

Examination practices on AI-related inventions

Annex
Complete answers of each office

June 2023

fiveIPoffices

European Patent Office /// Japan Patent Office ///
Korean Intellectual Property Office ///
National Intellectual Property Administration, PRC ///
United States Patent and Trademark Office

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1. EPO (European Patent Office)

<Definition>

"AI-related inventions" in this questionnaire means inventions of AI technologies themselves (e.g., learning methods), inventions of applications of AI technologies to specific technical fields, and inventions of products that were developed using AI technologies.

The following questions refer to the examination guidelines and other materials that your office has been providing to users.

<Question 1: Basic information>

Q1. Please provide the URL where the latest text of the Patent Act can be found. If the Patent Act is provided in English (including provisional translations), please indicate the relevant URL. If the English translation is provisional, or if it is necessary for reference purposes, please also indicate the URL that provides the Patent Act in a language other than English.

[Title of legal text] The European Patent Convention

[URL] <https://www.epo.org/law-practice/legal-texts/epc.html>

[Language] English (available also in [German](#) and [French](#))

Q2. What kind of materials has your office already prepared regarding examination standards and other rules applicable to AI-related inventions? Please answer the following items regarding the materials that are provided to users to help them understand examination practices/standards for AI-related inventions.

*If there are multiple materials that you consider useful for understanding the examination practices/standards for AI-related inventions, such as examination guidelines, practice manuals, and/or other presentation materials explaining the examination standards or practices to users, please include all of them in your answer.
*In your answer to Q3, please include information for the comparative study reports on AI-related inventions with other offices.

[Title of material] Guidelines for examination in the European Patent Office (2022)

[URL] <https://www.epo.org/law-practice/legal-texts/guidelines.html>

[Language] English (available also in [German](#) and [French](#))

[Features] Please select from the following 1 to 4.

1. **Material specifically explaining the examination practices and standards for AI-related inventions**
2. **Material explaining the examination practices and standards for software-related inventions, including those related to AI**
3. **Material explaining the examination practices and standards for all technical fields**
4. Other ()

[Title of material] Section G-II, 3.3.1 of the Guidelines for examination in the European Patent Office (2022)

[URL] https://www.epo.org/law-practice/legal-texts/html/guidelines/e/g_ii_3_3_1.htm

[Language] English (available also in [German](#) and [French](#))

[Features] Please select from the following 1 to 4.

1. **Material specifically explaining the examination practices and standards for AI-related inventions**
2. Material explaining the examination practices and standards for software-related inventions, including those related to AI
3. Material explaining the examination practices and standards for all technical fields
4. Other ()

[Title of material] Index for Computer-Implemented Inventions containing links to sections of Guidelines relating particularly to CIIs

[URL] <https://www.epo.org/law-practice/legal-texts/html/guidelines/e/j.htm>

[Language] English (available also in [German](#) and [French](#))

[Features] Please select from the following 1 to 4.

1. **Material specifically explaining the examination practices and standards for AI-related inventions**
2. **Material explaining the examination practices and standards for software-related inventions, including those related to AI**
3. **Material explaining the examination practices and standards for all technical fields**
4. Other ()

[Title of material] Case Law of the Boards of Appeal of the European Patent Office, 10th Edition, July 2022

[URL] <https://www.epo.org/law-practice/case-law-appeals/case-law.html>

[Language] English (available also in [German](#) and [French](#))

[Features] Please select from the following 1 to 4.

1. **Material specifically explaining the examination practices and standards for AI-related inventions**
2. **Material explaining the examination practices and standards for software-related inventions, including those related to AI**
3. **Material explaining the examination practices and standards for all technical fields, including examination of software-related inventions and AI-related inventions**

4. Other (collection of the most important case law of the Boards of Appeal of the European Patent Office)

[Title of material] Opinion G 3/08 of the Enlarged Board of Appeal dealing with the patentability of computer programs

[URL] <https://www.epo.org/law-practice/case-law-appeals/recent/g080003ex1.html>

[Language] English (available also in [German](#) and [French](#))

[Features] Please select from the following 1 to 4.

1. Material specifically explaining the examination practices and standards for AI-related inventions
- 2. Material explaining the examination practices and standards for software-related inventions, including those related to AI**
3. Material explaining the examination practices and standards for all technical fields
4. Other

[Title of material] Decision G 1/19 of the Enlarged Board of Appeal on computer-implemented simulations

[URL] <https://www.epo.org/law-practice/case-law-appeals/recent/g190001ex1.html>

[Language] English (available also in [German](#) and [French](#))

[Features] Please select from the following 1 to 4.

1. Material specifically explaining the examination practices and standards for AI-related inventions
- 2. Material explaining the examination practices and standards for software-related inventions, including those related to AI**
3. Material explaining the examination practices and standards for all technical fields
4. Other

Q3. Does your office cooperate with other offices to conduct comparative studies on the examination practices and standards for AI-related inventions? Please include all comparative study reports that promote understanding the examination practices and standards for AI-related inventions, if any.

Further, if the comparative study reports are published in more than one language, please include all of them.

[Title of material] Comparative study on computer-implemented inventions/software-related inventions (2021)

[URL]

[https://documents.epo.org/projects/babylon/eponot.nsf/0/E1845285B1DD9C53C125879F00374910/\\$FILE/comparative_study_on_computer_implemented_inventions_software_related_inventions_EPO_KIPO_en.pdf](https://documents.epo.org/projects/babylon/eponot.nsf/0/E1845285B1DD9C53C125879F00374910/$FILE/comparative_study_on_computer_implemented_inventions_software_related_inventions_EPO_KIPO_en.pdf)

[Language] English

[Name of office with which comparative study was conducted] KIPO

[Feature] Please select from the following (1 to 4):

1. Comparative study focusing on the examination practices and standards for AI-related inventions
- 2. Comparative study on the examination practices and standards for software-related inventions, including those related to AI**
3. Comparative study on all technical fields
4. Other ()

[Title of material] Comparative study on computer-implemented inventions/software-related inventions (2021)

[URL]

[https://documents.epo.org/projects/babylon/eponot.nsf/0/6CD3B51A85FD8C29C1258789004C23F3/\\$File/comparative_study_on_computer_implemented_inventionssoftware_related_inventions_EPO_JPO..pdf](https://documents.epo.org/projects/babylon/eponot.nsf/0/6CD3B51A85FD8C29C1258789004C23F3/$File/comparative_study_on_computer_implemented_inventionssoftware_related_inventions_EPO_JPO..pdf)

[Language] English

[Name of office with which comparative study was conducted] JPO

[Feature] Please select from the following (1 to 4):

1. Comparative study focusing on the examination practices and standards for AI-related inventions
- 2. Comparative study on the examination practices and standards for software-related inventions, including those related to AI**
3. Comparative study on all technical fields
4. Other ()

[Title of material] Comparative study on computer-implemented inventions/software-related inventions (2019)

[URL]

[https://documents.epo.org/projects/babylon/eponot.nsf/0/979CF38758D25C2CC12584AC004618D9/\\$File/comparative_study_on_computer_implemented_inventions_software_related_inventions_EPO_CNIPA_en.pdf](https://documents.epo.org/projects/babylon/eponot.nsf/0/979CF38758D25C2CC12584AC004618D9/$File/comparative_study_on_computer_implemented_inventions_software_related_inventions_EPO_CNIPA_en.pdf)

[Language] English

[Name of the office with which comparative study was conducted] CNIPA

[Feature] Please select from the following (1 to 4):

1. Comparative study focusing on the examination practices and standards for AI-related inventions
- 2. Comparative study on the examination practices and standards for software-related inventions, including those related to AI**
3. Comparative study on all technical fields

4. Other ()

<Question 2: Patent requirements pertaining to AI-related inventions>

A. Patent Eligibility

Q4. What are the texts of the Patent Act regarding eligibility for patents?

[Text number]

[Art. 52 EPC](#)

Q5. If there are examination guidelines or other materials for assessing the patent eligibility of AI-related inventions, please specify where this information is listed.

[Title of materials] Guidelines for Examination in the European Patent Office (2022)

[Where the information is listed] *Identifiable information such as page number, section number, etc.

G-I with subsections (Patentability – general requirements)

G-II, 1 (Inventions – general remarks)

G-II, 2 (Examination practice)

G-II, 3.3 (Exclusions – mathematical methods)

G-II, 3.3.1 (Artificial intelligence and machine learning)

G-II, 3.3.2 (Simulation, design or modelling)

G-II, 3.5 with subsections (Exclusions - Schemes, rules and methods for performing mental acts, playing games or doing business)

G-II, 3.6 with subsections (Exclusions - Programs for computers)

G-II, 3.7 with subsection (Exclusion - Presentations of information)

[URL] *Any link that allows direct reference to the relevant section, or (in the case of a PDF) a link that specifies the page number (end with "#page=○").

G-I with subsections: https://www.epo.org/law-practice/legal-texts/html/guidelines/e/g_i_1.htm

G-II, 1: https://www.epo.org/law-practice/legal-texts/html/guidelines/e/g_ii_1.htm

G-II, 2: https://www.epo.org/law-practice/legal-texts/html/guidelines/e/g_ii_2.htm

G-II, 3.3: https://www.epo.org/law-practice/legal-texts/html/guidelines/e/g_ii_3_3.htm

G-II, 3.3.1: https://www.epo.org/law-practice/legal-texts/html/guidelines/e/g_ii_3_3_1.htm

G-II, 3.3.2: https://www.epo.org/law-practice/legal-texts/html/guidelines/e/g_ii_3_3_2.htm

G-II, 3.5 with subsections: https://www.epo.org/law-practice/legal-texts/html/guidelines/e/g_ii_3_5.htm

G-II, 3.6 with subsections: https://www.epo.org/law-practice/legal-texts/html/guidelines/e/g_ii_3_6.htm

G-II, 3.7 with subsection: https://www.epo.org/law-practice/legal-texts/html/guidelines/e/g_ii_3_7.htm

<https://www.epo.org/law-practice/legal-texts/html/guidelines/e/j.htm>

Q6. If there are examination guidelines or any other materials that provide examples of acceptable or unacceptable subject matters, or forms for claims with respect to inventions that are related to AI or to software in general, please provide these, and also specify where this information is listed.

*For example, please provide materials for which computer programs, computer program products, recording mediums on which computer programs are recorded, learned models, data structures, etc. are subject to protection as the subject matter of the invention (forms for claims), if any.

[Title of material] Guidelines for Examination in the European Patent Office (2022)

[Where the information is listed] *Identifiable information such as page number, section number, etc.

G-II, 3.3 (Mathematical methods) - examples of allowable claims relating to mathematical methods with technical application or implementation

G-II, 3.3.1 (Artificial intelligence and machine learning) - examples of allowable claims relating to technical applications of algorithms and classification methods

G-II 3.3.2 (Simulation, design or modelling) - examples of allowable claims relating to computer-implemented methods of simulating, designing or modelling

G-II, 3.5.1 (Schemes, rules and methods for performing mental acts) - examples of allowable method claims which require the use of technical means

G-II, 3.5.2 (Schemes, rules and methods for playing games) - examples of allowable claims relating to technical implementation, eg by specifying how to provide user input or by interactive control of real-time manoeuvres in a game world

G-II, 3.5.3 (Schemes, rules and methods for doing business) - examples of allowable claims which specify technical means, such as computers, computer networks or other programmable apparatus, for executing at least some steps of a business method

G-II 3.6 (Programs for computers)

G-II 3.6.1 (Examples of further technical effects) - examples of further technical effects which confer technical character to a computer program, namely the control of a technical process or of the internal functioning of the computer itself or its interfaces

G-II 3.6.2 (Information modelling, activity of programming and programming languages) - examples of allowable claims relating to information models

G-II 3.6.3 (Data retrieval, formats and structures) - examples of allowable claims relating to computer-implemented data structure or data format embodied on a medium

G-II 3.6.4 (Database management systems and information retrieval) - examples of allowable claims relating to methods performed in a database management system

G-II 3.7 (Presentations of information) - examples of allowable claims relating to presentation of information, e.g. a claim directed to or specifying the use of any technical means for presenting information (e.g. a computer display)

G-II 3.7.1 (User interfaces) - examples of allowable claims relating to graphical user interfaces (GUI), e.g. providing in a GUI an alternative graphical shortcut allowing the user to directly set different processing conditions, such as initiating a printing process and setting the number of copies to be printed by dragging and reciprocated movement of a document icon onto a printer icon

G-VII, 5.4 (Claims comprising technical and non-technical features)

G-VII, 5.4.1 (Formulation of the objective technical problem for claims comprising technical and non-technical features)

G-VII, 5.4.2 (with subsections) - examples of applying the COMVIK approach to the assessment of inventive step of claims comprising technical and non-technical features

F-IV, 3.9 (Claims directed to computer-implemented inventions)

F-IV, 3.9.1 (Cases where all method steps can be fully implemented by generic data processing means) - examples of allowable method claims and computer program (product) claims which can be carried out by generic data processing means

F-IV, 3.9.2 (Cases where method steps define additional devices and /or specific data processing means) - examples of allowable claims in which at least one method step defines the use of specific data processing means or other technical devices

F-IV, 3.9.3 (Cases where the invention is realised in a distributed computing environment) - examples of allowable product claims where the invention is realised in a distributed computing environment

[URL] *Any link that allows direct reference to the relevant part, or (in the case of a PDF), a link that specifies the page number (end with "#page=○").

