Q276-SGL-P-2021

You are invited to submit a Report addressing the questions below.

Questions

I.   Current law and practice

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

<u>Inventiveness</u>

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.

R: **NO**. The assessment of inventive step is made comparing the invention against the prior art without any regard to the concrete/actual circumstances under which the invention was made.

2)   Further to question 1), when assessing Inventive Step, does your law differentiate be- tween 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.

R: **NO**. Currently, Mexican law does not differentiate between an invention made by a human being using AI technology and inventions made autonomously by AI.

As for the particular case where a specific invention is made using AI arguably without inventive step, but the applicant claims that the invention was made without using AI, under the current Mexican law, the outcome regarding inventive step will depend on the detailed description of the invention and the possibility of reproducing the invention without the use of AI.

As the applicant would be claiming that the invention was made without using AI, the Examiner will have to demonstrate that those skilled in the art, at the filing date, had access to AI systems that will necessarily lead to the claimed invention, with exactly the same essential technical features, which is very unlikely at this point.

Therefore, if the applicant claims that AI was not used, the burden of proving of the opposite is on the Examiner, or in a litigation setting, on the opposer or plaintiff of a nullity action. If it is proven that those skilled in the art could use AI to obtain exactly that invention, in addition to lack of inventive step, it could be argued that it is not an invention, as the <u>Mexican law requires an invention to be a human creation</u>.

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? Pleasebriefly explain.

R: The Mexican law does not provide for a definition of "person skilled in the art", "AI person" nor "human person" for the purpose of assessing inventive step.

The only reference to the level of skill of a person skilled in the art in Mexico is contained in a decision related to the doctrine of equivalence, where it was decided, in an isolated decision that is not mandatory for judges but only a reference, that someone skilled in the art should be able "*to interpret the vocabulary of the invention and extract its meaning in view of the technical context*

of the claims, and not in the philological sense of the specific locutions used to express them". (Isolated Thesis: I.1o.A.143 A (10a.).

Although this may be considered only an attribute of persons skilled in the art and not necessarily applicable to the inventive step evaluation, the human intervention in interpreting the claims and reproducing the invention from the description, another important feature of patent law, shows that the consideration of AI as a skilled person is not possible under current Mexican law because the obviousness evaluation, as it stands today, has to be made based on premises of the prior art and then filtered through the knowledge of those skilled in the art in order to be obvious.

Moreover, the assessment of inventive step does not seem to be particularly influenced by the increasing use of AI in the inventive process.

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

R: Additional to the lack of definition, nor the law neither secondary regulations or guidelines indicate the skills the person skilled in the art should have.

The court decision referred to in point a) of this question 3, as explained there, identifies one of the skills, which include:

"*to interpret the vocabulary of the invention and extract its meaning in view of the technical context of the claims, and not in the philological sense of the specific locutions used to express them*"

This decision seems consistent with the minimum skills referred to in AIPPI's resolution Q213, namely:

a)   This person possesses common general knowledge as well as knowledge in the field (or fields) to which the invention relates that the average person in that field (or fields) would be expected to have or which would be readily available to that the average person through routine searches;

b)   This person possesses the skills that are expected from the average person in the field (or fields) to which the invention relates.

c)   This person is able to perform routine experimentation and research and can be expected to obtain predictable solutions as compared to the prior art.

This person is inferred to be able to consult and understand technical information, to access and use technological tools (including software), and to combine known information/inventions to arrive to predictable results.

   c)   Do the capabilities of AI impact the assessment of the skillset of the person skilledin 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.

R: **NO**. Under current Mexican law, as expressed above, there is no definition of a person skilled in the art, and therefore, any capabilities of AI are not relevant to assess the skillset of that person. Nevertheless, if an AI tool becomes generally available to those skilled in the art with a somehow predictable outcome that converts a solution in something obvious in virtue of such capability, it could be said that such capability becomes part of the state of the art and therefore can be used as prior art itself.

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

R: **NO**.

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).

R: The AI origin of the technical solution (i.e. the compound) is irrelevant in assessing the inventive step of the invention.

In the proposed example, if the compound is "selected from a library" and such library is public, it may be assumed that the compound is therefore already known. If the compound is a new molecule, as proposed, then the compound would be considered novel.

