



AI-Related Inventions in Japan

Trends, Examination Practices, and Emerging Issues

Kazumi Makiuchi

**Japan Patent Attorneys Association
International Activities Center**

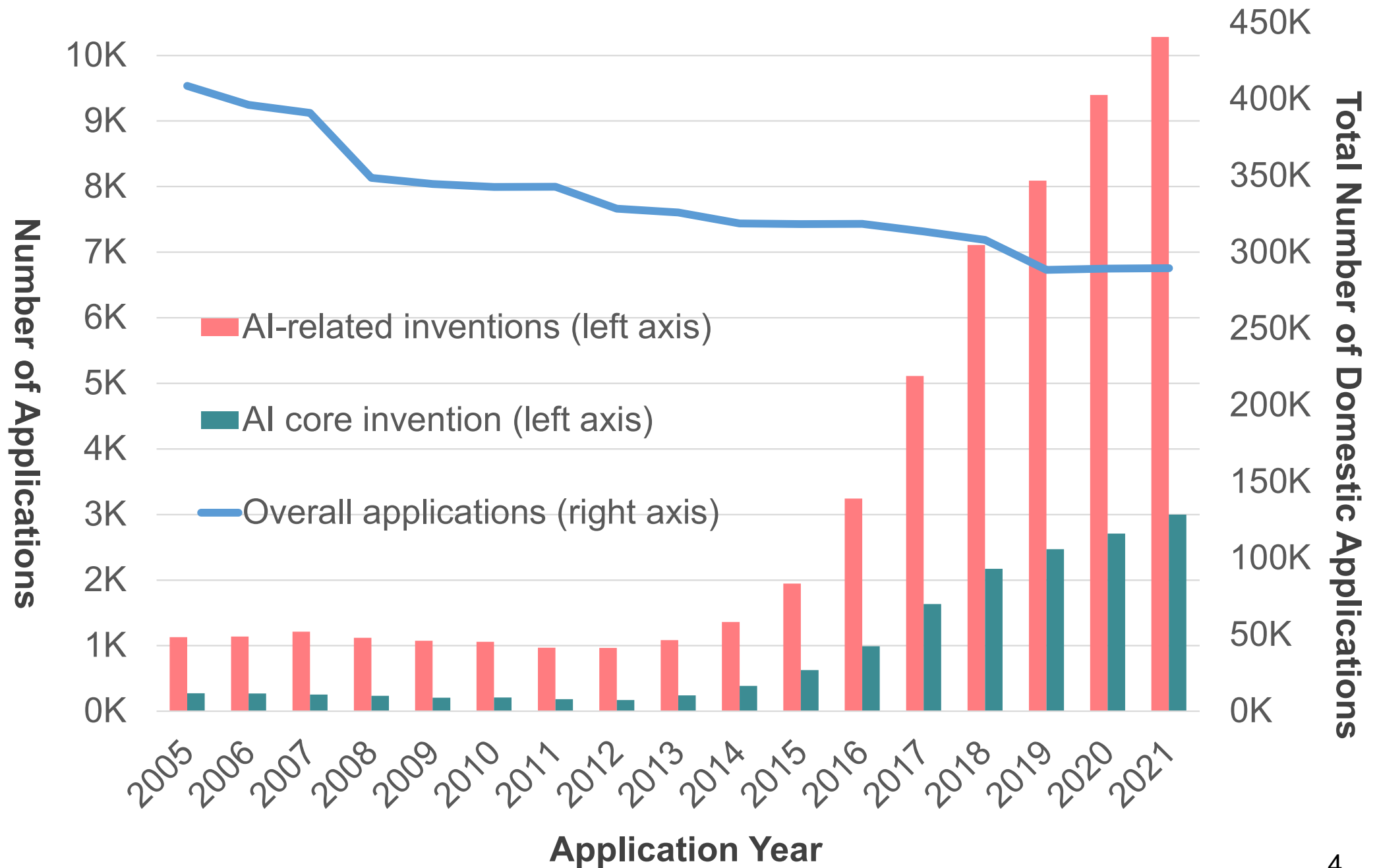
