

Risks to Patent Validity Involving Generative AI in the Creative Process - A Blog Post by David Thibodeau and Kip Werking

If there is any emerging technology that promises to disrupt society as a whole, it is the universal availability of generative AI at low or no cost. ChatGPT and similar tools learn from existing artifacts to generate new, realistic results that reflect the characteristics of the training data but without repeating them. These tools are being used to produce a variety of novel content, such as images, video, music, speech, text, and software code. They can even be leveraged to produce a novel product design when presented with a general problem statement¹.

The adoption of generative AI in the creative process is inevitable. Indeed, Windows 11 (and soon Bing, Edge, and Microsoft 365) incorporate “Copilot,” a tool built on OpenAI’s ChatGPT, that becomes “your everyday companion” which “empowers you to create faster.”²

How can anyone resist using it to augment your product design and development work?

However, use of generative AI is not without risk including privacy, confidentiality, loss of copyright or trade secret status, ambiguity over ownership, inaccuracy and other concerns³. Nonetheless, because innovators and their patent counsel face increasing demands to produce meaningful results at reduced cost, the pressure to leverage generative AI in the invention and patent preparation process has become very real.

Even assuming that one can put questions of confidentiality and ownership of results aside⁴, U.S. patent law still requires inventorship to be correctly stated in a patent application⁵.

First, the U.S. Court of Appeals for the Federal Circuit has made it clear that only a natural person can be listed as an inventor on a US patent application, not an AI⁶. Second, there is an obligation to correctly name inventors — and failure to correctly name them is fatal to validity⁷.

Thus by engaging a generative AI to either assist with the initial creative process, or even to merely assist with embellishing a patent specification, you necessarily invoke the risk that the AI has become an inventor and that the patent is, therefore, invalid.

Finally, generative AI in one sense represents the collective prior art knowledge. The patent office places a burden on inventors and their attorneys to disclose information that an examiner would consider relevant in assessing the patentability. 37 CFR 1.56(a). While there is no reported case yet on point, one could surmise that inventors and their patent counsel thus have an obligation to report to the patent office the details of how they used a generative AI tool when inventing a new technology or preparing their patent application⁸.

It is quite evident that generative AI and other automated learning tools will be increasingly used to devise innovative products and technologies. At the same time, the patent bar will increasingly consider whether its members can use generative AI to assist in the patent application process itself. For the reasons explained above, there are many significant legal and business risks associated with giving in to the temptation to use generative AI in the patent application process at this time—including especially the risk of patent invalidity.

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<sup>1</sup>Researchers recently provided an AI model with a straightforward prompt: “Design a robot that can walk.” In seconds, the AI dutifully complied and spit out schematics for a squishy, purple, blob-like robot that propels itself forward using “legs” and the power of air. See [here](#).

<sup>2</sup>Website link [here](#).

<sup>3</sup>See Swanson, B., “The Importance of Establishing a Policy on the Use of AI Within Your Organization”, see [here](#).

<sup>4</sup>OpenAI’s terms of service for ChatGPT promise they will not use user provided content “to develop or improve their services” except for their Application Programming Interface (API). Users can even opt out of that possibility and also shut off chat history upon request. Paying for their “Plus” or “Enterprise” level service provides even greater data protections. See [here](#) and [here](#).

<sup>5</sup>Although some commentary around the time the America Invents Act (AIA) was adopted in 2012 had suggested that the amendments to 35 USC § 102(f) eliminated the need to correctly list inventorship, the better view is that this provision was intended to eliminate redundancy and that both the Constitution and 35 USC § 101 still require that a patent may only be obtained by the person(s) who engage in the act of inventing. See [here](#).

<sup>6</sup>Thaler v. Vidal, 43 F.4th 1207 (Fed. Cir. 2022), cert denied, U.S. No. 16-677. Available [here](#).

<sup>7</sup>Consider HIP, Inc. v. Hormel Foods Corp., 22-1696, 66 F. 4th 1346 (Fed. Cir. 2023) available [here](#) and Plastipak Packaging, Inc. v. Premium Waters, Inc. 55 F. 4th 1332 (Fed. Cir. 2022) available [here](#).

<sup>8</sup>Crouch, D., “AI Inventor and the Ethics Trap for US Patent Attorneys”, see [here](#).