AIPPI Study Question 2020

Inventorship of Inventions Made Using AI

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**Questions**

**I. Current law and practice**

1) What are the **requirements to be considered an inventor** of a patented invention in your jurisdiction? When this Study Question is referring to *“your law”* or *“your jurisdiction”*, please note this is intended to be inclusive of both statutory law and case law.

The Finnish law does not set forth express requirements as to the characteristics of an inventor of a patented invention. However, the wording of the Finnish Patents Act (550/1967 as amended, the “Patents Act”), its preparatory works, and the legal practice seem to indicate that the legislator at the time of passing the legislation considered the term “*inventor*” to refer only to a natural person. There is no case law in Finland on the question of the requirements to be considered an inventor.

According to the Patents Act (Section 1(1)), anyone *who* has made an invention that relates to any branch of technology and is susceptible of industrial application, or the inventor's successor in title, shall be entitled to a patent. In Finnish standard language, the word “*who*” generally refers only to a natural person.

In Finnish legal literature, scholars have also argued that an inventor(s) of a patented invention must always be one or more natural person(s) and a computer cannot be considered an inventor or a co-inventor in the sense of the current legal framework: In case a computer contributes to an invention, the inventor in the legal sense could be, *e.g.*, the computer scientist responsible for designing the computer program contributing to the conception of the invention.

Further, the Finnish Act on the Right in Employee Inventions (1967/656 as amended, the "Employee Inventions Act") (Section 1(1)) refers to inventions patentable in Finland and made by *“a person employed by another, that is, an employee"*. Thus, an inventor within the meaning of the Employee Inventions Act means specifically a natural person.

Please also note that Finland is a member of the European Patent Convention (EPC) and, thus, the EPC applies with respect to European patents and patent applications.

2) Assuming valid inventorship, does your law include provisions concerning the ***naming* of the inventor** of an invention? If yes, please briefly explain.

According to the requirements of the Finnish law, a patent application must always include the name of the inventor who has been involved in making the invention for which the patent is being applied. Such requirement is recognized, *e.g.*, in the Patents Act (Section 8(3)) as well as in the Finnish Patent Decree (669/1980 as amended, the “Patent Decree”) (Section 2(2)). According to the Patent Decree, a patent application must also include the address of the inventor (Section 2(2)). If the patent application is filed by someone else than the inventor, the applicant is required to prove their right to the invention by attaching an appropriate statement in that respect to the patent application. Neither the Patents Act nor the Patent Decree contain any further guidance on the naming of the inventor.

3) Does your law, including any regulations or official guidelines, provide any specific guidance or rules on inventorship of inventions made using AI?

The Finnish AIPPI Group is not aware of any specific national Finnish guidance or rules applicable to inventorship of inventions made using AI. The European Patent Office (EPO) practice applies to European patents and patent applications with Finnish designation/validation.

4) Under your law, is it possible for an **AI entity** to be considered an inventor or co-inventor in a patent application? If yes, please explain.

In the Finnish law, there are no express provisions prohibiting or permitting an AI entity being considered an inventor or a co-inventor in a patent application. However, as described above in the answer to question No. 1, the standard language reading of the relevant provisions in Finnish law would appear to refer to a natural person. Also views have been expressed by Finnish scholars to interpret the requirements of the Finnish Patents Act to allow only one or more natural persons to be named as an inventor or a co-inventor.

The question has not to date been considered by the Finnish patent authorities (Finnish Patent and Registration Office, *FI: Patentti- ja rekisterihallitus,* PRH), as the PRH has not thusfar received any applications for a patent where an AI entity would have been named as an inventor or as a co-inventor.

The Finnish patent authorities (PRH) generally follow the goals of harmonization and guidance of the European Patent Office (EPO). With respect to the EPO practice, the EPO has recently considered whether an AI entity can be considered an inventor in a patent application under the EPC. The cases related to European patent applications Nos. EP18275163 and EP18275174 ("DABUS cases"). Referring to Article 81 EPC and Rule 19 EPC, the EPO refused the patent applications on the ground that they did not meet the requirement of the EPC stating that the inventor designated in the application has to be a human being, not a machine. The applicant has appealed the respective EPO decisions and, thus, it remains to be seen whether EPO’s initial position will be held.

