High-Quality Patents from the Comparison of IP5 description requirement judgments in notice of reasons for rejection

- Comparative study in PCT applications filed in USPTO, EPO and JPO as their receiving offices -

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Background & objectives

- In line with the globalization of business activities in recent years, international countermeasures and practices are required in IP activities.

- Therefore, our committee studied “Trilateral comparison of the description requirement based on the **First Action**” in 2013.

Background & objectives

- At 2014 PHEP meeting, "description requirement" was decided as one of major issues for harmonization.

Thus,

- From 2014, we further extended our study to cover IP5 office actions. Through this study, we collected additional “typical cases” to exemplify the apparent judgment disagreement cases among IP5 Offices.
- Today, I would like to introduce our research and some examples of selected “typical cases”.

Sampling and determination of cases to be studied

Subject to **identity of claims** judged in JPO, USPTO, EPO, SIPO and KIPO
(serving as a subject to determine description requirement)

Preconditions:

① **PCT applications** internationally published in the first week of August and December 2006 and April and August 2007

* Due to the use of trilateral comparative data, receiving offices are JPO, USPTO and EPO.

② **First Action (hereinafter referred to as FA) has been notified** after entry into the national phase in all IP5

* Identification in EP search report was also counted, and grant of patent without FA was counted as no identification.

③ **Presence of comparable claims** (with confirmation of amendment before examination)

Sampling and determination of cases to be studied

Out of a total of 947 cases …
subjects were narrowed down to **236 cases (population)**
to study **description requirement judgments in FA**
JP-PCT (81 cases), US-PCT (106 cases), EP-PCT (49 cases)

(Note) ●●-PCT
↓
Receiving office of PCT application

Method of comparative study

Compare by the **number** of identifications

Though a general trend is found out, the difference in **population in each receiving office*** makes it difficult to compare directly and the degree (rate) of identifications is somewhat unclear.

*JP-PCT (81 cases), US-PCT (106 cases), EP-PCT (49 cases)

Comparison by the **ratio** of identification

The “ratio of identification” is obtained by dividing the **“number of identifications”** by the **“population (number of cases)”**. The degree of identification for each case is understood at a glance.

Hereinafter, explanation is made one by one based on the ratio of identification.

Comparative study in IP5

1. Overall trend

Statistic data of each requirement (comparison among IP5) such as typical identification

2. Trend in each technical field

Comparison between technical fields in each requirement
“medical and chemical fields” vs “electrical and machine field”

