2017 TIPA INTERNATIONAL CONFERENCE

-Overview of International Patent Law and Practice-

Recent Development of Patent Law in Japan

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Overview

- Briefing Recent Amendments to Patent Law & Examination Guidelines

- Topics Addressed
  - Inventive Step
  - PBP (Product-by-Process) Claim
  - Computer Software-Related Invention
  - Opposition

Law and Guidelines Governing Patent Practice in Japan

- Patent Law

- Guidelines for Examination

  - Examination Guidelines for Patent & Utility Model
    https://www.jpo.go.jp/cgi/link.cgi?url=/shiryou/kijun/kijun2/tukujitu_kijun.htm (JP)
    https://www.jpo.go.jp/tetuzuki_e/t_tokkyo_e/1312-002_e.htm (EN)

  - Examination Handbook for Patent & Utility Model
    https://www.jpo.go.jp/shiryou/kijun/kijun2/handbook_shinsa.htm(JP)
    https://www.jpo.go.jp/tetuzuki_e/t_tokkyo_e/handbook_sinsa_e.htm(EN)

Recent Amendments to Patent Law

- Patent Law has been amended to re-introduce a post-grant opposition system (effective as of April 1, 2015).
- Patent Law has been amended to expand relief in respect of time limits (effective as of April 1, 2015) and introduce new provisions relating to procedural maters in accordance with PLT provisions (effective as of April 1, 2016).
- Patent Law has been amended to reduce official fees (effective as of April 1, 2016).
- Patent Law has been amended to introduce new provisions relating to employee's invention (effective as of April 1, 2016). According to the new provisions, if a specific agreement exists, the right to obtain a patent for an invention will automatically belong to an employer. An employee acquires a right to receive reasonable economic benefits in return.

Examination Guidelines in Japan
-Guidelines and Handbook-

- **Examination Guidelines:**

  providing basic ideas regarding application of Patent Law

- **Examination Handbook:**

  providing procedural matters and points to consider when conducting an examination; and

  providing examples to understand the basic ideas provided in Examination Guidelines

Contents of Guidelines & Handbook

Examination Guidelines

- Part I Outline of Examination
- Part II Description and Claims
- Part III Patentability
- Part IV Amendments of Description, Claims or Drawings
- Part V Priority
- Part VI Special Applications
- Part VII Foreign Language Written Application
- Part VIII International Patent Application
- Part IX Extension of Patent Term
- Part X Utility Model

Examination Handbook

- Part I–Part X
- Part XI Affairs in General
- Annex A Case examples
- Annex B Application examples of the specific technical fields

  Chapter 1 Computer software related Inventions

  Chapter 2 Biological Inventions

  Chapter 3 Medicinal Inventions
- Annex C Handbook for Preparing Report of the Utility Model Technical Opinion
- Annex D Court precedents

Amendments to Examination Guidelines in 2015

- Examination Guidelines and Handbook widely amended in 2015
- Overall purposes of amendments in 2015

  -Simpler and clearer description

  -Providing comprehensive examples and cases to enhance understating of the basic ides of the Examination Guidelines

  -256 case examples → 372 case examples & 193 Court decisions when amended
- Guidelines regarding inventive step and PBP claim amended
- The former examination guidelines relating to special technical fields moved to Annex B of Examination Handbook

Amendments to Examination Guidelines after 2015

- Examination Handbook further amended to revise clarity requirement regarding PBP Claim on March 30, 2016

- Examination Guidelines and Handbook amended to revise guidelines regarding a use invention for food product and a patent term extension, and etc. on April 1, 2016

- Examination Handbook updated to add case examples for technologies related to IoT, AI and 3D printing on September 28, 2016 & March 22, 2017

Topics Addressed

- Inventive Step
- PBP (Product-by-Process) Claim
- Computer Software-Related Invention
- Opposition

Trend of Inventive Step

- The bar on inventive step has been lowered since around 2009.

  IP High Court decision, 2008(Gyo-Ke)10096 decided on January 28, 2009 “Circuit connecting member case”, has helped lowering the bar on inventive step.