5) Under your law, is it possible to ***name* an AI entity** as an inventor or co-inventor in a patent application? If yes, please explain.

Please see the answer to question No. 4 above. I.e., while this has not been tested in the Finnish practice, the interpretation would appear to lean towards the notion of only a natural person being capable of being named as an inventor or a co-inventor in a patent application in Finland.

6) In connection with a hypothetical patentable invention made using AI, which of the following contributions by one or more human contributors could be considered under your law **as being at least co-inventorship of an invention made using AI**? In each case, please explain why or why not. Please note this question does not consider inventorship of the AI itself; only inventorship of an invention made using the AI:

*(a)* Using AI to design a particular type of product or process, when the resulting patentable invention is of the type of product or process **intended** (*e.g.*, a car designer who wishes to design a car body might start with a general shape, and then use AI to perfect aerodynamic or other characteristics leading to a patentable invention. Here, AI is being used as a tool to help invent, but the intent for the result lies with the user);

Finnish law does not provide an express answer to the question. However, these types of inventions are common in the Finnish practice. The Finnish AIPPI Group finds that it can be considered, under Finnish law, that the natural person defining the type of the product or process to be designed by the AI could be considered an inventor or a co-inventor of a patentable invention resulting from the design work made using the AI subject to the general criteria for patentability being met. Further details mapping the limits of inventorship in this type of context could be derived, *i.a.,* from the requirements for an invention to be patentable as well as from the exclusions of patentability under the Finnish Patents Act (for patentability requirements see especially Sections 1(1) and 2(1), and for exclusions of patentability see Section 1(2)).

*(b)* Using AI to achieve a particular intended goal, when a resulting patentable invention made using the AI is **not directly related to that intended** **goal** (*e.g.*, an AI system is developed to go through social media data looking for one thing **and then discovers a useful relationship** leading to a patentable invention **that was not an original objective** of the system);

Finnish law does not provide an express answer to the question. The Finnish AIPPI Group's view is that the most relevant factor to be considered in this case would be whether it is the AI entity or the natural person using the AI that determines that the relationship discovered by the AI is useful for a particular purpose.

If the natural person makes an active contribution and defines that the discovery is useful for a specific purpose, it could be concluded that it is the natural person who recognizes the importance and utility of the discovery, and thus, is an inventor or a co-inventor of the patentable invention. Under Finnish law, such discovery would be called an invention by observation (FIN: *havaintokeksintö*).

Please also note that according to the Finnish Patents Act (Section 1(2) exclusions to patentability apply and: (a) discoveries, scientific theories and mathematical methods; (b) aesthetic creations: (c) schemes, rules and methods for performing mental acts, playing games or doing business, and programs for computers; and (d) presentations of information are not regarded as "inventions". Thus, a mere discovery involving no technical impact, such as detecting a new characteristic of a material or object, is not as such considered a patentable invention. However, while the criteria for patentability may give some support in determining the inventorship, the Finnish AIPPI Group recognizes the question of whether or not the discovery made by the AI entity is a patentable invention or not to be as such separate of the assessment of who may qualify as inventor or a co-inventor under the given circumstances.

*(c)* **Designing or contributing to the design of the AI algorithm** that is used in (a) or (b);

Finnish law does not provide an express answer to the question. The Finnish AIPPI Group finds that this would likely be assessed on a case-by-case basis with a close view on identifying the inventive step/contribution to the technical character. Naturally, if the AI algorithm itself would contain a patentable invention, the natural person making such an invention would be considered an inventor.

*(d)* **Selecting the data or the source** of the data that is used to **train the AI algorithm** used in (a) or (b);

Finnish law does not provide an express answer to the question. The Finnish AIPPI Group considers that this would likely be assessed on a case-by-case basis with a close view on identifying the inventive step/contribution to the technical character. The Finnish AIPPI Group finds, however, that, in practice, inventorship on the part of the natural person would more likely be present in example (a) than in example (b).