3. Practical tips

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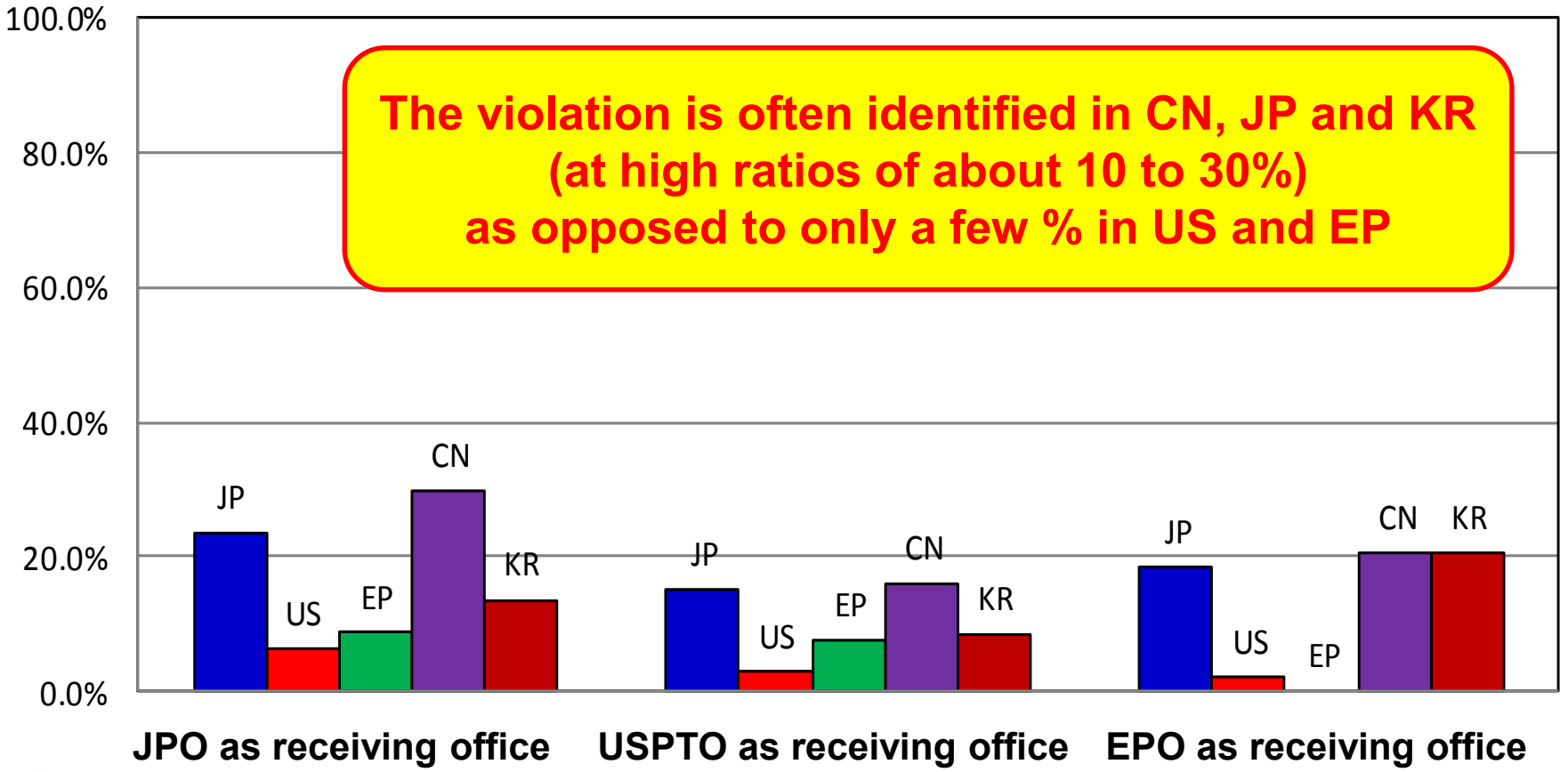
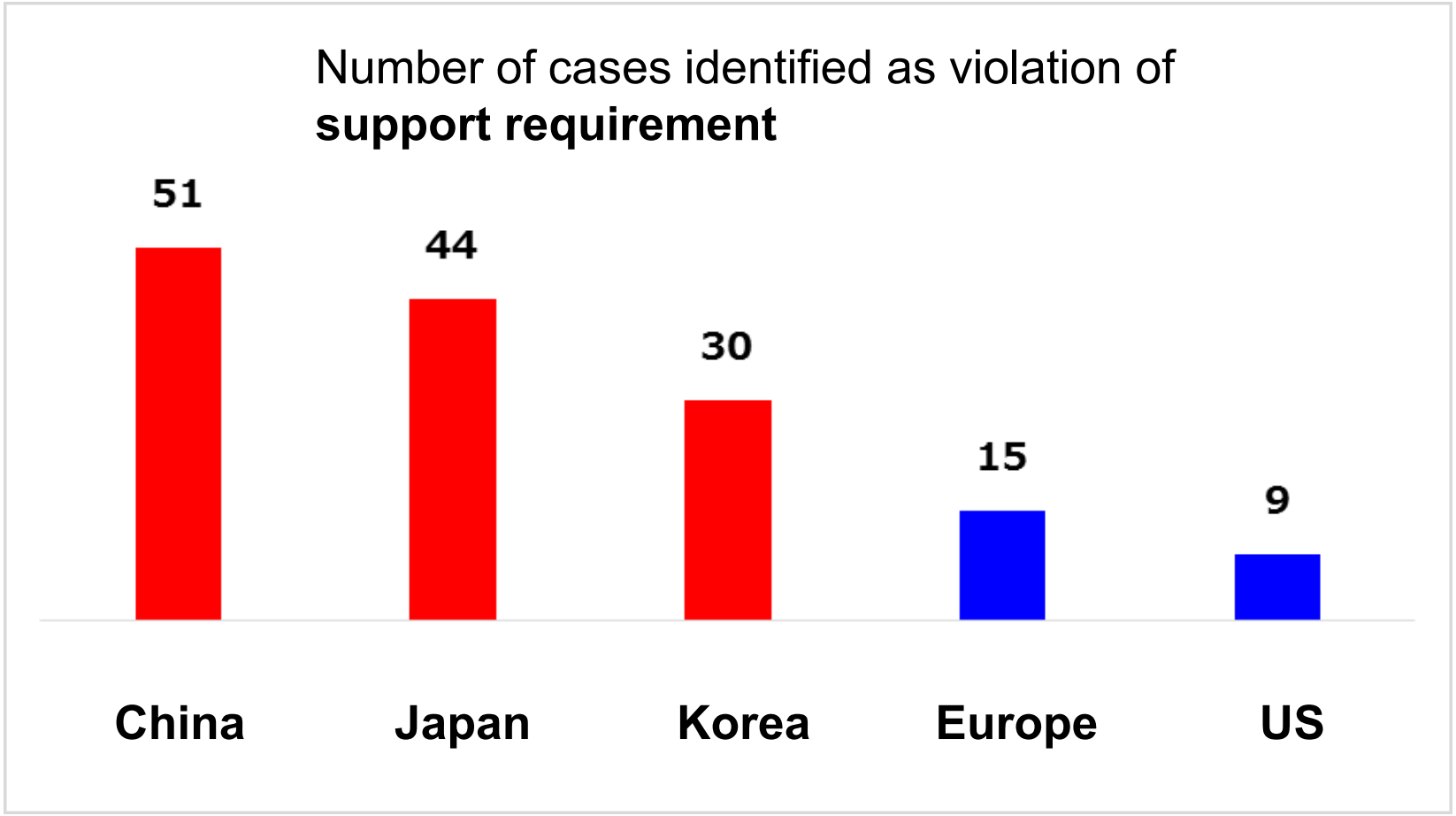
Violation of support requirement



Overall trend (comparison in the number of cases)



China, Japan and Korea tend to have more violations of support requirement

Typical identification (violation of support requirement)