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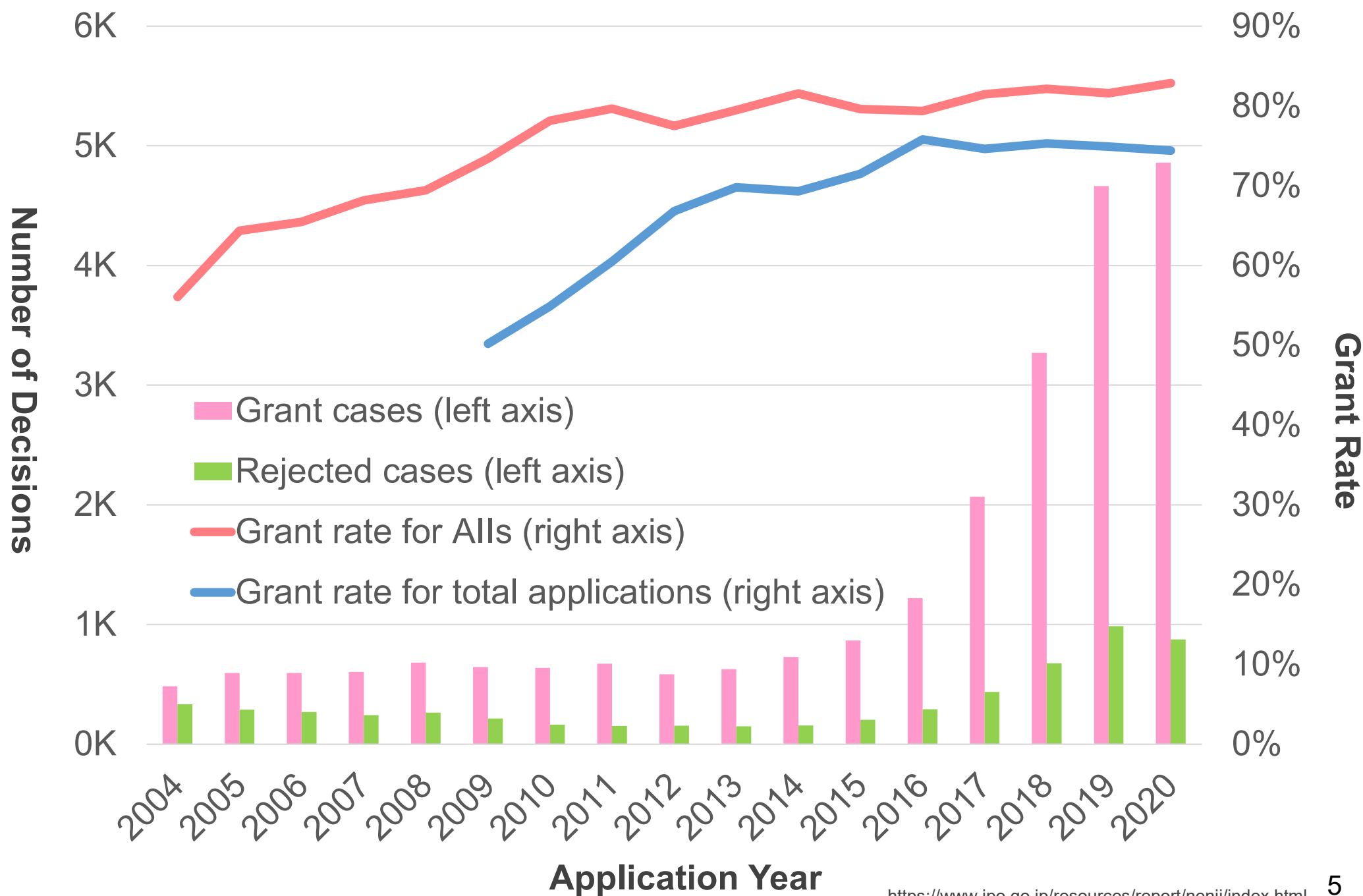
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Applications of AI-Related inventions (AIs)