G-II, 3.3: https://www.epo.org/law-practice/legal-texts/html/guidelines/e/g_ii_3_3.htm

G-II, 3.3.1: https://www.epo.org/law-practice/legal-texts/html/guidelines/e/g_ii_3_3_1.htm

G-II 3.3.2: https://www.epo.org/law-practice/legal-texts/html/guidelines/e/g_ii_3_3_2.htm

G-II, 3.5.1: https://www.epo.org/law-practice/legal-texts/html/guidelines/e/g_ii_3_5_1.htm

G-II, 3.5.2: https://www.epo.org/law-practice/legal-texts/html/guidelines/e/g_ii_3_5_2.htm

G-II, 3.5.3: https://www.epo.org/law-practice/legal-texts/html/guidelines/e/g_ii_3_5_3.htm

G-II 3.6: https://www.epo.org/law-practice/legal-texts/html/guidelines/e/g_ii_3_6.htm

G-II 3.6.1: https://www.epo.org/law-practice/legal-texts/html/guidelines/e/g_ii_3_6_1.htm

G-II 3.6.2: https://www.epo.org/law-practice/legal-texts/html/guidelines/e/g_ii_3_6_2.htm

G-II 3.6.3: https://www.epo.org/law-practice/legal-texts/html/guidelines/e/g_ii_3_6_3.htm

G-II 3.6.4: https://www.epo.org/law-practice/legal-texts/html/guidelines/e/g_ii_3_6_4.htm

G-II 3.7: https://www.epo.org/law-practice/legal-texts/html/guidelines/e/g_ii_3_7.htm

G-II 3.7.1: https://www.epo.org/law-practice/legal-texts/html/guidelines/e/g_ii_3_7_1.htm

G-VII, 5.4: https://www.epo.org/law-practice/legal-texts/html/guidelines/e/g_vii_5_4.htm

G-VII, 5.4.1: https://www.epo.org/law-practice/legal-texts/html/guidelines/e/g_vii_5_4_1.htm

G-VII, 5.4.2: https://www.epo.org/law-practice/legal-texts/html/guidelines/e/g_vii_5_4_2.htm

F-IV, 3.9: https://www.epo.org/law-practice/legal-texts/html/guidelines/e/f_iv_3_9.htm

F-IV, 3.9.1: https://www.epo.org/law-practice/legal-texts/html/guidelines/e/f_iv_3_9_1.htm

F-IV, 3.9.2: https://www.epo.org/law-practice/legal-texts/html/guidelines/e/f_iv_3_9_2.htm

F-IV, 3.9.3: https://www.epo.org/law-practice/legal-texts/html/guidelines/e/f_iv_3_9_3.htm

[Title of material] Case Law of the Boards of Appeal of the European Patent Office, 10th Edition, July 2022

[Where the information is listed] *Identifiable information such as page number, section number, etc.

I.A.2.2.2 (Mathematical methods)

I.A.2.4 (Computer-implemented inventions)

I.A.2.5 (Schemes, rules and methods for performing mental acts, playing games or doing business)

I.A.2.6 (Presentations of information)

[URL] *Any link that allows direct reference to the relevant part, or (in the case of a PDF), a link that specifies the page number (end with "#page=○").

I.A.2.2.2: https://www.epo.org/law-practice/legal-texts/html/caselaw/2022/e/clr_i_a_2_2_2.htm

I.A.2.4: https://www.epo.org/law-practice/legal-texts/html/caselaw/2022/e/clarification_2_4.htm

I.A.2.5: https://www.epo.org/law-practice/legal-texts/html/caselaw/2022/e/clarification_2_5.htm

I.A.2.6: https://www.epo.org/law-practice/legal-texts/html/caselaw/2022/e/clarification_2_6.htm

Q7. In order to help understand the method of assessing patent eligibility for AI-related inventions, if there are any case examples (e.g., hypothetical cases or representative court cases shown in the examination guidelines or other materials), please provide the following identifying information: case numbers/titles, etc., the URLs where the cases can be referenced, and a summary of each example case.

*If there are multiple case examples, please answer the following items for each case.

[Case number/Title] Decision T 1173/97 of the Boards of Appeal

[URL] *Any link that allows direct reference to the relevant part, or (in the case of a PDF), a link that specifies the page number (end with "#page=○").

<https://www.epo.org/law-practice/case-law-appeals/recent/t971173ex1.html>

[Summary of Case example] Please answer which of the following applies to the case:

1. **A case that satisfies patent eligibility**
2. A case that does not satisfy patent eligibility

[Supplement] Please provide brief supplementary information that introduces the points of the case, if any. (e.g., a case that does not fall under the category of invention because it is assessed not to satisfy the element to consider of XX.)

A computer program product is not excluded from patentability under Article 52(2) and (3) EPC if, when it is run on a computer, it produces a further technical effect which goes beyond the "normal" physical interactions between program (software) and computer (hardware)".

[Case number/Title] Decision T 1820/16 of Technical Board of Appeal

[URL] *Any link that allows direct reference to the relevant part, or (in the case of a PDF), a link that specifies the page number (end with "#page=○").

<https://www.epo.org/law-practice/case-law-appeals/recent/t161820eu1.html>

[Summary of Case example] Please answer which of the following applies to the case:

1. A case that satisfies patent eligibility
2. **A case that does not satisfy patent eligibility**

[Supplement] Please provide brief supplementary information that introduces the points of the case, if any. (e.g., a case that does not fall under the category of invention because it is assessed not to satisfy the element to consider of XX.)

The claimed method of solving optimization problems is defined purely in form of a mathematical method. The input and output data including any technical results that could be derived from the output remain unspecified and the field of application may even be non-technical in nature (economic). Hence, the method defined in claim 1 is considered to be an abstract method which falls under the category of non-inventions set out in Articles 52(2)(a) and (3) EPC.

Furthermore, a computer-implementation is neither explicitly specified in claim 1 nor could it be acknowledged as being implicit from the present wording of claim 1 considering the overall context of the application.

[Case number/Title] Hypothetical example of applying the COMVIK approach (GL G-VII, 5.4.2.5)

[URL] *Any link that allows direct reference to the relevant part, or (in the case of a PDF), a link that specifies the page number (end with "#page=○").

https://www.epo.org/law-practice/legal-texts/html/guidelines/e/g_vii_5_4_2_5.htm

[Summary of Case example] Please answer which of the following applies to the case:

1. **A case that satisfies patent eligibility**
2. A case that does not satisfy patent eligibility

[Supplement] Please provide brief supplementary information that introduces the points of the case, if any. (e.g., a case that does not fall under the category of invention because it is assessed not to satisfy the element to consider of XX.)

In this example, the patent eligibility requirement is met since the method involves using technical means, e.g., a spray jet and a controller controlling the process parameters.

This example also illustrates the case where a mathematical feature which, when taken in isolation, is non-technical but contributes to producing a technical effect serving a technical purpose in the context of the claim. The feature of using a combination of neural network results and fuzzy logic for adjusting process parameters for controlling thermal spraying contributes to the technical character of the invention and may therefore support the presence of an inventive step.

However, in the present case, claim 1 does not contain any information about the coating properties to be achieved. The input and output variables of the neuro-fuzzy controller, how the controller is trained or how the output is used in the regulation of the process parameters are not defined. No features of the neuro-fuzzy controller are linked to any technical properties of the spray coating. The neuro-fuzzy controller is therefore not adapted for the specific application of thermal spray coating. There is no evidence of any particular technical effect which is credibly achieved over the whole

claimed scope other than that of providing different process parameters as input to the controller.

B. Requirements for descriptions

Q8. What are the respective texts of the Patent Act regarding requirements for descriptions (clarity, support requirements/written description requirements, enablement requirement/sufficiency of disclosure)?

[Text number]

1. Clarity: Art. 84 EPC
2. Support requirement/Written description requirement: Art. 84 EPC
3. Enablement requirement/Sufficiency of disclosure: Art. 83 EPC

Q9. If there are any materials on the examination guidelines, etc. for assessing the clarity requirements of AI-related inventions, please specify where this information is listed.

[Title of material] Guidelines for Examination in the European Patent Office (2022)

[Where the information is listed] *Identifiable information such as page number, section number, etc.

F-IV (Claims) – applies to all inventions

F-IV, 3.9 (Claims directed to computer-implemented inventions)

F-IV, 3.9.1 (Cases where all method steps can be fully implemented by generic data processing means)

F-IV, 3.9.2 (Cases where method steps define additional devices and /or specific data processing means)

F-IV, 3.9.3 (Cases where the invention is realised in a distributed computing environment)

[URL] *Any link that allows direct reference to the relevant part, or (in the case of a PDF), a link that specifies the page number (end with "#page=○").

F-IV: https://www.epo.org/law-practice/legal-texts/html/guidelines/e/f_iv.htm

F-IV, 3.9: https://www.epo.org/law-practice/legal-texts/html/guidelines/e/f_iv_3_9.htm

F-IV, 3.9.1: https://www.epo.org/law-practice/legal-texts/html/guidelines/e/f_iv_3_9_1.htm

F-IV, 3.9.2: https://www.epo.org/law-practice/legal-texts/html/guidelines/e/f_iv_3_9_2.htm

F-IV, 3.9.3: https://www.epo.org/law-practice/legal-texts/html/guidelines/e/f_iv_3_9_3.htm

Q10. If there are any materials on the examination guidelines, etc. for assessing the

support requirements/written description requirements of AI-related inventions, please specify where this information is listed.

[Title of material] Guidelines for Examination in the European Patent Office (2022)

[Where the information is listed] *Identifiable information such as page number, section number, etc.

F-IV, 6 (Support in description) – applicable to all inventions

F-II, 4.12 (Computer programs)

[URL] *Any link that allows direct reference to the relevant part, or (in the case of a PDF), a link that specifies the page number (end with "#page=○").

F-IV, 6: https://www.epo.org/law-practice/legal-texts/html/guidelines/e/f_iv_6.htm

F-II, 4.12: https://www.epo.org/law-practice/legal-texts/html/guidelines/e/f_ii_4_12.htm

Q11. If there are any materials on the examination guidelines, etc. for assessing the enablement requirements/sufficiency of disclosure for AI-related inventions, please specify where this information is listed.

[Title of material] Guidelines for Examination in the European Patent Office (2022)

[Where the information is listed] *Identifiable information such as page number, section number, etc.

F-III, 1, par. 4 (Sufficiency of disclosure) – applicable to all inventions

[URL] *Any link that allows direct reference to the relevant part, or (in the case of a PDF), a link that specifies the page number (end with "#page=○").

F-III,1: https://www.epo.org/law-practice/legal-texts/html/guidelines/e/f_iii_1.htm

Q12: If there are any materials on the examination guidelines, etc. for assessing the support requirements/written description requirements or enablement requirements/sufficiency of disclosure for inventions of products developed by humans using AI technologies, please specify where this information is listed.

*For inventions of products, it is sometimes necessary to show experimental results in the specifications, etc. in order to satisfy support requirements/written description requirements or enablement requirement/sufficiency of disclosure. (In the case of product inventions specified by function/characteristics, for example, it is necessary to show experimental results in order to show that the products have the said function/characteristics).

In this case, please answer if there are any indications in the materials on the examination guidelines, etc. that specify whether the estimated results using AI technologies (e.g., material informatics) are recognized as equivalent to the experimental results.

[Title of material] Guidelines for Examination in the European Patent Office (2022)

[Where the information is listed] *Identifiable information such as page number, section number, etc.]

F-IV, 4.12 (Product-by-process claim) applicable to all inventions

F-III, 4 (Burden of proof as regards the possibility of performing and repeating the invention)

F-III, 12 (Sufficiency of disclosure and inventive step)

[URL] *Any link that allows direct reference to the relevant part, or (in the case of a PDF), a link that specifies the page number (end with "#page=○").

F-IV, 4.12: https://www.epo.org/law-practice/legal-texts/html/guidelines/e/f_iv_4_12.htm

F-III, 4: https://www.epo.org/law-practice/legal-texts/html/guidelines/e/f_iii_4.htm

F-III, 12: https://www.epo.org/law-practice/legal-texts/html/guidelines/e/f_iii_12.htm

Q13. In order to help understand the method of assessing the requirements for descriptions, that is clarity, support requirement/written description requirement and enablement requirement/sufficiency of disclosure, of AI-related inventions, if there are any case examples (e.g., hypothetical cases or representative court cases shown in the examination guidelines or other materials), please provide the following identifying information: case numbers/titles, etc., the URLs where the cases can be referenced, and a summary of each case example.

*If there are multiple cases, please answer the following items for each case.

[Case number/Title] Decision T 410/96 of the Boards of Appeal

[URL] *Any link that allows direct reference to the relevant part or, in the case of a PDF, a link that specifies the page number (end with "#page=○").

<https://www.epo.org/law-practice/case-law-appeals/recent/t960410eu1.html>

[Summary of Case example] Please answer which of the following applies to the case.

(Multiple answers allowed for a case example).

1. A case that satisfies clarity requirement

2. A case that does not satisfy clarity requirement

3. A case that satisfies enablement requirement/sufficiency of disclosure

4. A case that does not satisfy enablement requirement/sufficiency of disclosure

5. A case that satisfies support requirement/written description requirement

6. A case that does not satisfy support requirement/written description requirement

[Supplement] Please provide supplementary information that introduces the points of the case, if any.

e.g., a case where the enablement requirement is not satisfied because XX is not described in the specification.

Apparatus features of the means-plus-function type ("means for ...") are interpreted as means adapted to carry out the respective steps/functions, rather than merely means suitable for carrying them out. In the present case, neither the reference to the steps of the method claim, nor the use of the expression "means for ..." prevents the allowability of the form of present claim 6. Thus a claim in the form of the present claim 6 may, at

least in principle, be allowable under Article 84 in combination with Rules 29(1) and (3) EPC.

[Case number/Title] Decision T 2140/08 of the Boards of Appeal

[URL] *Any link that allows direct reference to the relevant part or, in the case of a PDF, a link that specifies the page number (end with "#page=○").

<https://www.epo.org/law-practice/case-law-appeals/recent/t082140eu1.html>

[Summary of Case example] Please answer which of the following applies to the case.

(Multiple answers allowed for a case example).

1. A case that satisfies clarity requirement
2. **A case that does not satisfy clarity requirement**
3. A case that satisfies enablement requirement/sufficiency of disclosure
4. A case that does not satisfy enablement requirement/sufficiency of disclosure
5. A case that satisfies support requirement/written description requirement
6. A case that does not satisfy support requirement/written description requirement

[Supplement] Please provide supplementary information that introduces the points of the case, if any.

e.g., a case where the enablement requirement is not satisfied because XX is not described in the specification.

Claim 1 of the main request does not comprise some essential features of the invention as illustrated in the embodiments of Figures. Moreover, it contains unclear expressions which do not appear to find full support in the description of the original application.

