Feeding and Generating AI Creates Patent Application Challenges

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- WilmerHale attorneys examine AI's role in patent application
- Inventors must be cautious of providing data to AI platforms

The explosion of artificial intelligence has raised some challenging questions in patent law, particularly with prior art, or the body of knowledge available prior to the filing of patent application.

Two of the most pressing questions are whether disclosing information to AI can be considered a public disclosure and thus prior art, and whether AI-generated information constitutes prior art.

The government will deny a patent application if the prior art discloses the claimed invention or makes it obvious. Publicly available information, or information on sale before the application date, is generally considered prior art.

Disclosing to AI

In large language models, computers consume writing samples to support an AI-driven chatbot that sounds like a person. AI becomes "smarter" with more training materials, which drives developers to train their AI on as much material as possible.

But how does the information used to train AI implicate patent rights and prior art? Are AI training materials public disclosures that could be used to invalidate a patent?

Prior art includes printed publications, public uses, or information that is otherwise publicly available. Public accessibility is the touchstone and is determined on a case-by-case basis. Relevant factors include:

- Length of time the material was posted
- Where the information is posted
- Existence (or lack) of reasonable expectations the material displayed won't be copied
- Expertise of target audience

- Simplicity or ease with which the material displayed could have been copied
- Whether a reference has been sufficiently indexed or cataloged

A disclosure can still be public even if nobody saw it, as long as it's sufficiently accessible that someone who is interested could find it with reasonable diligence.

Prior art doesn't have to be in a written format. Oral presentations may create prior art because the information was publicly known before the invention date.

When a user inputs information into an AI tool, that information is often used to train the tool. This disclosure may be considered prior art because the information is now available to the public.

Like an oral presentation, the disclosure isn't recorded, but the information is now known and available for use by the recipient. In this scenario, the AI tool receives the information, trains the model, and uses that information to provide "better" outputs to future questions.

But the information disclosed to AI may not become part of the public state of knowledge because AI isn't human, or because the information disclosed must be used and disseminated to the public in the form of AI-generated content to constitute prior art. It may be difficult to determine what an individual input into an AI platform to establish the scope of the prior art disclosure.

To avoid implicating their future patent rights, innovators should be cautious in providing information to AI platforms as training materials or otherwise.

AI-Generated Information

Separate from the training materials, AI itself generates huge amounts of content in response to questions from users. AI-generated information itself may be a prior art printed publication, public use, or otherwise available to the public.

When a user receives an AI-generated response to a question, that response may be a prior art printed publication, depending on the tool. The test is whether an interested person could find the AI-generated information using reasonable diligence.

If the platform maintains a searchable database of all AI-generated information, or the information is otherwise captured by another digital archive such as the Wayback Machine, the AI-generated information may be considered a printed publication. The AI output is more likely to be a printed publication if a user can ask the AI to re-produce the same information.

But if previously generated information is hidden or inaccessible to a future user, it likely won't qualify as a printed publication. If the AI platform restricts the users' ability to copy or otherwise distribute AI-generated text, limiting dissemination and reducing accessibility, the information may not qualify as a printed publication.

AI-generated information also may be considered prior art if it's "otherwise available to the public." This catch-all provision focuses on whether information was publicly available, rather than the means of publication. Internet posts have been held to be prior art under this provision.

Under the same rationale, AI-generated information might fall within this broad category because it's available to the user for a temporary period. Unlike the internet posts, however, AI-generated information may not be public, as it's only available upon specific request and

not widely publicized. Such factors support the arguments that AI-generated information isn't available to the public.

Regardless of the type of prior art, the substance of AI-generated information needs to be operable to be prior art—meaning the prior art needs to describe the invention in the patent application in sufficient detail to enable a person of ordinary skill in the field of the invention to carry out the invention

One must evaluate the disclosure to determine if it is detailed and accurate enough to be deemed operable. Because prior art is presumed to be operable, patent applicants bear the burden of establishing that the disclosure is inadequate.

But some AI-generated information has turned out not be entirely true or, in some cases, completely fabricated. While this may change as AI platforms improve, patent applicants and owners should be prepared to closely review AI-generated information and develop arguments that the information isn't "operable" prior art.

In the absence of incorrect statements, AI-generated information may be cited as prior art, if the AI-generated information is known to the applicant and disclosed to the Patent Office or is identified by the Patent Office while conducting searches for the claimed invention.

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