JPO examination appears favorable toward AIs



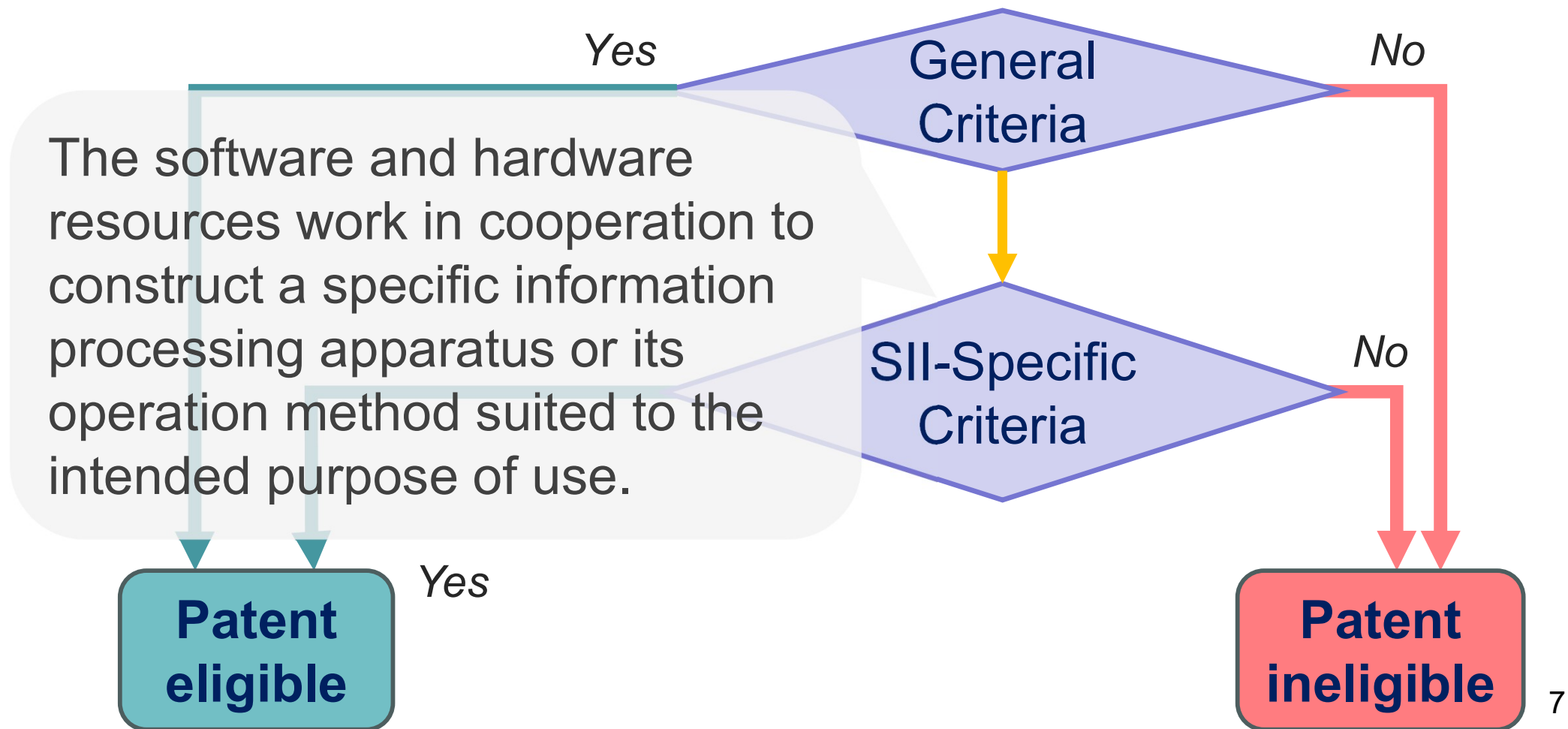
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Flow for Determining Eligibility