*(e)* **Generating or selecting the data or the source** of the data **that is input to the trained AI algorithm** used in (a) or (b); and

Finnish law does not provide an express answer to the question. The Finnish law recognizes an invention which is made by a natural person by selecting a useful option from a pre-determined group of options (“invention by selection”, FIN: *valintakeksintö*). It is required however that the selection made by the natural person leads to a new and surprising impact that can be considered inventive. Thus, a mere selection which could have been made by a person skilled in the art in the field in the course of routine experimenting, or a choice from a group of almost equal options, would not constitute an invention.

Therefore, based on a case-by-case assessment, a natural person generating or selecting the data or the source of the data that is used as input for the trained AI algorithm may be considered an inventor or a co-inventor of a patentable invention made using the AI algorithm. The outcome of the case-by-case assessment would likely depend, however, on: (i) the impact of the generation or selection of the data on the patentable invention; and (ii) the impact of the actions of the natural person on the generation or selection.

*(f)* Selecting **one** **from a large number of outputs** produced by the AI of (a) or (b) and recognizing it to be a patentable invention.

As described above in the answer in subpoint (e), a natural person who selects one option from a large number of outputs produced by the AI and then recognizes that the chosen option is a patentable invention, can be considered an inventor or a co-inventor under Finnish law. However, the act of selection must fulfil the criteria presented above for invention by selection, *i.e.*, among others, the selection must lead to a new and surprising impact that is considered inventive.

The Finnish AIPPI Group notes that, in some cases, an act of selection might constitute a mere finding involving no technical impact (as described in the answer to subpoint (b) above) and, thus, not qualify as human contribution to an invention made using AI.

7) Assuming an invention was made using at least **a minimum amount of AI contribution** during the inventive process at any stage, would this be considered **as a red flag under your law leading to an exclusion of the patentability of the invention as a whole**? Please briefly explain.

While there is no express provision in the Finnish law answering this question, the Finnish AIPPI Group does not consider that the use of AI contribution during an inventive process would be a red flag under the Finnish law which would lead to the automatic exclusion of the patentability of the invention as a whole. As described in our responses in this section I, assessment of patentability is made on a case-by-case basis and depends on the type and importance of the human contribution in question.

**II. Policy considerations and proposals for improvements of your Group’s current law**

8) According to the opinion of your Group, is your current law regarding **inventorship** of inventions made using AI **adequate**? Please briefly explain.

No, the Finnish AIPPI Group finds that the Finnish law is not adequate with respect to inventorship of inventions made using AI.

The current Finnish patent legislation (namely the Patents Act and the Patent Decree) is fairly old and the sections referring to an inventor date back to 1960s (and basically the same definitions derive back to 1940s). Although the Finnish Patents Act does not expressly mention that the inventor should be a natural person, there is also no indication that anything else would have been considered as an "inventor" at the time when the Patents Act and the Patent Decree were drafted.

With respect to inventorship, the main shortcoming of the current Finnish law is that there is no definition of an "inventor". It is only mentioned in the Patents Act that *“[t]he inventor's name shall be stated in the application“* (Section 8(3)), and that *“[a]nyone who has, in any field of technology, made an invention which is susceptible of industrial application, or his or her successor in title, is entitled, on application, to a patent and thereby to the exclusive right to exploit the invention commercially, in accordance with this Act”* (Section 1(1)). Further, as regards inventions made in an employment relationship, the current Employee Inventions Act refers to the employee inventor as *“a person employed by another, that is, an employee”* (Section 1(1)). Thus, the current Finnish law does not expressly define*, i.a.,* the person of the inventor nor the more precise level of contribution meriting to be named as an inventor.

