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Sent: Monday, September 27, 2010 8:22 PM

To: Bilski_Guidance

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Subject: Microsoft Comments on USPTO's "Interim Guidance for Determining Subject Matter Eligibility for Process Claims in View of *Bilski v. Kappos*"

Importance: High

Microsoft is pleased to provide the attached Comments on the USPTO's *Interim Guidance for Determining Subject Matter Eligibility for Process Claims in View of Bilski v. Kappos*, Docket No. PTO-P-2010-0067, 75 Fed. Reg. 43922 (July 27, 2010). Our comments are provided in both Word and PDF document formats.

If you have any questions or need additional information, please do not hesitate to contact us.

Best regards,

Bart Eppenauer

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September 27, 2010

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Via email: Bilski_Guidance@uspto.gov

Re: Microsoft Comments on “Interim Guidance for Determining Subject Matter Eligibility for Process Claims in View of Bilski v. Kappos” – Docket No. PTO-P-2010-0067

Dear Commissioner Stoll:

Microsoft appreciates the opportunity to provide this submission in response to the request for comments from the U.S. Patent and Trademark Office in the above referenced matter. *See Interim Guidance for Determining Subject Matter Eligibility for Process Claims in View of Bilski v. Kappos, Docket No. PTO-P-2010-0067, 75 Fed. Reg. 43922 (July 27, 2010).*

Overall, we believe that the *Interim Bilski Guidance* reflects the governing Supreme Court case law and that it will provide examiners with helpful and appropriate direction for assessing whether patent claims are directed toward patent-eligible subject matter under 35 U.S.C. § 101. We commend the Office for its timely, balanced, and carefully-crafted guidance, and appreciate its commitment to transparency and willingness to receive input from stakeholders in this matter.

We do believe, however, that the Office should consider several revisions to the factors provided in the *Interim Bilski Guidance* to more closely and clearly reflect Supreme Court case law. Additionally, we have some concerns about the ability to consistently and predictably administer the factors and their application to determinations regarding subject matter eligibility given the (largely unavoidable) subjectivity that is inherent in this type of multi-factor analysis.

Given the nature of our concerns, we provide only a few suggestions or comments to the specific drafting of the *Interim Bilski Guidance*. Our predominant suggestion is that the Office

consider a more explicit articulation of a guiding principle that defines the overarching nature of the Section 101 inquiry. This could serve as the basis for a clearer understanding of the meaning or motivations behind the factors, how they relate to this central principle, and the manner in which the factors are most appropriately applied and balanced to make an assessment of patent eligibility under Section 101. In particular, we propose that the Office consider more explicitly adopting and articulating the theme that runs throughout the Supreme Court case law that the overarching test for assessing patent eligibility under Section 101 is embodied in the distinction between abstract ideas and their practical application. We further suggest that the Office consider incorporating this as both a guiding principle and as a frame of reference against which to assess the various factors.

Consistency of Guidance with Supreme Court Precedents

There is one significant aspect of the *Interim Bilski Guidelines* that we view as inconsistent with prevailing case law. That is the relationship in the Guidelines between the abstract idea exception and the machine or transformation inquiry.

We are concerned that the bulk of the factors in the *Interim Bilski Guidelines* under the “Factors To Be Considered in an Abstract Idea Determination of a Method Claim” appear to be drawn directly from the purported machine or transformation “test” that the Supreme Court *rejected* in *Bilski*. We do not dispute that some variation or generalization of the machine and transformation factors may be appropriate for inclusion in the Office’s Final Bilski Guidance. However, we believe that both the prominence those machine and transformation factors are afforded and their placement at the very top of the list of factors inappropriately elevates these factors to the level of a formal test, and incorrectly suggests that application of the machine or transformation factors constitutes the essence of the “abstract idea” inquiry. Additionally, we question whether the particular factors the Office has provided are sufficiently established and defined in the case law to justify their inclusion in their current form.

a. Prominence and Placement

Quite simply, we believe that both the prominence accorded to the machine and transformation inquiries and their placement as the first two groupings of factors inappropriately elevates these inquiries and will tend to supplant the judicially-recognized exclusion of abstract ideas. Unlike the dichotomy that the Supreme Court has drawn between “abstract ideas” and practical applications, which has formed a central theme in the Court’s jurisprudence for more than a century and a half,¹ the inquiries forming the two prongs of the