[Case number/Title] Decision T 161/18 of the Boards of Appeal

[URL] *Any link that allows direct reference to the relevant part or, in the case of a PDF, a link that specifies the page number (end with "#page=○").

<https://www.epo.org/law-practice/case-law-appeals/recent/t180161du1.html>

[Summary of Case example] Please answer which of the following applies to the case.

(Multiple answers allowed for a case example).

1. A case that satisfies clarity requirement
2. A case that does not satisfy clarity requirement
3. A case that satisfies enablement requirement/sufficiency of disclosure
4. **A case that does not satisfy enablement requirement/sufficiency of disclosure**
5. A case that satisfies support requirement/written description requirement
6. A case that does not satisfy support requirement/written description requirement

[Supplement] Please provide supplementary information that introduces the points of the case, if any.

e.g., a case where the enablement requirement is not satisfied because XX is not described in the specification.

The training of the artificial neural network could not be reproduced by a person skilled in the art since the application did not disclose which input data were suitable for training the artificial neural network, or at least one data set suitable for solving the technical problem. The person skilled in the art could not therefore carry out the invention. As a result, the application was not sufficiently disclosed under Art. 83 EPC.

[Case number/Title] Decision T 2574/16 of the Boards of Appeal

[URL] *Any link that allows direct reference to the relevant part or, in the case of a PDF, a link that specifies the page number (end with "#page=○").

<https://www.epo.org/law-practice/case-law-appeals/recent/t162574eu1.html>

[Summary of Case example] Please answer which of the following applies to the case. (Multiple answers allowed for a case example).

1. **A case that satisfies clarity requirement**
2. A case that does not satisfy clarity requirement
3. **A case that satisfies enablement requirement/sufficiency of disclosure**
4. A case that does not satisfy enablement requirement/sufficiency of disclosure
5. A case that satisfies support requirement/written description requirement
6. A case that does not satisfy support requirement/written description requirement

[Supplement] Please provide supplementary information that introduces the points of the case, if any.

e.g., a case where the enablement requirement is not satisfied because XX is not described in the specification.

The Board noted that the claim is not limited to one simple way of simulating an operational element and in fact encompasses elaborate simulations going beyond any of the examples disclosed in the application as filed. But this in itself is not a problem of lack of clarity or insufficiency of disclosure. In fact, it is normal for a claim to define the scope of protection in terms that positively define the essential features of the invention. Any particular embodiment falling within the scope of the claim may have further characteristics that are not mentioned in the claim or disclosed in the application (and could even constitute a patentable further development).

[Case number/Title] Decision T 637/03

[URL] *Any link that allows direct reference to the relevant part or, in the case of a PDF, a link that specifies the page number (end with "#page=○").

https://www.epo.org/law-practice/case-law-appeals/recent/t030637eu1.html#T_2003_0637

[Summary of Case example] Please answer which of the following applies to the case. (Multiple answers allowed for a case example).

1. A case that satisfies clarity requirement
2. A case that does not satisfy clarity requirement
3. A case that satisfies enablement requirement/sufficiency of disclosure
4. A case that does not satisfy enablement requirement/sufficiency of disclosure
5. A case that satisfies support requirement/written description requirement
- 6. A case that does not satisfy support requirement/written description requirement**

[Supplement] Please provide supplementary information that introduces the points of the case, if any.

e.g., a case where the enablement requirement is not satisfied because XX is not described in the specification.

When trying to match the claim to the description, the Board has raised objections. Claims did not reflect the characteristics contained in the description. As the claims were inconsistent with the description, they were not supported by the description.

C. Novelty

Q14. What are the texts of the Patent Act regarding novelty?

[Text number]

[Art. 54 EPC](#)

Q15. If there are any materials on the examination guidelines, etc. for assessing the novelty of AI-related inventions, please specify where this information is listed.

[Title of material] Guidelines for Examination in the European Patent Office (2022)

[Where the information is listed] *Identifiable information such as page number, section number, etc.

G-VI (Novelty) - applicable to all inventions

[URL] *Any link that allows direct reference to the relevant part, or (in the case of a PDF), a link that specifies the page number (end with "#page=○").

G-VI: https://www.epo.org/law-practice/legal-texts/html/guidelines/e/g_vi.htm

[Title of material] Case Law of the Boards of Appeal of the European Patent Office, 10th Edition, July 2022

[Where the information is listed] *Identifiable information such as page number, section number, etc.

I.C.1-5 (Novelty)

[URL] *Any link that allows direct reference to the relevant part, or (in the case of a PDF), a link that specifies the page number (end with "#page=○").

I.C.1-5: https://www.epo.org/law-practice/legal-texts/html/caselaw/2022/e/clr_i_c.htm

Q16. In order to help understand the method for assessing "novelty" of AI-related inventions, if there are any case examples (e.g., hypothetical cases or representative court cases shown in the examination guidelines or other materials), please provide the following identifying information: case numbers/titles, etc., the URL where the cases can be referenced, and a summary of each case example.

*If there are multiple cases, please answer the following items for each case.

[Case number/Title] Decision T 2440/12 of the Boards of Appeal

[URL] *Any link that allows direct reference to the relevant part, or (in the case of a PDF), a link that specifies the page number (end with "#page=○").

<https://www.epo.org/law-practice/case-law-appeals/recent/t122440eu1.html>

[Summary of case example] Please answer which of the following applies to the case:

1. A case showing that novelty is affirmed

2. A case showing that novelty is denied

[Supplement] Please provide supplementary information that introduces the points of the case, if any.

e.g., a case where the novelty is denied because XX is not considered in the assessment of novelty

The invention was a method to be performed by a computer. The Board came to the conclusion that prior use of a software product in the form of sales made the method implemented by the software part of the state of the art since, in principle, the skilled person could have executed the software line-by-line on a computer, and, in doing so, would have not only carried out the method, but also gained knowledge of the method steps performed by the computer. The board concurred with the appellant that even a different "disclosure" of the method, as could be obtained by executing it on a computer line-by-line without infringing copyright protection, was sufficient to take away the novelty of the method as claimed. Hence, the subject-matter of claim 1 was not new following the prior use of a software product which undisputedly embodied the claimed subject-matter.

D. Inventive step

Q17. What are the texts of the Patent Act regarding inventive step?

[Text number]

[Art. 56 EPC](#)

Q18. If there are any materials on the examination guidelines, etc. for assessing "inventive step" of AI-related inventions, please specify where this information is listed.

[Title of material] Guidelines for Examination in the European Patent Office

[Where the information is listed] *Identifiable information such as page number, section number, etc.

G-VII, 5.4 (Claims comprising technical and non-technical features)

G-VII, 5.4.1 (Formulation of the objective technical problem)

G-VII, 5.4.2 (Examples of applying the COMVIK approach) with subsections 5.4.2.1 - 5.4.2.5 containing examples

[URL] *Any link that allows direct reference to the relevant part, or (in the case of a PDF), a link that specifies the page number (end with "#page=○").

G-VII, 5.4: https://www.epo.org/law-practice/legal-texts/html/guidelines/e/g_vii_5_4.htm

G-VII, 5.4.1: https://www.epo.org/law-practice/legal-texts/html/guidelines/e/g_vii_5_4_1.htm

G-VII, 5.4.2: https://www.epo.org/law-practice/legal-texts/html/guidelines/e/g_vii_5_4_2.htm https://www.epo.org/law-practice/legal-texts/html/guidelines/e/g_vii_5_4_2.htm

[Title of material] Case Law of the Boards of Appeal of the European Patent Office, 10th Edition, July 2022

[Where the information is listed] *Identifiable information such as page number, section number, etc.

I.D.9.1 (Assessment of inventive step in the case of mixed-type inventions)

I.D.9.2 (Problem-solution approach when applied to mixed-type inventions)

[URL] *Any link that allows direct reference to the relevant part, or (in the case of a PDF), a link that specifies the page number (end with "#page=○").

I.D.9.1: https://www.epo.org/law-practice/legal-texts/html/caselaw/2022/e/clr_i_d_9_1.htm

I.D.9.2: https://www.epo.org/law-practice/legal-texts/html/caselaw/2022/e/clr_i_d_9_2.htm

Q19. In order to help understand the method of assessing inventive step for AI-related

inventions, if there are any case examples (e.g., hypothetical cases or representative court cases shown in the examination guidelines or other materials), please provide the following identifying information: case numbers/titles, etc., the URL where the cases can be referenced, and a summary of the case examples.
*If there are multiple cases, please answer the following items for each case.

[Case number/Title] Decision T 1286/09 of the Boards of Appeal

[URL] *Any link that allows direct reference to the relevant part, or (in the case of a PDF), a link that specifies the page number (end with "#page=○").

<https://www.epo.org/law-practice/case-law-appeals/recent/t091286eu1.html>

[Summary of Case example] Please answer which of the following applies to the case:

1.A case showing that inventive step is affirmed

2.A case showing that inventive step is denied

[Supplement] Please provide supplementary information that introduces the points of the case, if any.

e.g., a case where the inventive step is affirmed because it cannot be said to be readily conceivable from the prior art.

The gist of the invention consists in increasing the diversity of exemplar images used to train a semantic classifier by systematically altering an exemplar colour image to generate an expanded set of images with the same salient characteristics as the initial exemplar image. An exemplar image may be altered by means of "spatial recomposition", i.e. by cropping its edges or by horizontally mirroring it. Another technique for expanding the set of exemplar images is to shift the colour distribution or to change the colour along the illuminant (i.e. red-blue) axis. Available prior art did not deal with the problem of training a colour image classifier and did not disclose these features. Therefore, the subject-matter of claim 1 involved an inventive step within the meaning of Article 56 EPC.

[Case number/Title] Decision G 1/19 of the Enlarged Board of Appeal

[URL] *Any link that allows direct reference to the relevant part, or (in the case of a PDF), a link that specifies the page number (end with "#page=○").

<https://www.epo.org/law-practice/case-law-appeals/recent/g190001ex1.html>

[Summary of Case example] Please answer which of the following applies to the case:

1. A case showing that inventive step is affirmed

2. A case showing that inventive step is denied

General principles, not confined to examining a specific invention

[Supplement] Please provide supplementary information that introduces the points of the case, if any.

e.g., a case where the inventive step is affirmed because it cannot be said to be readily conceivable from the prior art.

The Enlarged Board of Appeal, responsible for clarifying points of law of fundamental importance in interpretation of the European Patent Convention, confirmed that the long-established COMVIK approach (used for assessment of inventive step in mixed inventions and explained in decision T 641/00) applies to all computer-implemented inventions. It held that computer-implemented simulations must be assessed according to the same criteria as any other computer-implemented invention, including with regard to the question whether a claimed feature contributes to the invention's technical character. Any technical effect going beyond the normal electrical interactions within the computer on which the simulation is implemented (i.e. any "further technical effect") may be considered for inventive step.

In this particular case the Board also stated that a computer-implemented simulation of a technical system or process that is claimed as such can, for the purpose of assessing inventive step, solve a technical problem by producing a technical effect going beyond the simulation's implementation on a computer. For that assessment it is not a sufficient condition that the simulation is based, in whole or in part, on technical principles underlying the simulated system or process.

[Case number/Title] EPO – JPO Comparative study on computer-implemented inventions/software-related inventions – Report 2021, Case C-8: Training a neural network ("Drop-out")

[URL] *Any link that allows direct reference to the relevant part, or (in the case of a PDF), a link that specifies the page number (end with "#page=○").

[comparative_study_on_computer_implemented_inventionssoftware_related_inventions_EPO_JPO..pdf](#)

[Summary of Case example] Please answer which of the following applies to the case:

1. A case showing that inventive step is affirmed
- 2. A case showing that inventive step is denied**

The claim is directed to the workings of a neural network without serving a technical purpose or by being implemented in a specific manner which takes into account the internal functioning of a computer. Rather, all that the claims specify is the computer implementation of mathematical method steps. In such a case, it is not sufficient that the mathematical method is algorithmically more efficient than prior-art mathematical methods to establish a technical effect. Since the distinguishing method steps defined in claim 1 do not contribute to the technical character of the claimed subject-matter, they cannot form the basis for an inventive step.

2. JPO (Japan Patent Office)

<Definition>

"AI-related inventions" in this questionnaire means inventions of AI technologies themselves (e.g., learning methods), inventions of applications of AI technologies to specific technical fields, and inventions of products that were developed using AI technologies.

The following questions refer to the examination guidelines and other materials that your office has been providing to users.

<Question 1: Basic information>

Q1. Please provide the URL where the latest text of the Patent Act can be found. If the Patent Act is provided in English (including provisional translations), please indicate the relevant URL. If the English translation is provisional, or if it is necessary for reference purposes, please also indicate the URL that provides the Patent Act in a language other than English.

[Title of legal text] Patent Act

[URL] <https://www.japaneselawtranslation.go.jp/en/laws/view/4097>

[Language] English

Q2. What kind of materials has your office already prepared regarding examination standards and other rules applicable to AI-related inventions? Please answer the following items regarding the materials that are provided to users to help them understand examination practices/standards for AI-related inventions.

*If there are multiple materials that you consider useful for understanding the examination practices/standards for AI-related inventions, such as examination guidelines, practice manuals, and/or other presentation materials explaining the examination standards or practices to users, please include all of them in your answer.

*In your answer to Q3, please include information for the comparative study reports on AI-related inventions with other offices.

[Title of material] Examination Guidelines for Patent and Utility Model in Japan

[URL]

https://www.jpo.go.jp/e/system/laws/rule/guideline/patent/tukujitu_kijun/index.html

[Language] English

[Features] Please select from the following 1 to 4.

3. Material explaining the examination practices and standards for all technical fields

[Title of material] Examination Handbook for Patent and Utility Model in Japan Annex B Chapter 1 Computer software related Inventions

[URL]

https://www.ipa.go.jp/e/system/laws/rule/guideline/patent/handbook_shinsa/document/index/app_b1_e.pdf

[Language] English

[Features] Please select from the following 1 to 4.

2. Material explaining the examination practices and standards for software-related inventions, including those related to AI

[Title of material] Outline of the Examination Guidelines for Patent and Utility Model

[URL]

https://www.ipa.go.jp/e/system/laws/rule/guideline/patent/document/tokkyo_shinsakijyun_point/outline.pdf

[Language] English

[Features] Please select from the following 1 to 4.

