

# Comparison between IP5 Members of Judgments on Requirements for Disclosure and Claims in Notification of Reason for Refusal

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## Abstract

Since fiscal 2013, the Second Subcommittee of the First Patent Committee (the “Subcommittee”) has been surveying trends in judgments in first actions of non-compliance with the requirements for disclosure and claims. In fiscal 2013, we conducted a survey on PCT filings whose receiving office is the Japan Patent Office to compare judgements made by the Japanese, US and EU intellectual property offices (“IP3”). The results obtained from the survey on IP3 showed that the Japan Patent Office found the greatest numbers of families to be non-compliant with the support requirement and the enablement requirement, respectively, while it found the least number to be non-compliant with the clarity requirement. In fiscal 2014, we extended the scope of the survey from fiscal 2013 to target the Japanese, US, EU, Chinese and Korean intellectual property offices (“IP5”) in examining trends in judgments in first actions of non-compliance with the requirements for disclosure and claims. A series of survey sessions revealed that, in a comparison between IP5 as well, the Japan Patent Office found relatively large numbers of families to be non-compliant with the support requirement and the enablement requirement, respectively, but a relatively small number to be non-compliant with the clarity requirement.

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criteria were similar between IP3, there were differences in the ways of applying these to specific cases.<sup>1)</sup> In addition, more than one literature source pointed out that judgments regarding the requirements for disclosure and claims made by Japanese examiners appeared to be more stringent than EU and US examiners.<sup>2)-5)</sup>

Meanwhile, the Joint Experts Group of Patent Examination (JEGPE) formed by JPO, SIPO and KIPO released their “Comparative Study Report on Requirements for Disclosure and Claims” in November 2013 and “Comparative Case Study on Disclosure and Claims” in April 2015, which documented the results of examination of specific cases by these offices, and revealed that there were differences among the three offices in judgments regarding the requirements for disclosure and claims.<sup>6), 7)</sup>

## 1. Introduction

The “Comparative Study on Hypothetical/Real Cases: Requirements for Disclosure and Claims,” publicized by IP3 in June, 2008 revealed that although the laws and examination

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The five IP members, which form the conference body of IP5, have been promoting a continuous series of studies on how to harmonize the patent systems.<sup>8)</sup> Under the circumstances described above, demands for the international harmonization of patent systems have become increasingly pressing in recent years. In response to this momentum, in 2013 IP5 established a conference body called PHEP (Patent Harmonization Expert Panel) to promote the harmonization of patent systems. Many agendas were set up for PHEP designed to harmonize the patent systems between IP5 offices. Among these, the agenda for the requirements for disclosure and claims was chosen as one of the three priority agendas for study in 2014. It has been determined that the Japan Patent Office will play the role of lead office and take the initiative in studying how to harmonize the requirements for disclosure and claims between patent systems. Expectations are mounting that the PHEP study will accelerate harmonization of the requirements for disclosure and claims.

Against this background, since fiscal 2012, the Subcommittee has been addressing a comparative study of PCT filings to compare judgments in first actions (“FAs”) on the requirements for disclosure and claims by the patent offices of different countries after entering the national phase.<sup>9)-10)</sup> The Subcommittee has also launched a three-year project from fiscal 2013 to sequentially study PCT filings whose receiving office is the Japan Patent Office, the US Patent and Trademark Office and the European Patent Office. The results obtained will be used to determine trends in judgments on requirements for disclosure and claims and to compare PCT filings between different receiving offices. As the first phase of the project, in fiscal 2013 the Subcommittee studied PCT filings whose receiving office is the Japan Patent Office (hereinafter, “JP-PCT filings”) to compare judgments on the requirements for disclosure and claims made by the IP3 offices.<sup>10)</sup>

In examining trends in judgments on the requirements for disclosure and claims, in fiscal 2014 we extended the scope of the survey on JP-PCT filings from fiscal 2013 to target the IP5 offices. This document reports certain findings obtained through our survey concerning trends in judgments on non-compliance with the requirements for disclosure and claims by IP5 offices.

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## 2. Survey Method

As subjects of our survey, we extracted those JP-PCT filings that were subject to international publication in the first weeks of August 2006, December 2006, April 2007 and August 2007 respectively, and that were transferred to IP5. The survey was conducted following the procedure described below.