¹ See, e.g., *Corning v. Burden*, 56 U.S. 252 (1853) (“[Y]ou cannot take out a patent for a principle; [but] you may take out a patent for a principle coupled with *a mode of carrying the principle into effect.*”) (emphasis added); *Le Roy v. Tatham*, 63 U.S. 132 (1859) (“However brilliant the discovery of the new principle may be, to make it useful it must be *applied to some practical purpose.* Short of this, no patent can be granted.”) (emphasis added); *Cochrane v. Deener*, 94 U.S. 780, 787-88 (1876) (“A process is a mode of treatment of certain materials to *produce a given result.* . . . [B]ut the tools to be used in doing this may be of secondary consequence.”) (emphasis added); *Tilghman v. Proctor*, 102 U.S. 707, 727 (1881) (“Whoever discovers that a certain *useful result* will be *produced*, in any art [*i.e.*, process] ..., by the use of certain means, is entitled to a patent for it.”) (emphasis added); *Holland Furniture Co. v. Perkins Glue Co.*, 277 U.S. 245, 255 (1928) (“A patentable process is a method of treatment of

machine or transformation analysis are referred to only sporadically in the precedents and are drawn from a formulation that the Supreme Court declined to endorse as an explicit test in the *Bilski* decision.

This concern is amplified by Heading C. in the *Interim Bilski Guidance* used to identify the third grouping of factors (“Whether performance of the claimed method involves an application of a law of nature, even in the absence of a particular machine, apparatus, or transformation.”) This seems to cast the Supreme Court’s jurisprudence on the exclusion of abstract ideas from patentability as a narrow exception to the machine or transformation analysis, and could be understood by many readers as suggesting that machine or transformation is both the central test and the appropriate starting point for the inquiry, neither of which seems supported by the *Bilski* decision and long-standing Supreme Court precedent.

In our view, this approach does not reflect the Supreme Court precedents generally, and seems inconsistent with the Court’s practice of referring to machine or transformation primarily as a “clue” or “tool” instead of a “test.” Presumably, the Court declined to endorse machine or transformation as a test and chose instead to apply the traditional “abstract idea” test because the Court believes that there is an important distinction between treating the machine and transformation factors as a “test” and treating those same factors as evidence relevant to the “abstract idea” inquiry. We believe the Office should follow suit by directing examiners’ attention initially to the general “abstract idea” rule or test, and by characterizing the machine and transformation inquiries as factors that are relevant to whether subject matter is an “abstract idea” or a practical application. To a certain extent, this is just a matter of ordering – ensuring that it is explicitly clear to examiners that the overarching inquiry is whether a given claimed invention recites an “abstract idea,” and that the machine or transformation analysis (and its relevant factors) is helpful in that inquiry.

In this regard, we note that Microsoft did advance an articulation of the “abstract idea” test as it could be applied to computer-related process inventions in the amicus brief we filed before the Supreme Court in *Bilski* – along with Koninklijke Philips Electronics N.V. and Symantec Corporation.² In that brief, we first outlined the practical and technological contours of computer-related inventions. We then explained how the patent eligibility of claims describing computer-implemented processes can comfortably be resolved within the traditional eligibility framework developed by the Supreme Court in response to great advances in electronic and communication technologies during the Nineteenth Century. We concluded that under that framework, “a patentable process must involve one or more *disclosed physical things*—that is, it must describe a series of steps that use physical means to produce a result or effect in the

certain materials *to produce a particular result or product*”) (emphasis added); *Waxham v. Smith*, 294 U.S. 20, 22 (1935) (“By the use of materials in a particular manner he *secured the performance of the function* by a means which had never occurred in nature . . . ; this is a patentable method or process”) (emphasis added); *Diamond v. Diehr*, 450 U. S. 175 (1981) (quoting *Tilghman*, 102 U.S. at 722) (“The apparatus for performing the process was not patented, and was not material. The patent pointed out *how the process could be effected*, and that was deemed sufficient.”) (emphasis added).

² This brief is posted at: <http://www.patentlyo.com/am-brief.pdf>

physical world.” In coming to that conclusion, we stated that the term “physical” should be interpreted broadly to mean “anything discernible or measurable, including (for example) electromagnetic signals propagated through the air, electric current transmitted by wire, electrostatic or magnetic charges on appropriate media, or photonic impulses through a fiber optic cable. See John B. Anderson, *Digital Transmission Engineering* 1-5 (2 ed. 2005).” We believe that some articulation along these lines would be appropriate for the Final Bilski guidance as a closer approximation to the “abstract idea” test than the machine or transformation inquiry.

b. Judicial Recognition and Articulation of the Machine and Transformation Factors

Although perhaps not exhaustive, our reading of the case law also suggests that the machine and transformation factors appear only sporadically in the judicial precedents (often in *dicta*), tend to be discussed singly (rather than paired together and posed in the alternative), and lack any standardized or settled articulation. This is not surprising given that courts tend to adopt standard formulations primarily for established tests. While this does not diminish the potential relevance of these factors, it does detract from the clarity and consistency with which courts have described their meaning and appropriate application.