China, Japan and Korea

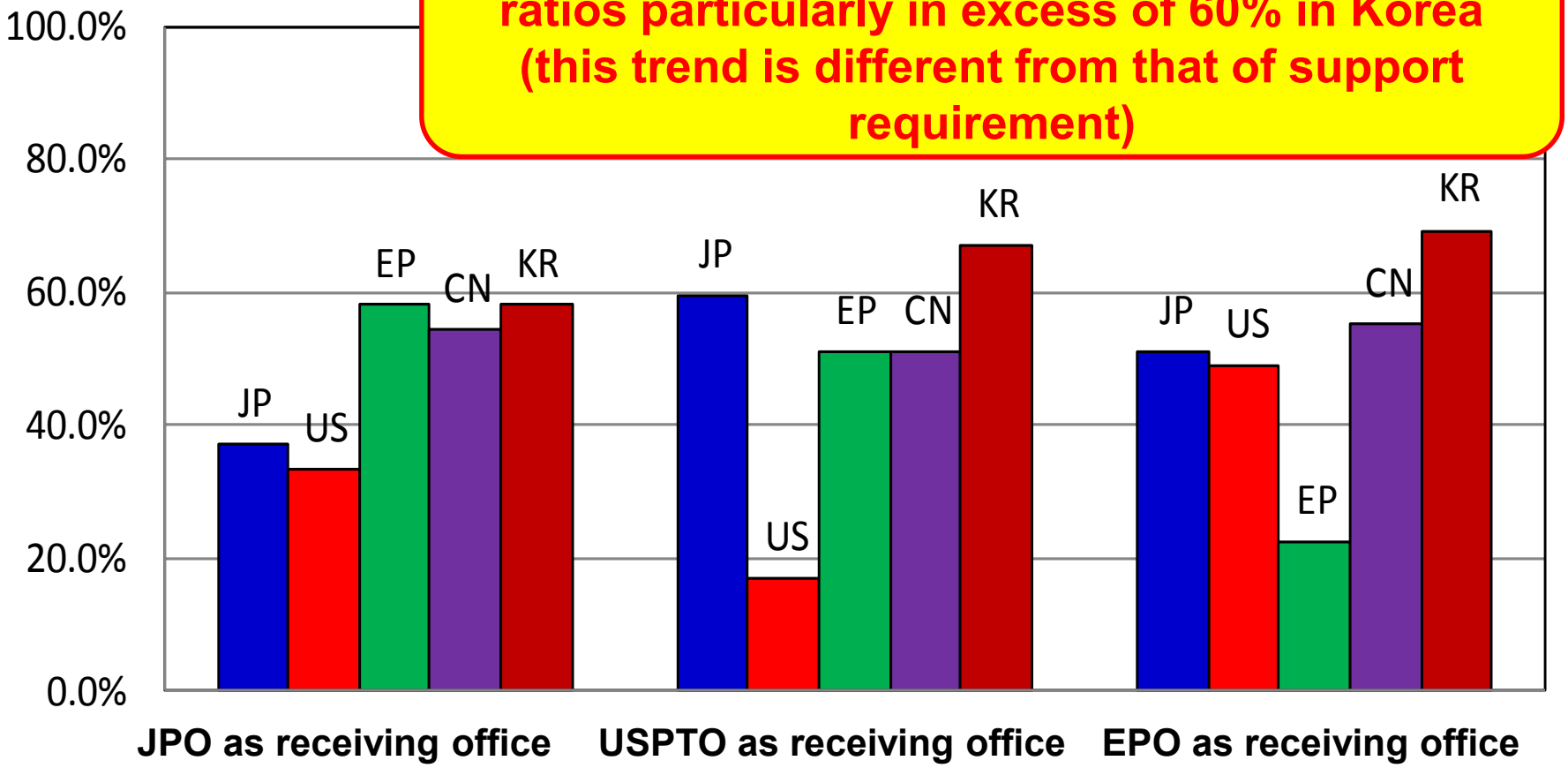
Limited judgment is made based on a specific embodiment (e.g. practical example, etc.)
(Expansion or generalization from a practical example is **denied?**)

US and Europe (less likely to be identified)

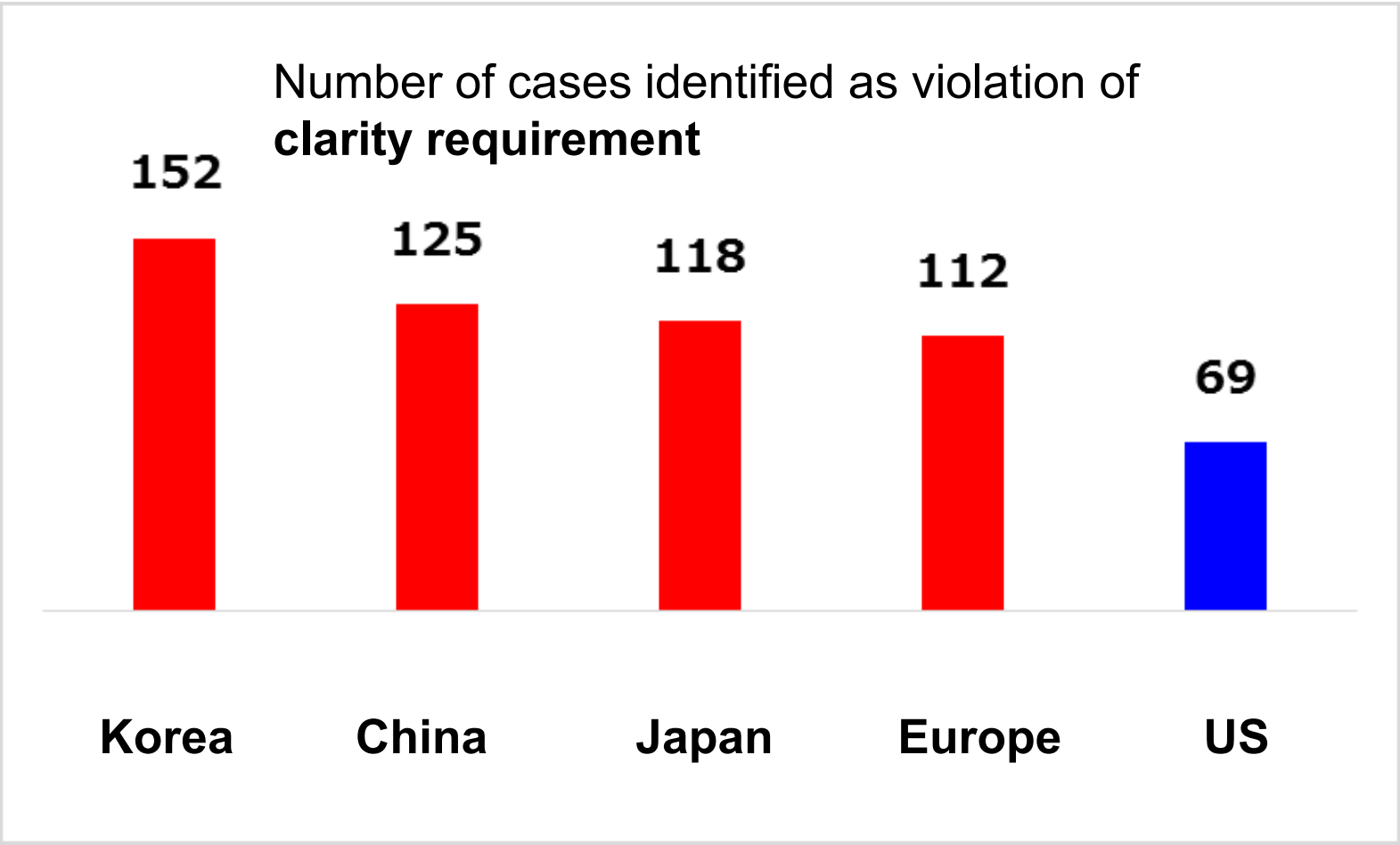
Extent of technical idea (scope of inventions) is reflected in examination?
(**Possible** to expand or generalize considering the number of practical examples)