In the case of a compound selected from a library, it follows that in order to be patentable, the inhibition of the physiological function of the target protein must be unknown or otherwise the invention would not be considered novel at all.

For the case of a novel compound, the compound would not be inventive if it belongs to a group of similar compounds that have previously shown similar effects, regardless of the method by which they were ultimately obtained.

Furthermore, those skilled in the art may not be able to reduce to practice the invention or obtain experimental information on its behavior only based on a theoretical proposal by the AI. This means that the proposed technical solution could comply with the patentability requirements by providing experimental results showing that the proposed solution achieves in fact the proposed effect.

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 <u>not</u> publicly available data (e.g. a library of molecules available only to the applicant).

R: The AI origin of the technical solution (i.e. the compound) is irrelevant in assessing the inventive step of the invention. If the compound is not available publicly, it would be practically impossible to determine that it came from an AI trained system, and because the fundamental rationale that the inventive step will depend on the information available to those skilled in the art, the same comments than for point a) on the experiments required are applicable to this situation.

c) A publicly available AI system is trained using <u>not</u> 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.

R: The AI origin of the technical solution (i.e. the compound) is irrelevant in assessing the inventive step of the invention. The solution could be inventive, since the technical solution should be enabled with more technical data than the suggestion made by the AI system. The suggestion may or may not be taken by the person(s) training the AI system.

d) A <u>not</u> 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.

R: The AI origin of the technical solution (i.e. the compound) is irrelevant in assessing the inventive step of the invention.

If the fundamental premise of this situation is that two AI systems (at least one of them could be existing in the prior art) using commonly used principles (also prior art) lead to the same result independently, this may mean that there is a scientific rationale that will lead those skilled in the art, based on prior art knowledge, to reach to an obvious solution, which is only being accelerated

by the use of AI systems.
In other words, if the data is publicly available it is possible that a person skilled in the art can build a rationale that will lead to the proposed technical solution based on the same data, perhaps under a lengthier process, which under current law could be considered obvious. This would be reinforced if the same solution is reached repeatedly through independent systems programmed based on the same premises.

e) 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 <u>not</u> commonly used in the technical field of the invention.

R: As in the other cases of this question, the fact that the solution was proposed by AI is not relevant in assessing inventive step under current Mexican law, as the solution must be non-obvious regardless of the tool used to conceive it. In other words, the fact that the suggestion was made through an AI system that is not conventional in the field does not guarantee that a non-obvious solution is reached, as it may be the case that the proposed solution is obvious to those (non-AI) skilled in the art.

f) 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.

R: As in the other cases, the AI origin is not relevant but the ability to demonstrate that those skilled in the art would not reach the same solution based on a rationale with premises from the prior art. The fact that a human needs to select a suggestion implies that there is a reason and different humans might select a different suggestion and the reduction to practice of the solution will be relevant to assess the inventiveness and other requirements.

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.

R: No. Currently, we consider that the Mexican Patent Office is unlikely to use the AI system during examination, but it might take into account the fact that the AI system has become standard for solving problems in a certain technical field by considering other known (prior art) solutions to similar technical problems already provided by the AI.

<u>Sufficiency of disclosure</u>

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

The description shall be written as clear and concise as possible and be congruent with the filed claims. The description must:

- specify the technical field the invention,

- indicate the state of the art known by the applicant, and be useful for understanding the invention;

- disclose the invention as claimed, in terms that make the technical problem and solution thereto understandable, and set forth the advantageous effects of the invention, if any, regarding previous technology, making note of the differences between the invention being disclosed and similar, known inventions;

- describe the figures contained in drawings, if any, making reference to them and the parts thereof;

- indicate the **best mode** foreseen by the applicant for bringing about the invention being claimed. This indication must be given using examples when appropriate, and

with reference to the drawings, if any.

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.

R: **YES**, if an invention should refer to biological material not accessible to the public, or the use thereof, and said material cannot be described in the patent application, the description shall be considered sufficiently clear and complete when the following requirements are met:

- That the biological material has been deposited, at the very latest, on the filing date of the patent, at a recognized institution, according to the provisions of International Treaties;
- That the application, as presented, contains all relevant information at the disposition of the applicant on the characteristics of the biological material deposited, and
- That the name and number of the receiving depository be stated.

