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Examination practices on AI-related inventions

IP5

June 2023 (Updated in 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.

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.
- ✓ Complete answers of the IP5 Offices are contained in the Annex of the document.
- ✓ Overview table of answers from the IP5 Offices is as follows from the next page.

Disclaimer

While this data aims at highlighting the examination practices of the IP5 Offices on AI-related inventions at the time of the data collection, its content may not be considered or construed as legally binding in any way. The IP5 Offices cannot guarantee the completeness, accuracy, or fitness for specific purposes of the data presented.

	EPO	JPO	KIPO	CNIPA	USPTO
Q1. Please provide the URL where the latest text of the Patent Act can be found.	The European Patent Convention [English] [German] [French]	Patent Act [English] [Japanese]	Patent Act [English] [Korean]	Patent Law of the People's Republic of China [Chinese] Rules for the Implementation of the Patent Law of the People's Republic of China [Chinese]	United States Code Title 35 – Patents [English]
Q2. What kind of materials has your office already prepared regarding examination standards and other rules applicable to AI-related inventions? **[Feature:]** **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**	Guidelines for examination in the European Patent Office (2022) [English] [German] [French] [Feature: 1, 2, 3] Section G-II, 3.3.1 of the Guidelines for examination in the European Patent Office (2022) [English] [German] [French] [Feature: 1] Index for Computer-Implemented Inventions containing links to sections of Guidelines relating particularly to CIIs [English] [German] [French] [Feature: 1, 2, 3] Case Law of the Boards of Appeal of the European Patent Office, 10th Edition, July 2022 [English] [German] [French] [Feature: 1, 2, 3, 4] Opinion G 3/08 of the Enlarged Board of Appeal dealing with the patentability of computer programs [English] [German] [French] [Feature: 2]	Examination Guidelines for Patent and Utility Model in Japan [English] [Japanese] [Feature: 3] Examination Handbook for Patent and Utility Model, Annex B, Chapter 1, Computer software related Inventions [English] [Japanese] [Feature: 2] Newly Added Case Examples for AI-related Technologies (Additions in March 2024) [English] [Japanese] [Feature: 1] Newly Added Case Examples for AI-related Technologies (Additions in March 2019) [English] [Japanese] [Feature: 1] Examination Guidelines in Manga: AI/IoT Edition [English] [Japanese] [Feature: 1, 2] Examination Guidelines pertinent to IoT related technologies [English] [Japanese] [Feature: 2]	Examination practice guide by technology field [Korean] [Feature: 1, 2] Patent Examination Guideline [English] [Korean] [Feature: 3]	Guidelines for Patent Examination [Chinese] [Feature:1,2,3]	Manual of Patent Examining Procedure [English] [Feature: 3] Chapter 2106, 2161-2166, 2181-2186 of Manual of Patent Examining Procedure [English] [Feature: 2] AI-related patent resources [English] [Feature: 1] AI Policy Report [English] [Feature: 2, 3]

	EPO	JPO	KIPO	CNIPA	USPTO
	Decision G 1/19 of the Enlarged Board of Appeal on computer-implemented simulations [English] [German] [French] [Feature: 2]	Case Examples pertinent to AI-related technologies [English] [Japanese] [Feature: 1] Case examples pertinent to IoT related technology, etc. [English] [Japanese] [Feature: 2]			
Q3. Does your office cooperate with other offices to conduct comparative studies on the examination practices and standards for AI-related inventions? **[Feature:]** **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**	[EPO & KIPO] Comparative study on computer-implemented inventions/software-related inventions (2021) [English] [Feature: 2] [EPO & JPO] Comparative study on computer-implemented inventions/software-related inventions (2021) [English] [Feature: 2] [EPO & CNIPA] Comparative study on computer-implemented inventions/software-related inventions (2019) [English] [Feature: 2]	[JPO & CNIPA] Comparative Study on AI-related inventions [English] [Japanese] [Feature: 2] [JPO & EPO] Comparative Study on Computer Implemented Inventions/Software related Inventions [English] [Japanese] [Feature: 2] [Five IP Offices] International Symposium on Patent Examination Practices on AI-related Inventions [English] [Feature: 1] [EPO, JPO & USPTO] Report on Comparative Study Carried Out Under Trilateral Project 24.2 [English] [Feature: 2]	[EPO & KIPO] Comparative study on computer-implemented inventions/software related inventions [English] [Korean] [Feature: 2]	[EPO & CNIPA] Comparative study on computer implemented inventions/software related inventions [Chinese] [English] [Feature: 2]	N/A
Q4. What are the texts of the Patent Act regarding eligibility for patents?	Art. 52 EPC [English] [German] [French]	Article 2 and main Paragraph of Article 29(1) of Patent Act [English] [Japanese]	Article 2, Article 29(1) and Article 32 of Patent Act [English] [Korean]	Article 2, Article 5 and Article 25 of Patent Law of PRC. [Chinese]	35 U.S.C. 101 [English]