Violation of clarity requirement

Except for US, the violation is identified at high ratios particularly in excess of 60% in Korea (this trend is different from that of support requirement)



Overall trend (comparison in the number of cases)



Korea, China, Japan and Europe tend to have more violations of clarity requirement

Typical identification (violation of clarity requirement)

Europe

Cases where the violation is identified because **definition of term and a calculation formula** recited in the detailed description of invention are **absent in claims.**

(e.g.) Lower alkyl group

(e.g.) Average particle diameter (whose calculation formula is absent in claims)

Korea, China and Japan

Cases where the violation is identified in **formality** due to the presence of **ambiguous term and wording** (without referring to the detailed description of the invention).

(e.g.) “about”, “substantially”, “approximate”, etc.

(e.g.) “specific current conditions” (identified in Korea and China)

Typical trend (violation of clarity requirement)

Japan, US and Europe

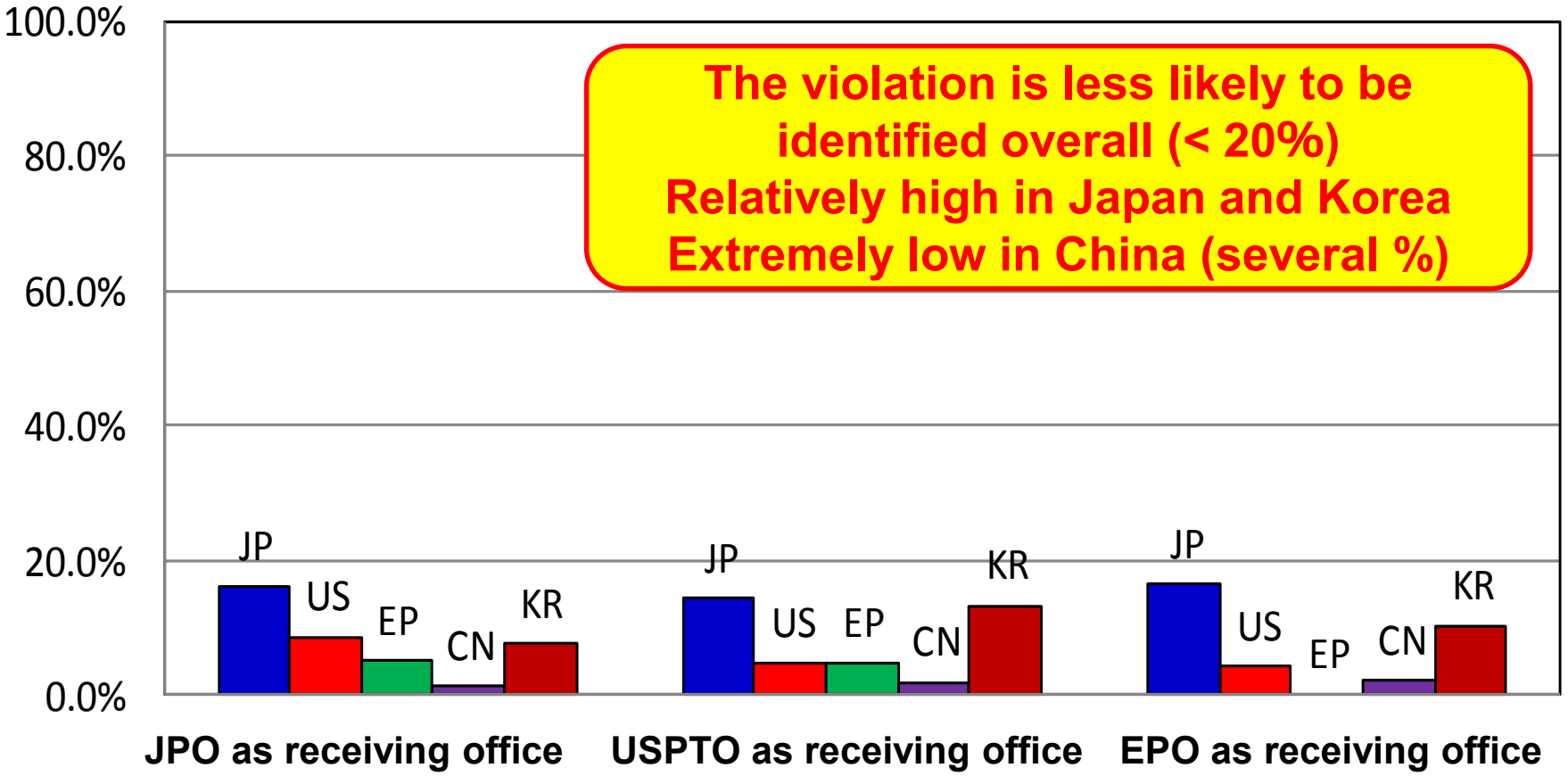
When **a receiving office is the examining office**, violation of clarity requirement is **less likely to be identified**.