### (1) Extracting subjects for the survey

As described above, for the study in fiscal 2013, we extracted JP-PCT filings (with international application numbers containing “JP”) that were transferred to all three countries (i.e. Japan, the US and the EU) and conducted the survey based on the FAs of each country (which totaled 278 applications). For the study in fiscal 2014, we extracted filings transferred to Korea and those transferred to and registered in China, in addition to those extracted for the fiscal 2013 study. We narrowed the target of extraction from filings transferred to China to those registered in the country, because patent files for relatively old filings targeted by the survey (i.e. with international publication dates falling between 2006 and 2007) were not available if they were not registered in the country, and thus it was impossible to obtain the contents of their FAs.<sup>12)</sup> In this document, filings based on the same PCT filing that were transferred to different countries are collectively referred to as a “family.”

## **(2) Confirmation of any findings of non-compliance with the requirements for disclosure and claims**

We surveyed the contents of FAs issued in China and Korea, in addition to the subject filings extracted by the method described in (1), and confirmed any findings of non-compliance with the requirements for disclosure and claims (i.e. non-compliance with the support requirement, the clarity requirement and/or the enablement requirement).

Since FAs in China and Korea are written in the respective local languages, judgment on whether or not an application filed in China or Korea is non-compliant with the requirements for disclosure and which of the three requirements the non-compliance relates to were basically made based on article numbers. In the case of China, Article 26 (4) of the Patent Law as amended in 2009 covers non-compliance with two of the three requirements, i.e. the support requirement and the clarity requirement, making it impossible to distinguish which of such requirements a non-compliance relates to by means of the article number only. Therefore, where Article 26 (4) of the Patent Law was indicated, which of the requirements for disclosure and claims a non-compliance relates to was determined by using keywords, that is, the Chinese characters indicating the nature of the non-compliance (e.g. “不清楚” and “不支持”).

In the case of China, in addition to Article 26 (4) of the Patent Law, we confirmed any findings of non-compliance with any of the requirements for disclosure and claims based on the Implementing Regulations of the Patent Law. We then recorded each of the cases of non-compliance thus found, together with the requirement to which the non-compliance relates to, as determined based on the content of the finding (which was primarily determined through the keyword used).<sup>13)</sup> This is because, regardless of which of Article 26 of the Patent Law and Article 20 of the Implementing Regulations of the Patent Law an application fails to satisfy, the failure will all the same constitute a reason for refusal on the grounds of non-compliance with any of the requirements for disclosure and claims.

## **(3) Confirmation of any amendment**

We confirmed whether or not the filings that were found to be non-compliant with any of

the requirements for disclosure and claims by either China or Korea in step (2) above had been amended by any of the IP5 offices prior to their FAs. We also confirmed whether or not the claims examined by the IP5 offices were substantially the same with one another. If a filing was judged to be not viable for comparison between IP5 offices, because, through amendment by some of the offices before the FA, substantial changes had been made to the element which constituted the reason for judgment of non-compliance with any of the requirements for disclosure and claims, that filing was excluded from the survey and the rest of the filings (consisting of 81 families in total) were used to form a population. However, some filings to which minor amendments were made were not excluded from the population if the amendment was for formality's sake or for other immaterial reasons, because their claims after amendment can be deemed to be viable for comparison. FAs, as referred to herein, include first notifications of the reasons for refusal, as well as extended search reports, etc. issued in the EU if they contain judgments regarding the requirements for disclosure and claims. Filings for which the decision to grant a patent was made without any notification of reasons for refusal being issued were counted as being without any finding of non-compliance with the requirements for disclosure and claims. We used FAs for comparison of the contents of non-compliance findings because we considered that all findings of non-compliance with the requirements for disclosure and claims arising from the initial specifications, etc. should have been indicated in FAs.

The sections below explain the survey results, first showing the overall trends across all technical fields and then with the focus on specific technical fields one by one.

## **3. Overall Trends in Notification of Reasons for Refusal**

Based on the population formed as described above, we counted the number of families receiving indications in FAs of findings of non-compliance with the requirements for disclosure and claims (the support requirement, the clarity requirement and the enablement requirement) issued by IP5. The overall trends identified are shown in Table 1. It should be noted that the results shown below are based on the population of 81 families and thus their statistical reliability may not necessarily be

sufficient. The figures shown in the “All IP5” column of the table indicate the numbers of families found to be non-compliant. Those shown in the “All requirements for disclosure and claims” row indicate the numbers of filings found to be non-compliant by the IP5 offices, respectively, not the total number of findings of non-compliance by each office.

As shown in Table 1, 78 out of the 81 families comprising the population resulted in one or more findings by at least one IP5 office of non-compliance with the requirements for disclosure and claims. In other words, the ratio of families that were not found by any of the IP5 offices to be non-compliant with any of the requirements for disclosure and claims was less than 4%. This may imply that it is practically difficult to prepare application documents that can satisfy all the requirements for disclosure and claims for all IP5 offices.