	EPO	JPO	KIPO	CNIPA	USPTO
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.	Guidelines for Examination in the European Patent Office (2022) [Index for Computer-Implemented Inventions] [G-I] [G-II, 1] [G-II, 2] [G-II, 3.3] [G-II, 3.3.1] [G-II, 3.3.2] [G-II, 3.5] [G-II, 3.6] [G-II, 3.7]	Examination Handbook for Patent and Utility Model, Annex B [Chapter 1, Section 2.1]	Examination practice guide by technology field [Pages 1301~1310, 7301~7306]	Guidelines for Patent Examination（2023）, Part 2 [Chapter 9, Section 6.1.1 and 6.1.2]	Manual of Patent Examining Procedure [2106 Patent Subject Matter Eligibility] The Subject Matter Eligibility webpage [Link]
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.	Guidelines for Examination in the European Patent Office (2022) [G-II, 3.3] [G-II, 3.3.1] [G-II 3.3.2] [G-II, 3.5.1] [G-II, 3.5.2] [G-II, 3.5.3] [G-II 3.6] [G-II 3.6.1] [G-II 3.6.2] [G-II 3.6.3] [G-II 3.6.4] [G-II 3.7] [G-II 3.7.1] [G-VII, 5.4] [G-VII, 5.4.1] [G-VII, 5.4.2] [F-IV, 3.9] [F-IV, 3.9.1] [F-IV, 3.9.2] [F-IV, 3.9.3] Case Law of the Boards of Appeal of the European Patent Office, 10th Edition, July 2022 [I.A.2.2.2] [I.A.2.4] [I.A.2.5] [I.A.2.6]	Examination Handbook for Patent and Utility Model, Annex B [Chapter 1, Section 1.2.1] [Chapter 1, Section 2.1.2]	Examination practice guide by technology field [Pages 1205~1211, 1301~1310, 6203~6204, 7301~7306, 55~76]	Guidelines for Patent Examination（2023）, Part 2 [Chapter 9, Section 2, 3, 5.2, 6.2, Example 1-10 of Section 6.2]	Manual of Patent Examining Procedure [2106.03 Eligibility Step 1: The Four Categories of Statutory Subject Matter] The Subject Matter Eligibility webpage [Link]
Q7. In order to help understand the method of assessing patent eligibility for AI-related inventions, if there are any case examples, please provide identifying information. [Summary:] **1. A case that satisfies patent eligibility** **2. A case that does not satisfy**	Decision T 1173/97 of the Boards of Appeal [Link] [Summary: 1] Decision T 1820/16 of Technical Board of Appeal [Link] [Summary: 2] Hypothetical example of applying the COMVIK approach (GL G-VII, 5.4.2.5) [Link] [Summary: 1]	Examination Handbook for Patent and Utility Model, Annex B [Case 2-13] [Summary: 1] [Case 2-14] [Summary: 1] [Case 2-14'] [Summary: 2] Examination Handbook for Patent and Utility Model, Annex A [Case 3-2] [Summary: 1, 2] [Case 5] [Summary: 1,2]	Examination practice guide by technology field [Pages 1301~1310, 7301~7306] [Summary: 1, 2]	Guidelines for Patent Examination（2023）, Part 2, Chapter 9, Section 6.2 [Example 2,3,4,5,6,7] [Summary:1] [Example 1,8,9,10] [Summary:2]	The Subject Matter Eligibility webpage [Example 36] [Summary: 1, 2] [Example 39] [Summary: 1]

