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Short Comment on the draft by WIPO Secretariat of Intellectual Property (IP) and Artificial Intelligence (AI)

Ryuta Hirashima  
(Professor of Law,  
University of Tsukuba,  
Japan)  
ryuta.hirasima@gmail.com

I would like to respectfully submit my short comment on the draft by WIPO Secretariat of Intellectual Property (IP) and Artificial Intelligence (AI).  
I would provide my short comment on some issues of patent law, along with issues presented by the draft, below.

**Patents Issue 1: Inventorship and Ownership**

To 7.

(i ) Basically, the law should not permit that the AI application be named as the inventor. Under current patent system, patent law is supposed to only protect inventions that human beings create. Even if AI could autonomously generate the “creation” like invention, the legal protection of the “creation” would be another problem (rather political) which may be beyond existing patent system. And, it would be preferable for the law to indicate the principle to determine human inventor of such kind of inventions. But, in many cases, existing laws concerning disputes over inventorship will do.

(ii) Specific legal provisions (to govern the ownership of autonomously generated AI inventions) does not need to be introduced, mostly, ownership would follow from inventorship.

(iii) Autonomously generated AI inventions should not be protected under current patent system.
(In Addition)

As a matter of premise, I am not convinced that not so much inventions could be FULL—autonomously generated by AI, considering current technical conditions and technical progress in near future. If possible, current AI technology could only generate something like inventions in limited conditions or specific technical realms. More, even in that cases, human-beings would need to arrange, input data for machine-learning, and make training and fine-tuning for some time being, I think. So, such outputs by AI(maybe assessible as invention under patent law) could treat as invention generated by human-beings relating to the AI’s generative action.

Then, the inventorship and ownership of such outputs could be roled by existing scheme of the inventorship and ownership under patent law, I think. As my above perspective tells, I do not basically find urgent necessity of new requirement to rule the inventorship or specific legal provision to govern the ownership of autonomously generated AI inventions.

Of course, I recognize that there’s no need to the AI application be named as the inventor.

Rather, looking to many cases of ongoing AI development scheme, it seems AI development tend to have the specific character that enormously diverse field of engineers and data scientists and so on are necessary to join and work cooperatively. So, it would be prohibitively complicating to delineate inventorship. Then, ex ante private arrangement(contracts, etc) might not work well.

Issue 2: Patentable Subject Matter and Patentability Guidelines

(i) Principally, the law should exclude the “creation” autonomously generated by an AI application from patent eligibility inventions that are inventions. The reason is the same as Issue1.

From the view of current Japanese patent law, Japanese patent law clearly defines “the invention” as patentable subject matter which requires the the “creation” by human-beings.

(ii) Specific provisions for inventions assisted by AI would not be needed.

(iii) Some amendments in patent examination guidelines for AI-assisted inventions may be needed. For example, guidelines shall clarify the
degree of intervention by human-beings or AI to be patentable invention.

Issue 4: Disclosure

10. (i)

As the effect and performance of AI-related inventions seems to deeply depend on the quality of data for learning, training, fine-tuning, etc., it would be difficult for another a person skilled in the relevant art than inventor to realize and reproduce inventions Only by current (linguistic) descriptive basis as disclosure measure (that means the claims and specification).

(ii) The disclosure of the initial algorithm sufficient is insufficient to disclosure.

(iii) For the purpose to secure the disclosure requirement, the concept of deposition system such as for living objects is very insightful idea. But, it seems that we could identify so many problems to solve for making such system go well. So, it may not be much useful. For example, deposited AI systems could be easily appropriated through deposition system and merged with other’s nearby systems, but the patentees would be untrackable about that and could not enforce their rights.

(iv) (v)

Principally, data for training and human expertise for selecting data, training, fine-tuning should be disclosed. But, I think requiring the full disclosure of such data, etc. is unduly hard for inventor and patentee and not good policy. To clarify the degree of disclosure with globally harmonization would be very important for patent authorities to work on.

Issue 5: General Policy Considerations for the Patent System

11. (i)

The possibility of Sui generis system for AI-related inventions should be explored continuously and intensively.