  Avoiding the use of hindsight or *ex post facto* analysis in assessing inventive step

  Putting weight on “suggestion shown in the references”

- The increased allowance rate reflects this trend.

Year	2010	2011	2012	2013	2014	2015
Allowance rate	54.9%	60.5%	66.8%	69.8%	69.3%	71.5%

- The Examination Guidelines revised in 2015 follows this trend.

Assessment of Inventive Step

- Identifying a claimed invention
- Determining a primary reference
- Identifying a difference between the claimed invention and the primary reference
- Determining whether there is a reasonable basis that the skilled person would easily arrive at the claimed invention starting from the primary reference in combination with a secondary reference relating to the difference or common general knowledge by **comprehensively considering factors denying and supporting the existence of inventive step**

Main Factors for Reasoning

Factors in support of the non-existence of inventive step

- Motivation for applying a secondary reference to a primary reference
  - Relevance of technical fields
  - Similarity of problems to be solved
  - Similarity of operations or functions
  - Suggestions shown in the prior art references
- Design variation of primary prior art
- Mere aggregation of prior arts

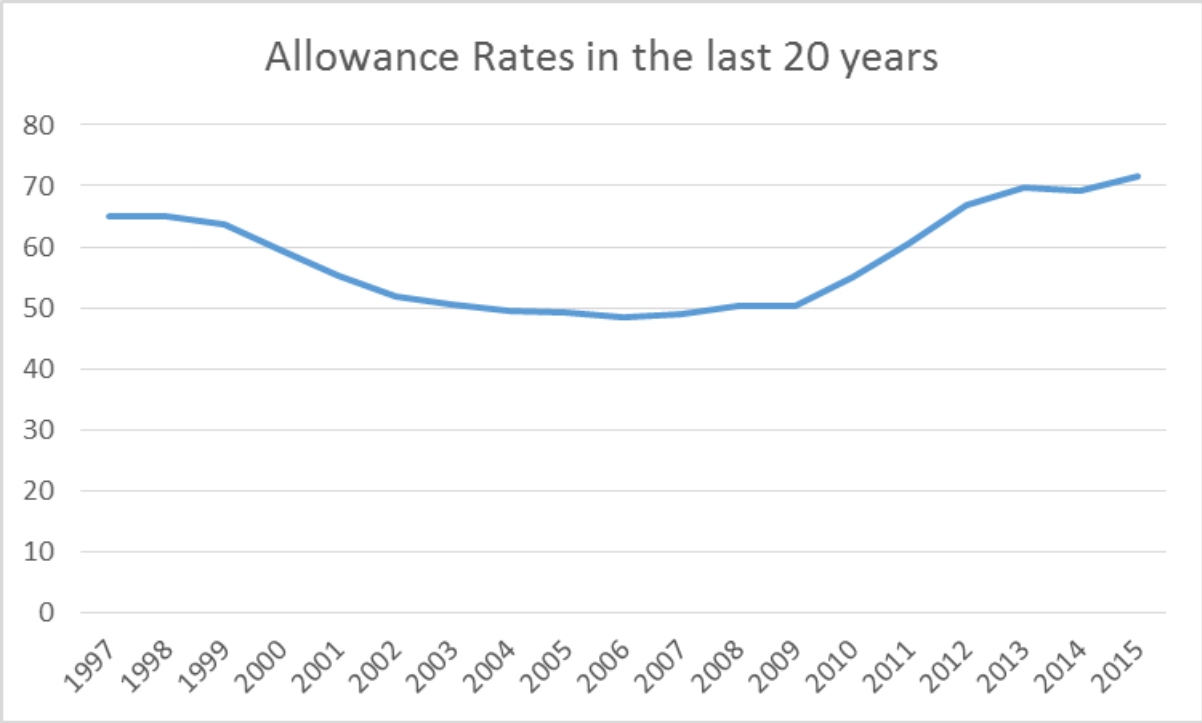
Factors in support of the existence of inventive step

- Advantageous effects
- Obstructive factors

  (Teaching away)
  - Application of the secondary prior art to the primary prior art conflicts with the purpose of the primary prior art.
  - The teaching of the primary prior art excludes application of the secondary prior art to the primary prior art.