Table 1 Trends among IP5 offices in Findings of Non-compliance with Requirements for Disclosure and Claims

	Number of filings (or families) resulting in a finding of a non-compliance with requirements for disclosure and claims (Population: 81 families)					
	All IP5 members	Japan	US	EU	China	Korea
Support	44	19	5	7	24	11
Clarity	76	30	27	47	44	47
Enablement	22	13	7	4	1	6
All requirements for disclosure and claims	78	42	31	48	53	49

A comparison of the number of filings within the population of 81 families was then made, resulting in an indication in the FA of a finding of a non-compliance with any of the requirements for disclosure and claims. The results were 42 for Japan, 31 for the US, 48 for the EU, 53 for China and 49 for Korea, with China showing the greatest number, followed by Korea, the EU and Japan, and the US showing the least number. When comparing China, which showed the greatest number of filings resulting in findings, with the US, which showed the least number of such filings, the difference was by a factor of ca. 1.7.

From the comparison for each of the three requirements between the population of 81 families, the numbers of filings (or families) resulting in findings of non-compliance in FAs were 44 for the support requirement, 76 for the clarity requirement and 22 for the enablement requirement. Expressing the results for each of

the requirements in terms of their percentage of the population, 54% of the population was found to be non-compliant with the support requirement, 94% with the clarity requirement and 27% with the enablement requirement.

Next, the number of filings (or families) resulting in findings of non-compliance was compared within IP5 offices for each of the requirements for disclosure and claims.

A comparison of the findings of non-compliance showed larger numbers for the support requirement for China and Japan and smaller numbers for the US and the EU. When comparing between China, which showed the greatest number of filings resulting in findings (24), and the US, which showed the least number of such findings (5), the difference was by a factor of ca. 5, which is rather significant when considering that the difference relates to the results of examinations of the same claims for the same invention. These results are considered to support what has been pointed out regarding the support requirement; that is, examination of the support requirement is more rigorous in China and Japan.<sup>1), 7), 9)-11), 14)</sup>

The support requirement is a requirement imposed on claims, and a judgment of compliance or non-compliance with this requirement directly affects the extent of the scope of rights pertaining to an invention. The results above, showing large differences between IP5 offices in the number of non-compliant filings found in terms of the support requirement, imply the probability of that being the cause of differences in the scope of rights granted and consequent practical hindrances to applicants.

In the case of the enablement requirement, while no IP5 offices found many non-compliant filings, Japan showed by far the largest number of such filings. In fact, other offices generally showed less than half the number for Japan. China showed a characteristic trend in which the number of filings found to be non-compliant with the support requirement was the largest but the number of findings of non-compliance with the enablement requirement was the least.

In Japan, there were a few cases where a filing was found to be non-compliant with the support requirement and the enablement requirement at the same time, on grounds that are substantially almost the same. Few such cases were observed at other offices.

This fact may partly explain why Japan found many filings to be non-compliant with the support requirement and the enablement

requirement.

Finally, a comparison of the clarity requirement between IP5 offices showed that the EU, Korea and China found more families to be non-compliant with this requirement, while the US and Japan found less. Some characteristics were observed in the findings for the EU and Korea for non-compliance with the clarity requirement, which will be explained in more detail later.

#### 4. Trends by Technical Field

##### 4.1 Pharmaceutical and chemical field

The numbers of filings (or families) that were found by IP5 to be non-compliant with the requirements for disclosure and claims in the pharmaceutical and chemical field are shown in Table 2.

Among the above-described population (of 81 families), 50 families were classified as being in the pharmaceutical and chemical field. As shown in Table 2, all 50 families resulted in a finding by at least one IP5 office of non-compliance with any of the requirements for disclosure and claims. In other words, in this technical category, there were no families in which zero non-compliance was found by any IP5 office.

Table 2 Trend in Findings of Non-compliance with Requirements for Disclosure and Claims in the Pharmaceutical and Chemical Field

	Number of filings (or families) resulting in a finding of a non-compliance with requirements for disclosure and claims (Population: 50 families)					
	All IP5	Japan	US	EU	China	KR
Support	37	16	5	7	19	11
Clarity	49	20	21	30	27	31
Enablement	18	10	7	3	1	6
All requirements for disclosure and claims	50	28	25	31	34	33

The numbers of filings resulting in non-compliance with at least one of the requirements for disclosure and claims in this field were 28 for Japan, 25 for the US, 31 for the EU, 34 for China and 33 for Korea 33, ranking China with the highest, followed by Korea, the EU and Japan, and placing the US with the lowest. When comparing between China, which showed the greatest number of filings found to be non-compliant, and the US, which showed the least number of such filings, the difference

was by a factor of ca. 1.4. This confirms that the ranking of the number of findings by IP5 in this field coincides with the overall results described above, but that the differences between IP5 offices were smaller for this field than in the overall results.

