



## **CIPA RESPONSE TO IPO CONSULTATION ON AI AND INVENTORSHIP**

This is the CIPA response to the IPO consultation at:

<https://www.gov.uk/government/consultations/artificial-intelligence-and-ip-copyright-and-patents>

### **Preliminary Comments**

(i) at present there is no clear consensus as to whether existing AI systems can make an “invention” that could be protected under the patent system, however AI systems are certainly involved in product development and innovation. This raises questions relating to AI systems and inventorship and it is important to provide industry with clear answers to these questions.

(ii) the current UK legal position is that a named inventor must be human, and the inventor is defined in statute as the “actual deviser” of the invention. The UK’s “actual deviser” wording has mostly been used to determine inventorship when a team of people has produced an invention, with some of the team making an innovative contribution and others a more routine contribution. This is rather different from the situation in which a human works with an AI system to create an invention. Therefore case-law relating to the former situation may be difficult to apply to the latter and this might lead to legal uncertainty. In addition, the “devising” definition of UK law is not shared by many other jurisdictions and might restrict patentability in the UK compared with other jurisdictions. In particular, UK patentability may be difficult for inventions made by a human working in close partnership with an AI system if the human cannot clearly demonstrate that they are the “actual deviser” of the invention.

(iii) subject to any possible UK Supreme Court appeal in the DABUS case, a UK patent application naming only an AI system as inventor will be refused by the UK IPO. A similar outcome is expected at the EPO and the USPTO. However, there is a potential for UK outcomes to differ from those in other countries for cases centring on the interpretation of “actual deviser” - such cases might occur as a result of the involvement of an AI system in the creation of the invention.

iv) many applicants seek patent protection for an invention in multiple countries.

CIPA recognises the value and importance of harmonisation across different national and regional patent offices to reduce complexity and improve legal certainty.

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## Consultation Questions

The Consultation proposes the following options, with CIPA's comments set out below each option:

### **Option 0: Make no legal change**

This option is acceptable at present to CIPA – subject to our strong recommendation that the UK IPO actively engages with other jurisdictions to develop a harmonised approach for AI and patents.

Under current procedures, at least one human inventor is likely to be identified for new UK patent applications because this is a requirement for the application to proceed. However, with the growing capability of AI systems, this position may become harder to maintain and the law should develop accordingly.

### **Option 1: “Inventor” expanded to include humans responsible for an AI system which devises inventions**

CIPA does not advocate this approach because it appears to cover a situation in which a human “responsible” for an AI system has made little or no direct contribution to a particular invention. This would not be consistent with the role of inventors in many other jurisdictions.

CIPA does advocate a *modification* of this approach (which we label Option 1A), when one or more humans clearly make a significant contribution to an invention, such as by recognising a technical problem, providing key technical insight for controlling the AI system to address this problem, and recognising the importance and utility of the output from the AI system. The AI system itself may be responsible for generating (arguably devising) the specific output of interest – whether that be a chemical structure, a geometric design for an aerial, and so on. Inventors have long used tools to support the inventive process, but AI systems can now make a greater and potentially more innovative (less routine) contribution.

We think that in the above circumstances, the contribution of the human is enough for the human to be recognised as an inventor, even if it could be argued that the AI system itself (rather than the human) “devised” the invention. Accordingly, CIPA proposes an update to the law, in particular to the definition of inventorship, to accommodate the above situation. In particular, such a modification would reduce or remove the definition based on “devising” in favour of human inventorship resulting from an innovative contribution (or similar). Importantly, this new approach would maintain international harmonisation because the updated definition of inventorship is consistent with international norms.



In practice, we think this change would reflect the approach that most applicants already follow – naming as inventor a human who has made an innovative contribution to the invention in order to ensure there is a human inventor. However, this change would remove a potential uncertainty regarding the validity of patents that might otherwise arise from the use of AI systems in the inventive process with respect to the “actual deviser” wording. Without the proposed change, patents granted on inventions that are “devised” using an AI system (and arguably by the AI system) might be at risk of an invalidity attack despite a human inventor having made a significant contribution to the invention.

### **Option 2: Allow patent applications to identify AI as inventor**

CIPA does not advocate such an approach. At present, and as recognised in the Consultation document, the identification of an AI system as inventor on a GB priority case may lead to significant problems (including potential invalidity) in foreign jurisdictions. This option might be acceptable to CIPA in the context of international harmonisation.

### **Option 3: Protect AI-devised inventions through a new type of protection**

CIPA is not in favour of this option. Patents are well understood in terms of scope and procedures, with good international harmonisation. Creating an additional IP right for AI systems is likely to result in greater complexity, cost and uncertainty.

## **ORDER OF PREFERENCE (most favoured first)**

- Option 1a (as identified above)**
- Option 0 (subject to engaging in international developments)**
- Option 1 (CIPA does not support)**
- Option 2 (CIPA does not support)**
- Option 3 (CIPA does not support)**



## **End Note**

CIPA is the UK professional body for chartered patent attorneys. CIPA's membership includes patent attorneys who routinely seek protection for computer-implemented inventions, including inventions involving AI.

## **Contact**

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