For example, in the case of JP-PCT, the violation is less likely to be identified in Japan.

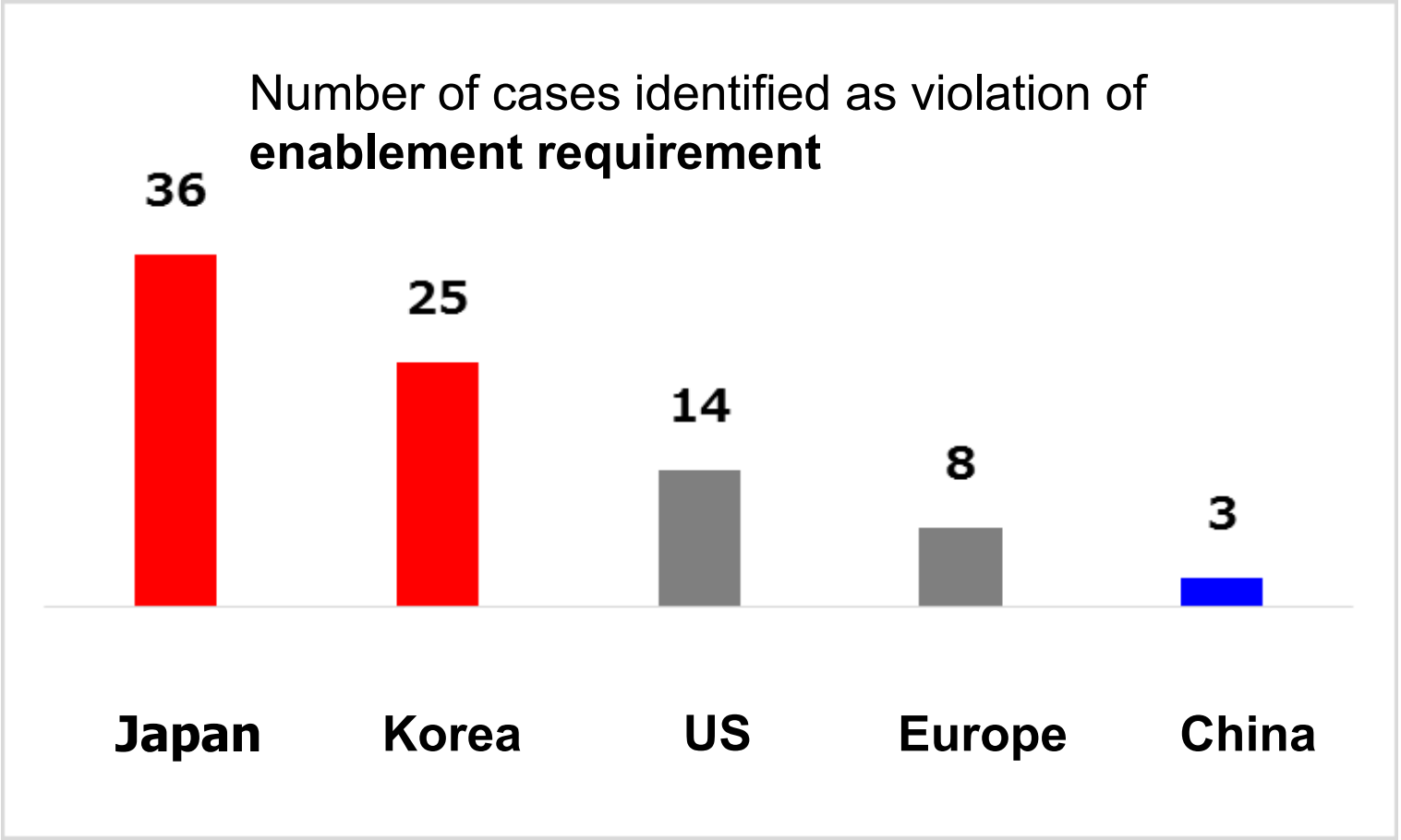
（∵ because majority of applicants are Japanese who are competent in practices.）

Comparison in comprehensive statistics shows no significant impact.

Violation of enablement requirement



Overall trend (comparison in the number of cases)



Japan and Korea tend to have more violations of enablement requirement

Typical identification (violation of enablement requirement)

Japan and Korea

Cases where the violation is identified if there is a **Markush-type** claim, based on the judgment that the invention is not necessarily enabled in options **other than those** shown in practical examples.

Cases where claims are **expressed functionally**.

