of patentability under sections 102 and 103 and 112. We believe that the Supreme Court’s decision in *Bilski* supports this role for the judicially created exceptions because the majority recognized the primacy of statutory law over judicially created rules and because of the flexible nature of the test for patent eligibility.

The *Bilski* Interim Guidance requested comments generally but indicated that the Office was particularly interested in receiving answers to three questions:

1. What are examples of claims that do not meet the machine-or-transformation test but nevertheless remain patent-eligible because they do not recite an abstract idea?
2. What are examples of claims that meet the machine-or-transformation test but nevertheless are not patent-eligible because they recite an abstract idea?
3. The decision in *Bilski* suggested that it might be possible to “defin[e] a narrower category or class of patent applications that claim to instruct how business should be conducted,” such that the category itself would be unpatentable as “an attempt to patent abstract ideas.” *Bilski* slip op. at 12. Do any such “categories” exist? If so, how does the category itself represent an “attempt to patent abstract ideas?”

Before providing comments on these three questions, we provide general comments on the Interim *Bilski* Guidance.

Compact prosecution

As stated above, AIPLA commends the Office for emphasizing that examiners should state all non-cumulative reasons and bases for rejecting claims under 35 U.S.C. §§ 101, 102, 103 and 112 during the initial review of the application, and should not rely solely on rejections under section 101. It has been AIPLA's position that section 101 is only one test of patentability, and that claims which have subject matter eligibility issues under section 101 often have related issues under sections 102, 103 or 112.

If a claim recites only an abstract idea, it is unlikely that it will disclose a definite invention that is enabled over its full scope and supported by an adequate written description. Conversely, if these requirements of the Patent Laws are satisfied, it is unlikely that a claim would be subject to rejection under section 101. Thus, it is important that Compact Prosecution be emphasized in determining patent eligibility under section 101, and that the examining corps receive proper training, especially as to the section 112 requirements of definiteness, written description and enablement.

The *Bilski* majority declined to provide a bright-line test for patent eligibility under the judicially created exceptions of abstract ideas, laws of nature and natural phenomena, and stressed the importance of a flexible test. "Section 101 is a 'dynamic provision designed to encompass new and unforeseen inventions.' *J.E.M. Ag Supply Inc. v. Pioneer HiBred Int'l, Inc.*, 534 U.S. 124, 135 (2001). A categorical rule denying patent protection for 'inventions in areas not contemplated by congress ... would frustrate the purposes of the patent law.' *Chakrabarty*, 447 U.S., at 315."¹ It would be difficult if not impossible for such a flexible test to be "a threshold question of patentability."

The *Bilski* majority first recognizes that the judicially created exceptions are "consistent with the notion that a patentable process must be 'new and useful,' "² and that they are essentially foundational because they "have defined the reach of the statute as a matter of statutory *stare decisis* going back 150 years. See *Le Roy v. Tatham*, 14 How. 156, 174– 175 (1853). The

¹ *Bilski* slip opinion at 8, 9

² *Id.* at 5

concepts covered by these exceptions are ‘part of the storehouse of knowledge of all men ... free to all men and reserved exclusively to none.’ *Funk Brothers Seed Co. v. Kalo Inoculant Co.*, 333 U. S. 127, 130 (1948).”³

This dichotomy between the statutory requirements and the judicially created exceptions is also recognized by the majority opinion in its emphasis that the terms of the statute must be given their ordinary meaning.

This Court has not indicated that the existence of these well-established exceptions gives the Judiciary *carte blanche* to impose other limitations that are inconsistent with the text and the statute’s purpose and design. ... Section 100(b) provides that “[t]he term ‘process’ means process, art or method, and includes a new use of a known process, machine, manufacture, composition of matter, or material.” The Court is unaware of any “ ‘ordinary, contemporary, common meaning,’ ” *Diehr, supra*, at 182, of the definitional terms “process, art or method” that would require these terms to be tied to a machine or to transform an article.