The both factors for denying and supporting the existence of inventive step should be comprehensively considered in assessing an inventive step

Will the trend continue or the bar be raised?



PBP (Product-by-Process) Claim

- A Product-by-Process claim defines a product by a process that produces the product.

- In the decision of *Pravastain Sodium Case*, 2012 (Ju) 1204 and 2658, on June 5, 2015", the Supreme Court held:

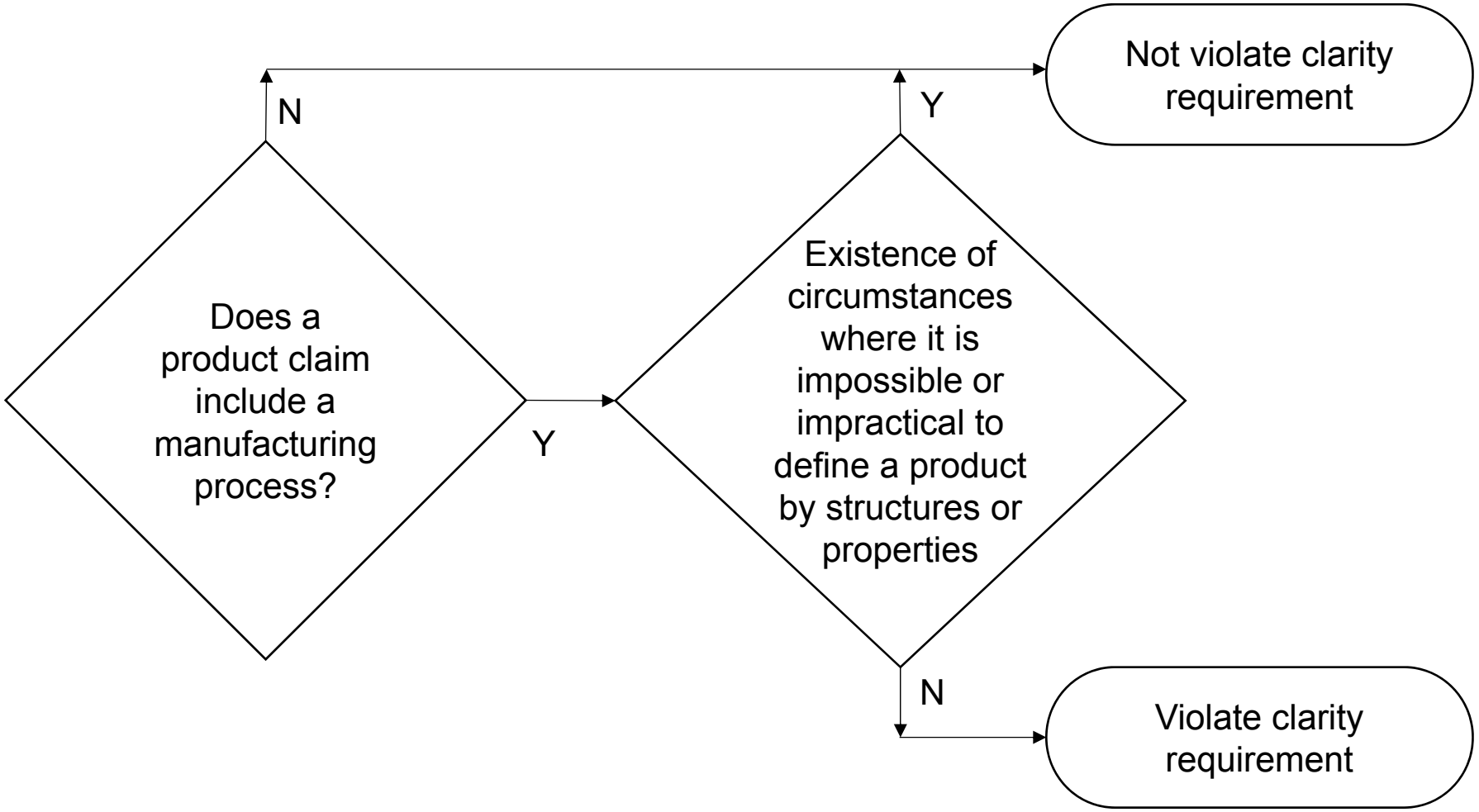
    - A PBP claim should be construed as product per se, regardless of the process recited in the claim; and

