Trilateral Comparison of Judgments on Written Description Requirements in Notices of Reasons for Refusal

-Comparison of Tendencies in PCT Applications Filed with the JPO as the Receiving Office-

The First Patent Committee Japan Intellectual Property Association

Abstract: In fiscal 2012, the Second Subcommittee examined first actions by the Trilateral Offices the Japan Patent Office (JPO), the US Patent and Trademark Office (USPTO) and the European Patent Office (EPO)-on internationally published PCT applications to research the tendencies in the judgments made by the respective Trilateral Offices on violations of written description requirements. The 2012 research found that the JPO judged each type of written description requirements (support requirements, clarity requirements and enablement requirements) more strictly than the USPTO and the EPO. This finding agrees with the perceptions of many patent practitioners and the opinions of review article authors. Since the 2012 research covered a tremendous volume of internationally published applications, however, the research samples had to be limited to applications internationally published on one day, arousing concerns about possible bias in the examined applications. In fiscal 2013, therefore, the Subcommittee limited the scope of sampling to PCT applications filed with the JPO as the receiving office, and extended the period of research by conducting, four times every four months, the same research of tendencies in the judgments of written description requirement violations in first actions as per the previous fiscal year. As a result, the 2013 research revealed that the JPO tends to point out more violations of enablement and support requirements than its US and European counterparts.

Table of Contents

- 1. Introduction
- 2. Research Method
- 3. Overall Tendencies in Notices of Reasons for Refusal
- 4. Tendencies by Technical Field
 - 4.1 Pharmaceuticals and Chemicals
 - 4.2 Machinery and Electric Appliances
 - 4.3 Synopsis
- 5. Discussion
- 5.1 Characteristic Tendencies in WDR Judgments
- 5.2 Considerations for Filing Applications with the JPO
- 5.3 Considerations for Filing Applications with the USPTO and EPO
- 6. Conclusion

1. Introduction

In recent years, the Trilateral Offices (JPO, USPTO and EPO) have conducted a series of studies comparative concerning patent examination practices in order for applicants to prepare high quality patent applications. In December 2007, the Trilateral Offices published the results of a comparative study on their respective laws, regulations and

examination guidelines. In June 2008, the Offices released the results of a case study on written description requirements ("WDRs").^[1] These case studies confirmed that the Offices' laws, regulations and examination guidelines are similar but different when they are applied to specific cases.

On the other hand, the Subcommittee, in its mid- to long-term action scheme for fiscal 2007–2009, compared and examined the Trilateral Offices' judgments on WDRs on the basis of actual court decisions and appeal/trial decisions. The results of this comparison and examination showed little difference in the strictness of examination.^{[2]–[4]} However, given that the JPO may judge WDRs in examinations more strictly than the EPO and the USPTO,^{[1], ^{[5]–[7]} the results of the comparative study above differ from what practitioners perceive.^[8] This may be because the comparative study covered only disputed cases in court and did not reflect on the large number of remaining cases not brought into court.}

Against this background, as part of its activities for fiscal 2012, the Subcommittee examined the Trilateral Offices' first actions ("FAs") on internationally published PCT applications to research the tendencies in the

WDR judgments in the reasons for refusal shown in the Offices' examinations.^[9] The research found that the JPO pointed out the highest percentage of WDR violations, a result that reflected to some extent the patent practitioners' perceptions as mentioned above. However, the research aroused concerns about possible bias in terms of the applications examined, including multiple applications filed by the same applicant, because the research, although not limited in terms of receiving offices. covered only applications internationally published on one day to limit the number of sampled cases for examination.

2013. fiscal therefore. the In Subcommittee limited the scope of research to PCT applications filed with the JPO as the receiving office, and extended the period of research by conducting, four times every four months (applications internationally published in the first weeks of August and December 2006, and April and August 2007), research on tendencies in the Trilateral Offices' WDR judgments in examinations. Limiting the receiving office to the JPO and extending the period of research, as mentioned above, minimized biases in terms of applicants and other elements, and narrowed down most of the sampled cases to PCT applications filed by Japanese individuals and businesses (collectively "Japanese applicants"). This made it possible to check how each Office WDRs in PCT examined and judged applications by Japanese applicants, who were accustomed to the patent practices in Japan. In this sense, the Subcommittee believes this research provides results of interest to Japanese patent practitioners.

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2. Research Method

The Subcommittee sampled and examined PCT applications that were internationally published in the first weeks of August and December 2006, and April and August 2007, and transferred to the Trilateral Offices. The Subcommittee conducted the research in accordance with the following steps:

(i) Sampling of applications for research

The Subcommittee sampled PCT applications filed with the JPO as the receiving office (the international application numbers of which contain "JP"). Of these samples, it selected applications that had been transferred to all the Trilateral Offices (327 applications).

