

**RESPONSE TO THE PTO REQUEST FOR COMMENTS ON
PROPOSED GUIDELINES RE: SUBJECT MATTER ELIGIBILITY**

Submitted by: The National Association of Patent Practitioners

Ron Reardon, President

Louis J. Hoffman, Government Affairs Liaison

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Introduction

The following comments are presented in response to the request for public comments published by the United States Patent & Trademark Office (PTO) in the Federal Register (70 Fed. Reg. 48) dated December 20, 2005, concerning the PTO's Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility, 1300 Off. Gaz. Pat. Office 142 (Nov. 22, 2005).

The National Association of Patent Practitioners (NAPP) is a nonprofit trade association for patent agents and patent attorneys. NAPP has approximately 500 members in 13 countries. The patent practices of the practitioner members are focused primarily on patent prosecution, namely practice before the PTO. As part of NAPP's mission statement, we aim to create a collective nationwide voice to address issues relating to patent prosecution practice. For more information about NAPP, visit www.napp.org.

NAPP speaks for a significant share of patent agents and a fair number of patent attorneys. Approximately 5% of all active U.S. patent agents are members of NAPP. NAPP membership also includes hundreds of patent attorneys, generally those more involved in active prosecution before the PTO. In preparing this document, comments from members of NAPP, who participate in our daily e-mail discussion group, were solicited and collected. Those members most interested in the subject volunteered to work on drafting or reviewing the comments. Accordingly, we believe that the information provided here is representative of the prevailing wisdom of NAPP members, as reflected in postings on the daily e-mail discussion list.

NAPP welcomes the opportunity to comment on the PTO's interim guidelines and hopes that the detailed nature of its comments will assist the Office in its work.

Executive Summary

NAPP appreciates the PTO's standard-setting efforts and supports most of the Interim Guidelines. NAPP requests that the PTO adjust the Interim Guidelines by (1) restoring the helpful "safe harbor" and other provisions explicitly defining certain types of subject matter considered eligible, at least in certain areas, and (2) allowing appropriately formatted signal-based claims, including "propagated signal" or related formats. For the most part, NAPP's comments relate to Annex IV of the Interim Guidelines.

NAPP's Specific Comments

Comment #1. The PTO ought to restore the “safe harbor” provisions or otherwise define computer-related subject matter considered eligible.

Explanation: The PTO's former Guidelines, most recently recorded at MPEP 2106.IV.B.2 (8th ed. Rev. 3 Aug. 2005), and in effect for many years, included significant and helpful discussion of certain “safe harbors” that defined subject matter considered eligible in the computer and related arts. Those provisions apparently have been deleted from Annex IV of the Interim Guidelines on which comments have been requested. At the end of part (a) in Annex IV, however, the Interim Guidelines still refer to “paragraph IV.B.2,” twice. The continued cross-reference reveals the helpfulness of including that discussion.

NAPP believes that the Interim Guidelines ought to include discussion of what *is* eligible, as well as what is *not* eligible. The discussion of “safe harbors” for computer programs was helpful, both to examiners and the PTO's customers. NAPP can conceive of no valid reason for eliminating it.

The discussion seemed to state correctly certain standards for subject matter eligibility, as applied to the circumstances discussed there. If a computer program or process operates on a tangible input or when applied creates a tangible transformation, those factors will result in eligible subject matter. Those situations may not cover all circumstances or provide a definition of what is eligible, but they are helpful illustrations nonetheless.

In addition, the PTO should include in Annex IV, part (a) a specific citation to *In re Beauregard*, 53 F.3d 1583, 35 USPQ2d 1383 (Fed. Cir. 1995), as well as the holding of that case, namely that a computer program embodied in a tangible medium is statutory subject matter. The closest discussion, relying on *Lowry* (in the second paragraph of part (a) of Annex IV), is written in a confusing fashion and fails to cite the lead case on this point.

Comment #2. The discussion of electro-magnetic signals should be adjusted to permit patentability of propagated-signal or related claims, at least when contained in or passing through a propagating medium.

Explanation: The Interim Guidelines explicitly request comment on the position stated in part (c) of Annex IV, in which the PTO proposes to reverse course and hold that “such signal claims are ineligible for patent protection because they do not fall within any of the four statutory classes of Sec. 101.” By “such signal claims,” the PTO apparently refers to “signals encoded with functional descriptive material.”

NAPP appreciates the PTO's apparent openness to hear opposing views and respectfully submits that the PTO's new analysis is not correct.

As a matter of history, for years the PTO has accepted claims directed to a manufactured transient phenomenon, such as an electrical, optical, or acoustical signal, when embodied in a carrier wave. Training materials used in the PTO since shortly after the PTO's original Guidelines were established, circa 1995, advocated an example of a "computer data signal embodied in a carrier wave," with a convincing supporting legal analysis. In the past decade, the PTO has issued hundreds of patents having at least one "propagated signal" claim.

As a matter of policy, properly formatted signal claims are becoming increasingly important, in tandem with the growth in importance of communications and software inventions, particularly as a result of the continuing growth and ever-increasing significance of the Internet. One Internet trend is towards distributed programming, in which program modules can be located on different servers. The standard *Beauregard* claim is not always enough for adequate protection of such inventions. Also, signal claims can be directed to different business types – for example, a communications company that makes money from *transmitting* signals of a novel sort, as opposed to creating or interpreting signals, may wish to secure protection for signal-related inventions.