3. Material explaining the examination practices and standards for all technical fields

[Title of material] Newly Added Case Examples for AI-related Technologies

[URL]

https://www.ipa.go.jp/e/system/laws/rule/guideline/patent/document/ai_jirei_e/jirei_tsuika_e.pdf

[Language] English

[Features] Please select from the following 1 to 4.

1. Material specifically explaining the examination practices and standards for AI-related inventions

[Title of material] Examination Guidelines in Manga: AI/IoT Edition

[URL] https://www.ipa.go.jp/e/system/laws/rule/guideline/patent/comic_ai_iot_e.html

[Language] English

[Features] Please select from the following 1 to 4.

2. Material explaining the examination practices and standards for software-related inventions, including those related to AI

[Title of material] Points of Revision of the Examination Guidelines and Examination Handbook for Computer Software-Related Inventions

[URL]

https://www.ipa.go.jp/e/system/laws/rule/guideline/patent/document/ai_jirei_e/point_of_update_1803.pdf

[Language] English

[Features] Please select from the following 1 to 4.

2. Material explaining the examination practices and standards for software-related inventions, including those related to AI

[Title of material] Examination Guidelines pertinent to IoT related technologies

[URL]

https://www.jpo.go.jp/e/system/laws/rule/guideline/patent/document/iot_shinsa/01.pdf

[Language] English

[Features] Please select from the following 1 to 4.

2. Material explaining the examination practices and standards for software-related inventions, including those related to AI

[Title of material] Case Examples pertinent to AI-related technologies

[URL]

https://www.jpo.go.jp/e/system/laws/rule/guideline/patent/document/ai_jirei_e/jirei_e.pdf

[Language] English

[Features] Please select from the following 1 to 4.

1. Material specifically explaining the examination practices and standards for AI-related inventions

[Title of material] Case examples pertinent to IoT related technology, etc.

[URL]

https://www.jpo.go.jp/e/system/laws/rule/guideline/patent/handbook_shinsa/document/index/app_z_e.pdf

[Language] English

[Features] Please select from the following 1 to 4.

2. Material explaining the examination practices and standards for software-related inventions, including those related to AI

[Title of material] コンピュータソフトウェア関連技術の審査基準等について

[URL]

https://www.jpo.go.jp/system/laws/rule/guideline/patent/document/cs_shinsa/cs_shinsa.pdf

[Language] Japanese

[Features] Please select from the following 1 to 4.

2. Material explaining the examination practices and standards for software-related inventions, including those related to AI

Q3. Does your office cooperate with other offices to conduct comparative studies on the examination practices and standards for AI-related inventions? Please include all comparative study reports that promote understanding the examination practices and standards for AI-related inventions, if any.

Further, if the comparative study reports are published in more than one language, please include all of them.

[Title of material] Comparative Study on Computer Implemented Inventions/Software related Inventions between JPO and EPO

[URL] https://www.jpo.go.jp/news/kokusai/epo/document/software_201903/01_en.pdf

[Language] English

[Name of office with which comparative study was conducted] EPO,JPO

[Feature] Please select from the following (1 to 4):

2.Comparative study on the examination practices and standards for software-related inventions, including those related to AI

[Title of material] ソフトウェア関連発明に関する比較研究報告書（和文仮訳）

[URL] https://www.jpo.go.jp/news/kokusai/epo/document/software_201903/01_ja.pdf

[Language] Japanese

[Name of office with which comparative study was conducted] EPO,JPO

[Feature] Please select from the following (1 to 4):

2.Comparative study on the examination practices and standards for software-related inventions, including those related to AI

[Title of material] 国際特許審査実務シンポジウム開催 – AI 関連発明のグローバルな権利取得に向けて –

[URL] https://www.jpo.go.jp/news/shinchaku/event/seminer/shinsa_jitsumu_2019.html

[Language] Japanese, English

[Name of office with which comparative study was conducted]

EPO,USPTO,CNIPA,KIPO,JPO

[Feature] Please select from the following (1 to 4):

1.Comparative study focusing on the examination practices and standards for AI-related inventions

[Title of material] Report on Comparative Study Carried Out Under Trilateral Project 24.2

[URL] https://www.jpo.go.jp/e/system/utp242_m.html

[Language] English

[Name of office with which comparative study was conducted] EPO,USPTO,JPO

[Feature] Please select from the following (1 to 4):

2.Comparative study on the examination practices and standards for software-related inventions, including those related to AI

<Question 2: Patent requirements pertaining to AI-related inventions>

C. Patent Eligibility

Q4. What are the texts of the Patent Act regarding eligibility for patents?

[Text number] Main Paragraph of Article 29(1) of Patent Act

Q5. If there are examination guidelines or other materials for assessing the patent eligibility of AI-related inventions, please specify where this information is listed.

[Title of materials] Examination Handbook for Patent and Utility Model in Japan
[Where the information is listed] Annex B Chapter 1 2.1 Eligibility for Patent (Main Paragraph of Article 29(1))

[URL]

https://www.ipa.go.jp/e/system/laws/rule/guideline/patent/handbook_shinsa/document/index/app_b1_e.pdf#page=10

Q6. If there are examination guidelines or any other materials that provide examples of acceptable or unacceptable subject matters, or forms for claims with respect to inventions that are related to AI or to software in general, please provide these, and also specify where this information is listed.

*For example, please provide materials for which computer programs, computer program products, recording mediums on which computer programs are recorded, learned models, data structures, etc. are subject to protection as the subject matter of the invention (forms for claims), if any.

[Title of material] Examination Handbook for Patent and Utility Model in Japan
[Where the information is listed] Annex B Chapter 1 2.1.2 Handling of "structured data" and "data structure"

[URL]

https://www.ipa.go.jp/e/system/laws/rule/guideline/patent/handbook_shinsa/document/index/app_b1_e.pdf#page=27

Q7. In order to help understand the method of assessing patent eligibility for AI-related inventions, if there are any case examples (e.g., hypothetical cases or representative court cases shown in the examination guidelines or other materials), please provide the following identifying information: case numbers/titles, etc., the URLs where the cases can be referenced, and a summary of each example case.

*If there are multiple case examples, please answer the following items for each case.

[Case number/Title]

[URL]

https://www.ipa.go.jp/e/system/laws/rule/guideline/patent/handbook_shinsa/document/index/app_b1_e.pdf#page=44

[Summary of Case example] Please answer which of the following applies to the case:

1. A case that satisfies patent eligibility
2. A case that does not satisfy patent eligibility

[Supplement] Please provide brief supplementary information that introduces the points of the case, if any. (e.g., a case that does not fall under the category of invention because it is assessed not to satisfy the element to consider of XX.)

Case Number	Title of the invention	Remarks	Summary
Case 2-13	Data Structure of Dialogue Scenarios in Voice Interactive System	Related to Data Structure in Voice Interactive System (AI related technology)	1
Case 2-14	Trained Model for Analyzing Reputations of Accommodations	Related to a Trained Model to Have a Computer Function for Analyzing Reputations of Accommodations (AI related technology)	1

[Case number/Title]

[URL]

https://www.ipa.go.jp/e/system/laws/rule/guideline/patent/handbook_shinsa/document/index/app_a3_e.pdf

[Summary of Case example] Please answer which of the following applies to the case:

1. A case that satisfies patent eligibility
2. A case that does not satisfy patent eligibility

[Supplement] Please provide brief supplementary information that introduces the points of the case, if any. (e.g., a case that does not fall under the category of invention because it is assessed not to satisfy the element to consider of XX.)

Case No.	Title of Invention	Remarks	
Case 3-2	Sugar Content Data of Apples and a Method for Predicting Sugar Content Data of Apples	Those regarded/not regarded as technical ideas	1/2

D. Requirements for descriptions

Q8. What are the respective texts of the Patent Act regarding requirements for descriptions (clarity, support requirements/written description requirements, enablement requirement/sufficiency of disclosure)?

[Text number]

1. Clarity: Patent Act Article 36(6)(ii)
2. Support requirement/Written description requirement: Patent Act Article 36(6)(i)
3. Enablement requirement/Sufficiency of disclosure: Patent Act Article 36(4)(i)

Q9. If there are any materials on the examination guidelines, etc. for assessing the clarity requirements of AI-related inventions, please specify where this information is listed.

[Title of material] Examination Handbook for Patent and Utility Model in Japan

[Where the information is listed] Annex B Chapter 1, 1.2.1 Clarity requirement (Article 36(6)(ii))

[URL]

https://www.jpo.go.jp/e/system/laws/rule/guideline/patent/handbook_shinsa/document/index/app_b1_e.pdf#page=5

Q10. If there are any materials on the examination guidelines, etc. for assessing the support requirements/written description requirements of AI-related inventions, please specify where this information is listed.

[Title of material] Examination Handbook for Patent and Utility Model in Japan

[Where the information is listed] Annex A Case Examples 1. Description Requirements (Article 36)

[URL]

https://www.jpo.go.jp/e/system/laws/rule/guideline/patent/handbook_shinsa/document/index/app_a1_e.pdf#page=135

[Title of material] Newly Added Case Examples for AI-related Technologies

[Where the information is listed] page 10

[URL]

https://www.jpo.go.jp/e/system/laws/rule/guideline/patent/document/ai_jirei_e/jirei_tsuika_e.pdf#page=10

Q11. If there are any materials on the examination guidelines, etc. for assessing the enablement requirements/sufficiency of disclosure for AI-related inventions, please specify where this information is listed.

[Title of material] Examination Handbook for Patent and Utility Model in Japan

[Where the information is listed] Annex B Chapter 1, 1.1.1 Enablement requirement (Article 36(4)(i))

[URL]

https://www.jpo.go.jp/e/system/laws/rule/guideline/patent/handbook_shinsa/document/index/app_b1_e.pdf#page=3

Q12: If there are any materials on the examination guidelines, etc. for assessing the support requirements/written description requirements or enablement requirements/sufficiency of disclosure for inventions of products developed by humans using AI technologies, please specify where this information is listed.

*For inventions of products, it is sometimes necessary to show experimental results in

the specifications, etc. in order to satisfy support requirements/written description requirements or enablement requirement/sufficiency of disclosure. (In the case of product inventions specified by function/characteristics, for example, it is necessary to show experimental results in order to show that the products have the said function/characteristics).

In this case, please answer if there are any indications in the materials on the examination guidelines, etc. that specify whether the estimated results using AI technologies (e.g., material informatics) are recognized as equivalent to the experimental results.

[Title of material] Examination Handbook for Patent and Utility Model in Japan

[Where the information is listed] Annex A Case Examples 1. Description Requirements

(Article 36) Case 51

[URL]

https://www.jpo.go.jp/e/system/laws/rule/guideline/patent/handbook_shinsa/document/index/app_a1_e.pdf#page=143

Q13. In order to help understand the method of assessing the requirements for descriptions, that is clarity, support requirement/written description requirement and enablement requirement/sufficiency of disclosure, of AI-related inventions, if there are any case examples (e.g., hypothetical cases or representative court cases shown in the examination guidelines or other materials), please provide the following identifying information: case numbers/titles, etc., the URLs where the cases can be referenced, and a summary of each case example.

*If there are multiple cases, please answer the following items for each case.

[Title of material] Examination Handbook for Patent and Utility Model in Japan, Annex A Case Examples, 1. Description Requirements (Article 36)

[Case number/Title]

[URL]

https://www.jpo.go.jp/e/system/laws/rule/guideline/patent/handbook_shinsa/document/index/app_a1_e.pdf

[Summary of Case example] Please answer which of the following applies to the case.

(Multiple answers allowed for a case example).

1. A case that satisfies clarity requirement
2. A case that does not satisfy clarity requirement
3. A case that satisfies enablement requirement/sufficiency of disclosure
4. A case that does not satisfy enablement requirement/sufficiency of disclosure
5. A case that satisfies support requirement/written description requirement
6. A case that does not satisfy support requirement/written description requirement

[Supplement] Please provide supplementary information that introduces the points of the case, if any.

e.g., a case where the enablement requirement is not satisfied because XX is not described in the specification.

Case No.	Title of Invention	Support Requirement	Clarity Requirement	Enablement Requirement	Ministerial Ordinance Requirement	Remarks
Case 46	Sugar content estimation system			4		AI-related technology
Case 47	Business plan design apparatus			3		AI-related technology
Case 48	Autonomous vehicle					AI-related technology
Case 49	Body weight estimation system	5/6		3/4		AI-related technology
Case 50	Method for estimating an allergy incidence rate of a test substance	5/6		3/4		AI-related technology
Case 51	Anaerobic adhesive composition	6		4		AI-related technology

C. Novelty

Q14. What are the texts of the Patent Act regarding novelty?

[Text number] Patent Act Article 29(1)

Q15. If there are any materials on the examination guidelines, etc. for assessing the novelty of AI-related inventions, please specify where this information is listed.

[Title of material] Examination Handbook for Patent and Utility Model in Japan

[Where the information is listed] Annex B Chapter 1, 2.2.2 Determination of novelty

[URL]

https://www.ipa.go.jp/e/system/laws/rule/guideline/patent/handbook_shinsa/document/index/app_b1_e.pdf#page=28

Q16. In order to help understand the method for assessing "novelty" of AI-related inventions, if there are any case examples (e.g., hypothetical cases or representative court cases shown in the examination guidelines or other materials), please provide the following identifying information: case numbers/titles, etc., the URL where the cases can be referenced, and a summary of each case example.

*If there are multiple cases, please answer the following items for each case.

[Case number/Title] N/A

[URL]

[Summary of case example] Please answer which of the following applies to the case:

1. A case showing that novelty is affirmed
2. A case showing that novelty is denied

[Supplement] Please provide supplementary information that introduces the points of the case, if any.

e.g., a case where the novelty is denied because XX is not considered in the assessment of novelty

D. Inventive step

Q17. What are the texts of the Patent Act regarding inventive step?

[Text number] Patent Act Article 29(2)

Q18. If there are any materials on the examination guidelines, etc. for assessing "inventive step" of AI-related inventions, please specify where this information is listed.

