

## Future Of Patents For Inventions By AI In Congress' Hands

By Ryan Davis

*Law360 (August 5, 2022, 10:53 PM EDT)* -- The Federal Circuit left it to Congress Friday to decide if the law should be changed to allow patents on inventions created solely by artificial intelligence, but attorneys say the question's futuristic tinge may make lawmakers leery of tackling it.

The Federal Circuit concluded Friday that the wording of the Patent Act, which refers to inventors as "individuals," makes clear that only human beings can be named as inventors on patent applications.

The appeals court therefore affirmed the U.S. Patent and Trademark Office's decision to reject patent applications by a researcher who claimed that an AI system he developed had invented a light beacon and a beverage container without his involvement, since the filings did not name a human inventor.

The thrust of the opinion seems to be that "the laws are not designed to deal with this issue, and if Congress wants to address it, they can," said Susan Krumplitsch of DLA Piper.

"This does seem like something that Congress is going to have to address sooner or later," she said. "I don't know if they're ready to do that now. It doesn't seem like a pressing issue for them."

Promoting innovation in the years to come will involve "encouraging AI to create great new things that will benefit society," said Blair Jacobs of McKool Smith.

Jacobs noted that the decision "creates a gap where those are not patentable subject matter for now, until Congress clarifies and addresses what appears to be this loophole." If those inventions cannot be protected by patents, it may limit the incentive for people to put AI to work to create them, and if they are created, they may be kept as trade secrets that aren't available to the public, Jacobs said.

### Sci-Fi Hurdle

Although the patent status of inventions created by AI has important legal and technological implications, lawmakers' attention is unlikely to be piqued on the issue until there is significant lobbying money behind it, with tech companies pointing to examples of breakthrough innovations developed by AI that cannot be patented under the current system, Jacobs said.

"Right now, you can kind of view it as Isaac Asimov, as abstract science fiction," Jacobs said. But once the issue gets raised by recognizable companies, "then it will become, you know, more apparent to

everybody that this is real and this is actually the way things are being done, and it's beneficial to society."

Stephen Thaler, the AI researcher who brought the case against the USPTO, indicated Friday that he plans to appeal. But attorneys said the consistency and straightforward nature of the rulings against him so far — in both the U.S. and other countries — make it difficult to envision either the en banc Federal Circuit or the U.S. Supreme Court reaching a different result.

"I think the Federal Circuit's ruling is about as unequivocal and clear and bright-line as it could be that there's no room for the discussion of AI as inventor under U.S. patent law," said Chris Mammen of Womble Bond Dickinson.

Currently, when AI is involved in inventing, such as in identifying promising compounds for drug development, the machine's work is usually driven by a human researcher who is using it as a tool, and the person could likely be named as the inventor, Mammen noted. Most AI technology is not yet advanced enough to create inventions on its own, and the issue presented by the case — where there is no human involvement at all — is "a very narrow question, almost verging on a sort of parlor game," he said.

Jaci McDole, a senior analyst at the think tank Information Technology and Innovation Foundation, said in a statement that the court's decision was correct because inventing involves making sentient decisions.

"Most experts have no idea if AI sentience is even possible. Thus, by no stretch of the imagination should AI systems be legally identified as a natural person," she said.

Technology could one day progress to the point of "artificial general intelligence," or AI that is as capable of intellectual tasks as humans, but that appears to still be some distance in the future, Mammen said.

"The conversation we should be having now is, how are we going to deal with accountability and liability arising out of that," Mammen said. "Then after that conversation, we could talk about property rights and inventorship, which are secondary."

On the other hand, Jacobs said, "given how fast AI is developing," it's worth starting to think now about whether the law should be changed to allow AI to be an inventor.

"It really has to be addressed through a public policy perspective of, 'What types of innovation do we want to encourage and what's valuable to society?'" he said. "That seems like that is something that Congress should certainly take up."

## **Next Steps**

If lawmakers were to decide the law should change, "They can't just say, 'OK, an inventor can be AI.' They're going to have to rewrite a lot of the Patent Act, and that's like a pretty big undertaking," Krumpalisch said.

In addition to replacing the word "individual" with something more neutral like "entity" that could encompass nonhumans, lawmakers would have to consider the requirement that inventors submit an

oath declaring their belief that they are the original inventor, which a machine may not be able to do.

In addition, the requirement that a patent contain an adequate written description of the invention takes on a different cast when the invention was created by AI, since it's possible that humans couldn't grasp the full scope of the invention "without the supercomputing power of the AI system," Krumplitsch noted.

With the law as it currently is, the use of AI by humans to develop inventions presents other legal questions that will come up in future cases, said Paul Ragusa of Baker Botts LLP. For instance, in a scenario where a human and AI system work together to create something and are truly co-inventors, it appears the law prevents the AI from being listed as an inventor — but it's less clear if the human could be, he said.

"That's a good question. If you didn't fully conceive the invention yourself, it leaves that open," and could be the next issue for the courts to address, Ragusa said.

Thaler has filed patent applications in more than a dozen different jurisdictions around the world, and so far only South Africa has said that AI can be an inventor. So while he has yet to achieve a significant court victory, he has put a spotlight on an important issue, Krumplitsch said.

"He's really advancing the ball to get people to start thinking about how the law applies new technology, and that's a laudable goal," she said.

The case is Thaler v. Vidal, case number 21-2347, at the U.S. Court of Appeals for the Federal Circuit.

--Editing by Alanna Weissman and Emily Kokoll.