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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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In re: Docket No. PTO-P-2011-0087

77 Fed. Reg. 7095  
(February 10, 2012)

*Comments by Intellectual Ventures, LLC on Transitional Program for  
Covered Business Method Patents-Definition of Technological  
Invention*

**Attention:**

The Honorable David J. Kappos  
Under Secretary of Commerce for Intellectual Property  
and Director of the United States Patent and Trademark Office  
Mail Stop Patent Board  
P.O. Box 1450  
Alexandria, VA 22313-1450  
Attn: Michael Tierney, Lead Administrative Patent Judge

**Submitted by:**

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<http://www.intellectualventures.com/inventors.aspx>.

Section 18(d)(1) of the Leahy-Smith America Invents Act (the “AIA”), in setting forth a definition of “covered business method patent,” states that the term “does not include patents for technological inventions.” Section 18(d)(2) of the AIA instructs the Director to “issue regulations for determining whether a patent is for a technological invention.” The Notice proposes to add a “Definitions” section (§ 42.301) to Subpart D of part 42 of Title 37 of the Code of Federal Regulations. Subsection (a) of this section includes the definition of “covered business method patent” found in Section 18(d)(1) of the AIA, while subsection (b) proposes a methodology by which it will be determined, on a “case-by-case basis,” “whether a patent is for a technological invention.”<sup>3</sup>

Determining whether an invention is “technological” is extremely amorphous.<sup>4</sup> Indeed, the European experience with a technology requirement in patent law is not especially promising, as it “has led to complicated rules and legal uncertainty.”<sup>5</sup> Accordingly, we appreciate the difficulty of promulgating rules in this area. As discussed below, however, we believe the proposed rules do not go far enough in providing guidance to the public, particularly in view of Congress’s express delegation to the USPTO on this issue.

## II. Comments on the Notice

### A. The USPTO Has Unnecessarily Framed the Proposed Definition for a Patent for a Technological Invention Based on Language from the AIA’s Legislative History.

Proposed Rule 42.301(b) does not actually set forth a definition for whether a patent is for a technological invention. Instead, the subsection states that two factors will be considered on a “case-by-case basis”:

In determining whether a patent is for a technological invention solely for purposes of the Transitional Program for Covered Business Methods (section 42.301(a)), the following will be considered on a case-by-case basis: whether the claimed subject matter as a whole recites a technological feature that is novel and unobvious over the prior art; and solves a technical problem using a technical solution.<sup>6</sup>

Accordingly, on this issue, the USPTO has merely committed itself to consideration of whether the claimed subject matter as a whole (1) recites a technological feature that is novel and unob-

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<sup>3</sup> Notice at 7108.

<sup>4</sup> *In re Bilski*, 545 F.3d 943, 960 (Fed. Cir. 2008) (en banc).

<sup>5</sup> Reinier B. Bakels, *Should Only Technical Inventions Be Patentable, Following the European Example?*, 7 NW. J. TECH. INTELL. PROP. 50, 61 (2008).

<sup>6</sup> Notice at 7108.

vious over the prior art, and (2) solves a technical problem using a technical solution.<sup>7</sup> The proposed “definition,” then, is actually no definition at all, but is instead a loose description of the USPTO’s proposed decision making process.

The only explanation given in the Notice for the proposed rule is that it is consistent with language found in the legislative history of the AIA.<sup>8</sup> As argued below, adherence to this language has led to a proposed rule with a number of significant deficiencies. This result is unfortunate given that the USPTO was not, in this instance, shackled by the legislative history. On the contrary, Congress specifically indicated its intent to have the USPTO use its expertise in this area to promulgate regulations. The USPTO, however, appears to have largely abdicated this responsibility by hewing strictly to language from the Congressional record. While adherence to statements in the Congressional record is generally a desirable goal, in this instance, it should not be elevated to such importance that it leads the USPTO to overlook certain facial problems with statements in the legislative history.

Specifically, when Congress expressly delegates regulatory authority to an agency, deference to that agency’s decisions regarding regulatory implementation is at its zenith:

If Congress has explicitly left a gap for the agency to fill, there is an express delegation of authority to the agency to elucidate a specific provision of the statute by regulation. Such legislative regulations are given controlling weight unless they are arbitrary, capricious, or manifestly contrary to the statute.<sup>9</sup>

Presumably, Congress expressly delegated authority to the Office to define “technological invention” in order to benefit from the USPTO’s special expertise in patent law. It seems improbable that in doing so, Congress intended for the USPTO to simply reiterate statements from the legislative history. That is, if Congress had intended to dictate the terms of what constitutes a “technological invention,” it had every opportunity to do so in the statute. Yet it relinquished that authority in the most unambiguous possible manner: by expressly ordering the Director to assume the task. Thus, for the USPTO to simply cite nonbinding Congressional debate as its primary rationale for its proposed definition conceivably *contradicts* Congress’s intent that, through express delegation, the USPTO exercise its *independent judgment* regarding the definition of “technological invention.”