[Title of material] Examination Handbook for Patent and Utility Model in Japan

[Where the information is listed] 2.2.3 Determination of inventive step

[URL]

https://www.jpo.go.jp/e/system/laws/rule/guideline/patent/handbook_shinsa/document/index/app_b1_e.pdf#page=28

Q19. In order to help understand the method of assessing inventive step for AI-related inventions, if there are any case examples (e.g., hypothetical cases or representative court cases shown in the examination guidelines or other materials), please provide the following identifying information: case numbers/titles, etc., the URL where the cases can be referenced, and a summary of the case examples.

*If there are multiple cases, please answer the following items for each case.

[Case number/Title]

[URL]

https://www.jpo.go.jp/e/system/laws/rule/guideline/patent/handbook_shinsa/document/index/app_a5_e.pdf

[Summary of Case example] Please answer which of the following applies to the case:

1. A case showing that inventive step is affirmed
2. A case showing that inventive step is denied

[Supplement] Please provide supplementary information that introduces the points of the case, if any.

e.g., a case where the inventive step is affirmed because it cannot be said to be readily conceivable from the prior art.

Case No.	Title of Invention	Motivation	Particularly considered motivation	Remarks	
Case 31	Learning System Comprising On-vehicle Devices and a Server	Yes	(b), (c)	IoT, AI related technology	2
Case 32	Quality management program of manufacturing lines	Yes	(b), (c)	IoT, AI related technology	2
Case 33	Cancer level calculation apparatus	Yes	(b)	AI related technology	2
Case 34	Estimation system of hydroelectric power generating capacity (Claim 1)	Yes	(c)	AI related technology	2
	(Claim 2)	-	-	AI related technology - Advantageous and Remarkable Effect	1
Case 35	Screw clamping quality estimation apparatus	Yes	(a), (b)	AI related technology	2
Case 36	Dementia stage estimation apparatus	-	-	AI related technology	1

3. KIPO (Korean Intellectual Property Office)

<Definition>

"AI-related inventions" in this questionnaire means inventions of AI technologies themselves (e.g., learning methods), inventions of applications of AI technologies to specific technical fields, and inventions of products that were developed using AI technologies.

The following questions refer to the examination guidelines and other materials that your office has been providing to users.

<Question 1: Basic information>

Q1. Please provide the URL where the latest text of the Patent Act can be found. If the Patent Act is provided in English (including provisional translations), please indicate the relevant URL. If the English translation is provisional, or if it is necessary for reference purposes, please also indicate the URL that provides the Patent Act in a language other than English.

[Title of legal text] Patent Act

[URL]

(ENG) https://elaw.klri.re.kr/eng_service/lawView.do?lang=ENG&hseq=59876

(KOR) <https://www.law.go.kr/LSW/lsInfoP.do?efYd=20220420&lsiSeq=236259#0000>

[Language] English(provisional, shall be used only for reference), Korean

Q2. What kind of materials has your office already prepared regarding examination standards and other rules applicable to AI-related inventions? Please answer the following items regarding the materials that are provided to users to help them understand examination practices/standards for AI-related inventions.

*If there are multiple materials that you consider useful for understanding the examination practices/standards for AI-related inventions, such as examination guidelines, practice manuals, and/or other presentation materials explaining the examination standards or practices to users, please include all of them in your answer.

*In your answer to Q3, please include information for the comparative study reports on AI-related inventions with other offices.

[Title of material] 1. Examination practice guide by technology field, 2. Patent Examination Guideline

[URL] 1.(KOR)

https://www.kipo.go.kr/ko/contFileDown.do?path=/upload/ip_info/simsaguide2022_01.pd&fileNm=%EA%B8%B0%EC%88%A0%EB%B6%84%EC%95%BC%EB%B3%84%20%EC%8B%AC%EC%82%AC%EC%8B%A4%EB%AC%B4%EA%B0%80%EC%9D%B4%EB%93%9C.pdf

2-1.(ENG)

https://www.kipo.go.kr/upload/en/download/Patent_Examination_Guidelines_2021.pdf

2-2.(KOR)

https://www.kipo.go.kr/ko/contFileDown.do?path=/upload/ip_info/criterion2021_12.pdf&fileNm=%ED%8A%B9%EC%8B%A4%EC%8B%AC%EC%82%AC%EA%B8%B0%EC%A4%80.pdf

[Language] English(provisional, shall be used only for reference), Korean

[Features] Please select from the following 1 to 4.

1. Material specifically explaining the examination practices and standards for AI-related inventions(Examination practice guide by technology field)
2. Material explaining the examination practices and standards for software-related inventions, including those related to AI(Examination practice guide by technology field)
3. Material explaining the examination practices and standards for all technical fields (Patent Examination Guideline)

Q3. Does your office cooperate with other offices to conduct comparative studies on the examination practices and standards for AI-related inventions? Please include all comparative study reports that promote understanding the examination practices and standards for AI-related inventions, if any.

Further, if the comparative study reports are published in more than one language, please include all of them.

[Title of material] Comparative study on computer-implemented inventions / software related inventions

[URL](ENG)<https://www.kipo.go.kr/ko/kpoBultnFileDown.do?menuCd=SCD0200640&ntatcSeq=16509&aprchId=BUT0000048&sysCd=SCD02&ntatcAtflSeq=3>

(KOR)<https://www.kipo.go.kr/ko/kpoBultnFileDown.do?menuCd=SCD0200640&ntatcSeq=16509&aprchId=BUT0000048&sysCd=SCD02&ntatcAtflSeq=4>

[Language] English, Korean

[Name of office with which comparative study was conducted] EPO

[Feature] Please select from the following (1 to 4):

2. Comparative study on the examination practices and standards for software-related inventions, including those related to AI

<Question 2: Patent requirements pertaining to AI-related inventions>

E. Patent Eligibility

Q4. What are the texts of the Patent Act regarding eligibility for patents?

[Text number] Article 2, Article 29(1), Article 32

Q5. If there are examination guidelines or other materials for assessing the patent eligibility of AI-related inventions, please specify where this information is listed.

[Title of materials] Examination practice guide by technology field

[Where the information is listed] Pages 1301~1310(3.1 Patent Eligibility in Chapter 1(Artificial Intelligence)), pages 7301~7306(3.1 Patent Eligibility, 3.2 Unpatentable invention in Chapter 7(Autonomous driving))

*Identifiable information such as page number, section number, etc.

[URL] see Q2 URL

*Any link that allows direct reference to the relevant section, or (in the case of a PDF) a link that specifies the page number (end with "#page=○").

Q6. If there are examination guidelines or any other materials that provide examples of acceptable or unacceptable subject matters, or forms for claims with respect to inventions that are related to AI or to software in general, please provide these, and also specify where this information is listed.

*For example, please provide materials for which computer programs, computer program products, recording mediums on which computer programs are recorded, learned models, data structures, etc. are subject to protection as the subject matter of the invention (forms for claims), if any.

[Title of material] Examination practice guide by technology field

[Where the information is listed] Pages 1205~1211, 1301~1310(2.2.2 Clarity of claim, 3.1 Patent Eligibility in Chapter 1(Artificial intelligence)), pages 6203~6204(2.2 Clarity of claim in Chapter 6(Intelligent robot)), pages 7301~7306(3.1 Patent Eligibility, 3.2 Unpatentable Invention in Chapter 7(Autonomous driving)), pages 55~76(1.2 Clarity of claim, 2.1 Patent Eligibility in Chapter 10(previous guidelines))

*Identifiable information such as page number, section number, etc.

[URL] see Q2 URL

*Any link that allows direct reference to the relevant part, or (in the case of a PDF), a link that specifies the page number (end with "#page=○").

Q7. In order to help understand the method of assessing patent eligibility for AI-related inventions, if there are any case examples (e.g., hypothetical cases or representative court cases shown in the examination guidelines or other materials), please provide the following identifying information: case numbers/titles, etc., the URLs where the cases can be referenced, and a summary of each example case.

*If there are multiple case examples, please answer the following items for each case.

[Case number/Title] Examination practice guide by technology field, pages

1301~1310(3.1 Patent Eligibility in Chapter 1(Artificial intelligence), pages

7301~7306(3.1 Patent Eligibility, 3.2 Unpatentable Invention in Chapter 7(Autonomous driving))

[URL] see Q2 URL

*Any link that allows direct reference to the relevant part, or (in the case of a PDF), a link that specifies the page number (end with "#page=○").

[Summary of Case example] Please answer which of the following applies to the case:

1. A case that satisfies patent eligibility
2. A case that does not satisfy patent eligibility

[Supplement] There is no direct precedent regarding patent eligibility of an AI-related invention, but the examination practice guide of KIPO suggests both 'patent eligible cases' and 'not patent eligible cases'.

Please provide brief supplementary information that introduces the points of the case, if any. (e.g., a case that does not fall under the category of invention because it is assessed not to satisfy the element to consider of XX.)

F. Requirements for descriptions

Q8. What are the respective texts of the Patent Act regarding requirements for descriptions (clarity, support requirements/written description requirements, enablement requirement/sufficiency of disclosure)?

[Text number]

1. Clarity: Article 42(4)2
2. Support requirement/Written description requirement: Article 42(3)2, 42(4)1
3. Enablement requirement/Sufficiency of disclosure: Article 42(3)1

Q9. If there are any materials on the examination guidelines, etc. for assessing the clarity requirements of AI-related inventions, please specify where this information is listed.

[Title of material] Examination practice guide by technology field

[Where the information is listed] Pages 1205~1211(2.2.2 Clarity of claim in Chapter 1(Artificial intelligence)), pages 6203~6204(2.2 Clarity of claim in Chapter 6(Intelligent robot)), pages 7206~7208, 7402~7407(2.2 Clarity of claim, 4.2 Clarity of claim, 4.3 Interpretation of claim in Chapter 7(Autonomous driving))

*Identifiable information such as page number, section number, etc.

[URL] see Q2 URL

*Any link that allows direct reference to the relevant part, or (in the case of a PDF), a link that specifies the page number (end with "#page=○").

Q10. If there are any materials on the examination guidelines, etc. for assessing the support requirements/written description requirements of AI-related inventions, please specify where this information is listed.

[Title of material] Examination practice guide by technology field

[Where the information is listed] Pages 1204~1205(2.2.1 Support requirement in Chapter 1(Artificial intelligence))

*Identifiable information such as page number, section number, etc.

[URL] see Q2 URL

*Any link that allows direct reference to the relevant part, or (in the case of a PDF), a link that specifies the page number (end with "#page=○").

Q11. If there are any materials on the examination guidelines, etc. for assessing the enablement requirements/sufficiency of disclosure for AI-related inventions, please specify where this information is listed.

[Title of material] Examination practice guide by technology field

[Where the information is listed] pages 1201~1204(2.1 Enablement requirements in Chapter 1(Artificial intelligence)), pages 6201~6203(2.1 Enablement requirements in Chapter 6(Intelligent robot)), pages 7201~7206, 7401~7402(2.1 Enablement requirements, 4.1 Enablement requirements in Chapter 7(Autonomous driving))

*Identifiable information such as page number, section number, etc.

[URL] see Q2 URL

*Any link that allows direct reference to the relevant part, or (in the case of a PDF), a link that specifies the page number (end with "#page=○").

Q12: If there are any materials on the examination guidelines, etc. for assessing the support requirements/written description requirements or enablement requirements/sufficiency of disclosure for inventions of products developed by humans using AI technologies, please specify where this information is listed.

*For inventions of products, it is sometimes necessary to show experimental results in the specifications, etc. in order to satisfy support requirements/written description requirements or enablement requirement/sufficiency of disclosure. (In the case of product inventions specified by function/characteristics, for example, it is necessary to show experimental results in order to show that the products have the said function/characteristics).

In this case, please answer if there are any indications in the materials on the examination guidelines, etc. that specify whether the estimated results using AI technologies (e.g., material informatics) are recognized as equivalent to the experimental results.

[Title of material] Examination practice guide by technology field

[Where the information is listed] Pages 1201~1205(2.1 Enablement requirements, 2.2.1 Support requirement in Chapter 1(Artificial intelligence)), pages 3402~3403, 3502~3511(4.2 In silico analysis method, 5.1 case 1, 5.2 case 2 in Chapter 3(Bio))

*Identifiable information such as page number, section number, etc.

[URL] see Q2 URL

*Any link that allows direct reference to the relevant part, or (in the case of a PDF), a link that specifies the page number (end with "#page=○").

Q13. In order to help understand the method of assessing the requirements for descriptions, that is clarity, support requirement/written description requirement and enablement requirement/sufficiency of disclosure, of AI-related inventions, if there are any case examples (e.g., hypothetical cases or representative court cases shown in the examination guidelines or other materials), please provide the following identifying information: case numbers/titles, etc., the URLs where the cases can be referenced, and a summary of each case example.

*If there are multiple cases, please answer the following items for each case.

[Case number/Title] Examination practice guide by technology field, pages 1403~1407(4.1 case 1 in Chapter 1(Artificial intelligence)), pages 6401~6419(4.1 case 1 ~ 4.7 case 7 in Chapter 6(Intelligent robot)), pages 7504~7506(5.2 case 2 in Chapter 7(Autonomous driving))

[URL] see Q2 URL

*Any link that allows direct reference to the relevant part or, in the case of a PDF, a link that specifies the page number (end with "#page=○").

[Summary of Case example] Please answer which of the following applies to the case. (Multiple answers allowed for a case example).

1. A case that satisfies clarity requirement
2. A case that does not satisfy clarity requirement
3. A case 1, 2 in Chapter 6 that satisfies enablement requirement/sufficiency of disclosure
4. A case 1 in Chapter 1, case 3~7 in Chapter 6, case 2 in Chapter 7 that does not satisfy enablement requirement/sufficiency of disclosure
5. A case that satisfies support requirement/written description requirement
6. A case 1 in Chapter 1 that does not satisfy support requirement/written description requirement

[Supplement] In the case 1 in Chapter 1, the description of an invention recites training data but does not specifically describe a correlation between input data and output data of the trained model and it is hard for a skilled person in the art to presume (or understand) the correlation through an embodiment described in the description of the invention in view of the common technical knowledge at the time of filing, the embodiment requirement is determined not to be satisfied. The claim is determined not to be supported by the description of the invention because a specific feature corresponding to the claim is neither described in the description of the invention nor can matters described in the description of the invention be expanded to overall scope of the claimed invention or be generalized in view of the common technical knowledge at the time of filing.