    - A PBP claim can satisfy the clarity requirement only when the product was "impossible" or "extremely impractical" to be defined by its structure or properties at the time of filing.

1st Amendments to Handbook (PBP Claim)

- In response to the latter holding of the Supreme Court, Examination Guidelines and Handbook were revised to include **additional clarity requirement which is exclusively applied to a PBP claim**.
- A PBP claim satisfies the clarity requirement (Art. 36 (6)(ii)) only when the product was “impossible” or “extremely impractical” to be defined by its structure or properties at the time of filing.
- Failure to comply with the clarity requirement (Art. 36 (6)(ii)) is the reason of **rejection** as well as **invalidation**.
- The use of PBP claim is substantially limited to the situation where the product cannot be described by its structure or properties.
- Previously, a PBP claim itself did not violate the clarity requirement (Art. 36 (6)(ii)) if the claim meets the general clarity requirements.

Assessment of Additional Requirement for PBP Claim



2nd Amendments to Handbook (PBP Claim)

- 2015 Amendments (1st Amendments) to Handbook introduced stringent guidelines regarding **Step 1**, which raised questions about the conventional claim drafting. For example, product claims in the mechanical field sometimes include **a product or element made by a certain process step (e.g. inserting, welded, coated,….)**.

- Examination Handbook were further amended to relax the strict guidelines to confirm that a claim that includes a manufacturing process should not be rejected due to the lack of clarity if **structure or properties of the product defined by the manufacturing process is clear** by considering the disclosure of the application and common general knowledge and add examples where a claim merely recites the structure or characteristics of the product by a process. e.g. “a member B **welded to** a member A”; "A pigment **coated with** a polymer A

- IP High Court Decisions (2015 (Gyo-Ke) 10025 & 2015 (Gyo-Ke) 10242) accord with the 2nd Amendments.

Computer Software (CS)-Related Invention

- Examination of CS-related invention is to be carried out in accordance with Examination Guidelines for CS-related invention which has become a part of **Examination Handbook Annex B** (**Application examples of the specific technical fields, Chapter 1 Computer Software Related Inventions)** at 2015 Amendments (No substantial change).

- In response to a growing interest in emerging technologies such as **IoT, AI & 3D printing**, Handbook (Annexes A & B) were updated on September 28, 2016 & March 22, 2017 to add case examples (23 examples covering eligibility, novelty and inventive step) relating to **IoT, AI, and 3D printing** though the present Examination Guidelines and Handbook are applicable to those technologies.

