EIP

End of the line: DABUS reaches its final stop in the UK

On 20 December 2023, the Supreme Court of the United Kingdom handed down its judgment in Thaler v Comptroller-General of Patents, Designs and Trademarks [2023] UKSC 49 in which it unanimously dismissed Dr Stephen Thaler's appeal against the Comptroller's decision, already dismissed by the High Court and the Court of Appeal, that Thaler was not entitled to patent for inventions created by his AI machine DABUS on the basis that an inventor must be a natural person and not a machine.

Legal Issues

1. Does section 13(2)(a) of the Patents Act 1977 ("the 1977 Act") require a person to be named as the inventor in all cases, including where the applicant believes the invention was created by an AI machine in the absence of a human inventor?
2. Does the 1977 Act provide for the grant of a patent without a named human inventor?
3. In the case of an invention made by an AI machine, is the owner, creator and user of that AI machine entitled to the grant of a patent for that invention?

This appeal was not concerned with the broader question of whether technical advances generated by machines acting autonomously and powered by AI should be patentable. Nor whether the meaning of the term "inventor" ought to be expanded to include machines powered by AI which generate new and non-obvious products and processes. The appeal was only concerned with the correct interpretation and application of the relevant provisions of the 1977 Act set out above to the applications made by Dr Thaler.

Background

In October and November 2018, Dr Thaler filed UK patent applications for the grant of patents for what were said to be inventions for new and useful devices and methods. The applications were filed by Dr Thaler under the 1977 Act. The request for grant forms which accompanied the applications stated that Dr Thaler was not an inventor.

Under section 13(1) of the 1977 Act and rule 10(3) of the Patent Rules 2007 ("the Rules") Dr Thaler was requested to file a statement of inventorship and an indication of the derivation of his right to the grant of the patents within 16 months of the filing date of the applications. Dr Thaler responded by maintaining that the inventor was in each case a machine called DABUS (Device for the Autonomous Bootstrapping of Unified Sentience) acting autonomously and powered by artificial intelligence ("AI"), and that he acquired the right to the grant of the patents by virtue of his ownership of that machine.

Having been warned that the applications would be deemed withdrawn, Dr Thaler requested a hearing at which he claimed that the information he had provided met the requirements of the 1977 Act and the Rules. However, on 4 December 2019, the Hearing Officer for the Comptroller issued a decision that DABUS could not be regarded as an inventor for the purposes of the 1977 Act, and further, that Dr Thaler was not entitled to apply for the patents simply by his ownership of DABUS. The Comptroller also confirmed that the applications would be taken to be withdrawn at the expiry of the sixteen-month period specified by rule 10(3) of the Rules.

Dr Thaler's appeal against the Comptroller's decision and order was dismissed in the High Court and by a majority in the Court of Appeal, and Dr Thaler was granted permission to appeal to the Supreme Court.

The Judgment

The Supreme Court's decision unanimously dismissed the appeal, holding that the Comptroller was right to find that the applications would be taken to be withdrawn at the expiry of the sixteen-month period specified in rule 10(3) of the Rules.

With regard to the first issue, the scope of the term "inventor" under the 1977 Act, the Supreme Court concurred with the position of the Comptroller that under sections 7 and 13 of the 1977 Act an inventor must be a natural person (paragraphs 56-59 and 73).

The Supreme Court also upheld the Court of Appeal's judgment that the doctrine of

accession does not, as a matter of law, operate to confer on Dr Thaler any property in, or the right to apply for and obtain a patent for, any technical development made by DABUS acting autonomously. This is because under section 7 of the 1977 Act the right to apply for and obtain a patent required a patent application to be made by an inventor, or alternatively through an inventor (for example in the case of inventions made by employees in their normal line of work), and an inventor must be a person.

Lastly, the Supreme Court agreed that the Comptroller was right to find the applications would be taken to be withdrawn at the expiry of the sixteen-month period specified by rule 10(3) of the Rules because Dr Thaler failed to identify any person or persons whom he believed to be the inventor or inventors of the inventions described in the applications.

Commentary

The Supreme Court's decision puts an end to the UK leg of the DABUS saga – an extensive program of test cases filed in patent offices around the world. Aside from an outlier in South Africa, the outcomes of the test cases have been largely consistent in refusing to accept an AI system as an inventor.

While the verdict undeniably has practical importance, it ultimately comes down to a black-and-white reading of current legislation and the ordinary meanings of the words "inventor" and "person", rather than the deeper question of how the IP system should best serve us in the age of mass AI adoption. The inevitable follow-on question is therefore whether and when new legislation should be passed to enable patent rights (or any form of IP rights) to be granted for products and processes devised by AI. If such changes are to be considered, then perhaps the most challenging question is who should be the owner of such IP? Thaler's ownership claim relied on him being the owner of DABUS, a "machine" that is referred to in an (intentionally) simplistic manner as if it is just a physical box of electronics. In reality, AI systems are composite entities with components defined by computer code and parameter values that are routinely copied, transferred, and distributed between devices. In these cases, who is the owner of the AI system – is it the owner of the physical servers on which an AI model is executed, or the owner of IP in the AI system? If the former, do we really want an IP system to reward companies merely for amassing processing resources? If the latter, then what IP are we talking about, specifically? And what about products and processes devised by publicly available (e.g., "open-source") AI systems – who is entitled to ownership then? Pandora's Box awaits any legislator that tries to tackle this question.

The judgment mentions that the outcome might have been different if DABUS had been

presented as a highly sophisticated tool used to assist a human inventor. Of course, this would be contrary to Thaler's case, but had these been the facts presented, then other questions might have become relevant, namely what level of human contribution is required for a person to be considered "the actual deviser of the invention" as required by section 7(3) of the UK Patents Act, and does the assessment of inventive step need to be adapted to account for AI assistance? Such issues are becoming increasingly pertinent with the rise of Large Language Models (LLMs) and prompt engineering, and will likely find their way into the Courts in due course.