FINLAND

by Folke JOHANSSON, Johanna FLYTHSTRÖM, Henri KAIKKONEN, Kati KIISKI, Tomi KONKONEN, Karri LESKINEN, Juhani SINKKONEN, Camilla SÖDERHOLM, Jennika SUCKSDORFF

2021 – Study
Question Q276

Inventiveness and sufficiency of disclosure in AI inventions

Questions

I. Current law and practice

Please answer the below questions with regard to your Group's current law and practice.

Inventiveness

1) When assessing Inventive Step under your law, are the concrete/actual circumstances under which an invention was made (e.g., the amount of time and resources used by the concrete inventor) considered at all, or is the assessment of the Inventive Step rather an objective examination of the invention against the prior art? Please briefly explain.

No. The assessment of inventive step is an objective examination as to whether the invention is significantly different from the prior art (Patent Law §2).

2) Further to question 1), when assessing Inventive Step, does your law differentiate between an invention made by a human being using AI technology and inventions made autonomously by AI? In particular, assuming that a specific invention could have been made using AI without Inventive Step, is the invention still patentable if the applicant claims that the invention was made without using AI? Please briefly explain.

No, the law does not. The basic principle of inventive step is in Finland defined so that it is a comparison as to whether the invention is significantly different from the prior art. In doing so, the Finnish Patent Office and the Market Court rely on the so called problem-solution approach defined by the European Patent Office (see the Finnish Patent Manual).

According to the problem-solution approach the consideration is whether or not the claimed invention, starting from the closest prior art and the objective technical problem, would have been obvious to a person skilled in the art (Patent Manual, section E.3.5.2).

In the particular example, when a specific invention could have been made using AI without inventive step, assuming this AI as well as the required training data and data is known and publicly available, and assuming that running this AI with this data would always result in the same solution, the invention would lack inventive step as being obvious to the person skilled in the art.

3) The following questions relate to the definition of the person skilled in the art when assessing Inventive Step of an AI Invention under your law:

a) What is the definition of the "person skilled in the art"? An AI "person"? A human person? A human person having access to AI? Does the increasing use of AI in the inventive process change the definition of the person skilled in the art? Please briefly explain.

The skilled person is rather a human person than an AI person. At least to date, the use of AI has not changed the concept of the "person skilled in the art". The more accurate definition of a "person skilled in the art" is explained in the following (Patent Manual, section E.3.5.1).

The "person skilled in the art" is presumed to be a skilled practitioner in the relevant field

of technology who is possessed of average knowledge and ability and is aware of what was common general knowledge in the art at the relevant date. The skilled person is also presumed to have had access to everything in the "state of the art". The skilled person is presumed to have capacity for routine work and experimentation which are normal for the field of technology in question. The skilled person is considered able to combine information from cited publications with common general knowledge. Assessment of whether the solution involves an inventive step must therefore be based on that skilled person's knowledge and ability. The skilled person does not refer to a top specialist in the art. There may be instances where it is more appropriate to think in terms of a group of persons, e.g. a research or production team, rather than a single person.

At least to date, there has been no change to the definition of the person skilled in the art due to AI. The Finnish Patent Office has added examples of patentable and non-patentable AI inventions to the Patent Manual but has not included anything of AI making inventions in relation to Inventive Step considerations.

b) What kind of "skills" (e.g., access to software) does this "person" have in the specific context? Please briefly explain.

The skilled person is presumed to have had access to everything in the "state of the art". This includes written publications as well as publicly available software and algorithms known to be used in AI (Patent Manual, section E.3.5.1).

Also public use is part of the state of the art and the criteria for proving public use is described in the Patent Manual (section E.3.2.1).

c) Do the capabilities of AI impact the assessment of the skillset of the person skilled in the art? In particular, do the capabilities of AI to process a high amount of theoretical solutions of a given problem impact the assessment of the skillset? Please briefly explain.

OTHER (YES and NO depending on the circumstances as explained in the following). We believe it does not impact the assessment since the person skilled in the art is already presumed to have had access to everything in the "state of the art", which would include the high amount of theoretical solutions of a given problem.