Cases **in combination with** violation of support requirement are found here and there in Japan.

China (less likely to be identified)

The violation is **identified in small numbers** in the biological field.

Those identified as violation of enablement requirement in other offices are identified as violation of support requirement (does this affect submission of certificate of experimental result?).

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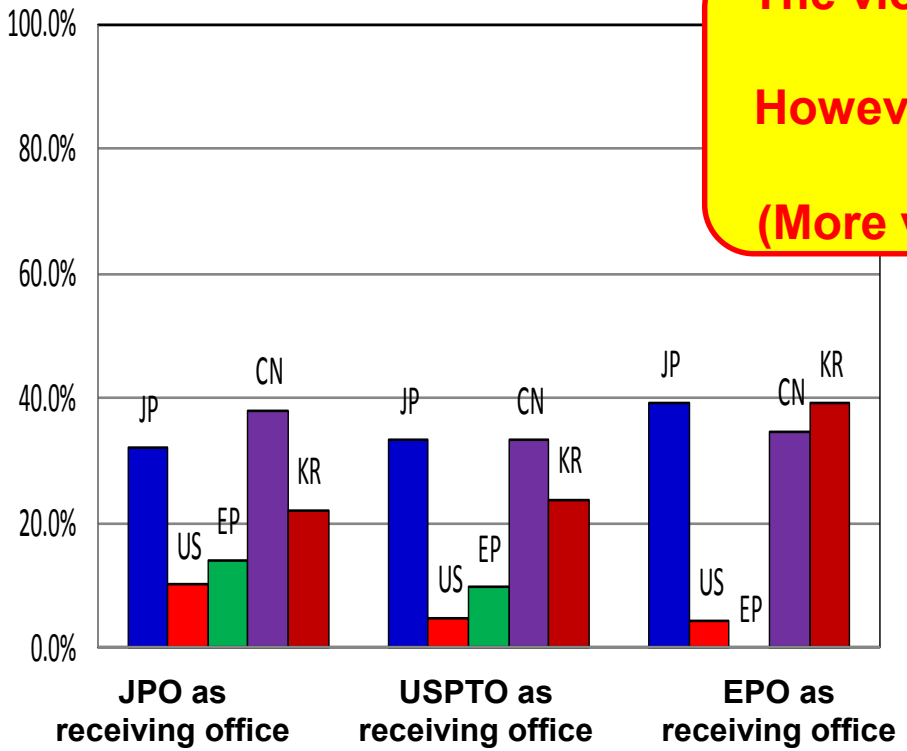
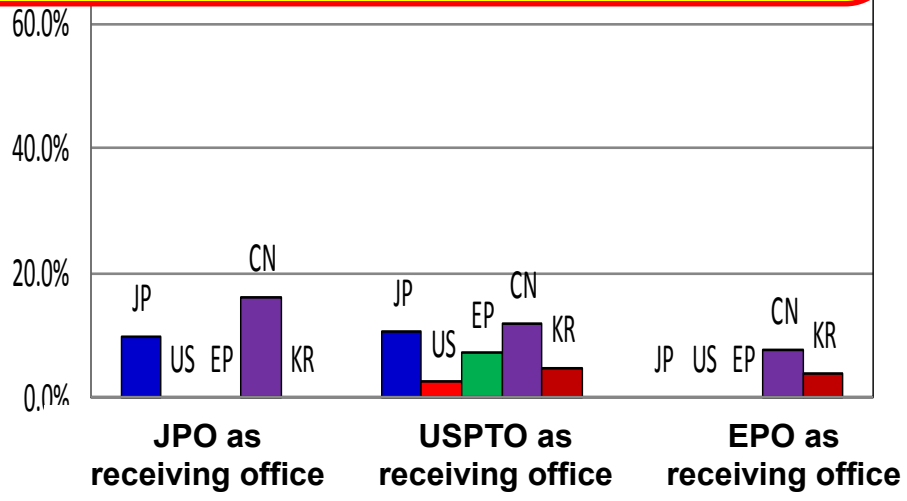
Violation of support requirement

**The violation is identified significantly in the medical/chemical fields.
However, this trend is similar irrespective of technical fields
(More violations in China, Japan and Korea)**