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.

R: **NO.**

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.

R: **NO.**

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 prior- ity/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, the product (either a wing or a drug) can be characterized by its own technical features, likewise, the AI system need not be used in order to reduce to practice of the product. Accordingly, if the product is sufficiently disclosed so that someone skilled in constructing wings or manufacturing drugs can obtain such products based on the detailed description, the sufficiency standard would be complied with.

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 product (either a wing or a drug) can be characterized by its own technical features, likewise, the AI system need not be used in order to reduce to practice of the product. Accordingly, if the product is sufficiently disclosed so that someone skilled in constructing wings or manufacturing drugs can obtain such products based on the detailed description, the sufficiency standard would be complied with.

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 pub- licly available on a website.

R: It depends on the specification of the invention as provided in the patent application. For the case as proposed, the requirement of sufficiency of disclosure would be complied with if the AI is described in terms of the algorithm or logic that gives place to the new or improved AI. However, if the description includes only the effects or the execution, this would not be enough to comply with the requirement even if it is said that it operates on a publicly available website.

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 <u>not</u> publicly available.

R: It depends on the specification of the invention as provided in the patent application.

For the case, as proposed, the requirement of sufficiency of disclosure would be complied with if the AI is described in terms of the algorithm or logic that gives place to the new or improved AI. However, if the description includes only the effects or the execution, this would not be enough to comply with the requirement.

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

<u>Inventiveness</u>

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.

R: At law level the definition of inventive step seems to be adequate and/or sufficient. The application of the concept to AI related inventions will depend on the availability of AI systems for the technical field and the effects of the AI system for those skilled in the art, and such interpretation at regulations level could be desirable.

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 ex-plain.

R: The Mexican group thinks that a generalization of the evaluation of inventive step to all kinds of inventions related to AI is not convenient and that, therefore, differentiating inventions made by a human being or through the use of AI at any level may have a different effect or impact in the incentives for new creations.

Accordingly, the lack of a specific definition for AI-related inventions regarding the evaluation of inventive step does not necessarily conflict with the purpose of incentivizing creativity.

In fact, the evaluation of inventive step of AI-related inventions should be assessed as with all inventions on a case-by-case basis, as it will depend greatly on claim drafting and the scope of the protection sought, which so far, is not made by the AI itself.

For the purposes of this discussion, the Mexican group proposes to divide AI related inventions into two categories:

• **Inventions made using AI as a tool for inventing.**

It is important to consider that the inventive step requirement implies determining if an invention will necessarily be obtained as a solution to a problem based on prior art premises. Although the figure of the person skilled in the art comes to place in order to determine if it is possible to obtain an invention based on such prior art premises, there is no reason why, in the context of AI, the skilled in the art can be an AI system.

Accordingly, if an invention is the product of certain premises and every AI system will propose the invention as claimed, then inventive step must not be recognized. Of course, the breadth of the claims will affect this interpretation, but in the end the standard that is truly changing is the standard of "undue experimentation", as AI systems provide for the possibility of performing massive numbers of experiments based on the learning algorithms.

However, in any case, the product or process obtained as a result of the use of the AI system

must be assessed as such, and its reduction to practice and enablement is not dependent on the AI system itself but on the best mode to obtain the product or perform the process, and not the best mode to "re-invent" it.

Therefore, there is no reason to change the standard of inventive step for inventions made using AI as a tool for inventing, as the inventive step is determined by the existence of other products or processes in the prior art and not by the AI system used to invent quicker or better. In other words, even if the AI optimizes the process, or reduces the number of iterations to get to a solution if the solution can be obtained through deduction from prior art premises, it should not be considered to involve an inventive step regardless of whether the AI was used to obtain it or not, but if even no other AI system can arrive at the same solution, the "inventiveness" of such solution should be recognized.

- **Inventions totally or partially consisting of AI.**

Now then, if the AI is considered as the invention itself, the standard for inventive step must be established by comparison with other AI systems existing in the prior art, and not because of its nature as such or by the prior art related to the products obtained by the AI. In other words, if a new AI system is characterized by a certain way of learning, a specific feature of the data used for learning, of processing the learned variables, or characterized by the way that the outcomes are shown, are organized or are ultimately described, the AI system itself must be compared to other known AI systems for a fair assessment of inventive step, in terms of the technical features of the system itself and its consequences in the outcomes obtained through the use of such system, but the outcome may not be novel or inventive itself necessarily.