Just as the ordinary meaning or statutory definition of terms should prevail over a court’s gloss on such terms, so too should consideration of statutory requirements precede consideration of non-statutory, judicially created exceptions to the statute. The primacy of the statute justifies a complete examination for the statutory elements (qualifying under one of the listed categories, utility, novelty, nonobviousness, written description, enablement and definiteness) before—or at the same time as—consideration is given the judicially created exceptions under section 101. An examination including the statutory factors can and should catch any dubious claims that would be ineligible under the judicially created exceptions.

Often past cases have addressed section 101 patent eligibility not because it had some priority in the analysis, but because that was the issue presented in the case by the parties. For example in *O’Reilly v. Morse*, 56 U.S. (15 How.) 62 (1853), the Court found the following claim to be unpatentable.

Eighth. I do not propose to limit myself to the specific machinery or parts of machinery described in the foregoing specifications and claims, the essence of my invention being the use of the motive power of the electric or galvanic current, which I call electro-magnetism, however developed, for making or printing intelligible characters, letters, or signs, at any distances, being a new application of that power, of which I claim to be the first inventor or discovered.

³ *Id.*

In its analysis of this claim, the Court stated, “If this claim can be maintained, it matters not by what process or machinery the result is accomplished”⁴ and “he claims what he has not described in the manner required by the law.”⁵ The first of these statements objects to the claim because it preempts an abstract idea—the use of electromagnetism for printing characters at a distance. The second statement, however, objects to the claim because the written description requirement of the patent statute was not satisfied.

Similarly, in *Parker v. Flook* 437 U.S. 584 (1978), the Court found a claim directed to calculating alarm limits to be unpatentable. Although the Court admitted that the claim did not preempt a mathematical formula, it still found the claim not to be patent eligible because “once [the] algorithm is assumed to be within the prior art, the application, considered as a whole, contains no patentable invention.”⁶ This is essentially an obviousness decision. In *Diamond v. Diehr*, 450 U.S. 175 (1981), the Court further analyzed *Flook* as follows: “The application, however, did not ... contain any disclosure relating to the chemical processes at work, the monitoring of process variables, or the means of setting of an alarm or adjusting an alarm system. All that it provides is a formula for computing an updated alarm limit.”⁷ This statement is consistent with the claims being indefinite or lacking sufficient written description or enablement. Thus, rather than rely on section 101, the Supreme Court in both *O’Reilly* and *Flook* could have found the claims to be invalid under § 103 or 112.

For many years, the courts have struggled to find a test for the patent eligibility exceptions, but the statute itself provides the best threshold test. Beyond that, we find ourselves swimming in a quagmire of vagueness and uncertainty (as in the case of signal claims, game board claims, human behavior claims, etc.) As stated by a member of the Board of Patent Appeals and Interferences, “The quest for a bright-line test for determining whether a claimed invention embodies statutory subject matter under 35 U.S.C. § 101 is an exercise in futility.” *Ex parte Bilski* Appeal no. 2002-2257 at 67 (McQuade concurring).

⁴ 56 U.S. 62 at 113

⁵ *Id.* at 120

⁶ 437 U.S. at 594

⁷ 450 U.S. 186

Patent Eligibility Factors

Because the Court has specified a flexible test for patent eligibility with respect to the judicially created exceptions, the analysis to determine whether a claim is invalid due to one of these exceptions is necessarily complex. Thus, the Patent Eligibility Factors proposed by the Office are an appropriate response to the Court's opinion. What is missing, however, are examples of how to apply these factors both to claims that are patent eligible and claims that are not.

Ideally, these examples would be based on cases decided by the Supreme Court and the Court of Appeals for the Federal Circuit. The relevant Supreme Court decisions—*Benson*, *Flook* and *Diehr*—provide only limited guidance. It is difficult to provide examples from previously decided cases of the Federal Circuit, however, because these cases were decided under standards that have now been rejected by the Supreme Court.