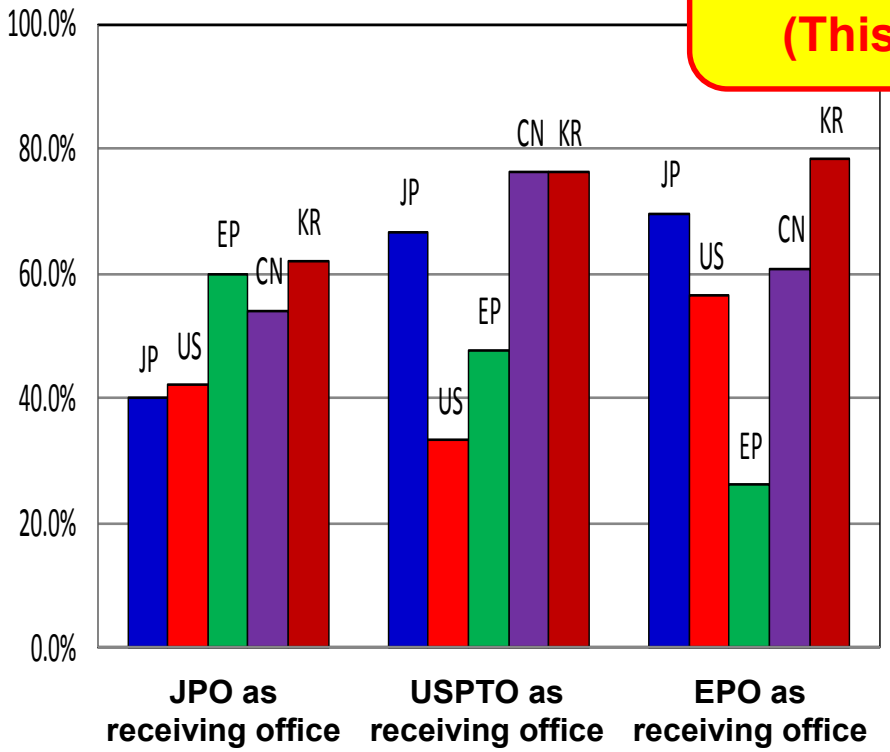
Medical and chemical fields



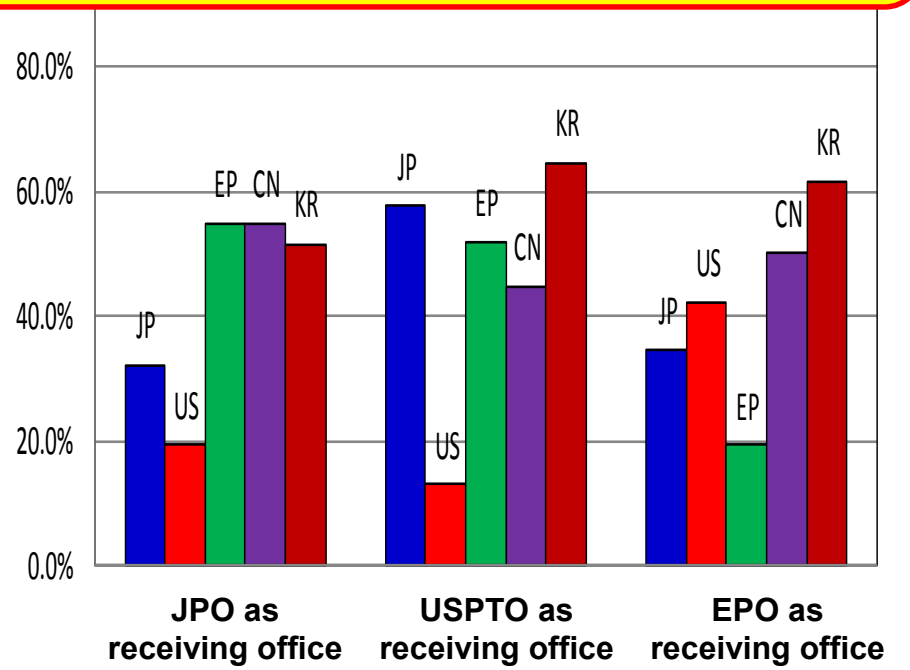
Electrical and machine fields

Violation of clarity requirement

**The violation is often identified overall.
No difference among technical fields.
(This trend tends to be similar each other)**