In the context of the problem-solution approach, it is permissible to combine the disclosure of one or more documents with the closest prior art. However, the fact that more than one disclosure must be combined with the closest prior art in order to arrive at a combination of features may be an indication of the presence of an inventive step, e.g. if the claimed invention is not a mere aggregation of features.

Accordingly, if processing that high amount of theoretical solutions would involve combining a high number of documents, that would currently be considered more likely an indication of the presence of an inventive step.

However, if a known AI and the required training data and other data is publicly available and it can be proven that the AI would result in the invention by processing the high amount of theoretical solutions, we believe it would already be possible to argue, based on current law and guidelines, that the invention is obvious to the person skilled in the art by utilizing the particular AI. In this sense, the capability of AI would enhance the

capability of the person skilled in the art. However, we believe that the criteria for proving public AI, public training data and other data used in an AI system would be the same as the criteria for proving other public use.

d) Does your law treat common general knowledge differently for AI inventions? Please answer YES or NO, and you may add a brief explanation.

NO. The criteria for common general knowledge are the same in all fields of technology.

4) Further to questions 2) and 3), under your law, how is the Inventive Step assessed in the following hypothetical cases (you may answer whether Inventive Step is met by answering YES or NO, but you also may add a brief explanation):

a) A publicly available AI system is trained using publicly available training data. The trained AI system is used to make a suggestion for a technical solution based on publicly available data (e.g., the invention is in the pharmaceutical field, the AI system was trained using structural information and binding data of molecules binding to a target protein and inhibiting its physiological function. The suggestion for the technical solution is a new molecule selected from a library of molecules and predicted to bind to the target protein and inhibit its physiological function).

NO.
If, having regard to the state of the art, it would already have been obvious for a skilled person to arrive at something falling within the terms of a claim, for example due to a lack of alternatives thereby creating a "one-way street" situation, the unexpected effect is merely a bonus effect which does not confer inventiveness on the claimed subject-matter
If the skilled person would have to choose from a range of possibilities, there is no one-way street situation and the unexpected effect may very well lead to the recognition of an inventive step.
The above is explained in the Finnish Patent Manual in chapter E.3.5.4 under combination inventions, similar to the EPO Guidelines, Part G, Chapter VII, section 10.2 concerning an unexpected technical effect (and correspondingly also discussing an expected technical effect). Accordingly, since the molecule would be selected by a public AI system using public training data, the result would arguably be a “one-way street” situation where the AI system would always result in that specific molecule. Thus not inventive.

b) A publicly available AI system is trained using publicly available training data. The trained AI system is used to make a suggestion for a technical solution based on not publicly available data (e.g. a library of molecules available only to the applicant).

OTHER (YES or NO). This depends. The question refers to a possible Selection Invention that is defined in the Finnish Patent Manual in E.3.5.4 and correspondingly in the EPO Guidelines, Part G, chapter VII, section 12 that states the following.

The subject-matter of selection inventions differs from the closest prior art in that it represents selected sub-sets (of possible molecules in this case). If this selection is connected to a particular technical effect, and if no hints exist leading the skilled person to the selection, then an inventive step is accepted. Accordingly, the selection must result in a novel and surprising effect to be considered inventive. However, if the skilled person can be considered to find the selection (the particular molecule) via reasonable routine experimentation, the selection (i.e. the molecule) would not be considered inventive.

If the skilled person would not arrive at the particular molecule without the not public data, then the answer would be YES.

c) A publicly available AI system is trained using not publicly available training data (e.g., unpublished experimental results obtained by the applicant). The trained AI system is used to make a suggestion for a technical solution based on publicly available data.

OTHER (YES or NO). See above the answer to question b). The situation here is similar and the answer would depend on whether or not the skilled person would arrive at the particular molecule without the AI system.

