13th February 2020

Intellectual Property (IP) and Artificial Intelligence (AI)

Dear Mr Gurry,

This is to thank you for your letter of 13th December 2019 with a paper listing some issues concerning the impact of AI on IP Policy, and for the kind invitation to provide comments and suggestions thereon. I have the pleasure to attach the paper prepared by our Institute.

I would like to seize the opportunity to thank you, once again, for having invited our Institute to the Conversation on AI and IP that was held at WIPO on 27th September 2019, bringing together Member States and other stakeholders to discuss the impact of AI on IP policy.

We look forward to further supporting WIPO, in particular in identifying the issues that are arising for IP policy as a consequence of the development and deployment of AI.

Yours sincerely

Francis Leyder
President

Attachment: comments and suggestions of epi
COMMENTS OF epi on WIPO LETTER dated December 13, 2019 and the enclosed DRAFT ISSUES PAPER ON INTELLECTUAL PROPERTY POLICY AND ARTIFICIAL INTELLIGENCE

Please find enclosed comments and suggestions of the Institute of Professional Representatives before the European Patent Office ("epi") regarding the issues, listed in your letter of December 13, 2019 (C.8919), arising as a consequence of the development and deployment of Artificial Intelligence (AI) in the field of Intellectual Property.

Inventorship and Ownership (Items 6-7 of the WIPO letter)

According to epi members, the expression at Item 6, namely "However, it would now seem clear that inventions can be autonomously generated by AI ..." seems appropriate for Copyright and Designs but not appropriate for inventions. epi's suggestion is to replace it with: "However, it could now seem that inventions can be autonomously generated by AI, ...".

Also, the expression "... and there are several reported cases of applications for patent protection in which the applicant has named an AI application as the inventor ..." could be deleted because it appears a little exaggerated: to our knowledge, only two such EP applications have been filed, naming the AI "DABUS" as inventor, with the sole purpose of testing the patent system (Link) and boosting the debate. So, the "several" reported cases are only 2, for which the outcome was already known by the time of filing the applications. It would be better if WIPO were to give the correct proportions of the issue.

Alternatively, that expression could be replaced by the correct information: "... and there are several-two reported cases of European patent applications for patent protection in which the applicant has named an AI application as the inventor and the Office has refused them".

We believe that in your letter, in particular in para. 7-11, WIPO should only refer to one of the two species/categories, i.e. AI-generated inventions and AI-assisted inventions, and avoid using any other hybrid definition.

The epi position on inventorship is that only human beings should be named as the inventor(s).

How the determination is to be made, i.e. how the inventor is to be identified where several individuals, or a team, developed an AI solution which then autonomously provided the technical answer to the problem addressed in the patent application (AI-generated invention) could be left to the national law, contracts and corporate policy. The existing patent system fits the case when AI is used to assist the inventor (AI-assisted inventions)
but does not provide the solution itself: in these cases, applications can be processed as CII (computer implemented inventions), according to existing practices before patent offices (point 2(ii) of the WIPO letter).

The same approach could also be used for ownership: for AI-generated inventions, ownership could be determined based on national law, contracts, policy, etc. and for AI-assisted inventions, the existing system works properly.

**Patentable Subject Matter and Patentability Guidelines (Item 8 of the WIPO Letter)**

*epi* is against excluding from patentability AI-generated inventions (see points 1(iii) and 2(i) of the WIPO letter) as this would easily kill investment. In any case, enforcement of the law would be very difficult because the burden of proving that AI intervened in the invention process would be on the defendant.

Concerning the Guidelines (point 2(iii) of the WIPO letter), *epi* already made a contribution during the last revision of the EPO Guidelines and the work already done can be taken into consideration by WIPO.

**Inventive Step or Non-Obviousness (Item 9 of the WIPO Letter)**

For the time being, the standard of the person skilled in the art should be maintained. In fact, switching to a different standard, wherein a sort of reference AI is considered, would introduce more complexity: for each examination, the reference AI would have to be set at the priority date using the hardware available at the date. In litigation, to assess inventive step, the courts would have to rely on their own AI solutions for which absence of bias (even in good faith, for instance from the coders) has been proved, etc. Moreover, considering that AI could process thousands of documents, to an extent not achievable by a human, using a reference AI to assess inventive step might lead to drastically lowering the number of patents granted.

Moreover, if a standard AI is introduced to assess inventive step, inevitably this would affect access to patent protection by those populations on the earth who have less AI capabilities and tech infrastructures.

On the other side, AI-generated content should qualify as prior art, as for any other disclosure.

**Disclosure (Item 10 of the WIPO Letter)**

Considering the issue of sufficiency of disclosure, the debate is still open within *epi*. Some would require submission of training data of the AI, at the time of filing the patent.
application, if those data are necessary to work the invention, i.e. if without the training data the invention could not be obtained using another, or the same, AI.

If training data serve only for optimizing the outcome, i.e. the data help obtaining the optimal solution but the solution could be found even without the training data provided by the applicant, submission should not be mandatory.

The problem remains of the burden of proof in case of litigation. Should it be on the patent owner who, using its AI, might prove that the solution could have been achieved using any training data and not necessarily its own, or should it be on the defendant?

A different approach could be used on algorithms (point 10iii of the WIPO letter), i.e. it could be sufficient to consider the disclosure of the initial algorithm.

**General Policy Considerations for the Patent System (Item 11 of the WIPO Letter)**

The expression “Does the advent of inventions autonomously generated by AI applications call for a re-assessment of the relevance of the patent incentive to AI-generated inventions” seems unclear due to the use of both the terms “autonomously” and “AI-generated”.

**General considerations**

Among the items listed at point 5 of the WIPO letter, trademarks are not included, which is strange, considering that AI solutions have been already deployed in this field (e.g. in the search engine of the EUIPO) and, to some extent, the challenges are not different from those in the copyright field (which is instead included among the relevant points): comparison between images, audio traces, etc.

Chris Mercer – Chair – European Patent Practice Committee

February 13, 2020