(ii) Checking for WDR violations

The Subcommittee examined the Trilateral Offices' FAs on the applications selected under step (i) above to check for WDR violations (support, clarity and enablement requirement violations) pointed out by the Offices. It used the FAs to compare such violations because all the WDR violations arising from the original specifications may have already been pointed out in the FA stage.

(iii) Checking for identity of claims examined by the Trilateral Offices

The Subcommittee checked whether amendments were made, before FA, to the WDRs pointed out as violations by any of the Trilateral Offices, shown in step (ii) above. It also checked whether the claims of each application examined by each Office were substantially identical. As a result, the Subcommittee excluded from the scope of research samples applications of which claims examined by the Offices (claims before FA) were substantially different in terms of WDR violations (278 applications). However, it kept in the research samples applications to which minor amendments were made including the amendment of formal errors (e.g., amending dependent claims to independent form) because such claims can be compared even after amendment. Here, the FAs examined included not only the first notices of reasons for refusal but also WDR judgments shown in European search reports and the like. Applications that entered the patent grant decision stage without notification of reasons for refusal were counted as ones for which no WDR violations had been pointed out.

The following section describes the results of the research.

3. Overall Tendencies in Notices of Reasons for Refusal

The Subcommittee examined the abovedescribed sampled cases for the frequency of violations for each type of WDR (support, clarity and enablement requirements) pointed out in the FA stage. The overall tendencies were as shown in Table 1.

In the 278 sampled cases, the number of WDR violations pointed out in the FA stage was 117 for the JPO, 119 for the USPTO, and 130 for the EPO. These figures indicate little difference between the Trilateral Offices, albeit with the EPO pointing out slightly more.

Table 1. Tendencies in WDR Violations	\$
Pointed Out by Trilateral Offices	

	Number of violations pointed out (278 sampled cases)			
	Total for Trilateral Offices	JPO	USPTO	EPO
Support	73	51	15	19
Clarity	210	87	104	123
Enable- ment	54	32	21	18
Total for all WDRs	222	117	119	130

On the other hand, comparison of the individual number of WDR violations pointed out by the Trilateral Offices revealed that the USPTO and the EPO pointed out more clarity requirement violations than the JPO. As for support and enablement requirements, the JPO pointed out about three and two times more violations, respectively, than its US and European counterparts. This result shows that the more frequent pointing out of violations by the EPO, as described above, was mainly due to the EPO pointing out a higher percentage of clarity requirement violations. The result also shows that even PCT applications filed with the JPO as the receiving office had statistically higher numbers of support and enablement requirement violations pointed out by the JPO than those by the USPTO and the EPO.

Comparison by each type of WDR revealed an overall tendency for clarity requirement violations to be pointed out most frequently. Clarity requirement violations accounted for 74% of all WDR violations for the JPO (87/117), 87% for the USPTO (104/119), and 95% for the EPO (123/130). This indicates a tendency for clarity requirement violations to be pointed out most frequently by the EPO, followed by the USPTO and the JPO.

As for support and enablement requirements, however, the percentage of violations were, respectively, 44% (51/117) and 27% (32/117) for the JPO, 13% (15/119) and 18% (21/119) for the USPTO, and 15% (19/130) and 14% (18/130) for the EPO. Thus the percentage of support and enablement requirement violations pointed out tended to be higher for the JPO in comparison with the USPTO and the EPO.

As described above, the comparison confirmed the overall tendency for the JPO to point out support and enablement requirement violations more frequently than the USPTO and the EPO.

4. Tendencies by Technical Field

4.1 Pharmaceuticals and Chemicals

Table 2 shows the numbers of WDR violations pointed out by the Trilateral Offices at the FA stage in the field of pharmaceuticals and chemicals.

In this field, clarity requirement violations were pointed out most frequently, in line with the overall tendency. Clarity requirement violations were pointed out by at least one of the Trilateral Offices in 76% of the 143 sampled cases (109/143). Of the 109 cases of clarity requirement violations, the percentage was 42% (46/109) for the JPO, 56% (61/109) for the USPTO, and 58% (63/109) for the EPO. This result indicates that the USPTO and the EPO pointed out clarity requirement violations more frequently than the JPO; this tendency agrees with the overall tendency mentioned in the preceding section.

Table 2. Tendencies in WDR Violations in the Field of Pharmaceuticals and Chemicals

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	Number of violations pointed out (143 sampled cases in the field of pharmaceuticals and chemicals)			
	Total for Trilateral Offices	JPO	USPTO	EPO
Support	52	37	12	13
Clarity	109	46	61	63
Enable- ment	36	21	19	13
Total for all WDRs	115	63	74	66

Enablement requirement violations were pointed out by at least one of the Trilateral Offices in 25% of the 143 sampled cases (36/143). The JPO and the USPTO pointed out a higher percentage of enablement requirement violations than the EPO. Of the 36 cases of enablement requirement violations. the percentage of enablement requirement violations accounted for 58% (21/36) for the JPO, 53% (19/36) for the USPTO, and 36% (13/36) for the EPO; the JPO and the USPTO

thus tended to point out a higher percentage of enablement requirement violations than the EPO. This confirmed that the JPO and the USPTO more frequently point out enablement requirement violations.