If the skilled person would not arrive at the particular molecule without the not public training data, then the answer would be YES.

d) A not publicly available AI system is trained using publicly available training data. The trained AI system is used to make a suggestion for a technical solution based on publicly available data. The AI system relies on commonly used AI principles and leads to the same result as another publicly available AI system commonly used in the technical field of the invention.

NO. Since the same result would be achieved using a public AI system, then the result is expected and thus not inventive.

d) A publicly available AI system is trained using publicly available training data. The trained AI system is used to make a suggestion for a technical solution based on publicly available data. The AI system is not commonly used in the technical field of the invention.

YES. This sounds like an unexpected result in that an AI system is used, that would commonly not be used in this particular technical field, and thus the result would be inventive.

e) A publicly available AI system is trained using publicly available training data. The

trained AI system makes a plurality of suggestions for technical solutions based on publicly available data. A human selects one of the suggestions as the most promising based on his/her experience.

YES, in case the criteria fora selection invention are fulfilled and the question is not about a situation where the skilled person can be considered to find the selection (the particular molecule) via reasonable routine experimentation.

5) Assuming that an AI system becomes standard for solving technical problems in a certain technical field, does the Patent Office in your country use this AI system during examination of a patent application? Please answer YES or NO, and you may add a brief explanation.

NO. The Finnish Patent Manual, section D.4.3.2 defines the searchable material to publications, such as patent publications, scientific papers and magazines, conference presentations and technical announcements and uses corresponding search databases as defined in the Finnish Patent Manual, section D.4.3.3., D.4.3.4 and D.4.4.

Thus, currently the Finnish Patent Office does not possess any software for solving technical problems. If such software becomes available and becomes the standard, then it is possible that the use of such software would also become a standard in Patent Offices, including the Finnish Patent Office.

Sufficiency of disclosure

6) Please briefly describe the standard of sufficiency of disclosure under your jurisdiction.

An invention should be expressed in the specification in such a clear and complete manner that a person skilled in the art can use the invention on the basis thereof. The realization of the invention must not depend on mere chance, but a person skilled in the art must be able to reach the same result by following the instructions in the application.

The description must include at least one embodiment, which has been described in sufficient detail to enable a person skilled in the art to carry out the invention. However, it is neither necessary nor desirable for the application to provide details which are not essential to the invention, when those details are part of the general knowledge of a person skilled in the art or such that a person skilled in the art finds them in the prior art at the date of application.

If the scope of the claims is broad, the explanatory part must present sufficient application examples or embodiments to reasonably cover the scope of the claims. The application must contain sufficient information to enable a person skilled in the art to carry out the invention on the basis of application examples over the entire scope of the requirements without undue effort and without requiring inventive skills.

Furthermore, while the European Patent Convention (EPC) article 83 and 84 makes a distinction between a clear and concise description of the claim and a clear and concise description of the invention for it to be carried out by a person skilled in the art the Finnish Patent Act 8 § treats both of the above-mentioned distinctions in the same paragraph.

7) Further to question 6), does your law provide exceptions from the standard of sufficiency of disclosure? Please answer YES or NO, and you may add a brief explanation.

NO

Within the Finnish jurisdiction we do not have a 'best practice' phenomenon as in the United States and hence, we have not constituted any special customs in regards to patents. Furthermore, the exceptions presented in EPC article 52 concerning patentability are also applicable in Finland.

In addition to the above, in Finland examples, figures, laboratory tests and industrial-scale tests are not mandatory to disclose but they are, however, typically presented. Yet, there have not been any interim decisions regarding a missing example or figure only criticism concerning the general level of ambiguity.

8) Does/did the increasing use of AI change the standard of sufficiency of disclosure? Please answer YES or NO, and you may add a brief explanation.

NO

Based on our experience, we have not seen any remarkable changes in this regard despite the increasing use of AI. However, as mentioned in the policy section, we believe the standard of sufficiency of disclosure should probably better account the increased use of AI.

9) Under your law, is it possible to overcome a possible lack of sufficiency of disclosure by submitting a "deposit" of AI software or data? Please answer YES or NO, and you may add a brief explanation.