In the event it would be considered that an AI entity could be named as an inventor, the current Finnish law does not define how and by whom the rights to the invention made by the AI entity would be controlled/managed. For example, the current Finnish law is silent, and as such in the Finnish AIPPI Group's view insufficient, as to who would control the AI entity's ownership rights pertaining to the invention. In addition, it remains expressly undetermined what kind of an impact (if any) an AI entity being a co-inventor would have with respect to inventions falling within the scope of application of the Finnish Employee Inventions Act in terms of, *e.g.*, reasonable compensation to be paid to the employee inventor(s).

9) According to the opinion of your Group, would recognition of **an AI entity as an inventor** or co-inventor **conflict** with the public policy issue of fostering innovation (you may also refer to other general patent law doctrines under your law, if applicable)? Please briefly explain.

The Finnish AIPPI Group considers that the answer to this question can be both "yes" and "no" depending on the perspective from which the issue is considered.

First, the Finnish AIPPI Group considers that recognition of an AI entity as an inventor or co-inventor *would not conflict* with the public policy issue of fostering innovation as it would likely also foster the investments made in the innovative activity conducted by the AI entity. Further, for example:

* *Impact on the trade-off between disclosure of invention and the grant of limited exclusive rights*: If an AI entity cannot be named as an inventor and patent cannot be obtained for an invention that has been made in whole or in part by AI, the entity having access to this invention might not be motivated to publish the invention without protection and, thus, the technical information would not be available to the public.
* *Impact on the transparency of inventorship*: If AI cannot be named as an inventor, it cannot be ruled out that applicants would be tempted to fabricate name(s) (human) of inventor(s) to inventions made in whole or in part by AI.

However, the Finnish AIPPI Group notes that recognition of an AI entity as an inventor or co-inventor would raise a number of other questions pertaining to the nature of the invention as a property of the inventor. These questions relate to, *i.a.,* ownership rights, compensation questions (*e.g.*, employee invention remuneration), and rights to control the invention (*e.g.*, to decide on patenting, enforcement, etc.).

Further, it is also possible that recognition of an AI entity as an inventor or a co-inventor *could conflict* with the public policy issue of fostering innovation, *e.g.*, for the following reasons:

* The current Finnish Employee Inventions Act applies to inventions patentable in Finland and made by *"a person employed by another, that is, by an employee"* (Section 1(1)). According to said Act, the employee is entitled to a reasonable compensation from the employer (Section 7). In case naming AI as an inventor would be accepted, it would be difficult to determine who will receive the part of the reasonable compensation that would be directed to the AI. If the compensation payable for the inventor(s) who are natural person(s) would become lower due to recognition of the AI as an inventor or a co-inventor, it cannot be ruled out that less inventions would possibly be reported.
* According to the current Finnish Employee Inventions Act, *“an employee who makes an invention referred to in section 4 shall notify the employer of it in writing without delay”* (Section 5). Thus, if an AI would be considered an inventor, reporting obligations with respect to employee inventions should be considered to be specified.
* Finally, if the legal framework would not be specific enough in determining the rights of different stakeholders with respect to inventions recognized to have been created by AI, the insecurities in the return on investment on such AI development work might deter disclosing of such inventions (and, instead, incentivize keeping such inventions secret).

10) In your jurisdiction, what is the **purpose of *naming***the inventor in the patent application? Does the naming of the inventor in the patent application, if applicable, consider aspects of personal rights under your law, *e.g.*, does it fulfill a reward function for **personal effort**? Please briefly explain.

Although, the current wording of the Finnish Patents Act does not provide an express reference, the Finnish Patents Act has historically recognized the so-called "inventor's honor" (FIN: *keksijänkunnia*), *i.e.*, the inventor's right to be named as an inventor. Through the naming function, the inventor is acknowledged as the creator of the invention and receives public accolade for the inventive effort.

Under the current Finnish framework, naming the inventor defines:

* who has the initial right to the invention;
* who can decide on the protection of the invention, *i.e.*, to file a patent application for the invention;
* who is entitled to reasonable compensation regarding employee inventions;
* who is entitled to assign the rights further;
* who is entitled to enforce the patent (/use the right to deny others from exploiting the invention); and
* who can decide about the commercialization of the invention.