Please provide supplementary information that introduces the points of the case, if any.

e.g., a case where the enablement requirement is not satisfied because XX is not described in the specification.

C. Novelty

Q14. What are the texts of the Patent Act regarding novelty?

[Text number] Article 29(1)

Q15. If there are any materials on the examination guidelines, etc. for assessing the novelty of AI-related inventions, please specify where this information is listed.

[Title of material] Examination practice guide by technology field

[Where the information is listed] Pages 1311~1324(3.2 Novelty, Inventive step in Chapter 1(Artificial intelligence))

*Identifiable information such as page number, section number, etc.

[URL] see Q2 URL

*Any link that allows direct reference to the relevant part, or (in the case of a PDF), a link that specifies the page number (end with "#page=○").

Q16. In order to help understand the method for assessing "novelty" of AI-related inventions, if there are any case examples (e.g., hypothetical cases or representative court cases shown in the examination guidelines or other materials), please provide the following identifying information: case numbers/titles, etc., the URL where the cases can be referenced, and a summary of each case example.

*If there are multiple cases, please answer the following items for each case.

[Case number/Title] Examination practice guide by technology field, pages 1311~1324 (3.2 Novelty, Inventive step in Chapter 1(Artificial intelligence))

[URL] see Q2 URL

*Any link that allows direct reference to the relevant part, or (in the case of a PDF), a link that specifies the page number (end with "#page=○").

[Summary of case example] There is no precedent of novelty. Please answer which of the following applies to the case:

1. A case showing that novelty is affirmed
2. A case showing that novelty is denied

[Supplement] Please provide supplementary information that introduces the points of the case, if any.

e.g., a case where the novelty is denied because XX is not considered in the assessment of novelty

D. Inventive step

Q17. What are the texts of the Patent Act regarding inventive step?

[Text number] Article 29(2)

Q18. If there are any materials on the examination guidelines, etc. for assessing "inventive step" of AI-related inventions, please specify where this information is listed.

[Title of material] Examination practice guide by technology field

[Where the information is listed] Pages 1311~1324(3.2 Novelty, Inventive step in Chapter 1(Artificial intelligence)), pages 6301~6302(3.2 Inventive step in Chapter 6(Intelligent robot)), pages 7306~7316(3.3 Inventive step in Chapter 7(Autonomous driving))

*Identifiable information such as page number, section number, etc.

[URL] see Q2 URL

*Any link that allows direct reference to the relevant part, or (in the case of a PDF), a link that specifies the page number (end with "#page=○").

Q19. In order to help understand the method of assessing inventive step for AI-related inventions, if there are any case examples (e.g., hypothetical cases or representative court cases shown in the examination guidelines or other materials), please provide the following identifying information: case numbers/titles, etc., the URL where the cases can be referenced, and a summary of the case examples.

*If there are multiple cases, please answer the following items for each case.

[Case number/Title] Examination practice guide by technology field, pages 1401~1402, 1407~1432(4.2 case 2 ~ 4.5 case 5 in Chapter 1(Artificial intelligence)), pages 6420~6444(4.8 case 8 ~ 4.18 case 18 in Chapter 6(Intelligent robot)), pages 7507~7510, 7515~7522(5.3 case 3, 5.5 case 5, 5.6 case 6 in Chapter 7(Autonomous driving))

[URL] see Q2 URL

*Any link that allows direct reference to the relevant part, or (in the case of a PDF), a link that specifies the page number (end with "#page=○").

[Summary of Case example] Please answer which of the following applies to the case:

1. Case 2, 3-2, 5-2 in Chapter 1 and case 15~18 in Chapter 6 and case 5 in Chapter 7 showing that inventive step is affirmed
2. Case 3-1, 4, 5-1 in Chapter 1 and case 8~14 in Chapter 6 and case 3, 6 in Chapter 7 showing that inventive step is denied

[Supplement] Please provide supplementary information that introduces the points of the case, if any.

e.g., a case where the inventive step is affirmed because it cannot be said to be readily conceivable from the prior art.

4. CNIPA (China National Intellectual Property Administration)

<Definition>

"AI-related inventions" in this questionnaire means inventions of AI technologies themselves (e.g., learning methods), inventions of applications of AI technologies to specific technical fields, and inventions of products that were developed using AI technologies.

The following questions refer to the examination guidelines and other materials that your office has been providing to users.

<Question 1: Basic information>

Q1. Please provide the URL where the latest text of the Patent Act can be found. If the Patent Act is provided in English (including provisional translations), please indicate the relevant URL. If the English translation is provisional, or if it is necessary for reference purposes, please also indicate the URL that provides the Patent Act in a language other than English.

[Title of legal text] 《中华人民共和国专利法》（Patent Law of the People's Republic of China）

[URL]

<https://flk.npc.gov.cn/detail2.html?ZmY4MDgwODE3NTJiN2Q0MzAxNzVINDY1MWNIzDE1NDc%3D>

[Language] Chinese

[Title of legal text] 《中华人民共和国专利法实施细则》（Rules for the Implementation of the Patent Law of the People's Republic of China）

[URL] http://www.gov.cn/zhengce/2020-12/26/content_5574514.htm

[Language] Chinese

[Title of legal text] Rules for the Implementation of the Patent Law of the People's Republic of China

[URL] https://english.cnipa.gov.cn/art/2014/3/31/art_1349_81671.html

[Language] English

Q2. What kind of materials has your office already prepared regarding examination standards and other rules applicable to AI-related inventions? Please answer the

following items regarding the materials that are provided to users to help them understand examination practices/standards for AI-related inventions.

*If there are multiple materials that you consider useful for understanding the examination practices/standards for AI-related inventions, such as examination guidelines, practice manuals, and/or other presentation materials explaining the examination standards or practices to users, please include all of them in your answer.

*In your answer to Q3, please include information for the comparative study reports on AI-related inventions with other offices.

Please select from the following 1 to 4.

1. Material specifically explaining the examination practices and standards for AI-related inventions
2. Material explaining the examination practices and standards for software-related inventions, including those related to AI
3. Material explaining the examination practices and standards for all technical fields
4. Other ()

[Title of material] 《专利审查指南（2010）》（Guidelines for Patent Examination (2010))

[URL] https://www.cnipa.gov.cn/art/2015/1/9/art_99_28237.html

[Language] Chinese

[Features] 3

[Title of material] 《关于修改〈专利审查指南〉的决定（第74号）》（The Order of Amending Guidelines for Patent Examination (No.74)）

[URL] https://www.cnipa.gov.cn/art/2017/3/2/art_74_27617.html

[Language] Chinese

[Features] 2

[Title of material] 《关于修改〈专利审查指南〉的公告（第343号）》（The Announcement of Amending Guidelines for Patent Examination (No.343)）

[URL] https://www.cnipa.gov.cn/art/2019/12/31/art_74_28143.html

[Language] Chinese

[Features] 1

Q3. Does your office cooperate with other offices to conduct comparative studies on the examination practices and standards for AI-related inventions? Please include all comparative study reports that promote understanding the examination practices and standards for AI-related inventions, if any.

Further, if the comparative study reports are published in more than one language, please include all of them.

Please select from the following (1 to 4):

1. Comparative study focusing on the examination practices and standards for AI-related inventions
2. Comparative study on the examination practices and standards for software-related inventions, including those related to AI
3. Comparative study on all technical fields
4. Other ()

[Title of material] 计算机实施发明/软件相关发明专利审查对比研究报告(EPO-CNIPA comparative study on computer-implemented inventions/software related inventions)
[URL]

https://www.cnipa.gov.cn/module/download/down.jsp?i_ID=182157&collID=88 (Chinese)

[https://documents.epo.org/projects/babylon/eponot.nsf/0/979CF38758D25C2CC12584AC004618D9/\\$File/comparative_study_on_computer_implemented_inventions_software_related_inventions_EPO_CNIPA_en.pdf](https://documents.epo.org/projects/babylon/eponot.nsf/0/979CF38758D25C2CC12584AC004618D9/$File/comparative_study_on_computer_implemented_inventions_software_related_inventions_EPO_CNIPA_en.pdf) (English)

[Language] Chinese, English

[Name of office with which comparative study was conducted] EPO

[Feature] 2

<Question 2: Patent requirements pertaining to AI-related inventions>

G. Patent Eligibility

Q4. What are the texts of the Patent Act regarding eligibility for patents?

[Text number] Article 2, Article 5 and Article 25 of Patent Law of PRC.

Q5. If there are examination guidelines or other materials for assessing the patent eligibility of AI-related inventions, please specify where this information is listed.

[Title of material]

[Where the information is listed] *Identifiable information such as page number, section number, etc.

[URL] *Any link that allows direct reference to the relevant part, or (in the case of a PDF), a link that specifies the page number (end with "#page=○").

[Title of materials] 《关于修改<专利审查指南>的公告（第 343 号）》（The

Announcement of Amending Guidelines for Patent Examination (No.343))

[Where the information is listed] *Identifiable information such as page number, section number, etc. Section 6.1.1 and 6.1.2.

[URL] *Any link that allows direct reference to the relevant section, or (in the case of a PDF) a link that specifies the page number (end with "#page=○").

https://www.cnipa.gov.cn/art/2019/12/31/art_74_28143.html

Q6. If there are examination guidelines or any other materials that provide examples of acceptable or unacceptable subject matters, or forms for claims with respect to inventions that are related to AI or to software in general, please provide these, and also specify where this information is listed.

*For example, please provide materials for which computer programs, computer program products, recording mediums on which computer programs are recorded, learned models, data structures, etc. are subject to protection as the subject matter of the invention (forms for claims), if any.

[Title of material]

[Where the information is listed] *Identifiable information such as page number, section number, etc.

[URL] *Any link that allows direct reference to the relevant part, or (in the case of a PDF), a link that specifies the page number (end with "#page=○").

[Title of material] 《关于修改<专利审查指南>的公告（第 343 号）》（The

Announcement of Amending Guidelines for Patent Examination (No.343))

[Where the information is listed] *Identifiable information such as page number, section number, etc. Example 1, 2, 3, 4, 5 and 6 in Section 6.2.

[URL] *Any link that allows direct reference to the relevant part, or (in the case of a PDF), a link that specifies the page number (end with "#page=○").

https://www.cnipa.gov.cn/art/2019/12/31/art_74_28143.html

[Title of material] 《关于修改〈专利审查指南〉的决定（第 74 号）》（The Order of

Amending Guidelines for Patent Examination (No.74))

[Where the information is listed] *Identifiable information such as page number, section number, etc. Section 2, 3 and 4.

[URL] *Any link that allows direct reference to the relevant part, or (in the case of a PDF), a link that specifies the page number (end with "#page=○").

https://www.cnipa.gov.cn/art/2017/3/2/art_74_27617.html

[Title of material] 《专利审查指南（2010）》（Guidelines for Patent Examination

（2010））

[Where the information is listed] *Identifiable information such as page number, section number, etc. Section 2, 3 and 5.2, Chapter 9, Part 2

[URL] *Any link that allows direct reference to the relevant part, or (in the case of a PDF), a link that specifies the page number (end with "#page=○").

https://www.cnipa.gov.cn/art/2015/1/9/art_99_28237.html

Q7. In order to help understand the method of assessing patent eligibility for AI-related inventions, if there are any case examples (e.g., hypothetical cases or representative court cases shown in the examination guidelines or other materials), please provide the following identifying information: case numbers/titles, etc., the URLs where the cases can be referenced, and a summary of each example case.

*If there are multiple case examples, please answer the following items for each case.

[Case number/Title] N.A.

[URL] *Any link that allows direct reference to the relevant part, or (in the case of a PDF), a link that specifies the page number (end with "#page=○").

[Summary of Case example] Please answer which of the following applies to the case:

1. A case that satisfies patent eligibility
2. A case that does not satisfy patent eligibility

[Supplement] Please provide brief supplementary information that introduces the points of the case, if any. (e.g., a case that does not fall under the category of invention because it is assessed not to satisfy the element to consider of XX.)

[Case number/Title] Example 1 to 6 of Section 6.2 in 《关于修改<专利审查指南>的公告

(第 343 号) 》 (Announcement of Amending Guidelines for Patent Examination

(No.343)).

[URL] *Any link that allows direct reference to the relevant part, or (in the case of a PDF), a link that specifies the page number (end with "#page=○").

https://www.cnipa.gov.cn/art/2019/12/31/art_74_28143.html

Summary of case example is as you proposed:

1. A case that satisfies patent eligibility: Examples 2, 3, 4
2. A case that does not satisfy patent eligibility: Examples 1, 5, 6

H. Requirements for descriptions

Q8. What are the respective texts of the Patent Act regarding requirements for descriptions (clarity, support requirements/written description requirements, enablement requirement/sufficiency of disclosure)?

[Text number]

1. Clarity:
2. Support requirement/Written description requirement:
3. Enablement requirement/Sufficiency of disclosure:

[Text number]

1. Clarity: Paragraph 3 of Article 26 of Patent Law of PRC.
2. Support requirement/Written description requirement: Paragraph 4 of Article 26 of Patent Law of PRC.
3. Enablement requirement/Sufficiency of disclosure: Paragraph 3 of Article 26 of Patent Law of PRC.

Q9. If there are any materials on the examination guidelines, etc. for assessing the clarity requirements of AI-related inventions, please specify where this information is listed.

[Title of material]

[Where the information is listed] *Identifiable information such as page number, section number, etc.

[URL] *Any link that allows direct reference to the relevant part, or (in the case of a PDF), a link that specifies the page number (end with "#page=○").