According to a comparison of each of the three requirements among the population of 50 families classified as being in this field, the numbers of families resulting in findings of non-compliance in FAs were 37 for the support requirement, 49 for the clarity requirement and 18 for the enablement requirement. Expressing the results for each of the requirements as a percentage of the population, 74% of the population was found to be non-compliant with the support requirement, 98% with the clarity requirement and 36% with the enablement requirement. The fact that the percentages of findings in the pharmaceutical and chemical field were higher than the overall trends implies that filings in this field are relatively susceptible to finding of non-compliance with the requirements for disclosure and claims. In particular, the percentages of findings of non-compliance with the support requirement and the enablement requirement were around 1.5 times those in the overall trend, and these findings are evidence for the fact that filings in this field were particularly susceptible.

Next, the number of findings of non-compliant filings for each of the three requirements was compared between IP5 offices. China and Japan found more filings to be non-compliant with the support requirement and the US and the EU found less, similar to the overall trend. All the findings for the support requirement made in the US, the EU and Korea related to the pharmaceutical and chemical field, in contrast to the mechanical and electrical field to be detailed later.

Japan found the largest number of filings that were non-compliant with the enablement requirement while the number of non-compliant filings found by other offices remained low, similar to the overall trend. In contrast to the mechanical and electrical field to be detailed later, most of the findings for the enablement requirement made in the US, China, the EU and Korea related to the pharmaceutical and chemical field.

In the pharmaceutical and chemical field, we observed that an abundance of embodiments can be the grounds for being judged to satisfy the support requirement and the enablement

requirement, and the details of this observation will be given later.

A comparison of the clarity requirement between IP5 offices showed that the EU, Korea and China found more filings to be non-compliant with this requirement, while the US and Japan found less, similar to the overall trend.

#### 4.2 Mechanical and Electrical Field

The numbers of filings found by IP5 offices to be non-compliant with the requirements for disclosure and claims in the mechanical and electrical field are shown in Table 3.

Table 3 Numbers of Findings of Non-compliance with the Requirements for Disclosure and Claim in the Mechanical and Electrical Field

	Number of filings (or families) resulting in a finding of a non-compliance with requirements for disclosure and claims (Population: 31 families)					
	All IP5	Japan	US	EU	China	Korea
Support	7	3	0	0	5	0
Clarity	27	10	6	17	17	16
Enablement	4	3	0	1	0	0
All requirements for disclosure and claims	28	14	6	17	19	16

In the above-described population (of 81 families), 31 families were classified as being in the mechanical and electrical field. As shown in Table 3, 28 out of the 31 families resulted in one or more findings by at least one of the IP5 offices of non-compliance with the requirements for disclosure and claims. The ratio of families that were not found by any of IP5 to be non-compliant with any of the requirements for disclosure and claims was around 10%.

The numbers of filings resulting in non-compliance with any of the requirements for disclosure and claims in this field were 14 for Japan, 6 for the US, 17 for the EU, 19 for China and 16 for Korea, ranking China with the highest, followed by the EU, Korea and Japan, and placing the US with the lowest. When comparing China, which showed the greatest number of filings resulting in findings, with the US, which showed the least number of such filings, the difference was by a factor of ca. 3.2. It was thus confirmed that the rankings in the number of findings by IP5 offices in this field almost coincide with the overall results described above, but that the differences between IP5 offices are larger for this field than

in the overall results.

A comparison of each of the three requirements between the 31 families classified in this field in the population showed the numbers of families with findings of non-compliance in FAs were 7 for the support requirement, 27 for the clarity requirement and 4 for the enablement requirement. Expressing the results for each of the requirements as a percentage of the population, 23% of the population was found to be non-compliant with the support requirement, 87% with the clarity requirement and 13% with the enablement requirement. The lower percentages for the findings in the mechanical and electrical field than in the overall trend imply that filings in this field are relatively unsusceptible to findings of non-compliance with the requirements for disclosure and claims. In particular, the percentages of non-compliance with the support requirement and the enablement requirement were both around half of those in overall trend, and these findings are evidence for the fact that filings in this field were particularly unsusceptible.

Next, the number of filings that were found to be non-compliant with each of the three requirements was compared between IP5 offices. China and Japan found a few filings to be non-compliant with the support requirement, but the other IP5 offices found none. While the number of filings found to be non-compliant with the support requirement across IP5 offices was rather small, China and Japan accounted for relatively high ratios in the total. This trend is in line with the overall trend described above.