NO

Finland has implemented into its Patents Act provisions as per the Budapest Treaty on the International Recognition of the Deposit of Microorganisms for the Purposes of Patent Procedure (28 April 1977), but the said provisions apply only to biological materials, and not to AI software or data.

Furthermore, in accordance with Section A.2.8 of the Patent Manual of the Finnish Patent and Registration Office (PRH), samples, specimens, and alike of the invention can only be provided if it is necessary to comprehend the description. The samples, specimens, and alike of the invention will not be returned.

Therefore, although submitting a "deposit" is not possible, it might be possible to overcome a possible lack of sufficiency of disclosure by providing e.g. sample of the data or a demo presentation of the invention. Whether such would be acceptable, however, would in practice depend much on the examiner assigned to the case.

10) Is the standard of sufficiency of disclosure met in the following hypothetical cases (you may answer whether sufficiency of disclosure is met by answering YES or NO, but you also may add a brief explanation)? Hereinafter, "publicly available" refers to the priority/filing date.

a) The specific profile of a wing or the specific composition of a drug was designed using AI, and this AI system was trained using publicly available training data.

YES

As it is already noted in the Study Guidelines point 26), "If the specific profile of a wing or the specific composition of a drug was designed using AI, one may say that it is sufficient to disclose this specific profile of a wing or the specific composition of a drug, without disclosing the inner workings and/or raw data of the used AI in order to meet the sufficiency of disclosure requirements."

In general a fundamental goal of the patent system is to disclose technology so that, in the course of time, the public domain may be enriched and a systematic record of humanity's technology is available and accessible. Patent laws require that the disclosure of an invention be sufficient to enable a person skilled in the relevant art to reproduce the invention. We agree on this view. If the invention is claimed using only features describing the physical properties of the wing or composition and the person skilled in the art is able to reproduce these, then the sufficiency of disclosure is met. It doesn't matter how the inventor came up with the idea of the invention. ("It was surprisingly found out that…")

b) The specific profile of a wing or the specific composition of a drug was designed using AI, and this AI system was trained using not publicly available training data.

YES

See reasons above in a).

c) The invention consists of a new or improved AI, and the AI platform or environment (which may involve extensive databases) in which the invention is operating is publicly available on a website.

YES, on the condition that all necessary features, configurations or functions how the new AI operates with respect to the publicly available AI platform must be described including a description of how the new AI functions (e.g. using flowcharts) so that a regular programmer could implement such new AI based on the description.

d) The invention consists of a new or improved AI, and the AI platform or environment (which may involve extensive databases) in which the invention is operating is not publicly available.

NO. We understand that in this case the new AI nor anything relating to it nor how it functions has been described.

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

Inventiveness

11) According to the opinion of your Group, is your current law regarding inventiveness of AI inventions adequate and/or sufficient? Please answer YES or NO, and you may add a brief explanation.

YES. We believe that the basic criteria for defining inventive step need not be changed but more examples of inventive and non-inventive AI solutions are needed so an update to the Patents Manual in this regard would be necessary. At least with the progress of AI, i.e. when AI (autonomously or via human use) that can make inventions becomes publicly available. The current law and practice already includes the definition of public use and the requirements of proving public use. Use and capability of AI will most likely require proof of public use and what was publicly known.

12) According to the opinion of your Group, would a differentiation between an invention made by a human being using AI technology and inventions made autonomous by an AI regarding the assessment of Inventive Step conflict with the purpose of patent law to incentivize creation (you may also refer to other general patent law doctrines under your law, if applicable)? In answering this question, please specifically refer to the scenario that a specific invention could have been made using AI without Inventive Step, but the patent applicant claims that the invention was made without using AI. Please briefly explain.

YES, this would conflict with the purpose of the patent law, i.e. providing incentives for making and publishing new inventions and thereby advance the development of technology. Differentiation between inventions made using different prior art tools, e.g. granting patents to inventions just because the patent applicant claims that the invention was made without using AI, would create an incentive to allocate resources inefficiently. People would make "innovations" that do not add anything to the technology that was already available through routine use of publicly available data and AI software. In the worst case, applicants would make false claims about the innovation process to get a patent for an obvious invention. Considering AI capabilities in the assessment of inventive step could help to avoid this kind of adverse incentives and reward effective innovation to the benefit of technological development. The incentive in the form of a patent should be given only to inventions that add to the art.

