

American Intellectual Property Law Association

May 10, 2024

The Honorable Katherine K. Vidal 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: Comments in response to the Inventorship Guidance for AI-Assisted Inventions (Vol. 89, No. 30 *Federal Register*, Tuesday, February 13, 2024) Docket No.: PTO-P-2023-0043

Dear Director Vidal:

The American Intellectual Property Law Association is pleased to offer its comments to the United States Patent and Trademark Office ("USPTO") in response to the Inventorship Guidance for AI-Assisted Inventions ("the Guidance").

Founded in 1897, the American Intellectual Property Law Association ("AIPLA") is a national bar association of approximately 7,000 members including professionals engaged in private or corporate practice, in government service, and in the academic community. AIPLA members represent a wide and diverse spectrum of individuals, companies, and institutions involved directly or indirectly in the practice of patent, trademark, copyright, trade secret, and unfair competition law, as well as other fields of law affecting intellectual property. Our members represent both owners and users of intellectual property. Our mission includes helping establish and maintain fair and effective laws and policies that stimulate and reward invention while balancing the public's interest in healthy competition, reasonable costs, and basic fairness.

AIPLA appreciates the USPTO's efforts to provide clarity as to how U.S. inventorship law applies to use of Artificial Intelligence ("AI") by a natural person. AIPLA strongly agrees with the USPTO's approach in the Guidance focusing on the activities of the natural person(s), rather than on what was done by AI, to determine inventorship. As stated in the Guidance,

While AI systems and other non-natural persons cannot be listed as inventors on patent applications or patents, the use of an AI system by a natural person(s) does not preclude a natural person(s) from qualifying as an inventor (or joint inventors) if the natural person(s) significantly contributed to the claimed invention, as explained in section IV of this notice.

89 FR 10043 at 10046 (Section III). Inventorship by a natural person is not negated or precluded merely because that human uses an AI tool as part of the inventive process. AIPLA also strongly agrees with the conclusion in the Guidance that a significant contribution from at least one natural person inventor to each claim is sufficient. As noted in the Guidance:

There is no requirement for a named inventor to contribute to every claim in an application or patent; a contribution to a single claim is sufficient. However, each claim must have been invented by at least one named inventor. In other words, a natural person must have significantly contributed to each claim in a patent application or patent. In the event of a single person using an AI system to create an invention, that single person must make a significant contribution to every claim in the patent or patent application.

89 FR 10043 at 10048 (Section IV) (citations omitted).

Section II of the Guidance is titled: "Inventors and Joint Inventors Named on U.S. Patents and Patent Applications Must Be Natural Persons." Under section II, the Guidance recognizes and cites the Federal Circuit's decision in *Thaler v. Vidal* holding "that only a natural person can be an inventor, so AI cannot be." 43 F.4th 1207 at 1209-10 (Fed. Cir. 2022) (*cert denied*). AIPLA agrees that all inventors and joint inventors named on U.S. patents and patent applications must be natural persons.

In Section II, the USPTO's Inventorship Guidance comments that:

Further, the USPTO recognizes that while an AI system may not be named an inventor or joint inventor in a patent or patent application, an AI system—like other tools—may perform acts that, if performed by a human, could constitute inventorship under our laws. The Thaler decisions around "inventorship" are not a recognition of any limits on the current or future state of AI, but rather are an acknowledgment that the statutory language clearly limits inventorship on U.S. patents and patent applications to natural persons.

89 FR 10043 at 10045 (Section II) (emphasis added).

To the extent that the highlighted portion above can be read to suggest that an AI system could "conceive" of an invention in the same way that a human inventor conceives of an invention, AIPLA disagrees. AIPLA suggests updating or otherwise harmonizing the above statement with other portions of the Guidance, including, for example, Section III.B.

In particular, AIPLA agrees with Section III.B, which cites Supreme Court and Federal Circuit law regarding inventorship and conception. For example, as recognized by the Guidance, "conception is often referred to as a mental act or the mental part of invention." 89 FR 10043 at 10046 (citing *Univ. of Utah v. Max-Planck-Gesellschaft Zur Forderung Der Wissenschaften E.V.*, 734 F.3d 1315, 1323 (Fed. Cir. 2013); *Fina Oil & Chem. Co. v. Ewen*, 123 F.3d 1466, 1474 (Fed. Cir. 1997)). Further, as recognized by the Guidance, "[i]t is 'the formation in the mind of the inventor, of a definite and permanent idea of the complete and operative invention, as it is hereafter to be applied in practice." *Id.* (citing *Burroughs Wellcome Co. v. Barr Labs., Inc.*, 40 F.3d 1223, 1228 (Fed. Cir. 1994) (citing *Hybritech Inc. v. Monoclonal Antibodies*, Inc., 802 F.2d 1367, 1376 (Fed. Cir. 1986) (quoting 1 Robinson on Patents 532 (1890))). "Because conception is an act performed in the mind, it has to date been understood as only performed by natural persons. The courts have been unwilling to extend conception to non-natural persons." *Id.* (citing to *Univ. of Utah*,734 F.3d at 1323; *Beech Aircraft Corp.* v. *EDO Corp.*, 990

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F.2d 1237, 1248 (Fed. Cir. 1993) Thus, the Guidance concludes with: "Hence, when a natural person invents using an AI system, the conception analysis should focus on the natural person(s))." *Id*.