Japan found 3 filings to be non-compliant with the enablement requirement, while the rest of the offices found none except for the EU, which found one filing to be non-compliant. Within the small number of filings found to be non-compliant with the enablement requirement across IP5 offices, Japan found the largest number, which is in line with the overall trend described above.

The results for the clarity requirement were also in line with the overall trend described above; that is, the EU, Korea and China found more filings to be non-compliant with this requirement, while Japan found less and the US found even less than Japan. As described above, the US, the EU and Korea found few filings to be non-compliant with the support requirement and the enablement requirement. Most of the

filings found by these offices related to the clarity requirement.

#### **4.3. Summary**

The following trends can be identified from the statistical results described above.

Within the overall trend, certain differences were observed between IP5 offices in their judgment of the requirements for disclosure and claims. Japan found a relatively small number of filings that were non-compliant with the clarity requirement, but in contrast to this, the numbers of filings it found to be non-compliant with the support requirement and the enablement requirement were relatively large. In particular, the number of filings found to be non-compliant with the enablement requirement was significantly large when compared with the other IP5 offices. The number of filings found to be non-compliant with the support requirement was the second largest following China, and was by far larger than the other three IP5 offices. On the other hand, the US was notable for having found fewer filings that were non-compliant with the requirements for disclosure and claims among IP5 offices. While China found more filings to be non-compliant with the requirements for disclosure and claims among IP5 offices, the number of filings found to be non-compliant with the enablement requirement was rather small. The EU and Korea found relatively large numbers of filings non-compliant with the clarity requirement, but not many in for the other requirements.

A comparison between IP5 offices of the trends by technical field in the number of filings found to be non-compliant with the requirements for disclosure and claims showed that filings in the pharmaceutical and chemical field were more susceptible than those in the mechanical and electrical field to being non-compliant with the support requirement and the enablement requirement. On the other hand, according to a comparison between IP5 offices of the ratios of filings found to be non-compliant with the requirements for disclosure and claims, IP5 offices showed greater differences in their judgment of non-compliance in the mechanical and electrical field than in the pharmaceutical and chemical field.

### **5. Summary of Trend in Judgments by IP5 Members**

This section summarizes the trend in judgments by IP5 offices of the requirements for disclosure and claims, extracted from the statistical results described above and based on the results of the characteristic cases observed with each IP5 office. This summary contains part of the survey report prepared by the Subcommittee on the comparative study of IP3 offices<sup>10)</sup> in order to facilitate an understanding of the comparative study of IP5 offices.

#### **5.1 Japan**

Japan found more filings to be non-compliant with the support requirement and the enablement requirement than other offices, and this trend was more prominent in the pharmaceutical and chemical field. For example, applications for inventions of chemical compounds with more than one substituent described in a Markush claim and those for inventions of compositions stipulated by parameters were more susceptible to findings of non-compliance with the enablement requirement on the grounds of the contents of embodiments disclosed.

On the other hand, in the mechanical and electrical field, some filings that involved claims stated using functional expressions were found to be non-compliant.

We then studied in detail the filings in the pharmaceutical and chemical field that were found to be non-compliant with the support requirement or the enablement requirement. As a result, seven out of ten filings that were found to be non-compliant with the enablement requirement were also found to be non-compliant with the support requirement.

We further studied the content of the findings stated in FAs for these seven applications. In only one of the seven applications was the finding of non-compliance with the support requirement accompanied by a reason or grounds that were different from the ones given for the enablement requirement. For the other six applications, a reason or grounds for non-compliance were given for the enablement requirement only, and the support requirement was accompanied by a mere statement that the finding of non-compliance was for the same reason as for non-compliance with the enablement requirement.

There is indeed a view that a non-compliance with the support requirement and non-compliance with the enablement

requirement are like the opposite sides of the same coin.<sup>15)</sup> On the other hand, in the ruling for the case of polarizing film (the expanded court system), the view was stated that the support requirement obviously deviates from the purpose of establishing the article.<sup>16)</sup>

An observation of responses of applicants to notification of reasons for refusal revealed that situations where an applicant is forced to amend his/her claim tend to occur in cases where the statement in the detailed description of the invention is not sufficient. If the applicant chooses to respond without amending the claim, the applicant needs to assert in a written opinion that the invention in accordance with the claim is the same as what is stated in the detailed description of the invention.

With regard to the findings of non-compliance with the enablement requirement, however, there seems to be sufficient room for counterargument without amending the claim. More specifically, an example of an approach to a counterargument that the applicant may take is to demonstrate that the invention in accordance with the claim is described in the specification in a way that can be sufficiently carried out by a third person skilled in the art, by using the detailed description of the invention as a basis for the argument or by submitting additional literature or a certificate of experimental results.