With the above background explaining why the subject is important, NAPP believes that Sec. 101 does not preclude all signal-related claims as a matter of statutory construction.

First, the Interim Guidelines do not properly define the term "manufacture." The PTO refers to the *Diamond* case from the Supreme Court, which discussed a definition of "manufacture" as "the production of articles for use from raw or prepared materials by giving to these materials new forms, qualities, properties, or combinations, whether by hand-labor or by machinery." That case did not address signal-related inventions, and that definition largely begs the question at issue here by switching the term "manufacture" to the parallel and equally difficult-to-define term "articles." *Diamond* dealt with whether a genetically altered living organism could be a "manufacture," and thus the case did not consider whether intangible items could be patentable, so a definition using the term "articles" was good enough.

Second, *Diamond* quoted from *American Fruit Growers*, a 1931 case that has been roundly criticized and limited. Chisum on Patents says, "It must be concluded that the *American Fruit Growers* treatment of the meaning of 'manufacture' is of little or no precedential value." Chisum Sec. 1.02[3], p. 1-18. Harmon on Patents and the Federal Circuit says, flatly, that the *American Fruit Growers* "decision is indefensible." Harmon, 7th ed. Sec. 2.2(a)(i), p. 51 n.12. Although *Diamond* cited the earlier case, it did so only in the context of finding the definition cited in that case "compatible with a broad view of the concept of manufacture." Chisum, *supra*. The Interim Guidelines place undue emphasis on *American Fruit Growers*, which is distinguishable for reasons discussed in

those treatises, aside from being criticized, while largely ignoring other cases to opposite effect. See Annex II.A.i and Annex IV, part (c), 5th paragraph, first and last sentence.

Third, the core of the issue is the PTO's proposed view that the term "manufacture" implies a "tangible physical article or object," *i.e.*, "some form of matter." Annex IV, part (c), 5th paragraph. The observation that a signal does not meet that definition ends the issue in Annex IV. However, the Supreme Court has never said, much less held, that the term "manufacture" includes a "tangible physical matter" test. *Diamond* and *American Fruit Growers* both involved tangible physical articles, the former a genetically altered bacterium and the latter an altered orange, so the Supreme Court has had no occasion to judge such a test. Indeed, *Diamond* held that the statute would include "anything under the sun that is made by man," suggesting a broad interpretation that would not allow limit to tangible physical matter. For its part, the Federal Circuit has held that "physical matter" is not the test. For example, *In re Lowry*, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994), cited in the Interim Guidelines but overlooked for this purpose, said (emphasis added), "In Lowry's invention, the stored data adopt no physical 'structure' per se. Rather, the stored data exist as a collection of bits having information about Yet this is the essence of electronic Structure." Yet Lowry's invention was held patentable.

Fourth, the PTO correctly observes the counter-argument by analogy to computer-readable memory encoded with functional descriptive material. Annex IV, para. 6. Indeed, for a *Beauregard* claim, too, the stored software itself does not meet any "tangible physical matter" test, as software is stored as signals. That goes to show that whether the content is tangible or physical matter is of no importance. Another analogy is found in a CCPA case, *In re Breslow*, 616 F.2d 516, 205 USPQ 659 (CCPA 1964), which held, in a composition of matter case, that an article could be patentable even if transitory. A signal is equally transitory.

Fifth, the PTO contends that a signal fails the test because it is a "form of energy." But of course, energy and matter can both be "manufactured," in the sense of being "made by man," more precisely re-arranged from one form to another. Indeed, energy and matter are related by Einstein's famous equation $E=mc^2$.

In sum, NAPP believes that PTO has placed undue emphasis on a test for "manufacture" that improperly imports a requirement of "tangible physical matter." To the contrary, "manufacture" is properly defined as a "residual category" (Chisum citing Robinson) for "anything under the sun made by man" (*Diamond*), whether transitory or not (*Breslow*), and whether having physical structure or not (*Lowry*). There should be no special exclusion for signals that are "manufactured by man."

NAPP recommends that, at the very least, PTO should treat signal-related claims in a fashion parallel to computer programs. Under that approach, the following would result:

1. Just as PTO and the courts do not consider software *per se* patentable, so too would PTO not consider signals *per se* patentable. However, the key word is “*per se*.”

2. Just as PTO and the courts consider nonfunctional descriptive material unpatentable, so too would PTO consider signals encoding nonfunctional descriptive material unpatentable. See Annex IV, 3d and 4th paragraphs, referring to “nonfunctional descriptive material” as not patentable whether “stored in a [or recorded on some] computer-readable medium, in a computer, [or] on an electromagnetic carrier signal.”

3. BUT, just as PTO and the courts (*Beauregard*) consider as patentable functional descriptive material like software signals, when embodied in a tangible medium, so too should PTO consider as patentable signals encoding functional descriptive material, when embodied in a carrier wave or otherwise transmitted in a tangible medium.

As applied to signals, then, at the very least, a signal (electrical, optical, acoustical, or undefined) encoding functional descriptive material and contained in or passing (i.e., propagated) through a network or other tangible medium ought to be considered patentable. A network, or other tangible medium containing a communications signal, for example, should be no less patentable than a computer disk or storage device (also a tangible item), containing a signal defining a software program. The degree of transience does not matter, and whether either the computer or communications signal is “physical matter” does not matter.

In conclusion, NAPP thanks the PTO for the opportunity to comment and offers to provide whatever assistance possible in connection with this important issue.