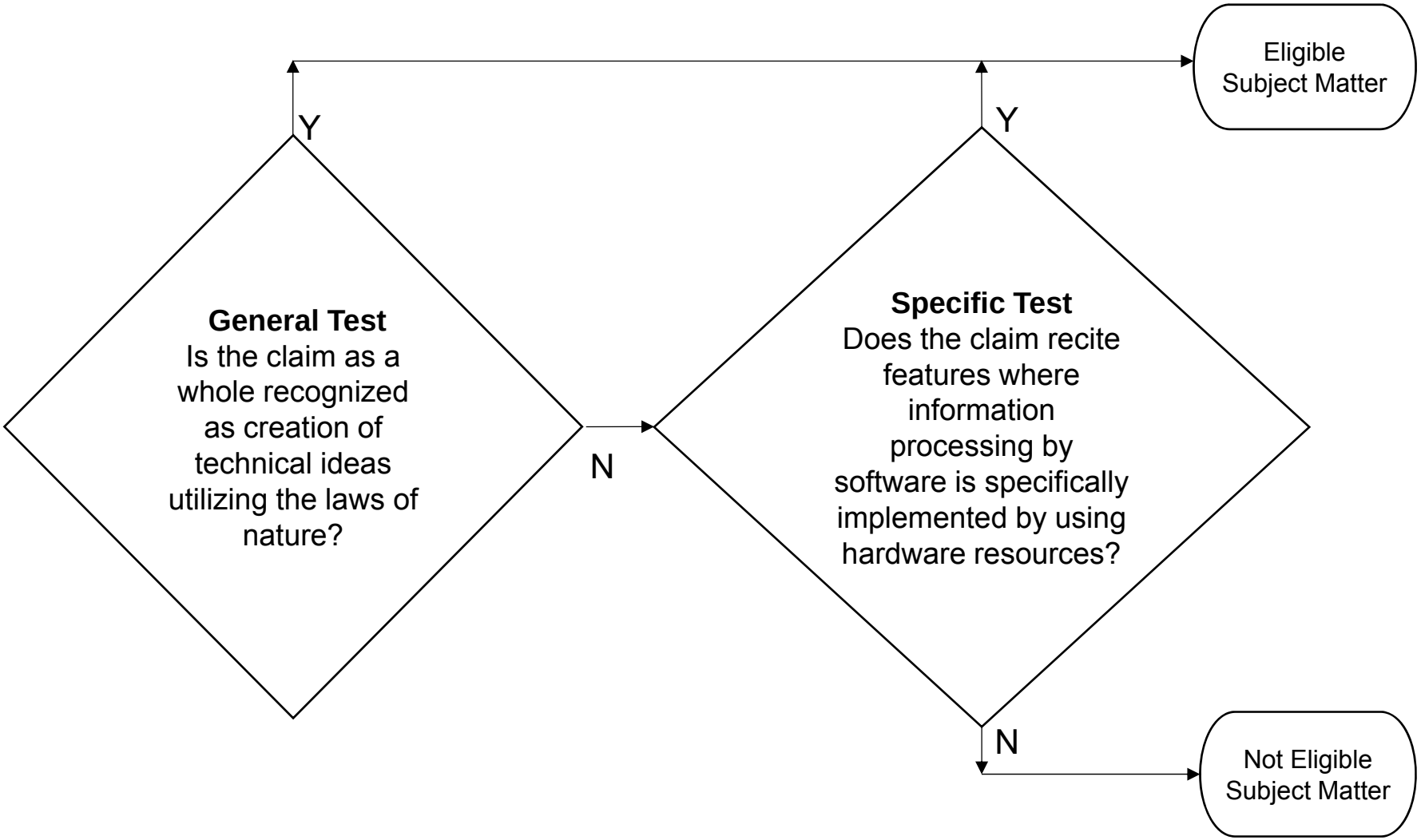
Determining Patent Subject Matter Eligibility

- Article 2(1) of the Patent Act defines an invention as "highly advanced **creation of technical ideas utilizing the laws of nature**."

- Determining patent subject matter eligibility of CS related invention is **whether a CS-related invention is the creation of technical ideas utilizing the laws of nature**.

- There are two criteria (general and specific tests) for determining subject matter eligibility of CS-related invention.

Steps for Determining Subject Matter Eligibility of CS-Related Invention



General Test

- The general test is whether CS-related invention meets the definition of a statutory invention, i.e. the creation of technical ideas utilizing the laws of nature.

- The general test is applied to all inventions including CS-related invention.

- The followings are examples of a patent eligible CS- related invention under the general test:

  (a)those concretely performing **control** of an apparatus (e.g., rice cooker, washing machine, engine, hard disk drive, chemical reaction apparatus, nucleic acid amplifier), or processing with respect to the **control**; and

  (b)those concretely performing information processing based on **the technical properties such as physical, chemical, biological or electric properties of an object** (e.g., rotation rate of engine, rolling temperature, …)

Eligible Claim Example under the General Test Case Example 4-1 in Annex A

An apparatus for controlling a fuel injection amount for an automobile engine by a programmed computer comprising:

a first detecting means for detecting the number of rotations of engine;

a second detecting means for detecting change in the number of rotations of engine; and

a fuel injection amount determining means for determining a fuel injection amount depending on a value detected by the first detecting means and a value detected by the second detecting means.