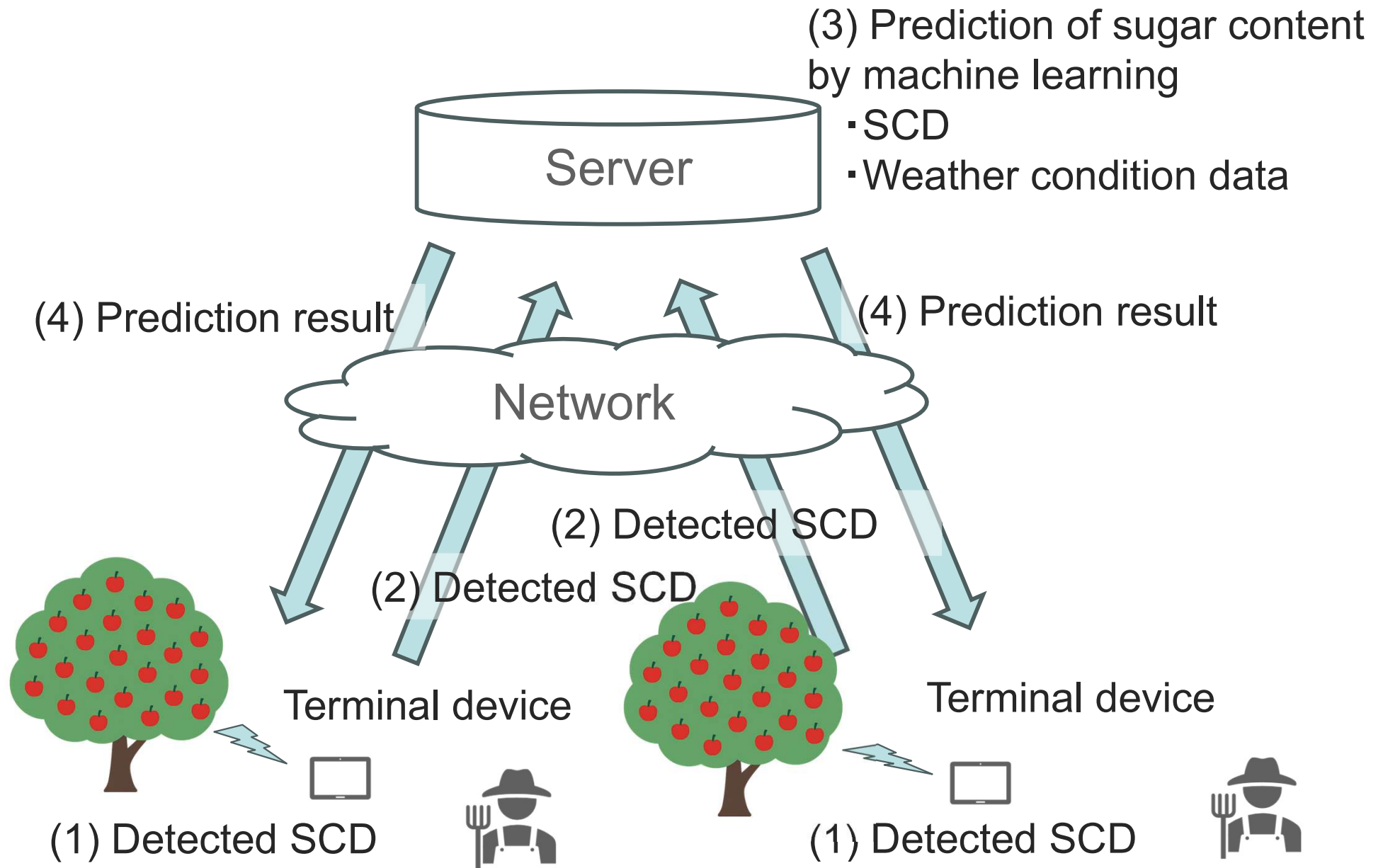
Software-implemented (incl. AI-related) inventions (SIIs)

- 1) First, **general criteria** are assessed: whether the invention as a whole utilizes a law of nature.
- 2) Second, **SII-specific criteria** are assessed, when the eligibility of the invention is not determined based on the general criteria.



Imaginary Examination Example

Sugar Content Data (SCD) of Apples and Method for Predicting Sugar Content of Apples



Imaginary Examination Example

Claim 1. **Sugar content data (SCD)** of apples before harvest, measured by a portable apple sugar content sensor that performs reflective near-infrared spectroscopy analysis.

× Does not constitute an “invention.”

Claim 2. **The SCD** of apples according to claim 1, received by a receiving unit of a server and stored in a storage unit of the server.

× Does not constitute an “invention.”

Claim 3. **A method for predicting SCD** of apples, comprising:

an analysis step in which an analysis unit of the server analyzes the relationship between pre-harvest apple SCD and weather condition data for a predetermined period and SCD at the time of shipment, based on records;

a receiving step in which the receiving unit of the server receives the pre-harvest apple SCD for a predetermined period as described in claim 1; and

a prediction step in which the prediction unit of the server predicts and outputs SCD of apples at the time of future shipment, based on the analyzed relationship and using the received pre-harvest apple SCD and past/future weather condition data as input.

✓ Does constitute an “invention.”

Imaginary Examination Example 1

Claim 1. **SCD** of apples before harvest, measured by a portable apple sugar content sensor that performs reflective near-infrared spectroscopy analysis.

