



Resolution

2020 – Study Question – Patents

Inventorship of inventions made using Artificial Intelligence

Background:

- 1) This Resolution concerns the question of inventorship of inventions made using Artificial Intelligence (“AI”). In particular, this Resolution considers the various roles humans play in the creation, training and use of AI systems and examines how the standards of inventorship should apply when considering an invention made using such a system.
- 2) As of today, in a typical AI application, humans may be involved at various stages including creation of an AI algorithm, designing an AI system to suit a particular purpose, curating data and training the system with that data, and applying the trained system to a particular task. Already, given the ability of AI systems to “learn”, traditional notions of inventorship may be challenged when dealing with inventing processes. In the future, if not already, human involvement in the inventing process may be minimized or disappear altogether. Whether the current law of inventorship is adequate to address these scenarios, or whether something new or different is needed, is the focus of this Resolution.
- 3) For the purposes of this Resolution:
 - a. The definition of "**inventor**" follows the AIPPI Resolution Q244 “Inventorship of Multinational Inventions” (Rio de Janeiro, 2015) noting that:

“A person should be considered a (co-)inventor if they have made an intellectual contribution to the inventive concept. The inventive concept shall be determined on the basis of the entire content of a patent application or patent, including the description, claims and drawings.”

and further continuing that:

“[t]he rule to determine intellectual contribution of an inventor should be consistent regardless of the residency or location of the inventor, their citizenship, the governing law of the employment, or the country in which the intellectual contribution was made,” and

- b. "**Invention**" means a patentable invention for which a patent would be granted under the current patent system if the invention was made by a natural person(s).
- 4) 39 Reports were received from AIPPI's National and Regional Groups and Independent Members providing detailed information and analysis regarding national and regional laws relating to this Resolution. These Reports were reviewed by the Reporter General Team of AIPPI and distilled into a Summary Report (see links below).
 - 5) At the online AIPPI World Congress in October 2020, the subject matter of this Resolution was further discussed within a dedicated Study Committee, and again in a full Plenary Session, following which the present Resolution was adopted by the Executive Committee of AIPPI.

AIPPI resolves that:

- 1) International harmonization regarding inventorship of inventions made using AI is desirable.
- 2) An invention should not be excluded from patent protection merely because an AI contributed to the invention.
- 3) The requirements for a natural person to be considered an inventor or a co-inventor of an invention made using AI should not be different compared to the requirements for being considered an inventor of an invention made without using AI.
- 4) Irrespective of whether or not AI was used in making the invention, a natural person should be considered an inventor or a co-inventor, if they have made an intellectual contribution to the inventive concept. By way of non-limiting examples, and assuming the other requirements of invention are met with respect to inventions made using AI, the following may be considered inventors:
 - a. A natural person who uses an AI algorithm to design a particular type of product or process should be considered to be an inventor or a co-inventor when the resulting invention is of the type of product or process intended by the natural person.

- b. A natural person who designs an AI algorithm used in the making of an invention should be considered to be an inventor or a co-inventor depending on the person's level of contribution to the invention. If a natural person designed the AI algorithm to solve a predetermined problem which is effectively solved by the invention, such natural person should be considered to be an inventor of the invention. If the AI algorithm was a generic AI algorithm designed without a specific problem in mind, the natural person who designed the AI algorithm should not be considered an inventor absent another intellectual contribution to the inventive concept.
 - c. A natural person who selects data or a data source for training an AI algorithm should be considered to be an inventor or a co-inventor of an invention made using that AI algorithm if the data or data source are selected with the purpose of solving a predetermined problem which is effectively solved by the invention.
 - d. A natural person who selects or generates data or selects a data source for input to a trained AI algorithm should be considered to be an inventor or a co-inventor of an invention made using that AI algorithm if the data or data source are generated or selected with the purpose of solving a predetermined problem and the invention effectively solves the problem.
 - e. A natural person who recognizes that an output of an AI algorithm constitutes an invention should be considered to be an inventor or a co-inventor of such invention.
- 5) An AI should not be considered an inventor or a co-inventor of an invention, nor be permitted to be named as such, even if no contribution to the invention by a natural person is identifiable.
 - 6) In order to foster innovation, inventions made using AI should not be excluded from patent protection *per se*, regardless of whether or not there is sufficient contribution by a natural person to be named as an inventor and provided that there is a natural or a legal person named as an applicant.

Links:

- [Study Guidelines](#)
- [Summary Report](#)
- [Group Reports](#)