	EPO	JPO	KIPO	CNIPA	USPTO
patent eligibility					
Q8. What are the respective texts of the Patent Act regarding requirements for descriptions? **[1] Clarity** **[2] Support requirement or Written description requirement** **[3]. Enablement requirement or Sufficiency of disclosure**	[1] Art. 84 EPC [English] [German] [French] [2] Art. 84 EPC [English] [German] [French] [3] Art. 83 EPC [English] [German] [French]	[1] Article 36(6)(ii) [English] [Japanese] [2] Article 36(6)(i) [English] [Japanese] [3] Article 36(4)(i) [English] [Japanese]	[1] Article 42(4)2 [English] [Korean] [2] Article 42(3)2, 42(4)1 [English] [Korean] [3] Article 42(3)1 [English] [Korean]	[1] Paragraph 3 of Article 26 [Chinese] [2] Paragraph 4 of Article 26 [Chinese] [3] Paragraph 3 of Article 26 [Chinese]	[1] 35 U.S.C. 112(b) [English] [2] 35 U.S.C. 112(a) [English] [3] 35 U.S.C. 112(a) [English]
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.	Guidelines for Examination in the European Patent Office (2022) [F-IV] [F-IV, 3.9] [F-IV, 3.9.1] [F-IV, 3.9.2] [F-IV, 3.9.3]	Examination Handbook for Patent and Utility Model, Annex B [Chapter 1, Section 1.2.1]	Examination practice guide by technology field [Pages 1205~1211, 6203~6204, 7206~7208, 7402~7407]	Guidelines for Patent Examination（2023）, Part 2 [Chapter 2, Section 2.1.1] [Chapter 9, Section 5.1,Section 6.3.1 and 6.3.2]	Manual of Patent Examining Procedure [2171 Two Separate Requirements for Claims]
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.	Guidelines for Examination in the European Patent Office (2022) [F-IV, 6] [F-II, 4.12]	Newly Added Case Examples for AI-related Technologies (Additions in March 2019) [Page 10]	Examination practice guide by technology field [Pages 1204~1205]	Guidelines for Patent Examination（2023）, Part 2 [Chapter 2, Section 3.2.1] [Chapter 9, Section 5.1 and 5.2]	Manual of Patent Examining Procedure [2163 “Written Description” Requirement]
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.	Guidelines for Examination in the European Patent Office (2022) [F-III, 1, par. 4]	Examination Handbook for Patent and Utility Model, Annex B [Chapter 1, Section 1.1.1]	Examination practice guide by technology field [Pages 1201~1204, 6201~6203, 7201~7206, 7401~7402]	Guidelines for Patent Examination（2023）, Part 2 [Chapter 2, Section 2.1.3] [Chapter 9, Section 5.1 and 5.2]	Manual of Patent Examining Procedure [2164 The Enablement Requirement]

	EPO	JPO	KIPO	CNIPA	USPTO
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.	Guidelines for Examination in the European Patent Office (2022) [F-IV, 4.12] [F-III, 4] [F-III, 12]	N/A	Examination practice guide by technology field [Pages 1201~1205, 3402~3403, 3502~3511]	N/A	Examination Guidance and Training Materials | USPTO
Q13. In order to help understand the method of assessing the requirements for descriptions of AI-related inventions, if there are any case examples, please provide identifying information. **[Summary:]** **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**	Decision T 410/96 of the Boards of Appeal [Link] [Summary: 1] Decision T 2140/08 of the Boards of Appeal [Link] [Summary: 2] Decision T 161/18 of the Boards of Appeal [Link] [Summary: 4] Decision T 2574/16 of the Boards of Appeal [Link] [Summary: 1,3] Decision T 637/03 of the Boards of Appeal [Link] [Summary: 6]	Examination Handbook for Patent and Utility Model, Annex A [Case 46] [Summary: 4] [Case 47] [Summary: 3] [Case 48] [Summary: 3] [Case 49] [Summary: 3,4,5,6] [Case 50] [Summary: 3,4,5,6] [Case 51] [Summary: 4,6] [Case 52] [Summary: 3,4,5,6] [Case 53] [Summary : 5,6] [Case 54] [Summary : 5,6] [Case 55] [Summary : 1,2]	Examination practice guide by technology field [Chapter 1, Case 1 (Pages 1403~1407)] [Summary: 4,6] [Chapter 6, Case 1~7 (Pages 6401~6419)] [Summary: 3,4] [Chapter 7, Case 2 (Pages 7504~7506)] [Summary: 4]	N/A	N/A