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 youmay add a brief explanation.

YES As in the case of inventive step, the Mexican Group considers that the rationale for sufficiency of disclosure of inventions made using AI and AI systems as inventions themselves is not the same.

Regarding inventions made using AI as a tool for inventing, typically the inventions will not need the AI to be reduced to practice or obtained, and the current standard would be adequate for this kind of invention because a description on the best mode of obtaining the product or process itself is required and not a way to invent repeatedly the same invention. Regarding inventions consisting of the AI system itself, as a whole or in part, the sufficiency of disclosure requirement is equally adequate or sufficient, as all the technical features of the learning algorithms, or of the algorithms needed in order to get an outcome, must be sufficiently described in order to be able to reproduce the AI system as an invention, with the intended results clearly stated.

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 disclosurehelp to foster innovation? Please answer YES or NO, and you may add a brief explana-tion.

For inventions derived from AI systems used as a tool for inventing NO, but for inventions where the algorithm is of the essence to practice the invention it might foster innovation because it will not be necessary to disclose the specific logic or algorithm in order to obtain patent protection.

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 desirablein

general? Please answer YES or NO, and you may add a brief explanation.
R: YES.

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 madeby a human using AI technology and inventions made autonomous by an AI? In particu-lar, assuming that a specific invention could have been made using AI without InventiveStep, should the invention still be patentable if the applicant claims that the invention wasmade without using AI? Please briefly explain.

R: Inventiveness of a determined invention should be assessed regardless of its human or AI origin. Therefore, if the applicant did not use AI, the inventive step assessment should include whether the AI was publicly available on the filing date of the patent application and also whether such AI will necessarily lead to the invention for solving the same problems by the person skilled in the art. Therefore, the invention may or may not be patentable so that a generalization is not recommended.

The general definition of inventive step must remain without change because the obviousness of the invention cannot be assessed from the perspective of its origin but from the perspective of the possibility of establishing a deductive process leading to it based on prior art premises.

Therefore, the inventive step of AI related inventions will depend on the availability of AI systems for the technical field and the effects of the AI system for those skilled in the art, so that a harmonized interpretation thereof would be desirable.

17) The following questions relate to the definition of the person skilled in the art when as-sessing 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 useof AI in the inventive process change the definition of the person skilled in the art? Please briefly explain.

Because the Mexican law does not include an express definition of a "*person skilled in the art*", in the first term harmonization on such definition, in general, is desirable.

A person skilled in the art for the purposes of inventive step must remain the same if any. The availability of the AI system, including the algorithm, the training data, and the trained system, at the time of filing a patent application, is itself part of the prior art for the purposes of evaluating inventive step. At this point, AI has not been able to identify a problem, assess solutions, and come to an outcome without the intervention, however minimal, of a person. If so, the burden of proving such facts must be on the examiner or an interested third party in case of nullity or re-examination actions.

Furthermore, the results of the propositions made by an AI system might not be always the same if the system is given the same data, and might not be reproduced by the same AI system again in the future and therefore the outcome is not necessarily straightforwardly used by those skilled in the art. Therefore, a person skilled in the art should still decide on the proposed solution and therefore the definition of skilled in the art must remain and include those that can use an existing AI system in the prior art.

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

Skills enough to program, use, train, identify and select outcomes of AI systems and

reduce outcomes to practice, under the current definition the person skilled in the art, as the case may be.

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.

R: **YES**, because it is understood that those skilled in the art can have access to similar AI tools for solving the same kind of problems. It is important to clarify that the ability to use an AI system is what modifies the skillset of the person skilled in the art as currently defined, but an AI system as such must not be considered as a person skilled in the art itself for the reasons explained in point b) above.

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

R: **NO**, if it is understood that those skilled in the art can have access to the same AI tools for solving the same kind of problems, just like any other tool available under general knowledge principles.

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 answer-ing 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 suggestionfor 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).