#### B. Issues with Proposed Rule 42.301.

1. The Proposed Rule Is Not Clear as to Whether a Single Technological Claim Triggers the Exception.

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<sup>7</sup> *Id.* at 7096.

<sup>8</sup> *Id.* (citing to the legislative history of the AIA).

<sup>9</sup> *Chevron U.S.A. Inc. vs. Natural Resources Defense Council, Inc.*, 467 U.S. 837, 843-44 (1984).

It appears that the initial portion of the definition of “covered business method patent” can be satisfied on the basis of a single claim:

(a) *Covered business method patent* means a patent that claims a method or corresponding apparatus for performing data processing or other operations used in the practice, administration, or management of a financial product or service...<sup>10</sup>

Thus, if at least one claim meets this test and the “technological invention” exception does not apply, the patent is eligible for review under the Transitional Program. With respect to the exception, the proposed rule states that the term “covered business method patent” “does not include patents for technological inventions.”<sup>11</sup> It is not clear from the wording of the exception whether it is triggered by the presence of a single claim to a technological invention, or whether some other standard applies. This ambiguity is not problematic in situations in which there are no claims in a patent to technological inventions (meaning the patent is eligible for the Transitional Program), or in situations in which all claims in a patent are to technological inventions (meaning the patent is not eligible for review). The proposed rule, however, does not clearly address a situation in which a patent includes claims that qualify as a technological invention as well as claims that do not so qualify.

It is noted that this ambiguity is not of the PTO’s own creation—the language of proposed rule 42.301(a) is taken directly from the AIA.<sup>12</sup> As noted above, however, Congress delegated authority to the USPTO to promulgate rules regarding the technological invention exception. Given this delegation, it is incumbent upon the PTO to address all aspects of the exception, including this ambiguity, in its rulemaking efforts, and not simply leave the question for another day.

Regarding this ambiguity, we submit that the text of Section 18(d)(1) of the AIA suggests that the exception should apply if a patent includes a single claim that can be classified as a “technological invention.” In such an instance, a patent can fairly be said to be a “patent for [a] technological invention[.]” The fact that a patent might also include non-technological claims does not change this categorization. If Congress had intended a different result, it could, for example, have defined “covered business method patent” to refer to a patent that includes a claim to “a method or corresponding apparatus for performing data processing or other operations used in the practice, administration, or management of a financial product or service, where the claim is not for a technological invention.” Instead, by phrasing the exception in terms of a technological *patent*, from a strictly textual basis, Congress appears to have chosen a standard under which the presence of a single technological claim triggers the exception.

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<sup>10</sup> Notice at 7108.

<sup>11</sup> *Id.*

<sup>12</sup> Leahy-Smith America Invents Act, Publ. L. No. 112-29, § 18(d)(1), 125 Stat. 284, 331 (2011).

In short, the USPTO should take a position on this question, clarifying whether the technological invention exception is triggered by a single technological claim, or whether some other standard applies.<sup>13</sup>

## 2. The Approach Set Forth in the Proposed Rule—A Consideration of Factors to be Evaluated on a “Case-By-Case Basis”—Is Too Arbitrary.

As noted above, proposed Rule 42.301 does not provide any affirmative guidance as to what constitutes a “technological invention.” Instead, the USPTO simply states that it will consider at least two factors and make a determination as to the applicability of the exception on a case-by-case basis.<sup>14</sup> Accordingly, the proposed rule provides very little guidance regarding whether a claim is directed to a technological invention or not. Indeed, as the proposed rule is written, there is no assurance that a claim will be found to be directed to a technological invention even if the claim satisfies the criteria set forth in the proposed rule. Such uncertainty is extremely undesirable.

We recognize that it will not be possible (nor would it be advisable) to enact a bright-line rule for this inquiry. We believe, however, that some greater degree of specificity is possible, and would be advisable for purposes of notice to the public and stakeholders. Such increased specificity is important for a variety of reasons, including patent valuation. Patents that are more likely to be subject to the Transitional Program face an additional obstacle in terms of monetization, and thus may need to be valued differently based on the increased possibility of being subject to this new proceeding.

As an improvement over the approach embodied in the proposed rule, we suggest that it would be desirable to craft a provision that, if satisfied, would qualify a claim as a technological invention. Similarly, it would be desirable to craft another provision that, if satisfied, would disqualify a claim from being a technological invention. The two provisions should, of course, be mutually exclusive. Claims that do not satisfy either of these provisions can be handled on a case-by-case basis.