- The claim is considered to be creation of technical ideas utilizing the laws of nature because the claimed invention relates to an apparatus for specifically performing **processes of control for automobile engine** as well as an apparatus for specifically performing processes based on **physical property of the automobile engine**.
- To be eligible under the general test, it is not necessary to define the interaction between the software and hardware resources in the claim.

Specific Test

- If the eligibility of CS-related invention cannot be determined by the general test, the specific test is applied.

- The idea behind the specific test is that software is regarded as the creation of a technical idea utilizing the laws of nature if information processing by the software is specifically implemented by using hardware resources.

- The **specific test determines the eligibility of CS-related invention by determining whether information processing by software is specifically implemented by using hardware resources**, i.e., whether the claim recites **the interaction between the software and hardware resources** to implement specific calculation or processing of information depending on the intended use by specific means or procedures.

- In accordance with the specific test, “an abstract idea” can be eligible without requiring “significantly more” in contrast to the U.S. practice.

Eligible claim example under the Specific Test Case example 2-9**[Modified]** in Annex B

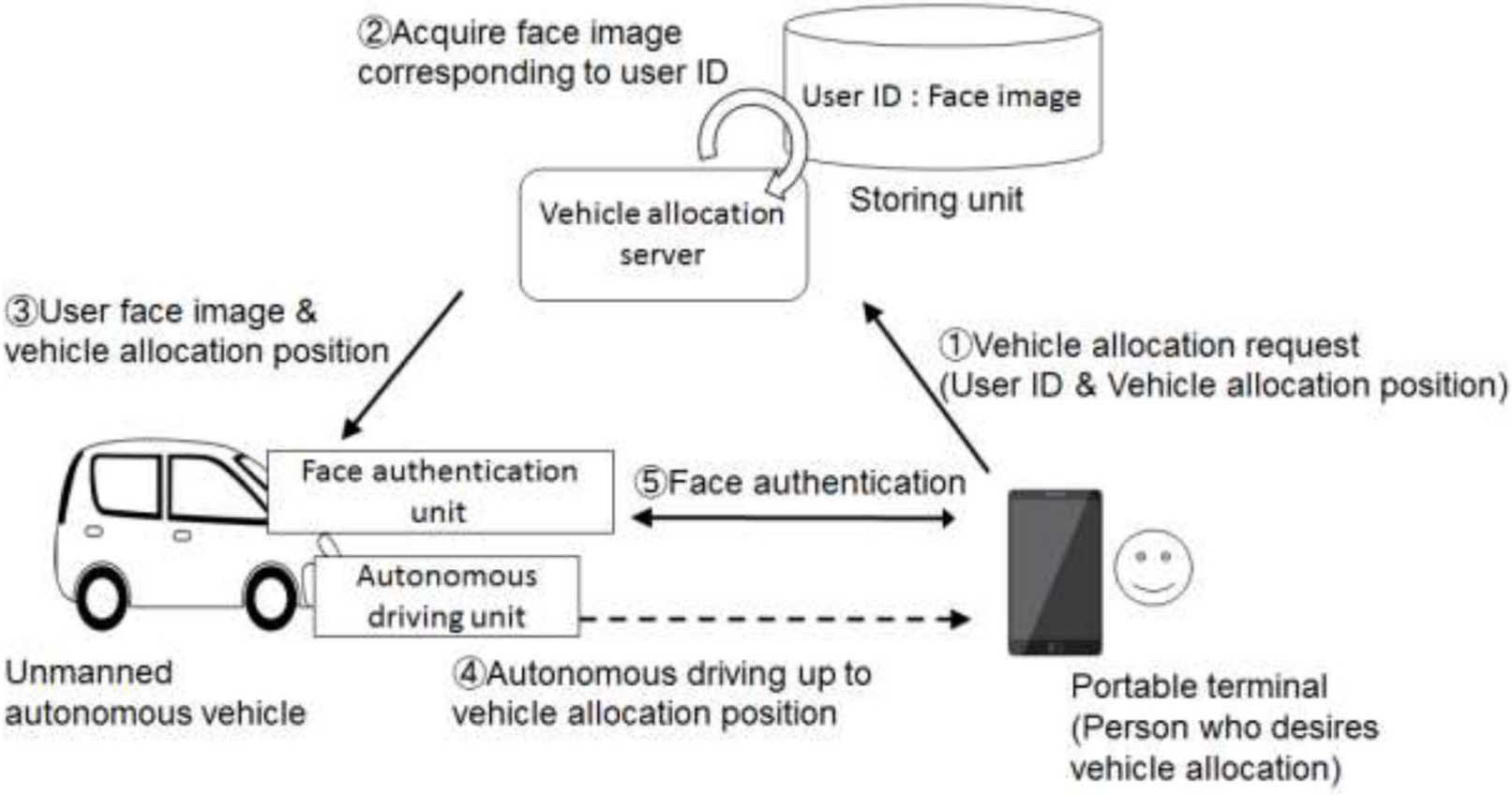
An autonomous vehicle allocating system comprising a vehicle allocation server, a portable terminal, and autonomous vehicles,