- The only distinctive feature lies in the content of the presented information.
- No technical features are found in the presentation itself, the presentation means, or the presentation method.

Conclusion :

The SCD of apples in Claim 1 constitutes a **mere presentation of information** and, as a whole, is **not a creation of a technical idea utilizing the laws of nature**, and thus **does not constitute an “invention.”**

Imaginary Examination Example 1

Claim 2. **The SCD** of apples according to claim 1, received by a receiving unit of a server and stored in a storage unit of the server.

- Reception and storage by a server are specified.
- Does not define any means or method for presenting the SCD.

Conclusion :

The SCD of apples in Claim 2 constitutes a **mere presentation of information** and, as a whole, is **not a creation of a technical idea utilizing the laws of nature**, and thus **does not constitute an “invention.”**

Imaginary Examination Example 1

Claim 3 relates to a **method for predicting apple sugar content** using software. The method involves three steps:

- i. **Analysis** – Analyze the relationship between past sugar content and weather data
- ii. **Reception** – Server receives pre-harvest SCD
- iii. **Prediction** – Predict future sugar content using analysis and weather forecasts

Claim 3 invention performs **specific information processing based on technical properties**, such as chemical or biological characteristics related to apples.

Conclusion:

The invention of Claim 3, as a whole, constitutes a **creation of a technical idea utilizing the laws of nature**, and thus **constitutes an “invention.”**

Granted Example – JP7217906B

Title of Invention: Estimation Device, Estimation System, and Estimation Program

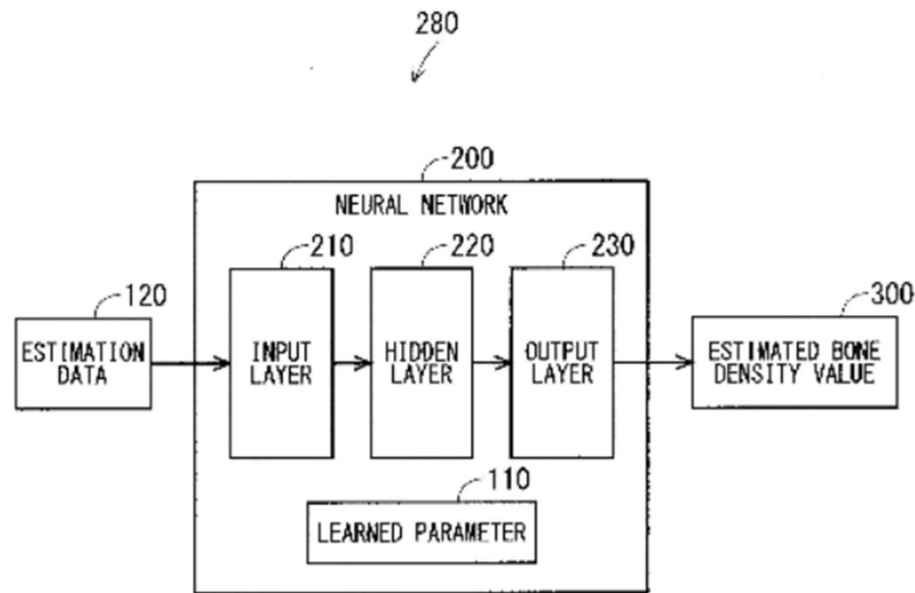
Application Date: Oct 28, 2022 (Div.)

Original Application Date: Sep 10, 2019

Registration Date: Jan 27, 2023

Applicants: Kyocera, University of Tokyo

Allowed w/o OA.



Claim 1. **An estimation apparatus** comprising:
an approximator configured to estimate the density of a bone **based on learned parameters** from input information having a side image of a simple X-ray image in which a human skeleton appears.

Granted Example – JP7605302B

Title of Invention: Musical Score Writing Device, Training Device, Musical Score Writing Method and Training Method

Application Date: Mar 8, 2022

Registration Date: Dec 16, 2024

Applicants: YAMAHA CORPORATION

Allowed w/o OA.