Further, under the Finnish framework, inventorship can be considered to fulfill a reward function for personal effort to a degree, as the inventions are always initially vested with the inventor(s) – even in employment contexts. As regards employee inventions specifically, the personal effort of the employee inventor is acknowledged, *e.g.*, through the mandatory compensation system.

11) According to the opinion of your Group, would the recognition of inventorship by an AI entity **conflict with or undermine the purpose of *naming* the inventor in the patent** application you identified in question 10? Please briefly explain.

The Finnish AIPPI Group considers that the recognition of inventorship by an AI entity would not *as such* conflict with the purpose of naming the inventor. However, it should be considered how the natural person who identifies/notifies the invention could, would, or should be acknowledged.

Further, it should be noted, however, that the recognition of inventorship by an AI entity would require changes to the current Finnish framework in order to ensure that the various questions relating thereto would be addressed holistically. For example, currently, in the Finnish system, the naming of the inventors links to the nature of the patent/patent application as a piece of property as well as to the right to compensation for an invention made by an employee. Also, the rights currently defined for an inventor should be reassessed, *e.g.,* to clarify who would be the actual owner of the rights assigned to an AI entity; this would likely trigger also broader review of contractual practices among the developers and users of AI.

**III. Proposals for harmonization**

*Please consult with relevant in-house / industry members of your Group in responding to Part III.*

12) Do you consider international harmonization regarding inventorship of inventions made using AI as desirable? Please briefly explain.

Yes. International harmonization of rules regarding inventorship of inventions made using AI would bring along more clarity as to how these types of inventions should be addressed. This would be important in particular considering also that the questions on inventorship relating to AI inventions have not been considered, and could not have been even foreseen, when enacting many of the patent laws around the world (including the Finnish Patents Act). On the other hand, technology develops so fast that even within the time frame of five years, rules harmonized now, could already turn out obsolete.

*If YES, please respond to the following questions without regard to your Group's current law or practice.*

*Even if NO, please address the following questions to the extent your Group considers your Group's current law or practice could be improved.*

13) What should be the **requirements to be considered an inventor or co-inventor** of an invention made using AI?

First, the Finnish AIPPI Group considers that the criteria for a natural person to be considered an inventor or a co-inventor should be the same regardless of whether the invention is made using AI or without using AI. With this respect, the Finnish AIPPI Group considers that in order to be considered as an inventor or a co-inventor of an invention made using AI, a natural person should have made an identifiable, direct, and independent contribution to the fulfillment of the criteria for patentability (in particular with respect to the inventive step through contribution to the technical character) in the absence of which there would be no invention fulfilling the criteria for patentability.

Second, the Finnish AIPPI Group also considers that the mere enablement of an invention should not be considered to be "inventorship" by any party (whether a natural person or an AI entity).

Third, as regards inventions made solely by an AI entity (*i.e.*, without any contribution of a natural person that would fulfil the criteria of inventorship), the Finnish AIPPI Group recognizes that there may be a desire to incentivize also the natural person detecting an invention made solely by an AI to publish the invention and mechanisms for recognizing and incentivizing such detection (when not constituting inventorship in itself) should also be assessed.

14) Should an AI entity, for example when considered as an “artificial person”, be considered an inventor or co-inventor of an invention made at least in part by contribution from the AI entity assuming the same contribution, if made by a human inventor, would be considered inventorship under applicable patent law?

Yes, the Finnish AIPPI Group considers in principle that it should be possible to consider the AI entity as an inventor or a co-inventor as it would clarify the scope of the actual inventors. In case an AI entity is the sole inventor, the Finnish AIPPI Group finds that the applicant, and later the proprietor, of the patent in question should be a natural or legal person and inventor's rights should vest with such applicant/proprietor.

Further, the Finnish AIPPI Group considers that defining the respective parts of contribution made by the "artificial person" (AI entity) and natural person(s) would also be in the interest of companies because this would have an impact on the mandatory compensation payable for employee inventors as well as because it might clarify inventorship with respect to joint development activities between different parties involving AI.

