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Examination practices on AI-related inventions

- Comparison Table for AI cases -

June 2024

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Background

- ✓ At its meeting held in June 2022, the IP5 Heads endorsed the launch of the NET/AI project regarding “Collection of existing materials on the examination practices of the IP5 Offices on AI-related inventions and the publication on the IP5 website”.
- ✓ The objective of the project is to provide an overview of the IP5 Offices’ examination practice on AI-related inventions to help users understand which points they should focus on in order to acquire patent rights in multiple countries.
- ✓ The scope of the project is to compile relevant legal texts and resources of the IP5 Offices, including the respective sections of examination guidelines, practice manuals, case examples, etc. to highlight the key points of each office’s examination practices applicable to the patenting of AI-related inventions.
- ✓ At its meeting held in June 2023, the IP5 heads endorsed a comparison table summarizing the IP5 Offices’ laws, examination guidelines, and examination cases and others as a product of the project to collect materials on the examination practices of the IP5 Offices on AI-related inventions, and reached an agreement to discuss further elaboration of this table in the next step.

Results of collection of existing materials

- ✓ As the leading office, JPO sent questionnaires regarding the project and received their answers.
- ✓ By listing materials in the form of hyperlinks to webpages, obsolescence of the output will be avoided. Users could access the latest materials by clicking the links even in the future.

Disclaimer

Eligibility

Classified information in Q7 of the comparison table in "Examination practices on AI-Related Inventions" (June 2023) is as follows.

([Outline:] 1. A case satisfying the eligibility of invention, 2. A case not satisfying the eligibility of invention)

	EPO	JPO	KIPO	CNIPA	USPTO
(1) Inventions of AI technology itself (e.g., learning method)	N/A	N/A	N/A	Guidelines for Patent Examination（2023）, Part 2, Chapter 9, Section6.2[Case 5][Outline: 1]	N/A
(2) Inventions that apply AI technology to specific technical fields	Hypothetical example of applying the COMVIK approach (GL G-VII, 5.4.2.5) [Link] [Outline:1]	Examination Handbook for Patent and Utility Model, Annex B, [Case 2-13] [Outline: 1] [Case 2-14] [Outline: 1] [Case 2-14'] [Outline: 2] Examination Handbook for Patent and Utility Model, Annex A, [Case 3-2] [Outline: 1, 2] [Case 5] [Outline: 1,2]	Examination practice guide by technology field Pages 1308 [Outline: 1] Pages 7301-7303 [Outline: 2]	Guidelines for Patent Examination (2023), Part 2, Chapter 9, Section 6.2 [Case 2, 3] [Outline: 1] [Case 1] [Outline: 2]	Subject Matter Eligibility web page [Case 36] [Outline: 1,2] [Case 39] [Outline: 1]
(3) Others（non AI）	Decision T 1173 / 97 of Boards of Appeal [Link] [Outline: 1] Decision T 1820/16 of Boards of Appeal [Link] [Outline: 2]	N/A	Examination practice guide by technology field Pages 1306-1307 [Outline: 1] Pages 1304-1306, 1308-1309 [Outline: 2]	Guidelines for Patent Examination (2023), Part 2, Chapter 9, Section 6.2 [Case 4,6,7] [Outline: 1] [Case 8,9,10] [Outline: 2]	N/A

Inventive Step

Classified information in Q19 of the comparison table in the "Examination practices on AI-Related Inventions" (June 2023) is as follows.

([Outline:] 1. A case showing that inventive step is affirmed, 2. A case showing that inventive step is denied, 3. other)

	EPO	JPO	KIPO	CNIPA	USPTO
(1) Mere application of AI	N/A	Examination Handbook for Patent and Utility Model, Annex B, Chapter 1, Section 2.2.3.3 [Example 1, Example 2] [Outline: 2] [Example 4, Example 5] [Outline: 1] Examination Handbook for Patent and Utility Model, Annex A [Case 33] [Outline: 2] [Case 34(Claim 1)] [Outline: 2] [Case 37] [Outline: 2] [Case 38] [Outline: 1,2] [Case 40] [Outline: 1,2]	Examination practice guide by technology field [Chapter 6, Case 8.11.14] [Outline: 2]	N/A	N/A
(2) Modification of training data	Decision T 1286/09 of the Enlarged Board of Appeal [Link] [Outline: 1]	Examination Handbook for Patent and Utility Model, Annex A [Case 34(Claim 2)] [Outline: 1] [Case 35] [Outline: 2]	Examination practice guide by technology field [Chapter 1, Case 4] [Outline: 2] [Chapter 6, Case 10.12.13] [Outline: 2]	N/A	N/A
(3) Performing preprocessing on training data	N/A	Examination Handbook for Patent and Utility Model, Annex A [Case 36] [Outline: 1]	Examination practice guide by technology field [Chapter 6, Case 16] [Outline: 1]	N/A	N/A
(4) Change the learning model	N/A	Examination Handbook for Patent and Utility Model, Annex A [Case 32] [Outline: 2]	Examination practice guide by technology field [Chapter 1, Case 2.3.5] [Outline: 1,2]	N/A	N/A
(5) Others（AI）	EPO-JPO Comparative study on computer-implemented inventions/software-related inventions (2021) [Case C-8] [Outline: 2]	Examination Handbook for Patent and Utility Model, Annex A [Case 31] [Outline: 2] [Case 39] [Outline: 1]	Examination practice guide by technology field [Chapter 6, Case 9.15.17.18] [Outline: 1,2] [Chapter 7, Case 3] [Outline: 2]	Guidelines for Patent Examination (2023), Part 2, Chapter 9, Section6.2 [Case 11,13,15] [Outline: 1] [Case 12,14] [Outline: 2]	N/A
(6) Others（non AI）	Decision G 1/19 of the Enlarged Board of Appeal [Link] [Outline: 3]	N/A	Examination practice guide by technology field [Chapter 7, Case 5.6] [Outline: 1,2]	N/A	N/A