The approach that the applicant should take would thus vary depending on which of the requirements the finding of a non-compliance relates to. Therefore, when finding non-compliance with two different requirements at the same time, it is desirable that the examiner indicates distinctive and different reasons or grounds for the two findings in the notification of reasons for refusal.

With regard to the clarity requirement, some applications were found to be non-compliant merely based on formality, on the grounds that certain expressions, such as “approximately” and “substantially” were used. These expressions may possibly make the scope of claims ambiguous. Even so, it should be taken into consideration that there exist certain arts that would not be able to be protected sufficiently unless such expressions were used.

In the mechanical and electrical field in particular, there is often a range of configurations that allows the functions to be exhibited. For example, when an invention is such that some of its parts suffice to have a

near-circular shape, the shape of these parts is often described as being formed roughly in a circular shape. Such an invention may be found to be non-compliant with the clarity requirement for formality’s sake, merely on the grounds of the use of the word “roughly.” In this case, the applicant has no choice but to amend the term by removing “roughly.” Such amendment would cause certain disadvantages; for example, the rights granted may be restricted to where the parts are in a true circular shape. We consider, therefore, that this kind of expression may well be acceptable as long as the meanings of such expressions can be clearly understood by referring to the statement in the specification or the common general knowledge.

Examination should desirably be addressed flexibly according to the content of each art.

## 5.2. US

The US found a relatively small number of filings to be non-compliant with the requirements for disclosure and claims, and showed no distinctive statistical trends in judgments on these requirements when compared with the other IP5 offices.

However, through a study of individual cases, rigidity was observed in some of the judgments of non-compliance with the enablement requirement. For example, substance patent applications in the pharmaceutical field were, almost without exception, found to be non-compliant with the enablement requirement on the grounds of multiple court precedents if they state the solvates of a compound of invention in the claims, but do not include any embodiment (synthetic example) of such solvates in the specification.

In the mechanical and electrical field, an invention of an electric circuit was found to be non-compliant with the enablement requirement on the grounds that the claims of the circuit were not supported by any concrete circuit diagrams in the drawings.

## 5.3 EU

The EU is notable in that many cases of non-compliance with the clarity requirement were found across all technical fields.

In particular, in the case of claimed inventions that include parameters, even though a method for calculating the parameters was stated in the detailed description of the invention,



there were observed some cases where findings of non-compliance with the clarity requirement were made in such a manner as to force applicants to amend the claims by making additions. Although such findings may not cause disadvantages leading to a decrease in the scope of patent inventions, they are somewhat harsh on applicants because they will increase the number of occasions requiring responses on the part of applicants.

It was also confirmed that applications in which the invention was described (identified) by the result to be achieved were apt to receive findings of non-compliance with the clarity requirement in accordance with Guideline F-IV, 4.10.

In the case of the enablement requirement, some cases were observed where, if a filing in the pharmaceutical and chemical field did not specify a range of the quantity of carbon atoms in the compound, a finding was made to prompt the applicant to add a claim stating a limitation on (or a range of) the quantity. In this respect, it seems that the EU is applying the requirement in a more rigid manner than the other IP5 offices. However, when viewed by third parties, this attitude might not necessarily be excessively stringent from the perspective of clarifying the outer limit of the invention.

There were some cases among the findings made by the EU where filings that would be found by Japan to be non-compliant with the support requirement were handled as non-compliance with the clarity requirement. Judgment of which requirement a non-compliance relates to is up to IP5 offices and should be made in accordance with their own examination criteria. With this fact in mind, it is necessary to clearly recognize the above-described characteristics of the EU in its judgments regarding the requirements for disclosure and claims, and be careful in practice not to confuse the characteristics of the EU with the attitudes of the other IP5 offices in dealing with non-compliance with the clarity requirement.

#### **5.4 China**

China found the largest number of filings that were non-compliant with the requirements for disclosure and claims among IP5 offices. The number of findings of non-compliance with the support requirement was significantly the largest, followed by findings of non-compliance with the

clarity requirement,

Many may have had a feeling during the course of actual filings in China that China tends to find a significant number of cases of non-compliance with the support requirement. Our survey showed results that support this impression.

More specifically, in the pharmaceutical and chemical field, some cases were observed where non-compliance with the support requirement was found based on the embodiments. We checked the contents of filings where non-compliance with the support requirement was found, and had the impression that in many of these applications, China forced applicants to limit their claims to the scope of embodiments.

China made a relatively large number of findings of non-compliance with the support requirement in the mechanical and electrical field, similar to the trend in the pharmaceutical and chemical field, although the absolute number of findings was not as large as in the pharmaceutical and chemical field.