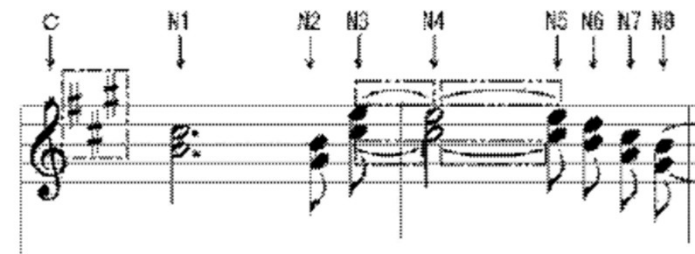
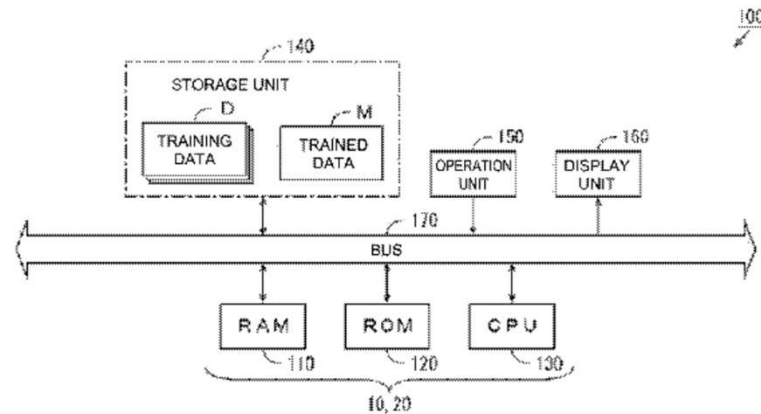


FIG. 5

Claim 1. A musical score writing device comprising:
 a reception unit that receives a musical note sequence that is composed of a plurality of musical notes, and
 an estimation unit that uses **a trained model** to estimate attribute information and each musical note for writing a musical score, wherein
 the trained model is a machine learning model that has learned an input-output relation between a reference musical note sequence made of a plurality of reference notes, and reference attribute information and each reference note for writing a musical score.

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Cloud Accounting Software Patent Lawsuit

Plaintiff: freee

2013 – Introduced *automatic journalizing* function

2014 – Patent granted (JP Patent No. 5503795)
'795 patent:

Automatic account title allocation using *keyword extraction, priority rules, and mapping table*.

Defendant: Money Forward

2016 – Introduced *automatic journalizing* function

2016 (Oct.) – Sued by freee for patent infringement

Tokyo District Court Decision (July 27, 2017)
Claim dismissed – Money Forward won.

Reason:

Defendant used a **machine learning-based** system, different from the patented “rule * table” method.



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Tips :

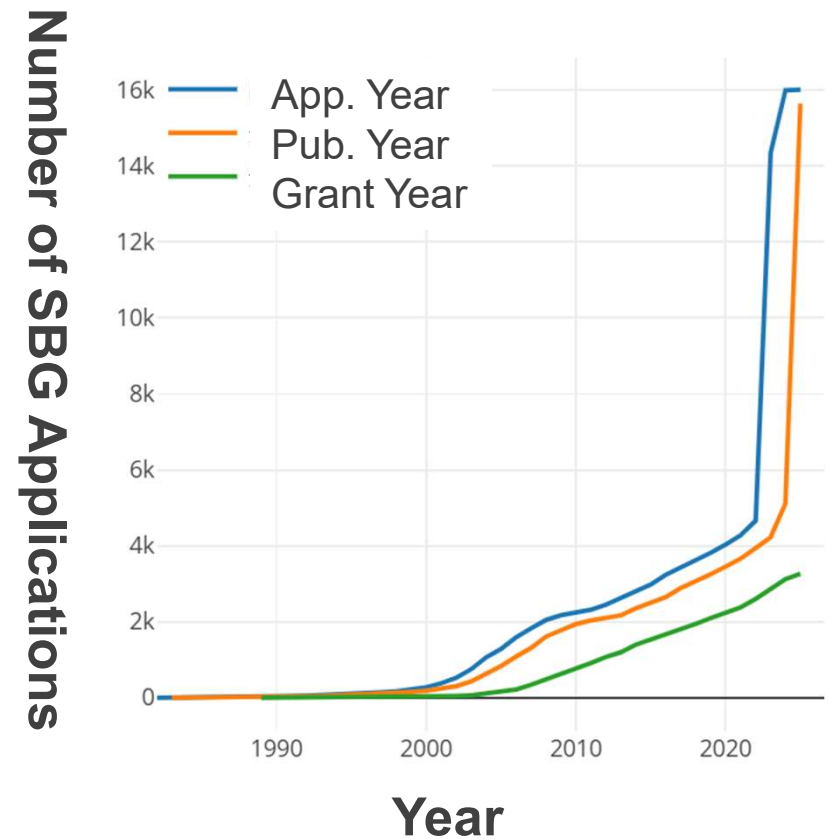
1) AI Implementation can avoid infringement