Description Requirement

Classified information in Q13 of the comparison table in the "Examination practices on AI-Related Inventions" (June 2023) is as follows.

([Outline:]1. A case satisfying clarity requirement, 2. A case not satisfying clarity requirement, 3. A case satisfying enablement requirement/sufficiency of disclosure, 4. A case not satisfying enablement requirement/sufficiency of disclosure, 5. A case satisfying support requirement/description requirement, 6. A case not satisfying support requirement/description requirement)

	EPO	JPO	KIPO	CNIPA	USPTO
(1) Whether it is presumable that a correlation exists between multiple types of data.	N/A	Examination Handbook for Patent and Utility Model, Annex A [Case 46] [Outline: 4] [Case 47] [Outline: 3] [Case 48] [Outline: 3]	Examination practice guide by technology field [Chapter 1, Case 1] [Outline: 4,6] [Chapter 6, Case 2.6.7] [Outline: 3,4]	N/A	N/A
(2) Whether correlations, etc. are supported by explanations and statistical information provided in the description and others.	N/A	[Case 49] [Outline: 3.4.5.6]	N/A	N/A	N/A
(3) Whether correlations, etc. are supported by performance evaluations of the AI models actually created	N/A	[Case 50] [Outline: 3.4.5.6]	N/A	N/A	N/A
(4) Inventions of products presumed by AI to have a certain function	N/A	[Case 51] [Outline: 4.6] [Case 52] [Outline: 3,4,5,6]	N/A	N/A	N/A
(5) Whether preprocessing method of input data is disclosed concretely	N/A	N/A	[Chapter 6, Case 4] [Outline: 4]	N/A	NA
(6) Whether the learning model or learning method is disclosed concretely	Decision T 161 / 18 of Boards of Appeal [Link] [Outline: 4]	N/A	[Chapter 6, Case 1.3.5] [Outline: 3,4] [Chapter 7, Case 2 (Pages 7504-7506)] [Outline: 4]	N/A	N/A
(7) Others	Decision T 410 / 96 of Boards of Appeal [Link] [Outline: 1] Decision T 2140 / 08 of Boards of Appeal [Link] [Outline: 2] Decision T 2574 / 16 of Boards of Appeal [Link] [Outline: 1,3] Decision T 637 / 03 of Boards of Appeal [Link] [Outline: 6]	[Case 53] [Outline: 5,6] [Case 54] [Outline: 5,6] [Case 55] [Outline: 1,2]	N/A	Guidelines for Patent Examination（2023）, Part 2, Chapter 9, Section5.2[Case 1-4][Outline: 1]	N/A

Summary

A summary of the results of classified examination cases of “Examination Practices for AI-related Inventions” (June 2023) is as follows.

1. Eligibility

- ✓ CNIPA has a case example regarding “inventions of AI technology itself”.
- ✓ EPO, JPO, KIPO, CNIPA and USPTO have case examples regarding “invention that apply AI technology to specific technical fields”.

2. Inventive step

- ✓ JPO and KIPO have case examples regarding “mere application of AI”.
- ✓ EPO, JPO and KIPO have case examples regarding “modification of training data”.
- ✓ JPO and KIPO have case examples regarding “performing preprocessing on training data”.
- ✓ JPO and KIPO have case examples regarding “change the learning model”.

3. Description requirement

- ✓ JPO and KIPO have case examples regarding “whether it is presumable that a correlation exists between multiple types of data”.
- ✓ JPO has case examples regarding “whether correlations, etc. are supported by explanations and statistical information provided in the description and others.
- ✓ JPO has case examples regarding “whether correlations, etc. are supported by performance evaluations of the AI models actually created”.
- ✓ JPO has case examples regarding “inventions of products presumed by AI to have a certain function”.
- ✓ KIPO has case examples regarding “whether preprocessing method of input data is disclosed concretely”.
- ✓ EPO and KIPO have case examples regarding “whether the learning model or learning method is disclosed concretely”.