We believe that the usefulness of the Bilski Interim Guidance would be greatly enhanced by providing specific examples, using hypothetical claims that show how the factors should be applied and how rebuttals from the patent applicants should be handled. To be most effective, these examples should show the complete analysis of a claim in terms of the statutory requirements under sections 101, 102, 103 and 112 as well as under the judicially created exceptions. However, the examples should not be of cases that are clearly patent eligible or clearly not patent eligible, but rather should show the application of the balancing factors for claims near the border line of patent eligibility.

Questions Posed in the Bilski Interim Guidance

The Bilski Interim Guidance posed three specific questions asking for examples of: 1) claims that do not satisfy the machine or transformation test but are still patent eligible; 2) claims that satisfy the machine or transformation test but are not patent eligible; and 3) suggestions for a narrow category of patent applications claiming business method inventions such that the category itself would be unpatentable as an attempt to patent abstract ideas.

Answers to the first two questions may be useful for examiners applying the judicially created exceptions of abstract ideas, laws of nature and natural phenomena. These examples may help them make an appropriate patent eligibility rejection along with rejections under the statutory

requirements of sections utility, novelty, obviousness, written description, enablement and definiteness. It is our opinion, however, that any attempt to define a classification for the third question is an exercise in futility in view of the flexible nature of the test provided in the *Bilski* decision. Accordingly, we do not provide an answer for that question.

For the first question, we note Morse’s fifth claim from *O’Reilly v. Morse*:

“Fifth, I claim as my invention the system of signs, consisting of dots, spaces, and of dots, spaces, and horizontal lines, for numerals, letters, words, or sentences, substantially as herein set forth and illustrated, for telegraphic purposes.”

While this is not strictly a method claim, is more a concept than an actual manufacture. Because it is an omnibus claim, however, it covers the exact code (the Morse Code) which is described in the application. Thus, even though there is no machine or transformation, the claim covers a well defined concept—a specific telegraphic code. This code has novel aspects in that shorter sequences of dots and dashes were used for more frequently used letters and longer sequences were used for less frequently used letters. There is no indication in the opinion that this claimed invention is anticipated or obvious. Its description in the application clearly satisfies the enablement and written description requirements, and because alternate codes may exist, it does not preempt any and all such codes. Thus, Morse’s claim 5 defines a definite invention with real-world applications, and it does not run afoul of any of the judicially created exceptions.

For the second question, we note Benson’s claim 8:

The method of converting signals from binary coded decimal form into binary which comprises the steps of

- 1) storing the binary coded decimal signals in a reentrant shift register,
- 2) shifting the signals to the right by at least three places, until there is a binary ‘1’ in the second position of said register,
- 3) masking out said binary ‘1’ in said second position of said register,
- 4) adding a binary ‘1’ to the first position of said register,
- 5) shifting the signals to the left by two positions,
- 6) adding a ‘1’ to said first position, and
- 7) shifting the signals to the right by at least three positions in preparation for a succeeding binary ‘1’ in the second position of said register.

This claim recites a specific machine as it includes “a reentrant shift register” and specific algorithmic steps for manipulating the data in the register. If the invention is assumed to be novel and non-obvious, then it appears to meet all of the statutory requirements as it is clearly definite, enabled, and supported by a sufficient written description. The Court found, however, that “[t]he mathematical formula involved here has no substantial practical application except in connection with a digital computer” Thus, the claim fell within one of the judicially created exceptions to patent eligibility.

Examination Process

More generally, we are concerned with the way examiners will make the section 101 determination. One problem is that section 101 includes many components, including the four recited categories: process, machine, manufacture and composition of matter, utility, and the judicially created exceptions. The *Bilski* Interim Guidance states that examiners “will evaluate *the claim as a whole* and weigh the relevant factors.”⁸ However *Bilski* suggests a broader consideration for section 101 determinations, quoting the conclusion in *Flook* that “*the application, considered as a whole*, contain[ed] no patentable invention.”⁹ (Emphasis added.) The *Bilski* opinion also states that “*Diehr* emphasized the need to consider *the invention as a whole*, rather than ‘dissect[ing] the claims into old and new elements and then ... ignor[ing] the presence of the old elements in the analysis.’”¹⁰ (Emphasis added.)

