"We are both created and create. Why cannot our own creations also create?"- Justice Beach, Australia High Court Judge- AI and Patent Law

21 December 2023

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On 20th December 2023 the UK Supreme Court delivered its much anticipated judgment in the case of <u>*Thaler*</u> v <u>*Comptroller General of Patents Trade Marks and Designs*</u>. The main issue to be determined was whether an AI system- 'DABUS'- could be considered to be an 'inventor' for the purposes of the Patents Act 1977.

The Comptroller as well as the Supreme Court were both conscious of the potentially wide interpretations that their respective decisions could be given and both expressly stated that their decisions should only be read narrowly as a ruling on the correct interpretation and application of the relevant provisions of the 1977 Act concerning the patent applications made by Dr. Thaler rather than be understood as decisions on the broader question whether technical advances generated by machines acting autonomously and powered by AI, should be patentable.

The Supreme Court further clarified that its judgment was not concerned with the question whether the meaning of the term "inventor" ought to be expanded, so far as necessary, to include machines powered by AI which generate new and non-obvious products and processes which may be thought to offer benefits over products and processes which are already known.

The Supreme Court pointed out that these questions raise policy issues about (i) the purpose of a patent system, (ii) the need to incentivise technical innovation and the provision of an appropriate monopoly in return for the making available to the public of new and non-obvious technical advances, and (iii) an explanation of how to put them into practice across the range of the monopoly sought. In view of the need of an in-depth consideration of the issues, it refrained from taking a stance on these broader issues, clearly passing the baton on to policy-makers prompting a wider discussion and consideration of the matters at hand and specifically, whether the rapid advances in AI technology we are currently witnessing, call for changes in the law.

The narrow scope of the Supreme Court's judgment thus, concerns solely the question as to whether an AI system may be considered an 'inventor' for the purposes of the 1977 Act.

Dr. Thaler, the applicant, stated that Dabus was exclusively responsible for the inventions and thus, Dabus- the AI system- should be named the 'inventor'. The Court confirmed that an inventor must be a 'person', either a natural or a legal person falling with the confines of section 7 of the Act. The Court said of DABUS that it was 'not a person, let alone a natural person and it did not devise any relevant invention'. The Court clearly ruled that DABUS cannot itself be an inventor within the meaning of the 1977 Act and as a result, Dr. Thaler could not file an application as the owner of DABUS on the basis of the doctrine of accession, since the latter was not a person within the meaning of the Act, neither as a natural person nor as a person falling within the scope of section 7(2) of the Act, i.e. a person acquiring the right to file from the inventor, who may be a legal person.

The Court, in no unclear terms, considered DABUS as a machine and thus under no circumstances, could it be considered as an 'inventor' under the 1977 Act. Further, the Court denied the application of the doctrine of accession in this case which as raised by Dr. Thaler. In this regard, the Court considered that there was no 'new' tangible property' created by an 'existing' tangible property (in this case, DABUS) owned by Dr. Thaler upon which Dr. Thaler could lay claim. The Court considered that DABUS could not be thought of as an inventor of any technical advance. Rather, it found that DABUS developed 'concepts' for new and non-obvious devices and methods and 'descriptions of ways to put them into practice' which could not be considered as constituting 'tangible property'.

Up to now Thaler has been unable to secure a judgment which recognises the right of an AI system to be considered as an 'inventor' who may be awarded a patent in a number of jurisdictions, namely the USA[1], UK[2], Australia[3] as well as before the EPO[4].

The Cyprus Patents Act, Law 16(I)/1998 (as amended) provides in article 9 that 'any natural or legal person may file an application for a patent either alone or jointly with another person'. In view of the provisions contained in articles 10 and 11 of the said law, it is arguable that our law follows the rationale contained in the UK Patents Act of 1977 and as such, Cyprus courts, pursuant to article 29(1)(c) of the Courts Act, Law 14/60 could draw

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[1] U.S. Court of Appeals for the Federal Circuit, *Thaler* v. *Vidal*, No. 21-2347, *2 (Fed. Cir. Aug. 5, 2022)

[2] [2023] UKSC 49 (20 December 2023)

[3] *Commissioner of Patents* v. *Thaler* [2022] FCAFC 62 (22 November 2022) N.B. The case was not heard on the merits by the High Court; the High Court of Australia refused to grant Thaler leave to appeal against the decision of the Full Federal Court issued in April 2022, which had overturned a decision of the Federal Court which had recognised that an AI system can be recognised as an inventor under the Patents Act.

[4] J 8/20 and J 9/20 (27 November 2022) concerning Thaler's patent applications under nos. EP 18 275 163 and EP 8 275 174

guidance from the Thaler judgment if faced with a similar question on the meaning of the term 'legal person' acting as a patent applicant, and whether, in particular, it may include an AI system.

The broader questions as to whether technical advances produced solely by AI machines should be patentable and/ or whether an AI developer who has developed an AI system which in turn produces inventions should have a right to apply for a patent and denote the AI system as the inventor, remain unanswered. Arguably, these questions are critical and should be considered imminently in view of the massive leaps made by AI models in recent years which raise issues of competitiveness, incentivisation of inventors and indeed, more philosophical issues such as theories of property rights.

It is interesting to note how the Australian Full Federal Court has framed the questions which should lead the public debate on the matter. In particular, it highlighted the following questions for consideration:

1. Whether "inventor" should be redefined to include AI;
2. If so, who should be entitled to the patent with respect to the AI output;
3. If AI is capable of being recognised as an inventor, does the standard of inventive step require recalibration; and
4. What continuing role might the ground of revocation for false suggestion or misrepresentation have in circumstances where the inventor is a machine?

These are just a few questions that spring to mind. One fundamental question that should be addressed with the onset of AI, is whether AI changes at all the nature of patents and if so, how. The legislator should be considering whether AI systems should be awarded patents and if so, why and on what conditions. It is important that patents granted do not create an anticompetitive effect such that they drive away potential inventors. The risk of unregulated use of AI could upset any balance struck in existing patent systems between rewarding inventors on one hand and encouraging competition on the other. For example, a step may not be obvious to a human but it may be so to an AI system; this difference would have an impact on the assessment of inventive step in the examination of a patent application.

Another question to consider is whether an AI system should indeed merit a patent reward. One should go back to basics and consider the reason for creating the patent system in the first place. Similarly, is it right, would any public interest be served, if the creator of an AI system were able to reap the benefits of work generated by an

AI system developed and owned by the creator, in the form of a patent award even if the creator is not involved in the development of the invention itself?

Given the dizzying speed at which AI is developing and applied more widely, it is imperative that this discussion is opened the soonest. Questions about the patentability of AI and any legislative changes which are to be made should be addressed, taking into consideration a variety of factors such as competitiveness, incentivisation, the need to keep free in order to encourage further inventiveness, the risk of marginalizing human endeavor in favor of smarter works produced by AI systems, the risk which may exist in rewarding deep pockets as well as the risk of monopolization of tools and resources in the hands of few (those who own the AI systems).

It would be interesting to follow developments in this area, which undoubtedly constitutes fertile ground for discussion and perhaps legislative changes in the near future. The fact that the highest courts of laws of major industrial nations are reluctant to recognise an AI system as an inventor is a welcome response in view of the speed at which AI is growing. A slower development may act as a counter-weight to allow time for greater reflection and assessment of the way forward.