On the other hand, support requirement violations were pointed out by at least one of the Trilateral Offices in 36% of the 143 sampled cases (52/143). Of the 52 cases of requirement violations, support support requirement violations accounted for 71% (37/52) for the JPO, 23% (12/52) for the USPTO, and 25% (13/52) for the EPO; the JPO tended to point out support requirements violations more frequently than the USPTO and the EPO. The JPO had by far the highest percentage among the Trilateral Offices, while no major difference was found between the USPTO and the EPO.

In addition, the JPO exhibited a unique tendency where both support and enablement requirement violations were often concurrently pointed out (data not shown in Table 2).

The above-described results revealed the following tendencies as a whole in the field of pharmaceuticals and chemicals:

- The JPO pointed out support requirement violations more frequently than the USPTO and the EPO.
- The JPO and the USPTO pointed out enablement requirement violations more frequently than the EPO.
- The JPO pointed out slightly fewer clarity requirement violations than the USPTO and the EPO.

4.2 Machinery and Electric Appliances

Table 3 shows the numbers of WDR violations pointed out by the Trilateral Offices at the FA stage in the field of machinery and electric appliances.

In the field of machinery and electric appliances, clarity requirement violations were also pointed out most frequently, in line with the overall tendencies. Clarity requirement violations were pointed out by at least one of the Trilateral Offices in 75% of the 135 sampled cases (101/135). Of the 101 cases of clarity requirement violations the percentage

was 41% (41/101) for the JPO, 42% (43/101) for the USPTO, and 60% (61/101) for the EPO. This result indicates that the USPTO and the EPO pointed out clarity requirement violations more frequently than the JPO, similar to the field of pharmaceuticals and chemicals.

in the Field of Machinery and Electric Appliances					
	Number of violations pointed out (135 sampled cases in the field of				

Table 3. Tendencies in WDR Violations

	(135 sampled cases in the field of machinery and electric appliances)				
	Total for Trilateral Offices	JPO	USPTO	EPO	
Support	21	14	3	6	
Clarity	101	41	43	61	
Enable- ment	18	11	2	5	
Total for all WDRs	107	54	45	64	

In the field of machinery and electric appliances, the percentages of support and enablement requirement violations pointed out among the 135 sampled cases were about 1.5-4.5% for the USPTO and the EPO, and about 10% and 8%, respectively, for the JPO. This means that the JPO issued notices of reasons for refusal two to five times more frequently than its US and European counterparts. Against support and enablement requirement violations pointed out by at least one of the Trilateral Offices (21 and 18, respectively), the percentages were 67% (14/21) and 61% (11/18), respectively, for the JPO, indicating that the JPO pointed out more than half of the total WDR violations of each type. Thus, in the field of machinery and electric appliances, the JPO also tended to point out support and enablement requirement violations more frequently, albeit fewer than those in pharmaceutical and chemicals.

In summary, in the field of machinery and electric appliances, clarity requirement violations were pointed out frequently, but the percentages of the other types of WDR violations were lower for all the Trilateral Offices. As a whole, WDR violations tended to be less frequently pointed out. In addition, support and enablement requirement violations tended to be more frequently pointed out by the JPO than its US and European counterparts.

The above-described results revealed the following tendencies as a whole in the field of machinery and electric appliances:

- The JPO pointed out support and enablement requirement violations more frequently than the USPTO and the EPO. The violations, although fewer in number than those in pharmaceutical and chemicals, were pointed out at moderate percentages of about 8–10% of the 135 sampled cases.
- The USPTO and the EPO pointed out support and enablement requirement violations at extremely low percentages of less than 5% of the 135 sampled cases; clarity requirement violations accounted for the majority of WDR violations.

4.3 Synopsis

The above-described statistical findings lead to the tendencies described below.

First, as for the percentages of WDR violations pointed out in the examinations by the Trilateral Offices, the percentage of clarity requirement violations was higher for the USPTO and the EPO while those of support and enablement requirement violations were higher for the JPO. Specifically, the JPO pointed out double the number of support requirement violations and 1.5 times the number of enablement requirement violations than those pointed out by the USPTO and the EPO. This tendency was similar to that revealed by the research that the Subcommittee conducted in 2012 without specifying the receiving office.^[9] The 2013 research was limited to PCT applications filed with the JPO as the receiving office, with almost all of the applications being by Japanese applicants. Most of the applicants were thus presumably accustomed to patent practices in Japan (at least it may be true that most Japanese PCT applicants were familiar with Japanese patent practices). These results suggest that the JPO judged support and enablement requirements more strictly than the USPTO and the EPO.