## 3. The Use of “Technological Feature,” “Technical Problem,” and “Technical Solution” to Define “Technological Invention” Borders on the Tautological.

The two criteria that the USPTO has proposed to consider in determining whether a claim constitutes a “technological invention” are whether the claimed subject matter as a whole (1) recites a technological feature that is novel and unobvious over the prior art; and (2) solves a tech-

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<sup>13</sup> Note that there should be no concerns about “gaming” the system by including claims directed to technological inventions. The primary motivation for the enactment of Section 18 appears to be patents that are already issued, and thus whose claims are already fixed. With respect to pending applications, we submit that if the applicant’s disclosure supports a claim to a technological invention and such a claim is allowed, the resulting patent is for a technological invention, and the exception should apply.

<sup>14</sup> Notice at 7096.

nical problem using a technical solution. Accordingly, insofar as the proposed rule provides guidance regarding a “technological invention,” it is based on the meaning of the terms “technological feature,” “technical problem,” and “technical solution.” By choosing to use phrases including the terms “technological” and “technical” to define “technological invention,” the USPTO has not provided meaningful guidance on the scope of the Rule 42.301 exception. Some effort should be made by the USPTO to provide more guidance as to the meaning of “technological” and “technical” if it chooses to use these terms.

#### 4. The Proposed Rule Conflates a Threshold Requirement for Eligibility for the Transitional Program With Questions of Novelty and Nonobviousness to be Decided During the Review.

The existence of the technological inventions exception presumes that there are claims that are to “a method or corresponding apparatus for performing data processing or other operations used in the practice, administration or management of a financial product or service” (as set forth in Rule 42.301(a)), but which fall within the exception of Rule 42.301(b). The first criterion set forth in proposed Rule 42.301 to evaluate the applicability of this exception is whether the claimed subject matter as a whole recites a technological feature that is novel and unobvious over the prior art. Although this language tracks portions of the legislative history,<sup>15</sup> it is nonetheless problematic and, depending on how it is applied, threatens to swallow the exception.

One problem with this criterion arises from how the USPTO would evaluate it when a request for a Transitional Program proceeding is filed. Consider, for example, a request to institute a Transitional Proceeding for a patent that includes a claim to a currency counting apparatus that includes features that appear to be “technological.” In many cases, the request will include an allegation that the claim is not novel and unobvious. If the proposed criterion is used, the USPTO can either choose to accept this allegation at face value or dig more deeply into the merits to determine whether a novel and unobvious technological feature exists. Either approach is suboptimal.

On one hand, if the USPTO simply accepts the allegation that the entire claim is not novel and unobvious, it follows that the USPTO would implicitly be accepting the allegation that there is no novel and unobvious technological claim feature. This criterion would then devolve from an inquiry into the technical character of a claim to an inquiry into novelty and nonobviousness. The mere fact that a case of unpatentability can be alleged under Sections 102 or 103 should not be dispositive as to the technological invention exception.

On the other hand, if the USPTO, at the outset of the proceeding, digs more deeply into the merits of novelty and nonobviousness to determine whether the claim includes a novel and unobvious technological feature, it would not be an efficient use of USPTO resources. It would

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<sup>15</sup> *Id.* (citing to statements of Sen. Schumer, Rep. Smith, and Sen. Coburn regarding the technological inventions exception).

not even be clear that such a question could be adequately decided at the outset of a proceeding. Indeed, in many cases, it will be likely that questions of novelty and nonobviousness are the very reason the proceeding is being instituted.

The logical flaw inherent in the proposed rule's incorporation of novelty and nonobviousness considerations into the threshold for review can be more formally understood as follows. Assume that the exception is satisfiable—i.e., assume the existence of a patent that includes a “technological invention.” Assume further that any petitioner could form an allegation that, *if true*, would establish the complete unpatentability of every claim of that patent on prior art grounds—i.e., that any petitioner could allege that *no* features of any claim are novel or unobvious. If such an allegation is accepted at face value, i.e., without regard as to whether it is *actually* true, then any petitioner could allege that any claim lacks “a technical feature that is novel and unobvious over the prior art,” and therefore no patent would ever satisfy the exception—an absurdity given the initial assumption. By contrast, if such an allegation is evaluated on its merits at the outset of the proceeding, an absurdity of a different sort results. In this scenario, the USPTO is faced with the task of determining, as a threshold criterion for sustaining a proceeding, questions of novelty and nonobviousness that the proceeding itself is intended to resolve.

A better practice is to decouple the question of the technological character of an invention from its ultimate patentability under Sections 102 or 103.

