AI INVENTIONS

UPDATED UKIPO GUIDELINES

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The UK Intellectual Property Office (UKIPO) has recently re-released its guidance on examining patent applications **concerning Artificial Intelligence (AI) inventions**. The guidance followed the ruling of the High Court trademark case of *Emotional Perception AI Ltd v Comptroller-General of Patents*, Designs, November 2023.

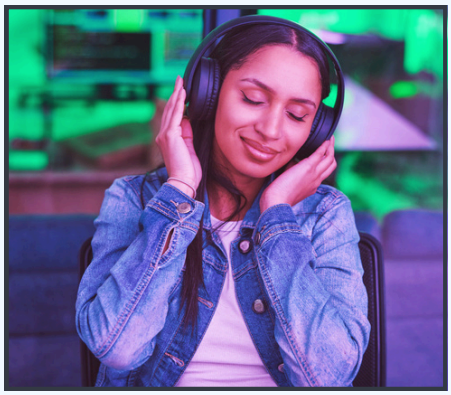
In the Emotional Perception AI case, a UKIPO hearing officer refused a patent application for an Artificial Neural Network (ANN) invention. The hearing officer argued that the ANN invention was a 'program for a computer' and therefore excluded under the Patents Act. The High Court disagreed with this decision, confirming that an ANN is patentable and falls outside of that exclusion.

Emotional Perception Case:

Emotional Perception AI invented a system that claimed to make music and media recommendations to its users in a new and improved way. This was said to be possible based on how the users were categorised by ANNs that were trained. The claim itself considered two aspects of ANN usage: (i) the process by which ANN is trained, and (ii) the process of using the trained ANN.

The patent application for this invention was rejected by a hearing officer of the UKIPO, who concluded that Emotional Perception's claimed invention was **not patentable**. The officer determined that the system created by Emotional Perception, as a whole, was a computer program, and additionally, its ability to provide similar file recommendations was not "technical in nature" and believed it to be excluded from patentability under the Patents Act.

To be patentable, an invention must be novel, involve an inventive step, be capable of industrial application and not be excluded by Sections 2 and 3. Section 2(c) excludes a "program for a computer".



Emotional Perception AI was successfully able to challenge this decision in the High Court.

The Judge determined that what Emotional Perception AI claimed was not a computer program and went on further to discuss the extent to which the system that was invented was patentable. The judge stated that rather than examining the system in its entirety it was better to separate it into (i) the part that was used to train the ANN; and (ii) the part used to implement the trained ANN.

The Judge reasoning was that the part of the system that initiates the training, did provide a "technical contribution" under UK Case law as it relates to the patentability of "computer implemented inventions."

Under UK case law, a computer-implemented invention no longer applies to the exclusion of patentability of "computer programs" so long as it provides a "technical contribution to the state of the art. This was true of the invention created by Emotional Perception AI.

UKIPOs updated guidelines:

The updated guidelines now confirm that ANNs do not involve a computerprogram. Consequently, the exclusion under Section 2(c) of the Patents Act which excludes a "program for a computer" are not applicable. This is for both ANNs that are implemented as physical hardware and those emulatedusing software.

> 9. The judgment compares hardware and software implementations of an ANN (see [32]-[62]). For hardware implementations, the judgment notes there is no program to which the program exclusion of s.1(2)(c) can apply (see [43]). For software implementations, the judgment holds it is appropriate to look at the emulated ANN as, in substance, operating in the same way as the hardware ANN it emulates. If the hardware ANN is not operating as a program, then neither is the emulated ANN (see [56]).
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> 10. Thus, the judgment concludes an emulated ANN is not a program for a computer (see [58]). As a matter of construction, the claimed invention is not a computer program at all (see [61]). So, the computer program exclusion is not invoked by the claimed invention ([61]).

The guidelines state that to qualify as an invention involving an ANN and be exempt from this exclusion, the applicant must " either claim an ANN itself or include claim limitations to training or using an ANN." Should the applicant fail to do so, then the exception *would not apply* and the exclusion of 'program for a computer' would be engaged; resulting in the invention being unpatentable. It is important to note that the determination of whether or not to limit a claim towards an ANN will always be case-specific.

Once it has been determined that an ANN-related invention is part of the application and thus not subject to the computer program exclusion, then the following stage of whether it makes a technical contribution must be looked at. Though the computer program exclusion may not apply for ANNs, it is important to consider that ANNs have multiple uses so other exclusions from patentability may still apply to ANN-related inventions such as the mathematical model exclusion.

Although the updated guidance proves to be a step forward for AI Inventors, specifically those with inventions involving ANNs, the UKIPO have since appealed this decision, which was heard by the High Court. Members of our team are monitoring this field and will report on any developments.

The outcome of this appeal will potentially influence how the UK is viewed by AI developers and whether it would be viewed as attractive for patenting their AI inventions. The ruling of the High Court positions the UK as being more AI- friendly than other jurisdicitons and whilst it may not be a complete solution, it stands as a catalyst for positive action.

RT Coopers aim to provide up-to-date information on these proceedings and any further changes to the UKIPO guidelines. Section 2(c) excludes a "program for a computer".