Finally, the Finnish AIPPI Group recognizes that one other alternative for naming the AI entity as an inventor or a co-inventor could be to only mention the owner of the invention (a natural or legal person) in the patent application.

15) If AI is considered an inventor or co-inventor of an invention made using AI, should it be possible to ***name* AI as an inventor or co-inventor** in a patent application?

The Finnish AIPPI Group considers that there should be a possibility to name AI as an inventor or a co-inventor in patent application. Such possibility could be offered either by including to the patent application: (i) a general reference to "AI" as an inventor or a co-inventor (*i.e.*, anonymous naming); or (ii) a specific reference to the particular AI entity in question (*i.e.*, identification of the AI entity).

However, it should be noted that in systems like the Finnish legal system, where the rights to inventions are always initially vested with the inventors and even in employment relationships transferred to the employer only subject to certain procedures, considering AI as an inventor or a co-inventor would require adjustments to the system, *e.g.*, with respect to rights in the invention, right to obtain rights in the inventions created by the AI, as well as with respect to division of reimbursement for employee inventions (as noted also in the answers above).

16) In connection with a hypothetical patentable invention made using AI, which of the following contributions by one or more human contributors should be considered under your law as being at least co-inventorship of the invention made using AI? In each case, please explain why or why not. Please note this question does not consider inventorship of the AI itself; only inventorship of an invention made using the AI:

*(a)* Using AI to design a particular type of product or process, when the resulting patentable invention is of the type of product or process intended (e.g., a car designer who wishes to design a car body might start with a general shape, and then use AI to perfect aerodynamic or other characteristics leading to a patentable invention. Here, AI is being used as a tool to help invent, but the intent for the result lies with the user);

The Finnish AIPPI Group finds that in this case, a human contributor should generally be considered an inventor. The Finnish AIPPI Group further considers that in case AI is only used as a tool to help a natural person to invent and the intent for the result is with such user of the AI, the human contributor (*i.e.,* the natural person) should be considered an inventor. However, the assessment should be conducted on a case-by-case basis and would depend on the significance of the AI contribution (*i.e.*, whether or not the AI entity itself qualifies as an inventor or a co-inventor and with respect to which contribution). Please see the answer above to question No. 13.

*(b)* Using AI to achieve a particular intended goal, when a resulting patentable invention made using the AI is not directly related to that intended goal (e.g., an AI system is developed to go through social media data looking for one thing and then discovers a useful relationship leading to a patentable invention that was not an original objective of the system);

This is a different situation from the point a) above and the Finnish AIPPI Group considers that the answer should be either "yes" or "no" depending on the case-specific circumstances.

The Finnish AIPPI Group considers that the fact whether or not a human contributor is considered an inventor should depend, *e.g.*, on how the actual patentable invention is achieved and who actually realizes and understands that the invention is a patentable invention. This may, perhaps, lead to one of the situations where the role of the AI as the actual inventor becomes relevant.

The Finnish AIPPI Group considers that the most important element to be assessed in this case is *who/what* identifiably, directly, and independently contributes to the fulfilment of the criteria for patentability (in particular the inventive step through contribution to technical character) in such a manner that there would be no patentable invention in the absence of such contribution (please see the answer above to question No. 13).

*(c)* Designing or contributing to the design of the AI algorithm that is used in (a) or (b);

As a general starting point, the Finnish AIPPI Group considers that the design of an AI algorithm that contributes to the coming into existence of a patentable invention should not, *as such*, be considered a patentable invention (unless the general conditions for a patentable invention in the form of a computer implemented invention are met which is, however, a different question). However, if the design or other contribution to the AI algorithm identifiably, directly, and independently contributes to the fulfilment of the criteria for patentability (in particular the inventive step through contribution to the technical character) in such a manner that there would be no patentable invention in the absence of such contribution, such contribution could be considered to merit inventorship by the human contributor (please see the answer above to question No. 13).