The majority in *Bilski* appears to distance itself from the narrow articulation of the transformation prong that originated in *Cochrane*, stating that:

It is true that *Cochrane v. Deener*, 94 U.S. 780, 788, 24 L. Ed. 139, 1877 Dec. Comm'r Pat. 242 (1877), explained that a “process” is “an act, or a series of acts, performed upon the subject-matter to be transformed and reduced to a different state or thing.” More recent cases, however, have rejected the broad implications of this *dictum*; and, in all events, later authority shows that it was not intended to be an exhaustive or exclusive test.

Bilski, 130 S. Ct. at 3226. Clearly, this statement goes beyond the central holding in *Bilski* regarding machine or transformation (*i.e.*, that it may be a useful analytical tool, but not an exclusive or an exhaustive test), both by referring to the statement as mere “*dictum*” and by stating that subsequent Supreme Court decisions have “rejected [its] broad implications.”³

More generally, because the Court has never conceived of machine or transformation as a formal test, it has not been necessary for the Court to articulate the precise meaning or analytical underpinnings of this analysis with the rigor and clarity that accompanies a formal test. Nor has the articulation of these factors been subjected to the iterative improvement and

³ While this does not constitute a rejection of the relevance of physical transformation as a factor, it does indicate that the specific articulation originating in *Cochrane* – which was the language adopted by the Federal Circuit to describe the transformation prong of its test – connotes something that is at odds with the Supreme Court’s understanding of its own subsequent case law. Unfortunately, the *Bilski* Court did not specify the particular nature or content of these “implications,” making it impossible to discern precisely what aspect of the statement from *Cochrane* the *Bilski* Court disagreed with.

refinement that occurs as courts successively seek to improve the formulation of an established standard by paring it down to its essence.

We would encourage the Office to recast the machine and transformation factors as evidence relevant to the “abstract idea” exception. And we would urge the Office to provide additional guidance clarifying how these factors should be interpreted and applied. From our perspective, it would be particularly helpful for the Office to address fundamental definitional issues about the precise meaning of certain key terms and concepts, such as:

- The meaning and application of “particularity” – is particularity in this context meant in an absolute sense (i.e., any limitation that confines the recited machine to a narrower class than all machines renders the recited machine a “particular machine”)? If not, what standard or point of reference should examiners employ to determine whether the relative particularity of the recited machine suffices to weigh in favor of eligibility? Does particularity in this context bear any relation to particularity under Section 112? In this connection, in our amicus brief before the Supreme Court in *Bilski*, we noted that the inventor must disclose an embodiment of a process that is susceptible to practical application using physical means and disclose those physical means with sufficient particularity to enable others to use the invention – but no particular “machine” is required.⁴
- The meaning and application of “transformation” – what is the scope of subject matter that, if transformed, will weigh in favor of eligibility? Is it limited only to tangible “articles,” or some broader class of physical things? What is the delimiting principal or characteristic that defines this class? Does “transformation” extend to all changes in physical traits and properties or is it limited to changes in some narrower class of physical characteristics (e.g., physical structure)?

Conclusion

We fully recognize that our comments above relate to a set of complex issues for which there are no simple answers or clear solutions. However, we view the decision by the Supreme Court in *Bilski* as a singular moment in the evolution of the law in this area. As such, we should take this opportunity to ensure that proper emphasis is placed on the overarching goal of Section 101 to distinguish between abstract ideas and their practical application. Additionally, we should ensure that appropriate weight is given to the correct elements or factors taken into consideration in making a determination as to whether a given claim is patent eligible.

⁴ Citing to *Cochrane v. Deener*, 94 U.S. 780, 787-88(1876) (“A process is a mode of treatment of certain materials to produce a given result. . . . [B]ut the tools to be used in doing this may be of secondary consequence.”)

With respect to these challenging issues, we believe that the approach suggested above has the potential to provide a clearer understanding and articulation of the ultimate goal of the Section 101 inquiry, and would provide a more intuitive conceptual framework within which to resolve these issues. Irrespective of whether the Office agrees with our concerns or suggestions, we commend the Office for producing the sophisticated and insightful guidance that it has provided in this matter. We look forward to working with the Office in whatever capacity is appropriate to ensure successful implementation of the Office's guidance.

Respectfully Submitted,

A handwritten signature in cursive script that reads "D. Bartley Eppenauer". The signature is written in black ink and is positioned above the typed name and contact information.

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