R: The AI origin of the technical solution (i.e. the compound) is irrelevant in assessing the inventive step of the invention. In the proposed example, if the compound is "selected from a library" and such library is public, it may be assumed that the compound is therefore already known. If the compound is a new molecule, as proposed, then the compound would be considered novel. In the case of a compound selected from a library, it follows that in order to be patentable, the inhibition of the physiological function of the target protein must be unknown, or otherwise, the invention would not be considered novel at all. For the case of a novel compound, the compound would not be inventive if it belongs to a group of similar compounds that have previously shown similar effects, regardless of the method by which they were ultimately obtained. Furthermore, those skilled in the art may not be able to reduce to practice the invention or obtain experimental information on its behavior only based on a theoretical proposal by the AI. This means that the proposed technical solution could comply with the patentability requirements by providing experimental results showing that the proposed solution achieves in fact the proposed effect.

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 <u>not</u> publicly available data (e.g. a library of molecules available only to the ap-plicant).

R: The AI origin of the technical solution (i.e. the compound) is irrelevant in assessing the inventive step of the invention. If the compound is not available publicly, it would be practically impossible to determine that it came from an AI trained system, and because the fundamental rationale that the inventive step will depend on the

information available to those skilled in the art, the same comments than for point a) on the experiments required are applicable to this situation.

c) A publicly available AI system is trained using <u>not</u> 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.
R: The AI origin of the technical solution (i.e. the compound) is irrelevant in assessing the inventive step of the invention. The solution could be inventive, because the technical solution should be enabled with more technical data than the suggestion made by the AI system. The suggestion may or may not be taken by the person(s) training the AI system.

d) A <u>not</u> 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 basedon 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.
R: The AI origin of the technical solution (i.e. the compound) is irrelevant in assessing the inventive step of the invention. If the fundamental premise of this situation is that two AI systems (at least one of them that could be existing as in the prior art) using commonly used principles (also prior art) lead to the same result independently, this may mean that there is a scientific rationale that will lead those skilled in the art, based on prior art knowledge, to reach to an obvious solution, which is only being accelerated by the use of AI systems. In other words, if the data is publicly available it is possible that a person skilled in the art can build a rationale that will lead to the proposed technical solution based on the same data, perhaps under a lengthier process, which under current law could be considered obvious. This would be reinforced if the same solution is reached repeatedly through independent systems programmed based on the same premises.

e) 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 <u>not</u> commonly used in the technical field of the invention.
R: As in the other cases of this question, the fact that the solution was proposed by AI is not relevant in assessing inventive step, as the solution must be non-obvious regardless of the tool used to conceive it. In other words, the fact that the suggestion was made through an AI system that is not conventional in the field does not guarantee that a non-obvious solution is reached, as it may be the case that the proposed solution is obvious to those (non-AI) skilled in the art.

f) 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 prom-ising based on his/her experience.
R: As in the other cases, the AI origin is not relevant but the ability to demonstrate that those skilled in the art would not reach the same solution based on a rationale with premises from the prior art. The fact that a human needs to select a suggestion implies that there is a reason, and different humans might select a different suggestion and the reduction to practice of the solution will be relevant to assess the inventiveness and other requirements.

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.

R: **NO**. Patent offices must be aware of such standard and the burden of proving that the standard does not lead necessarily to the claimed invention must be on the applicant, but if and when an obligation of including in the description all the prior art known by the applicant, such AI system must be part of the disclosure.

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 In- ventive Step? Please answer YES or NO, and you may add a brief explanation.

R: **NO** at this point of development of AI systems. An AI system may or may not predict an invention based on prior art premises, and therefore, automation of the assessment at this point of development of AI is not desirable because it cannot be ensured that the AI system will reach a reliable conclusion. Furthermore, in certain kinds of invention such as biotechnology or chemistry when the reduction to practice may not be feasible and require significant efforts, the theoretical evaluation of inventive step without considering such other efforts that may be supported in the description will lead to poor or even erroneous decisions. Under this principle, it is important to clarify that Patent Offices may adopt AI as a tool for facilitating examination and relationships of prior art, provided that the systems are not loaded with information on the resulting invention but only problems and prior art made available prior to the filing date, in order to avoid hindsight bias.