Equal treatment of inventions made by using different tools might create appropriate incentives to develop AI tools to be used in innovation processes. However, this effect may require appropriate solutions to the issues discussed in AIPPI Q272, and the Patent Law would require amendments to take into account the possibility of an AI system making inventions.

Regarding inventive step, the current Patent Law does not differentiate as to whether the invention has been made by a human being (with or without the help of AI technology) or autonomous by an AI system. The criteria are still the same in that relevant is (in deciding inventive step) whether the invention would or would not have been obvious to a person skilled in the art in view of the prior art. Accordingly, we believe the current Patent Law and practice is already sufficient, and if it can be proven that a specific invention could have been made using AI without inventive step, then such an invention should considered not inventive. As stated above, the Patents Manual would probably need an update in this regard with the progress and public availability of AI that is capable of "making inventions".

Sufficiency of disclosure

13) According to the opinion of your Group, is your current law regarding sufficiency of disclosure of AI inventions adequate and/or sufficient? Please answer YES or NO, and you may add a brief explanation.

NO

Especially 8 § of the Finnish Patent Act could need an amendmentto differentiate between clarity and sufficiency, similar to EPC articles 83 and 84.

Examples of sufficiency of disclosure for inventions in different fields of technology could be added to the Patent Manual, including examples of AI inventions. For example "Implemented with AI" would probably be accepted although it does not describe why something actually happened or what was dealt with.

14) According to the opinion of your Group, if applicable, would the recognition of the possibility to submit a "deposit" in order to overcome a possible lack of sufficiency of disclosure help to foster innovation? Please answer YES or NO, and you may add a brief explanation.

NO

The Finnish Group is hesitant that the possibility to submit a "deposit" would help foster innovation, since it is unclear whether the patent authorities would in essence be able to assess the lack of sufficiency of disclosure based on the "deposit". Furthermore, there are numerous practical questions that should be addressed, if such "deposit" arrangement would be possible.

In practice, the "deposit" arrangement would probably merit a similar international treaty as has been adopted for depositing micro-organisms (see above question 9), however bearing in mind the particularities related to AI software and data (such as the proprietary or confidential nature of the same).

Instead of "deposit" arrangements, the Finnish Group believes focus and guidance should be placed on how to describe the invention rationally and sufficiently to a person skilled in the art when AI software and the related data are concerned.

III. Proposals for harmonization

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

Inventiveness

15) Do you consider harmonization regarding the inventiveness of AI inventions as desirable in general? Please answer YES or NO, and you may add a brief explanation.

YES. We don't believe that inventiveness of AI inventions should be treated any different than inventiveness of other inventions. However, a general harmonization of inventiveness would simplify global patenting, and if such harmonization could be achieved the criteria (and especially examples) should address AI inventions also.

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.

16) When assessing Inventive Step, should the law differentiate between an invention made by a human using AI technology and inventions made autonomous by an AI? In particular, assuming that a specific invention could have been made using AI without Inventive Step, should the invention still be patentable if the applicant claims that the invention was made without using AI? Please briefly explain.

NO. The same criteria regarding inventive step should apply in general. However, the law should take into account whether or not a particular AI (whether used by a human or operating autonomously) is publicly available. If the AI is publicly available and using it the invention would not be inventive, then it should also not be inventive even if made without that AI.

You could compare this to using certain automatic tools to build something or using a computer to calculate something. Without the automatic tools the building work would be cumbersome, more expensive and take more time, and without the computer the calculation would likewise be cumbersome, more expensive and take more time. Just because someone doesn't use the help of the tools or a computer, it doesn't mean they should be incentivized. Rather the opposite, if tools are available to make things easier, faster and cheaper, such tools should be used. The same applies to the use of AI.