#### 5. The Proposed Rule Should Not Require the Presence of a Technological Problem.

The second criterion set forth in proposed § 42.301(b) is whether the claimed subject matter as a whole solves a technical problem using a technical solution. We submit that while a claim that satisfies this criterion would constitute a technological invention, the criterion is overly restrictive by requiring both the problem and the solution to be “technical.” A better approach would be for the USPTO to focus on the technical character of the solution embodied in the claim, without requiring the presence of a technical problem. In other words, the presence of a technical solution should be sufficient to constitute a technological invention, regardless of whether the problem can be characterized as a “business” problem or a “technical” problem. This change in approach is important since many technical inventions can be cast as solving a business problem. Accordingly, the nature of the problem being solved should not be dispositive as to the technical character of the invention.

### C. Proposals for Definition of “Technological Invention.”

Given the perceived deficiencies of the proposed rule, we make the following recommendations:

## 1. Provision for Technological Invention Safe Harbor

As opposed to the paradigm of proposed Rule 42.301, in which a “technological invention” is assessed on a case-by-case basis, a set of criteria should be established that, if satisfied, affirmatively establish that a claim is to a technological invention. One possible version of such criteria is as follows:

A claim is directed to a technological invention if it covers only embodiments that involve a feature from the natural sciences, mathematics, applied science, or engineering that is not merely nominal.<sup>16</sup>

At least three attributes of this exemplary provision are important. First, establishing such a “safe harbor” provision would greatly increase certainty as to the contours of the technological invention exception, enhancing the public notice function of the rule (as opposed to the proposed regime, in which there is no definitive test). Second, this provision attempts to provide some greater degree of specificity as to what constitutes a technological feature by specifically referring to a number of different disciplines.<sup>17</sup> We fully recognize that this list could be made more specific (and urge the USPTO to adopt a list of its own choosing)—the central thrust of this approach is to provide some further granularity as to what “technological” means. The goal of this safe harbor provision is not to formulate a bright-line test to identify *all* technological inventions, but rather to craft a provision that covers those inventions that are clearly technological—and thus provide greater certainty about the application of the proposed rule. Third, the exemplary provision recognizes that a feature from the listed disciplines must be more than simply nominal to convey status as a technological invention.

## 2. Provision for *Per Se* Non-Technological Subject Matter

Conversely, a set of criteria should be established for subject matter that is *per se* non-technological. As one example, a claim that, under the broadest reasonable interpretation (BRI) standard, is directed solely to manual activity or mental steps could be considered to be a non-technological invention. Similarly, a claim that, under BRI and ignoring any nominal recitation of technical features, involves only the application of subject matter from the social sciences and other non-technical fields (i.e., not the natural sciences, mathematics, applied sciences, or engineering) could also be considered a non-technological invention. Again, this set of criteria could be expanded or contracted as deemed appropriate by the USPTO, but in conjunction with the

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<sup>16</sup> If necessary, this provision could additionally require that the *per se* non-technological provision, discussed in the next section, must also not apply.

<sup>17</sup> This list is based in part on the legislative history of the AIA. See 157 CONG. RECORD at S1379 (March 8, 2011) (comments of Sen. Kyl) (“As the proviso at the end of the definition makes clear, business methods do not include ‘technological inventions.’ In other words, the definition applies only to abstract business concepts and their implementation, whether in computers or otherwise, but does not apply to inventions relating to computer operations for other uses or the application of the natural sciences or engineering.”).

safe harbor provision recommended above, it again creates a greater degree of certainty regarding the exception.

### 3. Provision for Other Claims

Claims that do not clearly satisfy the safe harbor or the *per se* non-technological provisions should be evaluated by the USPTO on a case-by-case basis. In making such determinations, we recommend that the USPTO focus on the technical character of the solution as embodied in the claim, and not require the presence of a technical problem (although the presence of a technical problem could be further evidence that the exception applies).

### III. Conclusion

The question whether a claim is to a “technological invention” is an especially difficult one that does not always lead to fully satisfying answers. Accordingly, we appreciate the difficulty the USPTO faced in crafting proposed Rule 42.301. Nonetheless, we respectfully submit that the proposal can be improved in a number of respects. First, the proposal should clearly identify whether a patent is for a technological invention based on the presence of a single technological claim, or whether some other standard applies. Second, the proposal should provide greater certainty—for example, by crafting provisions that identify clearly technological and clearly non-technological claims. Third, the proposal should provide some greater degree of specificity as to what the terms “technological” and/or “technical” mean. Fourth, technical features in the claim should not be evaluated for novelty/nonobviousness as suggested by the proposal, although it does make sense to disregard those features that are merely nominal. Finally, the proposal should be revised to focus more on the technical nature of the solution provided by a claim, rather than also requiring the presence of a technical problem.

We appreciate the opportunity to comment, and look forward to continuing to work with the USPTO to improve patent examination for the benefit of applicants and the public.

Consideration of the above comments is respectfully requested.

Respectfully submitted,  
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