[Title of material] 《专利审查指南（2010）》(Guidelines for Patent Examination (2010))

[Where the information is listed] Section 2.1.1, Chapter 2, Part 2

[URL] https://www.cnipa.gov.cn/art/2015/1/9/art_99_28237.html (Page 131)

[Title of material] 《专利审查指南（2010）》(Guidelines for Patent Examination (2010))

[Where the information is listed] Section 5.1, Chapter 9, Part 2

[URL] https://www.cnipa.gov.cn/art/2015/1/9/art_99_28237.html (Page 271)

[Title of material] 《关于修改<专利审查指南>的公告（第 343 号）》（The Announcement of Amending Guidelines for Patent Examination (No.343))

[Where the information is listed] Section 6.3.1 and 6.3.2

[URL] https://www.cnipa.gov.cn/art/2019/12/31/art_74_28143.html

Q10. If there are any materials on the examination guidelines, etc. for assessing the support requirements/written description requirements of AI-related inventions, please specify where this information is listed.

[Title of material]

[Where the information is listed] *Identifiable information such as page number, section number, etc.

[URL] *Any link that allows direct reference to the relevant part, or (in the case of a PDF), a link that specifies the page number (end with "#page=○").

[Title of material] 《专利审查指南（2010）》(Guidelines for Patent Examination (2010))

[Where the information is listed] Section 3.2.1, Chapter 2, Part 2

[URL] https://www.cnipa.gov.cn/art/2015/1/9/art_99_28237.html (Page 143-146)

[Title of material] 《专利审查指南（2010）》(Guidelines for Patent Examination (2010))

[Where the information is listed] Section 5.1 and 5.2, Chapter 9, Part 2

[URL] https://www.cnipa.gov.cn/art/2015/1/9/art_99_28237.html (Page 271-272)

[Title of material] 《关于修改〈专利审查指南〉的决定（第74号）》（The Order of Amending Guidelines for Patent Examination (No.74)）

[Where the information is listed] Part 4 of the amendment.

[URL] https://www.cnipa.gov.cn/art/2017/3/2/art_74_27617.html

Q11. If there are any materials on the examination guidelines, etc. for assessing the enablement requirements/sufficiency of disclosure for AI-related inventions, please specify where this information is listed.

[Title of material]

[Where the information is listed] *Identifiable information such as page number, section number, etc.

[URL] *Any link that allows direct reference to the relevant part, or (in the case of a PDF), a link that specifies the page number (end with "#page=○").

[Title of material] 《专利审查指南（2010）》(Guidelines for Patent Examination (2010))

[Where the information is listed] Section 2.1.3, Chapter 2, Part 2

[URL] https://www.cnipa.gov.cn/art/2015/1/9/art_99_28237.html (Page 132)

[Title of material] 《专利审查指南（2010）》(Guidelines for Patent Examination (2010))

[Where the information is listed] Section 5.1 and 5.2, Chapter 9, Part 2

[URL] https://www.cnipa.gov.cn/art/2015/1/9/art_99_28237.html (Page 271-272)

[Title of material] 《关于修改〈专利审查指南〉的决定（第 74 号）》（The Order of Amending Guidelines for Patent Examination (No.74))

[Where the information is listed] Part 4 of the amendment.

[URL] https://www.cnipa.gov.cn/art/2017/3/2/art_74_27617.html

Q12: If there are any materials on the examination guidelines, etc. for assessing the support requirements/written description requirements or enablement requirements/sufficiency of disclosure for inventions of products developed by humans using AI technologies, please specify where this information is listed.

*For inventions of products, it is sometimes necessary to show experimental results in the specifications, etc. in order to satisfy support requirements/written description requirements or enablement requirement/sufficiency of disclosure. (In the case of product inventions specified by function/characteristics, for example, it is necessary to show experimental results in order to show that the products have the said function/characteristics).

In this case, please answer if there are any indications in the materials on the examination guidelines, etc. that specify whether the estimated results using AI technologies (e.g., material informatics) are recognized as equivalent to the experimental results.

[Title of material] N.A.

[Where the information is listed] *Identifiable information such as page number, section number, etc.

[URL] *Any link that allows direct reference to the relevant part, or (in the case of a PDF), a link that specifies the page number (end with "#page=○").

Q13. In order to help understand the method of assessing the requirements for descriptions, that is clarity, support requirement/written description requirement and enablement requirement/sufficiency of disclosure, of AI-related inventions, if there are any case examples (e.g., hypothetical cases or representative court cases shown in the examination guidelines or other materials), please provide the following identifying information: case numbers/titles, etc., the URLs where the cases can be referenced, and a summary of each case example.

*If there are multiple cases, please answer the following items for each case.

[Case number/Title] N.A.

[URL] *Any link that allows direct reference to the relevant part or, in the case of a PDF, a link that specifies the page number (end with "#page=○").

[Summary of Case example] Please answer which of the following applies to the case.

(Multiple answers allowed for a case example).

1. A case that satisfies clarity requirement
2. A case that does not satisfy clarity requirement
3. A case that satisfies enablement requirement/sufficiency of disclosure
4. A case that does not satisfy enablement requirement/sufficiency of disclosure
5. A case that satisfies support requirement/written description requirement
6. A case that does not satisfy support requirement/written description requirement

[Supplement] Please provide supplementary information that introduces the points of the case, if any.

e.g., a case where the enablement requirement is not satisfied because XX is not described in the specification.

C. Novelty

Q14. What are the texts of the Patent Act regarding novelty?

[Text number] Paragraph 2 of Article 22 of Patent Law of PRC.

Q15. If there are any materials on the examination guidelines, etc. for assessing the novelty of AI-related inventions, please specify where this information is listed.

[Title of material]

[Where the information is listed] *Identifiable information such as page number, section number, etc.

[URL] *Any link that allows direct reference to the relevant part, or (in the case of a PDF), a link that specifies the page number (end with "#page=○").

[Title of material] 《专利审查指南（2010）》(Guidelines for Patent Examination

(2010))

[Where the information is listed] Section 3, Chapter 3, Part 2

[URL] https://www.cnipa.gov.cn/art/2015/1/9/art_99_28237.html (Page 156-161)

[Title of material] 《关于修改<专利审查指南>的公告（第 343 号）》（The
Announcement of Amending Guidelines for Patent Examination (No.343))

[Where the information is listed] Section 6.1.3

[URL] https://www.cnipa.gov.cn/art/2019/12/31/art_74_28143.html

Q16. In order to help understand the method for assessing "novelty" of AI-related inventions, if there are any case examples (e.g., hypothetical cases or representative court cases shown in the examination guidelines or other materials), please provide the following identifying information: case numbers/titles, etc., the URL where the cases can be referenced, and a summary of each case example.

*If there are multiple cases, please answer the following items for each case.

[Case number/Title] N.A.

[URL] *Any link that allows direct reference to the relevant part, or (in the case of a PDF), a link that specifies the page number (end with "#page=○").

[Summary of case example] Please answer which of the following applies to the case:

1. A case showing that novelty is affirmed
2. A case showing that novelty is denied

[Supplement] Please provide supplementary information that introduces the points of the case, if any.

e.g., a case where the novelty is denied because XX is not considered in the assessment of novelty

D. Inventive step

Q17. What are the texts of the Patent Act regarding inventive step?

[Text number] Paragraph 3 of Article 22 of Patent Law of PRC.

Q18. If there are any materials on the examination guidelines, etc. for assessing "inventive step" of AI-related inventions, please specify where this information is listed.

[Title of material]

[Where the information is listed] *Identifiable information such as page number, section number, etc.

[URL] *Any link that allows direct reference to the relevant part, or (in the case of a PDF), a link that specifies the page number (end with "#page=○").

[Title of material] 《专利审查指南（2010）》(Guidelines for Patent Examination (2010))

[Where the information is listed] Section 3, Chapter 4, Part 2

[URL] https://www.cnipa.gov.cn/art/2015/1/9/art_99_28237.html (Page 171-175)

[Title of material] 《关于修改<专利审查指南>的公告（第 343 号）》（The Announcement of Amending Guidelines for Patent Examination (No.343))

[Where the information is listed] Section 6.1.3

[URL] https://www.cnipa.gov.cn/art/2019/12/31/art_74_28143.html

Q19. In order to help understand the method of assessing inventive step for AI-related inventions, if there are any case examples (e.g., hypothetical cases or representative court cases shown in the examination guidelines or other materials), please provide the following identifying information: case numbers/titles, etc., the URL where the cases can be referenced, and a summary of the case examples.

*If there are multiple cases, please answer the following items for each case.

[Case number/Title]

[URL] *Any link that allows direct reference to the relevant part, or (in the case of a PDF), a link that specifies the page number (end with "#page=○").

[Summary of Case example] Please answer which of the following applies to the case:

- 1.A case showing that inventive step is affirmed
- 2.A case showing that inventive step is denied

[Supplement] Please provide supplementary information that introduces the points of the case, if any.

e.g., a case where the inventive step is affirmed because it cannot be said to be readily conceivable from the prior art.

[Case number/Title] 《关于修改<专利审查指南>的公告（第 343 号）》（The Announcement of Amending Guidelines for Patent Examination (No.343))

[URL] *Any link that allows direct reference to the relevant part, or (in the case of a PDF), a link that specifies the page number (end with "#page=○").

Example 7, 9. https://www.cnipa.gov.cn/art/2019/12/31/art_74_28143.html

[Summary of Case example] Please answer which of the following applies to the case:

1. A case showing that inventive step is affirmed

[Supplement] Please provide supplementary information that introduces the points of the case, if any.

e.g., a case where the inventive step is affirmed because it cannot be said to be readily conceivable from the prior art.

[Case number/Title] 《关于修改<专利审查指南>的公告（第 343 号）》（The

Announcement of Amending Guidelines for Patent Examination (No.343))

[URL] *Any link that allows direct reference to the relevant part, or (in the case of a PDF), a link that specifies the page number (end with "#page=○").

Example 8, 10. https://www.cnipa.gov.cn/art/2019/12/31/art_74_28143.html

[Summary of Case example] Please answer which of the following applies to the case:

2. A case showing that inventive step is denied

[Supplement] Please provide supplementary information that introduces the points of the case, if any.

e.g., a case where the inventive step is affirmed because it cannot be said to be readily conceivable from the prior art.

5. USPTO (United States Patent and Trademark Office)

<Definition>

"AI-related inventions" in this questionnaire means inventions of AI technologies themselves (e.g., learning methods), inventions of applications of AI technologies to specific technical fields, and inventions of products that were developed using AI technologies.

The following questions refer to the examination guidelines and other materials that your office has been providing to users.

<Question 1: Basic information>

Q1. Please provide the URL where the latest text of the Patent Act can be found.

If the Patent Act is provided in English (including provisional translations), please indicate the relevant URL. If the English translation is provisional, or if it is necessary for reference purposes, please also indicate the URL that provides the Patent Act in a language other than English.

[Title of legal text] **Manual of Patent Examining Procedure**

[URL] https://www.uspto.gov/web/offices/pac/mpep/consolidated_laws.pdf

[Language] **English**

Q2. What kind of materials has your office already prepared regarding examination standards and other rules applicable to AI-related inventions? Please answer the following items regarding the materials that are provided to users to help them understand examination practices/standards for AI-related inventions.

*If there are multiple materials that you consider useful for understanding the examination practices/standards for AI-related inventions, such as examination guidelines, practice manuals, and/or other presentation materials explaining the examination standards or practices to users, please include all of them in your answer.

*In your answer to Q3, please include information for the comparative study reports on AI-related inventions with other offices.

[Title of material] **Public Views on Artificial Intelligence and Intellectual Property Policy**

[URL] https://www.uspto.gov/sites/default/files/documents/USPTO_AI-Report_2020-10-07.pdf

[Language] English

[Features] Please select from the following 1 to 4.

1. Material specifically explaining the examination practices and standards for AI-related inventions
2. Material explaining the examination practices and standards for software-related inventions, including those related to AI

101 – All MPEP 2106 is relevant but 2106.04(a) relates to abstract ideas which are prevalent in software inventions.

112(a) – MPEP 2161.01 is focused on software inventions, but 2161-2166 are all relevant.

112(f) – MPEP 2181-2186 is relevant to all tech but prevalent in software

Note that this is not a comprehensive list.

[URL] [AI-related patent resources | USPTO](#)

3. Material explaining the examination practices and standards for all technical fields

Manual of Patent Examining Procedure

4.Other ()

Q3. Does your office cooperate with other offices to conduct comparative studies on the examination practices and standards for AI-related inventions? Please include all comparative study reports that promote understanding the examination practices and standards for AI-related inventions, if any.

Further, if the comparative study reports are published in more than one language, please include all of them.

[Title of material] n/a

[URL] n/a

[Language] n/a

[Name of office with which comparative study was conducted] n/a

[Feature] Please select from the following (1 to 4):

- 1.Comparative study focusing on the examination practices and standards for AI-related inventions
- 2.Comparative study on the examination practices and standards for software-related inventions, including those related to AI
- 3.Comparative study on all technical fields
- 4.Other ()

<Question 2: Patent requirements pertaining to AI-related inventions>

I. Patent Eligibility

Q4. What are the texts of the Patent Act regarding eligibility for patents?

[Text number]

35 U.S.C. 101 Inventions patentable.

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

[MPEP - L \(uspto.gov\)](#)

See MPEP 2106 for details: available at [MPEP - Chapter 2100 - Patentability \(uspto.gov\)](#).

Q5. If there are examination guidelines or other materials for assessing the patent eligibility of AI-related inventions, please specify where this information is listed.

[Title of materials]

[Where the information is listed] *Identifiable information such as page number, section number, etc.

[URL] *Any link that allows direct reference to the relevant section, or (in the case of a PDF) a link that specifies the page number (end with "#page=0").

The Subject Matter Eligibility webpage:

<https://www.uspto.gov/patents/laws/examination-policy/subject-matter-eligibility>

provides 101 Examples 36 and 39 that are directed to AI inventions.

Q6. If there are examination guidelines or any other materials that provide examples of acceptable or unacceptable subject matters, or forms for claims with respect to inventions that are related to AI or to software in general, please provide these, and also specify where this information is listed.

*For example, please provide materials for which computer programs, computer program products, recording mediums on which computer programs are recorded, learned models, data structures, etc. are subject to protection as the subject matter of the invention (forms for claims), if any.

[Title of material]

[Where the information is listed] *Identifiable information such as page number, section number, etc.