These results show that in China, as well as to Japan, applicants are required to endeavor to prepare application documents that will satisfy the support requirement of each of these offices.

On the other hand, cases where Japan would find non-compliance with the enablement requirement were mostly handled by China as non-compliance with the support requirement. Perhaps due to this way of handling, the number of findings by China of non-compliance with the enablement requirement was far lower than in the other IP offices. This trend differs significantly from the trend in Japan, where non-compliance with the support requirement and with the enablement requirement are often found at the same time.

We also had the impression that China, similar to Japan, tended to make judgments on non-compliance with the clarity requirement based on formality only, on the grounds of the use of ambiguous expressions.

#### **5.5 Korea**

In Korea, in the pharmaceutical and chemical field, the trend showed that the number of findings of non-compliance with the support requirement was slightly smaller than in China and Japan but larger than in the US and the EU.

More specifically, we had the feeling that, in the case of compound inventions in the

pharmaceutical field, Korea tended to find non-compliance with the support requirement if pharmacological data was not sufficient. However, since the number of families subject to the present survey was not necessarily large, there remains room to study the characteristics of filings that are more susceptible to being found by Korea to be non-compliant with the support requirement.

We also had the feeling that Korea generally tended to more finely judge the clarity of the words stated in claims. Similar to the EU, Korea often judged filings to be non-compliant with the clarity requirement if inventions in accordance with their claims were described (identified) by the result to be achieved.

## 6. Conclusion

We conducted a survey on PCT filings for which the receiving office is the Japan Patent Office to compare judgements made on the requirements for disclosure and claims by the IP5 offices. The present survey was designed by extending the scope of the previous survey for comparison of IP3 offices to include China and Korea. The present survey demonstrates that IP5 offices make their own individual judgments on each of the requirements for disclosure and claims.

For example, from the statistical results, significant differences were observed between the extent (number) of findings of non-compliance made by the IP5 offices. In other cases, multiple offices showed similar trends in judgment. For examples, Japan, China and Korea showed a similar tendency in their judgments regarding the support requirement in the pharmaceutical field, and the EU and Korea in their judgments regarding the clarity requirement. We also learned that there were slight differences in trends from one technical field to another.

A study of the contents of typical cases in which differences between judgements occurred showed that there were considerable differences from one office to another. For example, in judgments of the support requirement, one office tended to make stringent findings of non-compliance that demand applicants to put limitations even at the level of embodiments. Another office often made findings of non-compliance in such a manner that the non-compliance could be resolved with simple amendments so that no substantial disadvantages

would be caused on the part of applicants.

Even in cases of non-compliance with the requirements for disclosure and claims that are similar to each other in nature, judgment of which one of the requirements (i.e. support, enablement or clarity) a non-compliance relates to differed between one IP5 office and another. We consider that simple comparison of these judgments is difficult, because they are dependent on the examination criteria of the individual offices.

What applicants should first focus on is the preparation of application documents to file with each office. In other words, when filing an application with the IP5 offices, it is desirable to state in advance claims that can be limited as dependent claims so as to avoid receiving the findings described above, and to improve their claim through voluntary amendment prior to examination so as not to unnecessarily receive findings of non-compliance with the requirements for disclosure and claims. One more piece of advice, which may have been mentioned too frequently, is to provide a sufficient number of embodiments, in particular in cases of filings in the pharmaceutical and chemical field.

In the procedural aspect, in the case of filings with IP5 offices via the Paris route, it is desirable to make necessary amendments at the time of filing (however, it will be acceptable to make voluntary amendments after filing). In the case of PCT filings, it would suffice to make voluntary amendment after entering the domestic phase. However, these discrepancies among IP5 offices give rise to concern that applicants must determine which approach to take or make other strategic decisions, leading to increased procedural complexities on the part of applicants.

Applicants may be able to eliminate the influences of these practical discrepancies to some extent through their efforts prior to examination, but not all. Thus, the early achievement of international harmonization between patent systems is still awaited.