Medical and chemical fields

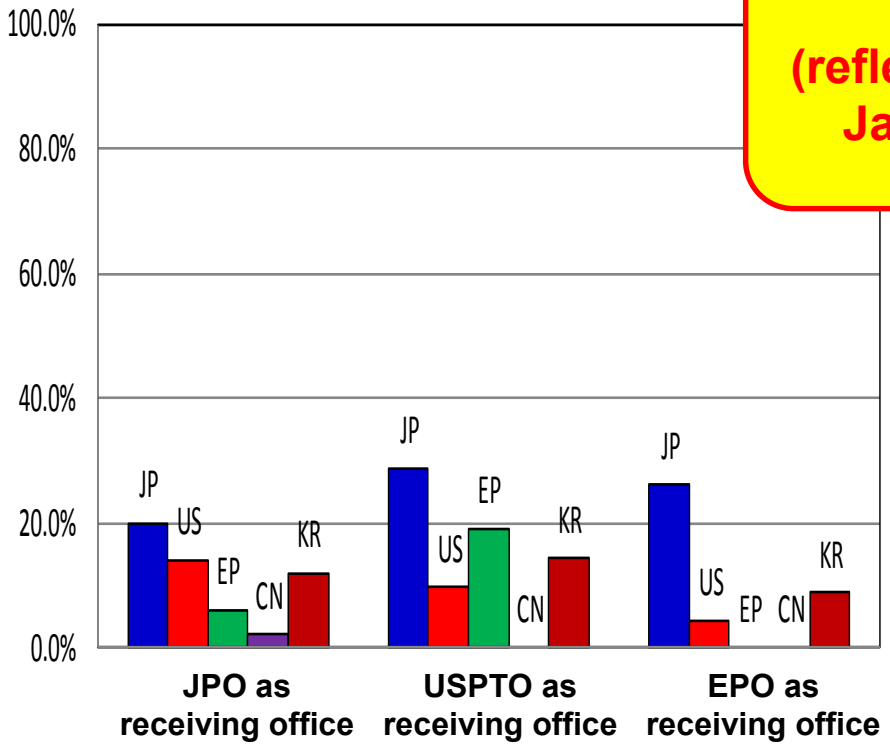


Electrical and machine fields

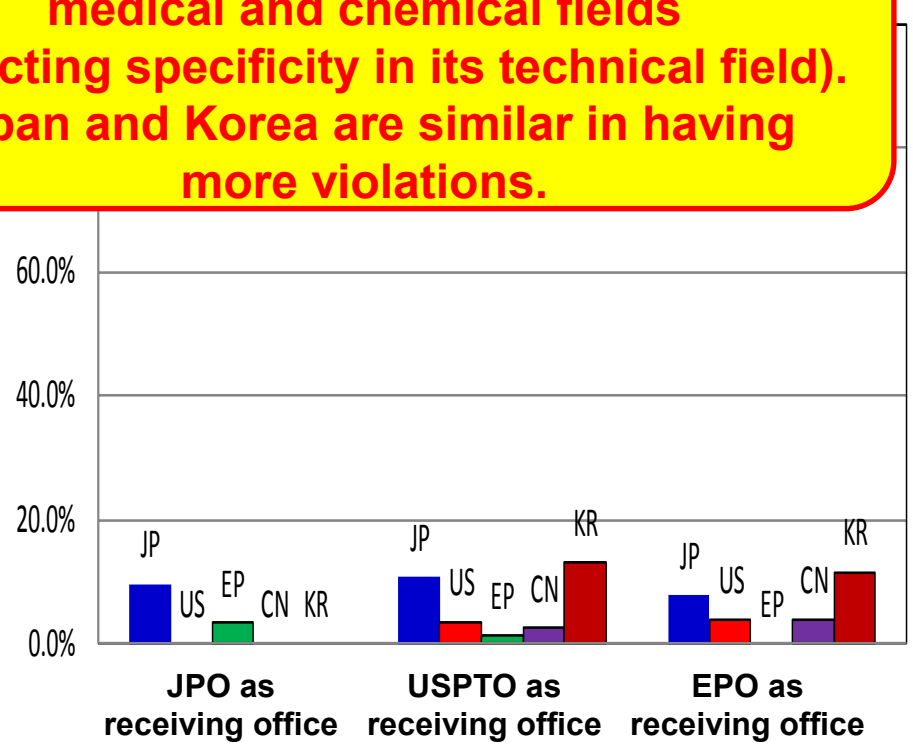
Trend in each technical field (violation of enablement requirement)

Violation of enablement requirement

The violation is often identified in the medical and chemical fields (reflecting specificity in its technical field). Japan and Korea are similar in having more violations.



Medical and chemical fields



Electrical and machine fields

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Practical tips

Support requirement

- Further **enrich** **contents in the detailed description of the invention**.
  Enrich **embodiments** in the medical and chemical fields (in both quantity and quality).
  Enrich **drawings and their explanations** in the electrical and machine fields.

- Include **basis** to allow expansion and generalization of specific embodiments and the scope of claims (on a case-by-case basis).

- **Prepare several sub-claims expressed in specific concepts** so as make amendment in response to strict identification.
  * In PCT application, this can be made by voluntary amendment after entry into the national phase.

Clarity requirement

- Avoid use of ambiguous terms and wording **as much as possible**.

- **If there is no choice other than using ambiguous terms and wording**, it should be explained in the detailed description of the invention that use of these terms and wording does not make the scope of invention indefinite in view of the common general knowledge.
  For example, the term “substantially circular” in the present invention means the distance from the center・・・

- **Even if a general technical term is used**, its **definition and explanation** should be provided in the detailed description of the invention.

Enablement requirement

- Further **enrich** **contents in the detailed description of the invention**.
  Enrich **embodiments** in the medical and chemical fields (in both quantity and quality).
  It should be stated that the invention **is similarly enabled in other embodiments** from a practical example.
  * However, excessive description may cause lack of inventive step.

- In the case of a functional claim, further enrich drawings or specifically state **relevance of function and effect**.

Practical tips

Common items

- **Considering different judgment in each country**, **amendment** should be made **before examination** in offices that provide typical identification so as to avoid unnecessary notice of reasons for rejection.

  For example, the following amendment should be made proactively in Europe:
  "Lower alkyl group" → "1-4C alkyl group"

Findings

- Each IP5 office does not necessarily find the same ground of lack of description requirement.
- The number of rejections indicating lack of “Written Description” was more frequent at KIPO, SIPO and JPO, particularly evident in chemical and biotechnology fields.
- The number of cases identified as violation of clarity requirement tends to be less in offices serving as receiving offices than other offices.

Thank you for your attention

Overall trend (comparison in the number of cases)

Number of cases identified as violation of **support requirement**

Japan (44)
China (51)
Korea (30)
> Europe (15) > US (9)

Number of cases identified as violation of **clarity requirement**

Korea (152), China (125)
Europe (112), Japan (118)
> US (69)

Number of cases identified as violation of **enablement requirement**

Japan (36)
Korea (25)
> US (14)
Europe (8)
> China (3)

Difference depending on receiving offices from the number of identified cases

Cases identified as
violation of support requirement

JP-PCT **CN 24** > JP 19 > KR 11 > EP 7 ≒ US 5
US-PCT **CN 17** ≒ JP 16 > KR 9 ≒ EP 8 > US 3
EP-PCT **CN 10** = KR 10 ≒ JP 9 > US 1 ≒ EP 0

Cases identified as
violation of clarity requirement

JP-PCT EP 47 = **KR 47** ≒ CH 44 > **JP 30** ≒ US 27
US-PCT **KR 71** > JP 63 > EP 54 ≒ CN 54 > **US 18**
EP-PCT **KR 34** > CN 27 ≒ JP 25 ≒ US 24 > **EP 11**

When a receiving office is the examining office, the violation tends to be less likely to be identified.

Cases identified as
violation of enablement requirement

JP-PCT **JP 13** > US 7 ≒ KR6 > EP 4 > CN 1
US-PCT **JP 15** ≒ KR 14 > US 5 ≒ EP 5 > CN 2
EP-PCT **JP8** > KR 5 > US 2 ≒ CN 1 ≒ EP 0

There is almost no discrepancy due to the difference of receiving offices.