17) The following questions relate to the definition of the person skilled in the art when assessing Inventive Step of an AI Invention:

a) What should the definition of the "person skilled in the art" be? An AI "person"? A human person? A human person having access to AI? Should the increasing use of AI in the inventive process change the definition of the person skilled in the art? Please briefly explain.

The definition of the "person skilled in the art" should be modified to directly address the capability of AI software, whether used by a human or operating autonomously. Currently, the definition mainly addresses a human being only, although the "person skilled in the art" is a fictive person.

b) What kind of "skills" (e.g., access to software) should this "person" have in the specific context? Please briefly explain.

It would be good to denote clearly in the Patent Manual that what a publicly available AI system is doing utilizing publicly available training data and publicly available data would be within the skills of a "person skilled in the art". However, we do believe that these are already included in the state of the art via public use that is documented in the Patent Manual, section E.3.2.1.

c) Should the capabilities of AI impact the assessment of the skillset of the person skilled in the art? In particular, should the capabilities of AI to process a high amount of theoretical solutions of a given problem impact the assessment of the skillset? Please briefly explain.

YES. If a publicly available AI system utilizing publicly available training data and publicly available data would result in a particular solution (from among a high number of theoretical solutions) and would every time result in the same particular solution, then such a solution should not be considered inventive because the result is expected.

d) Should the law treat common general knowledge differently for AI inventions? Please answer YES or NO, and you may add a brief explanation.

NO, if something is common general knowledge it doesn't matter in which field of technology it is. However, it may be more difficult to prove (that it is commonly known) in new fields of technology but that applies to all new fields of technology, not just to AI.

18) Further to questions 16) and 17), how should the Inventive Step be assessed in the following hypothetical cases (you may answer whether Inventive Step is met by answering YES or NO, but you also may add a brief explanation):

a) A publicly available AI system is trained using publicly available training data. The trained AI system is used to make a suggestion for a technical solution based on publicly available data (e.g., the invention is in the pharmaceutical field, the AI system was trained using structural information and binding data of molecules binding to a target protein and inhibiting its physiological function. The suggestion for the technical solution is a new molecule selected from a library of molecules and predicted to bind to the target protein and inhibit its physiological function).

NO. It is an expected result if the known AI system (with the known training data and public data) is proven to always result in selecting the particular molecule. The aforesaid is based on the assumption that the selection of the publicly available training data is obvious. However, if the selection of the training data is non-obvious, inventive step may be met.

b) A publicly available AI system is trained using publicly available training data. The trained AI system is used to make a suggestion for a technical solution based on not publicly available data (e.g. a library of molecules available only to the applicant).

NO. It sounds as if the molecule is not novel, nor the other molecules. Merely the particular set of molecules is not publicly available. However, the result still seems expected when using the AI system with the particular library of molecules. The aforesaid is based on the assumption that the selection of the publicly available training data is obvious. However, if the selection of the training data is non-obvious, inventive step may be met.

c) A publicly available AI system is trained using not publicly available training data (e.g., unpublished experimental results obtained by the applicant). The trained AI

system is used to make a suggestion for a technical solution based on publicly available data.

YES. It sounds as if this is a selection invention where the result is unexpected and the unexpected result is achieved thanks to the novel training data.

d) A not publicly available AI system is trained using publicly available training data. The trained AI system is used to make a suggestion for a technical solution based on publicly available data. The AI system relies on commonly used AI principles and leads to the same result as another publicly available AI system commonly used in the technical field of the invention.

NO. Since the same result would be achieved using a public AI system, then the result is expected and thus not inventive.

d) A publicly available AI system is trained using publicly available training data. The trained AI system is used to make a suggestion for a technical solution based on publicly available data. The AI system is not commonly used in the technical field of the invention.

YES. We assume this is a selection invention where the result is unexpected and the unexpected result is achieved thanks to using the AI system in this field of technology for the first time.

e) A publicly available AI system is trained using publicly available training data. The trained AI system makes a plurality of suggestions for technical solutions based on publicly available data. A human selects one of the suggestions as the most promising based on his/her experience.