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

The Mexican group wishes to emphasize that any standard for inventiveness must be assessed on the basis of the merits of the claimed invention over the prior art and not on its origin, considering that AI related inventions can coexist with human made inventions.

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

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.

R: **NO**, in line with AIPPI's resolution on Q69 "Sufficient description of the invention" the description shall disclose the claimed invention in a manner sufficiently clear and complete for the invention to be carried out by a person skilled in the art. If an AI system is required in order to reduce to practice an invention, which is not necessarily the case for all AI related inventions, the disclosure in the specification should provide information enough to guide those skilled in the art to access the same AI or build an AI system based on the description that can achieve the same results under the current best-mode standards.

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

R: **NO**. The basic premise of the patent system is that the patent holder obtains a temporary privilege in exchange of disclosure and this principle must remain. Accordingly, if the AI itself is the invention, the disclosure must be enabling to those that build AI systems in the same field in order to reproduce an AI that solves the same problem or behaves the same way, not necessarily access the AI or the data as such, which must be assessed on a case-by-case basis according to what is actually claimed. If the AI system is used as a critical part to obtain the invention, the standard would still be that the description is enabling by either identifying the AI system that was used to obtain the invention, or how to build one with the necessary features for enabling the invention, even if the invention itself is not the AI. It is important to note that, whenever the invention can be obtained independently of the AI system and the AI was used as a tool to invent but not as a tool for reducing to practice the claimed product or process, the sufficiency of disclosure should be totally independent of the AI system and such AI system may not be disclosed.

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

R: **YES**, not as a requirement but only as an alternative. Unlike biological materials, AI software can be stored and provided any time anywhere, and run in the platform where it was programmed originally, and the depositary may be each patent office itself. In practice, it is known that the data and the AI systems themselves are subject to trade secret protection and that the holders of such programs and data are not willing to make it publicly available. Accordingly, depending on the nature of the program, the same decision to an applicant of any invention on whether keeping the invention as a trade secret or obtaining patent protection is applicable for AI systems. The bottom line for harmonization from the Mexican group's perspective is that, if the AI is not material to reproduce the invention for those skilled in the art, but anyone can obtain the invention otherwise, there is no reason to provide the AI software at all. However, if a person skilled in the art must use the specific AI in order to reproduce or even use the invention with the features as claimed, the description must include the best mode to build such AI or the applicant must make available the AI system to the patent office and to the public after the expiry date.

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 product (either a wing or a drug) can be characterized by its own technical features and the AI system need not be used in order to reduce to practice the product. Accordingly, if the product is sufficiently disclosed so that someone skilled in constructing wings or manufacturing drugs can obtain such products based on the detailed description, the sufficiency standard would be complied with.

   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 <u>not</u> publicly available training data.
   YES, the product (either a wing or a drug) can be characterized by its own technical features and the AI system need not be used in order to reduce to practice the

product. Accordingly, if the product is sufficiently disclosed so that someone skilled in constructing wings or manufacturing drugs can obtain such products based on the detailed description, the sufficiency standard would be complied with.

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.
R: It should depend on the specification of the invention as provided in the patent application. For the case as proposed, the requirement of sufficiency of disclosure would be complied with if the AI is described in terms of the algorithm or logic that gives place to the new or improved AI. However, if the description includes only the effects or the execution, this would not be enough to comply with the requirement even if it is said that it operates on a publicly available website.

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 <u>not</u> publicly available.
R: It should depend on the specification of the invention as provided in the patent application. For the case as proposed, the requirement of sufficiency of disclosure would be complied with if the AI is described in terms of the algorithm or logic that gives place to the new or improved AI. However, if the description includes only the effects or the execution, this would not be enough to comply with the requirement.

27) Please comment on any additional issues concerning any aspect of sufficiency of disclo-sure of AI inventions you consider relevant to this Study Question.
R: As a general principle, the Mexican group is of the opinion that sufficiency of disclosure of AI related inventions should be assessed in the light of whether the system is really material for reproducing, developing to put in practice or using the invention.

<u>General</u>

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

Chemical, Biotechnology, Mechanical and Electrical/Electronic sectors were included but in the experience of firms prosecuting patents for companies and not the in-house counsels which typically are not in Mexico.