said portable terminal comprising a transmitting unit for transmitting a user ID and a vehicle allocation position to said vehicle allocation server,

said vehicle allocation server comprising: a storing unit for storing a face image of a user and a corresponding user ID; an acquiring unit for acquiring the face image from the storing unit in response to receive the user ID from said portable terminal; a specifying unit for specifying an autonomous vehicle based on position information and availability of the autonomous vehicle; and a transmitting unit for transmitting the vehicle allocation position and the face image to the specified autonomous vehicle, and

said autonomous vehicle comprising: an autonomous driving unit; a face authentication unit for performing face authentication processing; and a determining unit for determining a person having a face matching the received face image to allow the use of the autonomous vehicle.

Eligible Claim Example under the Specific Test (Continued)



The claim recites a specific information processing system depending on intended use obtained through cooperation of the software and hardware resources.
The claimed invention is a creation of the technical idea utilizing a law of nature.

Ineligible claim example under the Specific Test Case example 2-10**[Modified]** in Annex B

An autonomous vehicle allocating system comprising a vehicle allocation server, a portable terminal, and autonomous vehicles,

in response to receive an autonomous vehicle allocation request which specifies a location of a person from the portable terminal, the vehicle allocation server allocating an autonomous vehicle to the person.

- The claim does not recite any information processing obtained by the interaction between the software and hardware resources. The claimed invention is not a creation of the technical idea utilizing a law of nature.

Non-Technical Features in Claims

- A claim for CS-related invention often includes technical features and non-technical features.

- When assessing novelty and inventive step on the claimed CS-related invention including technical features and non-technical features, it is appropriate to understand the claimed invention **as a whole** rather than distinguishing between the technical features and the non-technical features.

- This practice is unique to the JPO and in contrast to the practices of other jurisdictions such as EPO where features which do not contribute to the technical character of the invention cannot support the presence of an inventive step.

Allowable Types of Claim

- A CS-related invention can be defined as a **product claim** and/or **method claim**.

- The product claim covers “**system**,” “**program**," "**data structure**," and "**computer readable recording medium**."

- The use of a term “program signal (array)," "data signal (array)," or "program product” violates the clarity requirement except where a term “program product” is definite from the description.

Post-Grant Opposition

- A post-grant opposition system has become effective as of April 1, 2015.
- The JPO abolished the post-grant opposition system in 2004 partly because of redundant measures to invalidate a patent. However, the change in the number of invalidation trial after 2004 showed that the invalidation trial did not serve as an alternative to the opposition system.
- The number of opposition filed with the JPO from April 1, 2015 to June 30, 2017 is 2240.
- The numbers of invalidation trial filed with the JPO in 2015 and 2016 are 231 and 140 respectively.