Based on the above-stated law, current generative AI tools cannot "conceive" inventions in the manner natural persons can. They cannot form inventions or ideas in a natural "mind" in the manner that natural persons do. Instead, current generative AI tools are statistical by nature. There is no conception or understanding of the outputs they produce. Such outputs cannot be said to be inventions or ideas formed in the "mind of an inventor." Such outputs fail to satisfy existing inventorship law, which requires the act of conception to include forming a permanent idea of a complete and operative invention in the mind of an inventor. That invention must then have practical application in accordance with the U.S. jurisprudence noted above. *See* 89 FR 10043 at 10046.

For at least these reasons, AIPLA suggests that Guidance be updated to rephrase the above-identified statement. For example, AIPLA suggests that the above statement be rephrased as: "an AI system—like other tools—may perform acts that, if performed by a human, could constitute inventorship under our laws can act as a tool to assist natural persons to discover inventions consistent with current law regarding inventorship and conception."

AIPLA believes that this update to the USPTO's Inventorship Guidance would harmonize the Guidance in view of U.S. law regarding conception, including U.S. law stated in other sections of the Guidance (e.g., Section III.B as noted above).

Guiding Principle 3 of the Guidance begins with the statement,

Reducing an invention to practice alone is not a significant contribution that rises to the level of inventorship.⁵⁵ Therefore, a natural person who merely recognizes and appreciates the output of an AI system as an invention, particularly when the properties and utility of the output are apparent to those of ordinary skill, is not necessarily an inventor.⁵⁶

89 FR 10043 at 10048 (Guiding Principles) (citations omitted).

The first sentence of this statement appears to be overbroad as a statement of the law and presents the potential for confusion. Precedent has recognized that contribution through reduction to practice may constitute invention. As correctly noted elsewhere in the Guidance, "in some instances, an inventor may only be able to establish a conception by pointing to a reduction to practice through a successful experiment." 89 FR 10043 at 10047 (Section IV) (citing Fina Oil & Chemical Co. v. Ewen, 123 F.3d 1466, 1473 (Fed. Cir. 1997)). The focus, as always, should be on whether there was significant contribution to the conception of the invention by the natural person—which may in some cases result from the reduction to practice. "[A] joint inventor must contribute in some significant manner to the conception of the invention." Fina Oil, 123 F.3d at 1473. The section of the MPEP cited in support of the first sentence (footnote 55 of the Guidance, MPEP 2109 subsection III) appears to be inapposite. This subsection, titled "The inventor is not required to reduce the invention to practice," addresses a different issue, namely, the fact that an inventor who shares conception of an invention need not also be the one who reduces the invention to practice.

The second sentence of Guiding Principle 3 also has the potential for confusion. First, the issue of whether recognition and appreciation can give rise to conception of an invention does not logically follow from the issue of reduction to practice addressed in the first sentence; hence,

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the use of "therefore" is confusing. Second, the phrase "particularly when the properties and utility of the output are apparent to those of ordinary skill" would appear to draw issues of non-obviousness into the inventorship determination—something for which there is no support in the law and which AIPLA would strongly oppose. The decision cited in the Guidance (footnote 56), *Solvay S.A. v. Honeywell Intern. Inc.*, 622 F.3d 1367 (Fed. Cir. 2010), is not supportive. In *Solvay*, the Court held that conception cannot lie in reproduction of another person's prior conceived invention:

In this case, Honeywell did not have, or formulate, a definite and permanent "idea" of its own capable of being reduced to practice. Rather, it reproduced the invention previously conceived and reduced to practice by RSCAC in Russia. Such reproduction cannot be conception because, if it were, the result would be that one who simply followed another inventor's instructions to reproduce that person's prior conceived invention would, by so doing, also become an "inventor."

Solvay, 622 F.3d at 1377. This holding rests on there being a prior invention, conceived and reduced to practice by another, that can be reproduced. As such, this holding is not instructive as to whether conception can arise when a natural person, using an AI tool, recognizes and appreciates the output of that AI tool as an invention. AIPLA believes a more apt comparison would be to decisions addressing patentability of accidental discoveries. See generally Sean B. Seymore, Serendipity, 88 North Carolina Law Review 185 (2009). "[T]he path that leads an inventor to the invention is expressly made irrelevant to patentability by statute." Life Technologies, Inc. v. Clontech Laboratories, Inc., 224 F.3d 1320, 1325 (Fed. Cir. 2000).

An important related aspect to inventorship is recordation of the development and discovery of the invention. Particularly, in the context of the Guidance, an inventor may be called upon in litigation or other proceedings to provide evidence of their contribution to a claimed invention that was made using an AI tool. AIPLA suggests that future guidance from the USPTO continue to emphasize traditional record keeping related to invention as a whole, but caution should be exercised to avoid creating an elevated burden of "record keeping" or "inventor notebook keeping" in cases related to use of AI tools. Such an elevated burden not only would be a trap for the unwary or the unsophisticated but could penalize some who work in certain subject matter areas versus others—creating wildly different and evolving standards. AIPLA suggests reminders and/or guidance that inventors should maintain records sufficient to establish development and discovery of patentable ideas, as they must under current law, without imposing undue burdens.

Finally, AIPLA supports the position taken in the Guidance that the existing duty of disclosure and duty of reasonable inquiry are sufficient to address inventions made by natural persons using AI tools. As noted in the Guidance, improper inventorship is a statutory ground for rejection and thus there is an existing duty to disclose to the USPTO information that would indicate inventorship is improper or that refutes or is inconsistent with a position taken by an applicant regarding inventorship.

AIPLA gratefully acknowledges the significant and timely efforts of the USPTO to provide helpful guidance for inventors and practitioners in this rapidly evolving field. We thank the USPTO for this opportunity to provide our comments.

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Sincerely,

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President

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