### Notes:

- 1) Material published by the Patent Office: "Comparative Study on Hypothetical/Real Cases: Requirement for Disclosure and Claims" (published in June 2008) (<http://www.trilateral.net/projects/worksharing/study/cases.pdf>, accessed and confirmed on May 18, 2015)

- 2) 平成 19 年度特許庁産業財産権制度問題調査研究報告書 (FY2007 JPO Research Reports on Problems with the Industrial Property System), “特許の審査実務 (記載要件)に関する調査研究報告書ーバイオテクノロジー分野の記載要件に関する調査研究 (Research Report on Patent Examination Practices (Requirements for Disclosure and Claims) ---Research Report on Requirements for Disclosure and Claims in the Bio Technology Field),” pp.173-201 ([http://www.jpo.go.jp/shiryoutoushin/chousa/pdf/zaisanken/1904bio\\_honpen.pdf](http://www.jpo.go.jp/shiryoutoushin/chousa/pdf/zaisanken/1904bio_honpen.pdf), accessed and confirmed on May 18, 2015)
- 3) The European Commission invited opinions and published the results as “Summaries of contributions to the Public Consultation on: ‘The future of EU Japan trade and economic relations,’ p. 1 (<http://www.jetro.go.jp/world/europe/ip/pdf/20110223.pdf>, accessed and confirmed on May 18, 2015)
- 4) “Practical study as to judgments of Intellectual Property High Court dealing with written description requirements for inventions defined by numerical ranges (further report),” Naosuke Miyamae, Patent, Vol. 65, No. 7 (2012) pp. 60-69
- 5) “サポート要件不備は特許無効にする程に悪い瑕疵か? 機械分野における判断の海外との比較考察と最近の判決動向 (Is Violation of the Support Requirement a Serious Defect That Justifies Invalidation of a Patent? Comparative Study of Judgments in the Machinery Fields in Japan and Overseas and Recent Trends in Court Rulings)” by Yukihiko Tsuda, 別冊パテント (Separate Volume of Patent), No.9, (2013), pp.122-133
- 6) Material published by the Patent Office: “COMPARATIVE STUDY REPORT ON REQUIREMENTS FOR DISCLOSURE AND CLAIMS” (published in November 2013) ([https://www.jpo.go.jp/torikumi/kokusai/kokusai3/pdf/nicyukan\\_hikakuken/jegpe\\_comparative\\_study\\_on\\_disclosure\\_jp.pdf](https://www.jpo.go.jp/torikumi/kokusai/kokusai3/pdf/nicyukan_hikakuken/jegpe_comparative_study_on_disclosure_jp.pdf), accessed and confirmed on May 18, 2015)
- 7) Material published by the Patent Office: “Comparative Case Study on Disclosure and Claims” (published in April, 2015) (<http://english.sipo.gov.cn/examination/reference/materials/201512/P020151231350886718585.pdf#search=%27Comparative+Case+Study+on+Disclosure+and+Claims+May+18%27>, accessed and confirmed on May 19, 2015)
- 8) “five IP offices” website (<http://www.fiveipoffices.org/activities/harmonisation.html>, accessed and confirmed on May 18, 2015)
- 9) The Second Subcommittee, The First Patent Committee “ Comparison of Trilateral Description Requirements Through Office Actions During Examination – Trilateral tendencies in examination –” 知財管理 (IP Management), Vol. 63, No. 9, (2013), pp. 1493-1508
- 10) The Second Subcommittee, The First Patent Committee “ Comparison of Trilateral Description Requirements During Examination – Study of trends in examination of PCT applications filed with the JPO –” 知財管理 (IP Management), Vol. 64, No. 9, (2014), pp. 1360-1370
- 11) The Second Subcommittee, The First Patent Committee “ Trilateral Comparison of Description Requirements through Examination – Compative study of trends in examination of PCT applications filed at USPTO –” 知財管理 (IP Management), Vol. 65, No. 7, (2015), pp. 888-897
- 12) Although patent files for applications filed in China on and after February 10, 2010 were available, we decided not to include them in the population. This is because these files were issued relatively recently and it would have been impossible for us to obtain FAs issued by IP5 offices during the same period.
- 13) Before the amendment in 2009, the article prescribing non-compliance with the clarity requirement was Article 20 (1) of the Implementing Regulations of the Patent Law. In China, the requirement to state technical characteristics that are necessary for solving technical problems is stipulated in an article separate from the article for the support requirement. This article corresponds to Article 21 (2) of the Implementing Regulations of the Patent Law before amendment and Article 20 (2) of the Implementing Regulations of the Patent Law after amendment.
- 14) Tadashige ITOH, etc. “Drafting Universal Claims for Japan, U.S., Europe, and China (No.1)” 知財管理 (IP Management), Vol. 64, No. 2, (2014), pp. 191-208
- 15) In the “Body Weight Modulator” case (Intellectual Property High Court Ruling 2005 (Gyo Ke) No. 10013 (October 19, 2005), it was held that the argument concerning the enablement requirement and the argument concerning the support requirement may well be two sides of the same coin.

- 16) The “Polarizing Film” case (Intellectual Property High Court Ruling 2005 (Gyo Ke) No. 10042 (November 11, 2005)

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