[URL] *Any link that allows direct reference to the relevant part, or (in the case of a PDF), a link that specifies the page number (end with "#page=○").

Please refer to

<https://www.uspto.gov/patents/laws/examination-policy/subject-matter-eligibility>

which provides Subject Matter Eligibility Examples 37-42 and 45-46 that pertain to software-related inventions generally. See <https://ptoweb.uspto.gov/patents/exTrain/101.html> for examples.

Q7. In order to help understand the method of assessing patent eligibility for AI-related inventions, if there are any case examples (e.g., hypothetical cases or representative court cases shown in the examination guidelines or other materials), please provide the following identifying information: case numbers/titles, etc., the URLs where the cases can be referenced, and a summary of each example case.

*If there are multiple case examples, please answer the following items for each case.

Subject Matter Eligibility examples 36 and 39 (above) at

<https://ptoweb.uspto.gov/patents/exTrain/101.html> for examples

[URL] *Any link that allows direct reference to the relevant part, or (in the case of a PDF), a link that specifies the page number (end with "#page=○").

<https://www.uspto.gov/initiatives/artificial-intelligence/artificial-intelligence-resources>

[Summary of Case example] Please answer which of the following applies to the case:

1. A case that satisfies patent eligibility
2. A case that does not satisfy patent eligibility

[Supplement] Please provide brief supplementary information that introduces the points of the case, if any. (e.g., a case that does not fall under the category of invention because it is assessed not to satisfy the element to consider of XX.)

J. Requirements for descriptions

Q8. What are the respective texts of the Patent Act regarding requirements for descriptions (clarity, support requirements/written description requirements, enablement requirement/sufficiency of disclosure)?

[Text number] 35 U.S.C. 112 Specification.

[Editor Note: Applicable to any patent application filed on or after September 16, 2012. See 35 U.S.C. 112 (pre-AIA) for the law otherwise applicable.]

(a) IN GENERAL.—The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the

same, and shall set forth the best mode contemplated by the inventor or joint inventor of carrying out the invention.

(b) CONCLUSION.—The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the inventor or a joint inventor regards as the invention.

(c) FORM.—A claim may be written in independent or, if the nature of the case admits, in dependent or multiple dependent form.

(d) REFERENCE IN DEPENDENT FORMS.—Subject to subsection (e), a claim in dependent form shall contain a reference to a claim previously set forth and then specify a further limitation of the subject matter claimed. A claim in dependent form shall be construed to incorporate by reference all the limitations of the claim to which it refers.

(e) REFERENCE IN MULTIPLE DEPENDENT FORM.—A claim in multiple dependent form shall contain a reference, in the alternative only, to more than one claim previously set forth and then specify a further limitation of the subject matter claimed. A multiple dependent claim shall not serve as a basis for any other multiple dependent claim. A multiple dependent claim shall be construed to incorporate by reference all the limitations of the particular claim in relation to which it is being considered.

(f) ELEMENT IN CLAIM FOR A COMBINATION.—An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.

[MPEP - L \(uspto.gov\)](#)

For details, see MPEP 2161 available at [MPEP - Chapter 2100 - Patentability \(uspto.gov\)](#).

<https://www.uspto.gov/patents/laws/examination-policy/examination-guidance-and-training-materials>

Q9. If there are any materials on the examination guidelines, etc. for assessing the clarity requirements of AI-related inventions, please specify where this information is listed.

[Title of material] n/a

[Where the information is listed] *Identifiable information such as page number, section number, etc. n/a

[URL] *Any link that allows direct reference to the relevant part, or (in the case of a PDF), a link that specifies the page number (end with "#page=○").

[AI-related patent resources | USPTO](#)

Q10. If there are any materials on the examination guidelines, etc. for assessing the support requirements/written description requirements of AI-related inventions, please specify where this information is listed.

[Title of material] Manual of Patent Examining Procedure (MPEP)

[Where the information is listed] *Identifiable information such as page number, section number, etc. MPEP 2163

[URL] *Any link that allows direct reference to the relevant part, or (in the case of a PDF), a link that specifies the page number (end with "#page=○").

[MPEP - Chapter 2100 - Patentability \(uspto.gov\)](#)

Q11. If there are any materials on the examination guidelines, etc. for assessing the enablement requirements/sufficiency of disclosure for AI-related inventions, please specify where this information is listed.

[Title of material] Manual of Patent Examining Procedure (MPEP)

[Where the information is listed] *Identifiable information such as page number, section number, etc. MPEP 2164

[URL] *Any link that allows direct reference to the relevant part, or (in the case of a PDF), a link that specifies the page number (end with "#page=○").

[MPEP - Chapter 2100 - Patentability \(uspto.gov\)](#)

Q12: If there are any materials on the examination guidelines, etc. for assessing the support requirements/written description requirements or enablement requirements/sufficiency of disclosure for inventions of products developed by humans using AI technologies, please specify where this information is listed.

*For inventions of products, it is sometimes necessary to show experimental results in the specifications, etc. in order to satisfy support requirements/written description requirements or enablement requirement/sufficiency of disclosure. (In the case of product inventions specified by function/characteristics, for example, it is necessary to show experimental results in order to show that the products have the said function/characteristics).

In this case, please answer if there are any indications in the materials on the examination guidelines, etc. that specify whether the estimated results using AI technologies (e.g., material informatics) are recognized as equivalent to the experimental results.

- [Title of material] Examining Computer-Implemented Functional Claim Limitations for Compliance with 35 U.S.C. 112
- Examining Claims for Compliance with 35 U.S.C. 112(a): Overview and Part I - Written Description = Focus on Electrical/Mechanical and Computer/Software-related Claims
- Examining Claims for Compliance with 35 U.S.C. 112(a): Part II - Enablement = Focus on Electrical/Mechanical and Computer/Software-related Claims
- Enhancing Clarity By Ensuring That Claims are Definite Under 35 U.S.C. 112(b)

[Where the information is listed] *Identifiable information such as page number, section number, etc. n/a

[URL] *Any link that allows direct reference to the relevant part, or (in the case of a PDF), a link that specifies the page number (end with "#page=○").

Examiner training on [Examining Computer-Implemented Functional Claim Limitations for Compliance with 35 U.S.C. 112](#) – generally discussing case law examples with respect to s/w inventions.

See [Examiner training materials | USPTO](#)

[Examination Guidance and Training Materials | USPTO](#) -See training materials under 35 U.S.C. 112

Q13. In order to help understand the method of assessing the requirements for descriptions, that is clarity, support requirement/written description requirement and enablement requirement/sufficiency of disclosure, of AI-related inventions, if there are

any case examples (e.g., hypothetical cases or representative court cases shown in the examination guidelines or other materials), please provide the following identifying information: case numbers/titles, etc., the URLs where the cases can be referenced, and a summary of each case example.
*If there are multiple cases, please answer the following items for each case.

[Case number/Title] n/a

[URL] *Any link that allows direct reference to the relevant part or, in the case of a PDF, a link that specifies the page number (end with "#page=o"). n/a

[Summary of Case example] Please answer which of the following applies to the case. (Multiple answers allowed for a case example). n/a

1. A case that satisfies clarity requirement
2. A case that does not satisfy clarity requirement
3. A case that satisfies enablement requirement/sufficiency of disclosure
4. A case that does not satisfy enablement requirement/sufficiency of disclosure
5. A case that satisfies support requirement/written description requirement
6. A case that does not satisfy support requirement/written description requirement

[Supplement] Please provide supplementary information that introduces the points of the case, if any.

e.g., a case where the enablement requirement is not satisfied because XX is not described in the specification.

C. Novelty

Q14. What are the texts of the Patent Act regarding novelty?

[Text number] **35 U.S.C. 102 Conditions for patentability; novelty.**

[Editor Note: Applicable to any patent application subject to the first inventor to file provisions of the AIA (see 35 U.S.C. 100 (note)). See 35 U.S.C. 102 (pre-AIA) for the law otherwise applicable.]

(a) NOVELTY; PRIOR ART.—A person shall be entitled to a patent unless—

(1) the claimed invention was patented, described in a printed publication, or in public use, on sale, or otherwise available to the public before the effective filing date of the claimed invention; or

(2) the claimed invention was described in a patent issued under section 151, or in an application for patent published or deemed published under section 122(b), in which the patent or application, as the case may be, names another inventor and was effectively filed before the effective filing date of the claimed invention.

(b) EXCEPTIONS.—

(1) DISCLOSURES MADE 1 YEAR OR LESS BEFORE THE EFFECTIVE FILING DATE OF THE CLAIMED INVENTION.—A disclosure made 1 year or less before the effective filing date of a claimed invention shall not be prior art to the claimed invention under subsection (a)(1) if—

(A) the disclosure was made by the inventor or joint inventor or by another who obtained the subject matter disclosed directly or indirectly from the inventor or a joint inventor; or

(B) the subject matter disclosed had, before such disclosure, been publicly disclosed by the inventor or a joint inventor or another who obtained the subject matter disclosed directly or indirectly from the inventor or a joint inventor.

(2) DISCLOSURES APPEARING IN APPLICATIONS AND PATENTS.—A disclosure shall not be prior art to a claimed invention under subsection (a)(2) if—

(A) the subject matter disclosed was obtained directly or indirectly from the inventor or a joint inventor;

(B) the subject matter disclosed had, before such subject matter was effectively filed under subsection (a)(2), been publicly disclosed by the inventor or a joint inventor or another who obtained the subject matter disclosed directly or indirectly from the inventor or a joint inventor; or

(C) the subject matter disclosed and the claimed invention, not later than the effective filing date of the claimed invention, were owned by the same person or subject to an obligation of assignment to the same person.

(c) COMMON OWNERSHIP UNDER JOINT RESEARCH AGREEMENTS.—Subject matter disclosed and a claimed invention shall be deemed to have been owned by the same person or subject to an obligation of assignment to the same person in applying the provisions of subsection (b)(2)(C) if—

(1) the subject matter disclosed was developed and the claimed invention was made by, or on behalf of, 1 or more parties to a joint research agreement that was in effect on or before the effective filing date of the claimed invention;

(2) the claimed invention was made as a result of activities undertaken within the scope of the joint research agreement; and

(3) the application for patent for the claimed invention discloses or is amended to disclose the names of the parties to the joint research agreement.

(d) PATENTS AND PUBLISHED APPLICATIONS EFFECTIVE AS PRIOR ART.—For purposes of determining whether a patent or application for patent is prior art to a claimed invention under subsection (a)(2), such patent or application shall be considered to have been effectively filed, with respect to any subject matter described in the patent or application— (1) if paragraph (2) does not apply, as of the actual filing date of the patent or the application for patent; or (2) if the patent or application for patent is entitled to claim a right of priority under section 119, 365(a), 365(b), 386(a), or 386(b), or to claim the benefit of an earlier filing date under section 120, 121, 365(c), or 386(c) based upon 1 or more prior filed applications for patent, as of the filing date of the earliest such application that describes the subject matter.

[URL] [MPEP - L \(uspto.gov\)](http://mpep-l.uspto.gov)

novelty of AI-related inventions, please specify where this information is listed.

[Title of material] MPEP 2131 Anticipation — Application of 35 U.S.C. 102

[Where the information is listed] *Identifiable information such as page number, section number, etc. n/a

[URL] *Any link that allows direct reference to the relevant part, or (in the case of a PDF), a link that specifies the page number (end with "#page=○"). [MPEP - Chapter 2100 - Patentability \(uspto.gov\)](#)

Q16. In order to help understand the method for assessing "novelty" of AI-related inventions, if there are any case examples (e.g., hypothetical cases or representative court cases shown in the examination guidelines or other materials), please provide the following identifying information: case numbers/titles, etc., the URL where the cases can be referenced, and a summary of each case example.

*If there are multiple cases, please answer the following items for each case.

[Case number/Title] n/a

[URL] *Any link that allows direct reference to the relevant part, or (in the case of a PDF), a link that specifies the page number (end with "#page=○"). n/a

[Summary of case example] Please answer which of the following applies to the case:

1. A case showing that novelty is affirmed
2. A case showing that novelty is denied

[Supplement] Please provide supplementary information that introduces the points of the case, if any. n/a

e.g., a case where the novelty is denied because XX is not considered in the assessment of novelty

D. Inventive step

Q17. What are the texts of the Patent Act regarding inventive step?

[Text number] **35 U.S.C. 103 Conditions for patentability; non-obvious subject matter.**

[Editor Note: Applicable to any patent application subject to the first inventor to file provisions of the AIA (see 35 U.S.C. 100 (note)). See 35 U.S.C. 103 (pre-AIA) for the law otherwise applicable.]

A patent for a claimed invention may not be obtained, notwithstanding that the claimed invention is not identically disclosed as set forth in section 102, if the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious before the effective filing date of the claimed invention to a person having ordinary skill in the art to which the claimed invention pertains. Patentability shall not be negated by the manner in which the invention was made.

Q18. If there are any materials on the examination guidelines, etc. for assessing "inventive step" of AI-related inventions, please specify where this information is listed.

[Title of material] 2141 Examination Guidelines for Determining Obviousness Under 35 U.S.C. 103

[Where the information is listed] *Identifiable information such as page number, section number, etc. n/a

[URL] *Any link that allows direct reference to the relevant part, or (in the case of a PDF), a link that specifies the page number (end with "#page=○"). [MPEP - Chapter 2100 - Patentability \(uspto.gov\)](#)

Q19. In order to help understand the method of assessing inventive step for AI-related inventions, if there are any case examples (e.g., hypothetical cases or representative court cases shown in the examination guidelines or other materials), please provide the following identifying information: case numbers/titles, etc., the URL where the cases can be referenced, and a summary of the case examples.

*If there are multiple cases, please answer the following items for each case.

[Case number/Title] n/a

[URL] *Any link that allows direct reference to the relevant part, or (in the case of a PDF), a link that specifies the page number (end with "#page=○"). n/a

[Summary of Case example] Please answer which of the following applies to the case:

1.A case showing that inventive step is affirmed

2.A case showing that inventive step is denied

[Supplement] Please provide supplementary information that introduces the points of the case, if any. n/a

e.g., a case where the inventive step is affirmed because it cannot be said to be readily conceivable from the prior art.

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