*(d)* Selecting the data or the source of the data that is used to train the AI algorithm used in (a) or (b);

In principle, the Finnish AIPPI Group considers that the mere selection of data or source for training the AI algorithm that later generates an invention should not, *as such,* be considered a contribution to the invention meriting inventorship. However, if such selection is inventive and as such the natural person identifiably, directly, and independently contributes to the fulfilment of the criteria for patentability (in particular the inventive step through contribution to the technical character) in such a manner that there would be no patentable invention in the absence of such contribution, such contribution should warrant inventorship (*e.g.*, an invention by selection as defined above in the answer to question No. 6e; please also see the answer above to question No. 13).

The Finnish AIPPI Group also recognizes the fact that the way the AI algorithm is trained, *i.e.*, the choice of the source data used in the training, affects the way the AI algorithm is able to learn and develop in the future. Thus, particular circumstances, where the training of the AI algorithm is a fundamental part of the process leading to a patentable invention, may give rise to the conclusion that the designer of the AI algorithm should be considered an inventor or a co-inventor of the patentable invention made using the AI algorithm (please see also the answer above to question No. 13).

*(e)* Generating or selecting the data or the source of the data that is input to the trained AI algorithm used in (a) or (b); and

The Finnish AIPPI Group considers that if the end result in (a) or (b) fulfills the criteria for patentability, the human contributor selecting the data or the source of data should be considered as an inventor provided that the generation or selection of the data identifiably, directly, and independently contributes to the fulfilment of the criteria for patentability (in particular the inventive step through contribution to the technical character) in such a manner that there would be no patentable invention in the absence of such contribution (please see also the answers above to questions No. 13 as well as to 6e).

*(f)* Selecting one from a large number of outputs produced by the AI of (a) or (b) and recognizing it to be a patentable invention.

The Finnish AIPPI Group considers that if the end result in (a) or (b) fulfills the criteria for patentability, the human contributor selecting the output should be considered as an inventor provided that the selection of the output identifiably, directly, and independently contributes to the fulfilment of the criteria for patentability (in particular the inventive step through contribution to the technical character) in such a manner that there would be no patentable invention in the absence of such contribution (please see also the answers above to questions No. 13 as well as to No. 6e). Further, the Finnish AIPPI Group considers that the fact that AI would be involved in producing the output should not have an impact on the availability of protection for selection inventions (please see the answer above to question No. 6e)

17) If an invention was made using at least a certain level of AI contribution during the inventive process should the invention be excluded from patentability as a whole? If yes, what would be the minimum level of AI contribution to trigger this exclusion? Please briefly explain.

No, the Finnish AIPPI Group finds that an invention which was made using at least a certain level of AI contribution during the inventive process should not be excluded from patentability as a whole. The Finnish AIPPI Group does not see a reason why patentability should be excluded merely because AI was used in the inventive process; this could also be against the underlying principles of the patent system of fostering innovation and promoting investment in technological development through balancing between disclosure and limited monopoly.

18) Please comment on any additional issues concerning any aspect of inventorship of inventions made using AI you consider relevant to this Study Question.

The Finnish AIPPI Group finds that the definition of an "inventor" should be harmonized and defined in more detail. In this connection, also the criteria that needs to be fulfilled in order to be named as an inventor should be considered in more detail.

The Finnish AIPPI Group also finds that the naming of an AI entity in a patent application should be considered either on anonymous or identified basis. In this connection, also existing practices with respect to waiving rights to be mentioned as an inventor (as recognized by the EPO) could be explored.

Finally, the Finnish AIPPI Group would also like to highlight the following:

* It would be important to consider who has the right to exercise inventor rights on behalf of an AI entity. Also, in this connection it could be explored whether written waivers could be used;
* Potential needs to reassess mandatory compensation schemes concerning employee inventions should be considered;
* It should also be considered how the natural person who identifies/notifies the invention could, would, or should be acknowledged; and
* If AI is recognized as an inventor, the agreements regarding the AI will play a significant role in the ownership of the invention.

19) Please indicate which industry sector views provided by **in-house counsels** are included in your Group’s answers to Part III.

[TO BE SUPPLEMENTED]