YES, in case the criteria for a selection invention are fulfilled and the question is not about a situation where the skilled person can be considered to find the selection (the particular molecule) via reasonable routine experimentation.

19) Assuming that an AI system becomes standard for solving technical problems in a certain technical field, should Patent Offices use this AI system during examination of a patent application? Please answer YES or NO, and you may add a brief explanation.

NO, public use as prior art should be left to third parties to prove, and not to Patent Offices.

.

20) Would it be desirable that assessment of Inventive Step be automated in Patent Offices, using standard AI systems and publicly available information in order to evaluate Inventive Step? Please answer YES or NO, and you may add a brief explanation.

NO. A patent examiner should provide an opinion on inventive step using the rules established by the Patent Office, not an AI system. If the AI system would make a decision, how could an applicant argue with it?

21) Please comment on any additional issues concerning any aspect of inventiveness of AI inventions you consider relevant to this Study Question.

Sufficiency of disclosure

22) Do you consider harmonization regarding the sufficiency of disclosure of AI inventions as desirable in general? Please answer YES or NO, and you may add a brief explanation.

YES

The Finnish Group believes harmonization should especially focus on how to describe the AI invention in a manner that is acceptable from a viewpoint of a person skilled in the art.

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.

23) Should the increasing use of AI change the standard of sufficiency of disclosure? Please answer YES or NO, and you may add a brief explanation.

NO.

In principle the increasing use of AI should not change the standard of sufficiency of disclosure. It would be sufficient, in principle, to mention the involvement of AI without naming AI as inventor, but hardly the need to describe the process of making the invention in case the invention itself is sufficiently described. If it is clear to a person skilled in the art how the invention was made with AI, then AI alone should not impose additional precision requirements. For example if the invention itself is not related to AI (for example a car steering wheel), then it does not necessarily matter whether AI participated in designing of the invention or not, and the focus should be on the specification of the invention itself, and not necessary on the AI design process. However, if AI makes a significant contribution in the design so that it is not understandable or clear to the skilled person how the invention operates or is configured, AI should be mentioned and described, and the AI design process should be described.

24) Should the law provide exceptions from the standard of sufficiency of disclosure regarding AI Inventions? Please answer YES or NO, and you may add a brief explanation.

NO

AI should be described properly in a manner that is acceptable from a viewpoint of a person skilled in the art.

25) Should it be possible to overcome a possible lack of sufficiency of disclosure by submitting a “deposit” of AI software or data? Please answer YES or NO, and you may add a brief explanation.

NO

As mentioned above, the Finnish Group is hesitant that the "deposit" arrangement would bring any remarkable benefits as opposed to those benefits that could be reach be harmonizing the ways in which AI inventions should be described.

26) Should the standard of sufficiency of disclosure be met in the following hypothetical cases (you may answer whether sufficiency of disclosure is met by answering YES or NO, but you also may add a brief explanation)?

a) The specific profile of a wing or the specific composition of a drug was designed using AI, and this AI system was trained using publicly available training data.

YES, the sufficiency of disclosure should always be met.

b) The specific profile of a wing or the specific composition of a drug was designed using AI, and this AI system was trained using not publicly available training data.

YES, the sufficiency of disclosure should always be met.

c) The invention consists of a new or improved AI, and the AI platform or environment (which may involve extensive databases) in which the invention is operating is publicly available on a website.

YES, on the condition that the configurations and operations should be described with respect to the publicly available AI platform or environment that relate to the new contribution of the invention.

d) The invention consists of a new or improved AI, and the AI platform or environment (which may involve extensive databases) in which the invention is operating is not publicly available.

NO. We understand that in this case the new AI, nor the platform or environment has been described.

27) Please comment on any additional issues concerning any aspect of sufficiency of disclosure of AI inventions you consider relevant to this Study Question.

General

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

We consulted the Finnish industry broadly and received responses from companies in the field of chemistry and engineering technology.