	EPO	JPO	KIPO	CNIPA	USPTO
Q14. What are the texts of the Patent Act regarding novelty?	Art. 54 EPC [English] [German] [French]	Article 29(1) [English] [Japanese]	Article 29(1) [English] [Korean]	Paragraph 2 of Article 22 [Chinese]	35 U.S.C. 102 [English]
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.	Guidelines for Examination in the European Patent Office (2022) [G-VI] Case Law of the Boards of Appeal of the European Patent Office, 10th Edition, July 2022 [I.C.1-5]	Examination Handbook for Patent and Utility Model, Annex B [Chapter 1, Section 2.2.2]	Examination practice guide by technology field [Pages 1311~1324]	Guidelines for Patent Examination（2023）, Part 2 [Chapter 3, Section 3] [Chapter 9, Section6.1.3]	Manual of Patent Examining Procedure [2120 Rejection on Prior Art] [2131 Anticipation - Application of 35 U.S.C. 102]
Q16. In order to help understand the method for assessing "novelty" of AI-related inventions, if there are any case examples, please provide identifying information. **[Summary:]** **1. A case showing that novelty is affirmed** **2. A case showing that novelty is denied**	Decision T 2440/12 of the Boards of Appeal [Link] [Summary: 2]	N/A	N/A	N/A	N/A
Q17. What are the texts of the Patent Act regarding inventive step?	Art. 56 EPC [English] [German] [French]	Article 29(2) [English] [Japanese]	Article 29(2) [English] [Korean]	Paragraph 3 of Article 22 [Chinese]	35 U.S.C. 103 [English]
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.	Guidelines for Examination in the European Patent Office [G-VII, 5.4] [G-VII, 5.4.1] [G-VII, 5.4.2]	Examination Handbook for Patent and Utility Model, Annex B [Chapter 1, Section 2.2.3]	Examination practice guide by technology field [Pages 1311~1324, 6301~6302, 7306~7316]	Guidelines for Patent Examination（2023）, Part 2 [Chapter 4, Section 3] [Chapter 9, Section6.1.3]	Manual of Patent Examining Procedure [2141 Examination Guidelines for Determining Obviousness]

	EPO	JPO	KIPO	CNIPA	USPTO
	Case Law of the Boards of Appeal of the European Patent Office, 10th Edition, July 2022 [I.D.9.1] [I.D.9.2]				
Q19. In order to help understand the method of assessing inventive step for AI-related inventions, if there are any case examples, please provide identifying information. **[Summary:]** **1. A case showing that inventive step is affirmed** **2. A case showing that inventive step is denied** **3. Other**	Decision T 1286/09 of the Boards of Appeal [Link] [Summary: 1] Decision G 1/19 of the Enlarged Board of Appeal [Link] [Summary: 3] EPO-JPO Comparative study on computer-implemented inventions/software-related inventions (2021) [Case C-8] [Summary: 2]	Examination Handbook for Patent and Utility Model, Annex A [Case 31] [Summary: 2] [Case 32] [Summary: 2] [Case 33] [Summary: 2] [Case 34] [Summary: 1, 2] [Case 35] [Summary: 2] [Case 36] [Summary: 1] [Case 37] [Summary: 2] [Case 38] [Summary: 1,2] [Case 39] [Summary: 1] [Case 40] [Summary: 1,2] Examination Handbook for Patent and Utility Model, Annex B, Chapter 1, Section 2.2.3.3 [Example 1] [Summary: 2] [Example 2] [Summary: 2] [Example 4] [Summary: 1] [Example 5] [Summary: 1]	Examination practice guide by technology field [Chapter 1, Case 2~5 (Pages 1407~1432)] [Summary: 1, 2] [Chapter 6, Case 8~18 (Pages 6420~6444)] [Summary: 1, 2] [Chapter 7, Case 3, 5, 6 (Pages 7507~7510, 7515~7522)] [Summary: 1, 2]	Guidelines for Patent Examination（2023）, Part 2, Chapter 9 [Example 11, 13, 15] [Summary:1] [Example 12, 14] [Summary:2]	N/A

Summary

- ✓ All five offices have case examples regarding patent eligibility of AI-related inventions. (See Q7)
- ✓ EPO, JPO and KIPO have case examples regarding requirements for descriptions of AI-related inventions. (See Q13)
- ✓ EPO has a case example regarding novelty of AI-related inventions. (See Q16)
- ✓ EPO, JPO, KIPO and CNIPA have case examples regarding inventive step of AI-related inventions. (See Q19)
- ✓ There are some approaches to deal with AI technologies. EPO, JPO and CNIPA introduced specialized sections or case examples on AI-related inventions in their examination guidelines etc. KIPO created the examination guidelines specialized in the AI technological field. USPTO released a webpage compiling AI-related patent resources. (See Q2)