

(iii) compilation of laws and practices relating to the patentability of artificial intelligence (AI)-related inventions (update of document SCP/30/5);

1. Patent Examination Case Examples pertinent to AI-related technologies

Looking ahead to the development of AI-related technologies in various technical fields, the Japan Patent Office created and published Case Examples on AI-related technologies.

Five case examples pertinent to AI-related technologies are included in the list of those regarding the IoT-related patent applications added in the Examination Handbook for Patent and Utility Models in 2017.

List of Case Examples:

(Annex A, 3. Eligibility for Patent and Industrial Applicability)

Sugar Content Data of Apples and a Method for Predicting Sugar Content

Data of Apples .....Case 3-2

(Annex A, 5. Inventive Step)

Learning System Comprising On-vehicle Devices and a Server .....Case 31

Quality management program of manufacturing lines .....Case 32

(Annex B, Chapter 1, 3. Case)

Data Structure of Dialogue Scenarios in Voice Interactive System .....Case 2-13

Trained Model for Analyzing Reputations of Accommodations .....Case 2-14

[Case examples pertinent to IoT, etc. related technology](#)

In 2019, the following ten case examples pertinent to AI-related technologies were added within Annex A of the Examination Handbook for Patent and Utility Models:

(Annex A, 1. Case Examples pertinent to Description Requirements)

Sugar content estimation system .....Case 46

Business plan design apparatus .....Case 47

Autonomous vehicles .....Case 48

Body weight estimation system .....Case 49

Method for estimating allergy incidence rate of test substance .....Case 50

Anaerobic adhesive composition .....Case 51

(Annex A, 5. Case Examples pertinent to Inventive Step)

Cancer level calculation apparatus .....Case 33

Estimation system of hydroelectric generating capacity .....Case 34

Screw clamping quality estimation apparatus .....Case 35

Dementia stage estimation apparatus .....Case 36

[- Newly Added Case Examples for AI-related technologies \(Additions in January 2019 – Explanatory material\)](#)

In 2024, the following ten case examples pertinent to AI-related technologies were added within Annex A and B of the Examination Handbook for Patent and Utility Models:

(Annex A, 1. Case Examples pertinent to Description Requirements)

Fluorescent Compound .....	Case 52
Method for Generating Images for Training Data .....	Case 53
Machine Learning Apparatus for Screw Clamping Quality .....	Case 54
Trained Model to Output Content of Work to be Performed in Response to Malfunction .....	Case 55

(Annex A, 5. Case Examples pertinent to Inventive Step)

Automatic Response Generator for Customer Service Centers .....	Case 37
Method for Generating Texts for Prompt for Input into Large Language Models .....	Case 38
Method for Learning Trained Models for Radiographic Image Brightness Adjustment .....	Case 39
Laser Beam Processing Device .....	Case 40

(Annex A, 3. Eligibility for Patent and Industrial Applicability)

Training Data and Method for Generating Images for Training Data .....	Case 5
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(Annex B, Chapter 1, 3.2 Case for eligibility for invention)

Trained Model for Analyzing Reputations of Accommodations .....	Case 2-14'
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[-Newly Added Case Examples for AI-related technologies \(Additions in March 2024 – Explanatory material\)](#)

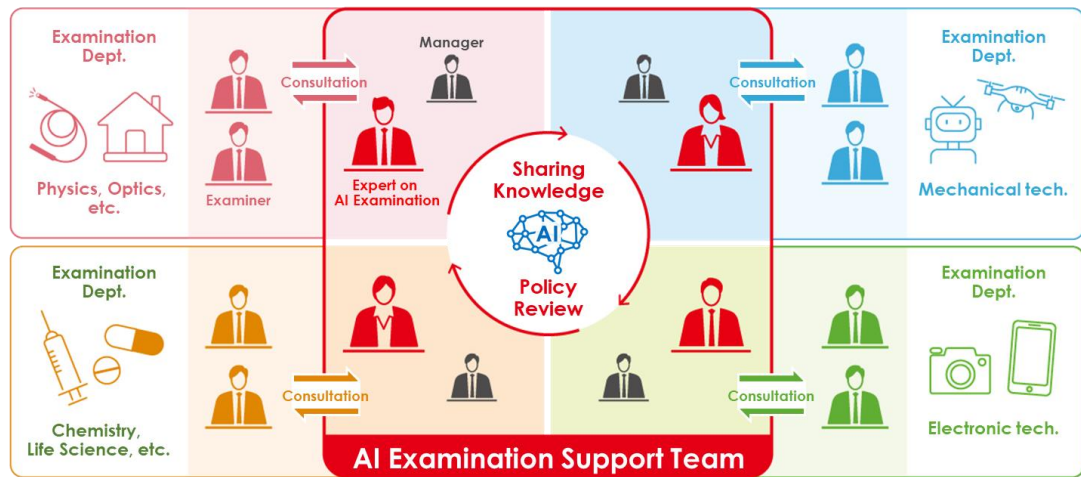
[-Case Examples pertinent to AI-related technologies \(Full Text\)](#)

## 2. Development of Examination Environment for AI-related Inventions

In January 2021, aiming to develop an environment of more efficient and highest-quality examinations for AI-related inventions, the Japan Patent Office (JPO) inaugurated a Team for Supporting AI Examinations, which is an internal body in which the respective examination divisions collaborate beyond their responsible technical fields. The team will have the respective examination divisions collaborate beyond their responsible technical fields, and will accumulate and share knowledge on the latest AI-related technologies and case examples of examination results; as well as hold discussions on related measures for patent examinations, and conduct other efforts. These officials in charge of AI who belong to the team will collect knowledge from the respective examination divisions, wherein they will serve as a hub of examinations concerning AI-related inventions, and provide

consultation services to examiners outside the team; thereby supporting examiners in achieving efficient quality examinations.

In October 2023, the JPO will increase the number of experts on AI examination to around 40 in an effort to enhance the examination support system for AI-related inventions. Previously, the JPO had assigned experts on AI examination only to the examination offices in charge of fields where AI technology is used frequently. Now, it will assign one expert on AI examination to all examination offices, thereby enhancing the system for the team. It will provide experts on AI examination with opportunities to continue improving their knowledge on the latest AI technology, including through the provision of training courses by external experts and other lecturers.



Schematic view of the team supporting AI examinations