The message from this language in the Court’s opinion is that the “as a whole” test, for purposes of the judicially created exceptions and utility determinations under section 101, should take into account more than just the claim (especially insofar as claims are interpreted in light of the specification) and should encompass particular applications or modes of operation for an invention as expressed in the specification. To be clear, the “as a whole” determination under section 101, made with such broad considerations, is distinct from a determination of patentability or of the scope of exclusive rights, which must be based solely on the properly construed claims. It is simply a determination of whether the “application” or “invention” is directed to one of the categories listed in section 101, leaving the “scope of rights” to the “conditions for patentability” and to questions of prior art.

⁸ 75 Fed. Reg. at 43923.

⁹ *Bilski* slip opinion at 14.

¹⁰ *Id.* at 14-15.

Furthermore, the line between section 101 determinations and determinations under sections 102, 103 and 112 has been dangerously blurred. *In re Bergy*, where the late Judge Giles Rich complained about references to section 101 as a patentability provision, made clear that prior art is not part of the section 101 determination in:

“[W]hen one has only compliance with §101 to consider, the sole question, aside from utility, is whether the invention falls into a named category, not whether it is patentable. Falling into a category, does not involve considerations of novelty or nonobviousness and only those two considerations involve comparison with prior art or inquiry as to whether all or any part of the invention is or is not in, or assumed to be in, the prior art or the public domain. Prior art is irrelevant to the determination of statutory subject matter under § 101. An invention can be statutory subject matter and be 100% old, devoid of any utility, or entirely obvious. This is our understanding of the statute and the basis on which we proceed to the further consideration of these appeals.”¹¹

Finally, if section 101 is to be applied as a threshold question of patentability, it should be applied only to require that an applicant’s invention fall into one of the listed categories, as understood by their “ordinary meaning” or statutory definition. Once the invention falls into one of the listed categories as a threshold matter, the application can easily pass to consideration of the “conditions for patentability” at sections 102 and 103, of the sufficiency of the application under section 112 and the utility requirements and judicially created exceptions under section 101. This tier of the examination will doubtless eliminate many applications that otherwise raise questions about claiming an abstract idea, law of nature or natural phenomenon. For applications raising such questions but not so eliminated, the judicial exceptions to statutory subject matter must be applied.

AIPLA believes that this approach is the most reliable way to observe the admonition in the Bilski Guidance that “examiners should avoid focusing on issues of patent-eligibility under §101 to the detriment of considering an application for compliance with the requirements of §§ 102, 103, and 112, and should avoid treating an application solely on the basis of patent-eligibility under §101 except in the most extreme cases.” 75 FR 43923-24

¹¹ 596 F.2d 952, 962-963 (CCPA 1979).

Conclusion

While AIPLA commends the PTO for providing a quick response to the *Bilski* decision and generally agrees with the format of the test as sets of factors to be applied, we believe that the judicially defined exceptions should not be given precedence during examination over the statutory patentability requirements of utility, novelty, nonobviousness, enablement, written description and definiteness. The *Bilski* Interim Guidance should be revised to emphasize a holistic approach to the examination in which each claim is analyzed as a whole under all of the requirements of patentability and that the judicially created exceptions are viewed as a backstop or safeguard against the patenting of an ineligible process instead of as a threshold question of patentability.

Respectfully submitted,

A handwritten signature in dark ink, appearing to read "Alan J. Kasper". The signature is fluid and cursive, with the first name "Alan" and last name "Kasper" being clearly legible.

Alan J. Kasper

President