2) Importance of functional claim drafting

- Broader functional wording — e.g., “classifying using specific terms” — might have covered both rule-based and ML-based implementations.
- When both rule-based and ML-based processes could achieve the function, claims should be drafted to encompass either approach.

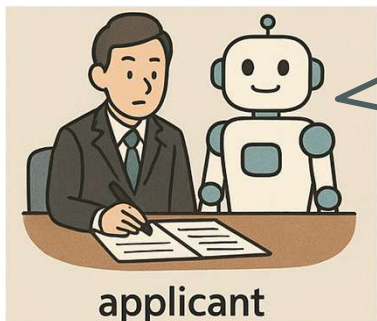
SoftBank Group – Mass AI Patent Publication

- Apr 1–9, 2025: about 9,800 AI-related patent applications of SBG published in Japan.
- Covers broad areas: telecom, autonomous driving, energy, healthcare, metaverse.
- Many of the inventions feature a structure of **automatic problem extraction** → **automatic solution generation**
- Building an intellectual property portfolio that integrates **technology with social significance**



Can AI Be an Inventor? - DABUS Case in Japan

A National Entry of a PCT application on Aug 5, 2020, with the inventor's name of "DABUS", was objected to by the JPO's formality examination.



No provision in the Patent Act limiting who can obtain a patent right.

Filing a lawsuit

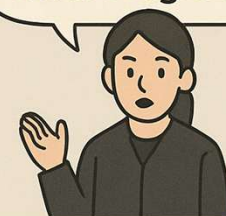


An inventor listed in a patent application must be a natural person.



Under the current patent law, inventions are limited to those made by natural persons.

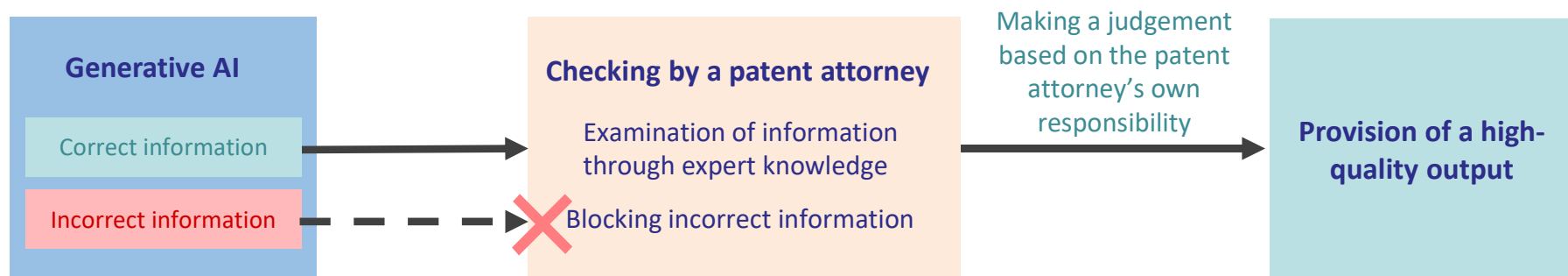
Court hopes for future legislation



JPAA AI Utilization Guidelines

- JPAA issued **AI Utilization Guidelines** for members in Apr 2025.
- Focus on understanding **AI's features and risks** to **enhance productivity and service quality**.
- Builds **client confidence** by explicitly adhering to the guidelines.

Process of information examination and provision by a patent attorney



Examples of key points for checking by a patent attorney

- Check the consistency with facts
- Check the output against expert knowledge
- Compare the output with the latest industry trends
- Confirm the reliability of the information source
- Make a judgment based on practical experience
- Check the logical consistency

Key Takeaways

- An increasing number of AIs are patented by JPO.
- JPO examination appears favorable towards AIs.
- JPAA's AI Utilization Guidelines help enhance productivity and quality of work.



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Kazumi Makiuchi

JPAA International Activities Center

makiuchi@sat-patent.co.jp