Opposition Proceedings Compared with Invalidation Proceedings

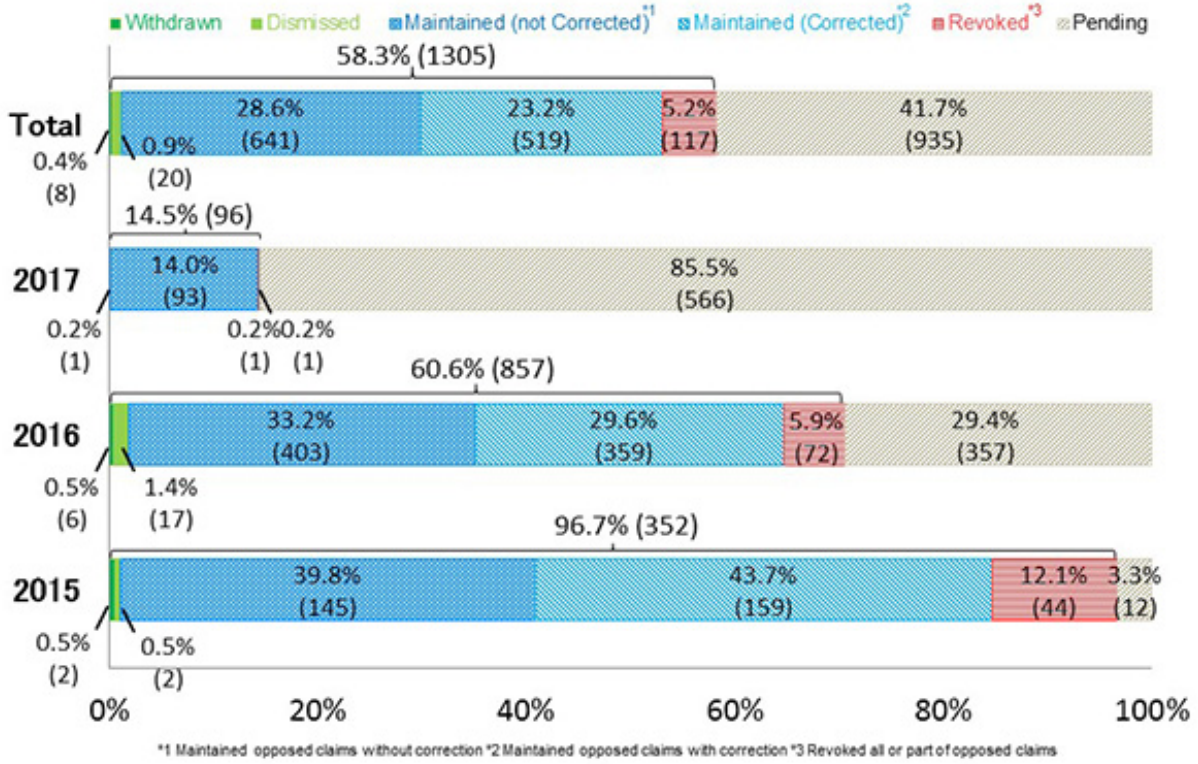
	Opposition	Invalidation Trial
Jurisdiction	JPO	JPO
Petitioner	Anyone	Interested party
Time limit	6 months from patent publication	Anytime
Examination	Ex parte/Documentary proceeding	Inter partes /Oral(documentary) proceeding

- In opposition proceedings, the JPO gives a patentee a chance to submit an argument only if the JPO intends to cancel the patent. The JPO also gives the petitioner a chance to submit an argument if a request for correction is made by the patentee.

- Regarding invalidation of patent, the courts (Tokyo District Court, Osaka District Court and IP High Court) can also judge whether or not a patent should be invalidated in a patent infringement lawsuit.

Status of Opposition
[Excerpt from JPO website]

Graph2: Number of Decisions for Opposition by Year
(as of June 30th, 2017)



*1 Maintained opposed claims without correction *2 Maintained opposed claims with correction *3 Revoked all or part of opposed claims

Thank You

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