The Artificial Inventor Project and the Case for AI Inventorship

Artificial Inventor Project

Dr. Stephen Thaler and a team of attorneys including Professor Ryan Abbott have filed patent applications around the globe claiming DABUS, an Artificial Intelligence (AI), as the inventor. So far, almost all jurisdictions that have issued decisions in these cases (e.g., US, UK, EPO) maintain the position that AI cannot be an inventor. However, South Africa, which does not have a substantive examination process, has issued a patent listing DABUS as the inventor of the claimed subject matter, and a federal court in Australia has found that AI can be an inventor under current Australian patent law. The purpose of the Artificial Inventor Project is to spur discussion and advocate for AI inventorship.

The Argument for AI Inventorship

Policy concerns drive most of the discourse in favor—and against—granting inventorship to AI. By not recognizing that AI can be classed as an inventor, the incentives to create and innovate in that domain are reduced. It is possible AI conceived inventions will lose patent protection, which means that innovators will not be able to avail themselves, at the exclusion of others, of the benefit of said innovation. To avoid any questions of inventorship in the application process, applicants likely make inaccurate statements of inventorship listing a natural person as the inventor even though, as a matter of fact, the AI has invented the patentable idea. As a matter of policy, encouraging lack of honesty is most undesirable.

Not recognizing AI inventorship is also unfair to human inventors as it reduces the value of their accomplishments by allowing individuals to take credit for work that is really the work product of AI. Additionally, recognizing AI inventorship serves to inform the public on the invention's origin. As AI becomes more generalized and sophisticated, these concerns become amplified. In the future, most innovation will likely be performed by AI, so addressing AI inventorship beforehand will help reduce any these issues.

Helpful case law

Thaler v. Hirshfeld, 2021 WL 3934803, at *4 (E.D. Va. Sept. 24, 2021). This is the most recent court decision in the United States, which held that inventors must be natural persons. It held that "the USPTO's interpretation that an "inventor" must be a natural person is entitled to deference. Even if no deference were due, the USPTO's conclusion is correct under the law."

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Thaler v. The Comptroller-General of Patents, Designs and Trade Marks [2021] EWCA (Civ) 1374 (Eng.). This is the most recent court decision in the United Kingdom, which, in a divided court, held the person who devises, or conceives, the invention is the inventor, and the application should remain withdrawn. Available [here](#).

Thaler v. Commissioner of Patents (2021) FCA 879 (30 July 2021)(Austl.). This is the most recent court decision in Australia, which held AI can be considered for inventorship. Available [here](#).

Other helpful sources

Ryan Abbott, *I Think, Therefore I Invent: Creative Computers and the Future of Patent Law*, 57 B.C. L. REV. 1079, 1088–89 (2016). This law review article explores issues relating to allowing AI inventorship and what areas of patent law might be impacted. https://lawdigitalcommons.bc.edu/cgi/viewcontent.cgi?article=3522&context=bclr

Russ Pearlman, *Recognizing Artificial Intelligence (AI) as Authors and Inventors Under U.S. Intellectual Property Law*, 24 RICH. J.L. & TECH. 2, 8 (2018). This article provides an overview and policy considerations as to why the US should recognize artificial intelligence as authors in copyright law and inventors in patent law. https://jolt.richmond.edu/recognizing-artificial-intelligence-ai-as-authors-and-inventors-under-u-s-intellectual-property-law/

Ryan Abbott, *Everything is Obvious*, 66 UCLA L. REV. 2, 27-29 (2019). This law review article discusses the impact of AI inventorship on obviousness doctrine and the timeframe at which different kinds of artificial intelligence will develop as the technology becomes more advanced. https://openresearch.surrey.ac.uk/esploro/outputs/journalArticle/Everything-is-Obvious/99512573402346?institution=44SUR_INST

Ryan Abbott, THE REASONABLE ROBOT: ARTIFICIAL INTELLIGENCE AND THE LAW (2020). This book discusses many topics from standards of obviousness how a person having ordinary skill in the art would change with AI inventorship to the implications in affecting negligence claims in situations such as automobile accidents as artificial intelligence becomes implemented in more areas of technology.

Status in the United States

In July 2019, Dr. Stephen Thaler applied for two patents declaring the artificial intelligence DABUS as the inventor. On July 29, 2019, the USPTO responded by rejecting these applications stating the legal name of the inventor was not properly indicated in the Inventor's Oath and that the plain meaning of the definition of "inventor" provided in 35 U.S.C. §100 required the inventor to be a natural person. A team of attorneys from Brown Neri Smith & Khan LLP appealed the decision to the Eastern District of Virginia seeking to reinstate the patent applications for examination and to argue for AI inventorship based on the policy arguments above. They also argued that the requirements for the Inventor's Oath under the provisions of the Leahy-Smith America Invents Act allowed for an applicant, Dr. Stephen Thaler, to file on behalf of an inventor

that is under legal incapacity. Judge Brinkema decided in favor of the USPTO and held that inventors may only be natural persons given the plain meaning of "individual" provided in the definition section of the Patent Act. Currently, the case awaits appeal at the Court of Appeals of the Federal Circuit.

Other helpful sources

Ryan Abbott, THE ARTIFICIAL INVENTOR PROJECT (Aug. 1, 2021), https://artificialinventor.com/. This website includes the latest information regarding the team, patent application status, and resources regarding The Artificial Inventor Project.

Application of 16/524,350, No. 50567-3-01-US (Dec. Comm'r Pat. July 29, 2019). This document contains the USPTO's rejection and reasoning for rejecting Dr. Stephen Thaler's patent applications indicating DABUS as the inventor. Available here.

35 U.S.C. §§ 100, 101, 103, 112, 115. These are relevant statutory provisions of the United States Patent Act. https://www.law.cornell.edu/uscode/text/35/part-II.

ZA 2021/03242. This is the patent granted in South Africa indicating DABUS as the inventor. Available here beginning on page 255.

WO 2020/079499 A1. This is a patent application publication filed at the World Intellectual Property Office. Available here.

AU 2019363177. This is a patent application publication filed at the Australian Patent Office. Available here.

EP 3564144. This is a patent application filed at the European Patent Office. Available here.

EP 3563896. This is a patent application filed at the European Patent Office. Available here.

In Re 18 275 165 & In Re 18 275 174. This is the decision relating to the patent applications filed at the European Patent Office. Available here.