On the other hand, the research found that the USPTO and the EPO pointed out more clarity requirement violations than the JPO, a tendency different from that shown by the Subcommittee's 2012 research results,^[9] which indicated that the JPO pointed out more clarity requirement violations than its US and European counterparts. This may be partly because the 2013 research was limited to PCT applications filed with the JPO as the receiving office, and some applications filed by foreign applicants with clarity requirement violations may have been excluded due to mistranslations in the Japanese versions.

Comparison of the tendencies for WDR violations among the Trilateral Offices by technical field show that support requirement violations in particular tended to be pointed out far more often in the field of pharmaceuticals and chemicals than in machinery and electric appliances. This tendency is common-but with subtle differences-among the Trilateral Offices. Specifically, the percentage of support requirement violations pointed out by the Trilateral Offices as a whole was 36% (52/143) in pharmaceuticals and chemicals and 16% (21/135) in machinery and electric appliances. In addition, the percentage of enablement requirement violations pointed out by the Trilateral Offices as a whole-25% (36/143) in pharmaceuticals and chemicals and 13% machinery (18/135)in and electric appliances-shows a similar tendency, where violations were pointed out more in pharmaceuticals and chemicals albeit with a smaller difference than in the case of support requirement violations. However, the percentage of clarity requirement violations pointed out by the Trilateral Offices as a whole shows little difference between the field of pharmaceuticals and chemicals and the field of machinery and electric appliances: 76% (109/143) and 75% (101/135), respectively.

In summary, the JPO was found to point out higher percentages of support and enablement requirement violations than the USPTO and the EPO. Comparisons by technical field revealed higher percentages in the field of pharmaceuticals and chemicals than in the field of machinery and electric appliances, with remarkably higher percentages of violations pointed out for support and enablement requirements.

5. Discussion

The research found that the JPO also made stricter judgments on support and enablement requirements than its US and European counterparts in examining PCT applications filed with the JPO as the receiving office. Under these circumstances, what points should applicants keep in mind in their efforts to obtain patents in Japan, the US and Europe? following subsections provide The an overview of characteristic tendencies in the Trilateral Offices' WDR judgments based on examination of the research cases. The subsections also include considerations for filing applications.

5.1 Characteristic Tendencies in WDR Judgments

The research indicates that the JPO judged support and enablement requirements more strictly than its Europe and America counterparts. This tendency is common for all fields, but more markedly in the field of pharmaceuticals and chemicals. Certainly, there are not a few cases where inventions, including compounds and constituents, in the field of pharmaceuticals and chemicals vary remarkably in terms of properties by a slight change in some of their constituent features.^[10] It is understandable that the predictable scope of the person skilled in the art achieving the operation and effect of the claimed invention based on the disclosure thereof may be narrower than that for inventions in the field of machinery and electric appliances. In some cases, however, the JPO required more specific examples to be disclosed in the specification than did the USPTO and the EPO. In an instance of an invented compound, the JPO pointed out support or enablement requirement violations based only on specific descriptions in the examples, while the USPTO and the EPO, in some cases, did not give a notice of reason for refusal. For claims defined by parameters in particular, the research reveals some cases where the JPO pointed out support requirement violations because only part of the parameter range was described in the examples without disclosure of the entire parameter range. It is a considerable burden for the

applicant to prepare examples for the entire parameter range. From this standpoint, flexible judgments should be made by acknowledging that support requirements will be fulfilled regardless of the description of the example if the specification contains a rational and sufficient explanation of the parameter range. (However, it is also true that there are some cases where the JPO's strict judgments are deemed more appropriate than those made by USPTO and the EPO. Therefore, the judgments that are too strict should be more flexible as described above, but this does not mean that WDRs in all patent applications should be judged in a tolerant manner. Keep in mind that flexible judgments as described above should be made only when the specification contains 'rational and sufficient' explanation.)

In addition, particularly if support requirement violations are notified as reason for refusal, experimental data submission should, in principle, be unacceptable and, in many cases, the claims need to be restricted and amended.^{[11] [12]} In fact, the 2013 research reviewed the claims of all nine applications in the patent decision process in which the JPO had pointed out support requirement violations then which and were registered for establishment by the Trilateral Offices. In all applications, the elements pointed out as support requirement violations were reduced and amended. On the other hand, looking at the nine applications examined by the USPTO and the EPO, in only about half of them were the same elements restricted and amended (five applications by the USPTO and four applications by the EPO). The result is that differences in the extent of claims arose between the JPO and its counterparts from a variance in judgments on support requirements. Such inconvenience may occur only in cases of WDR violations due to differences in WDR examination practices. unlike novelty violations or other cases where reduction and amendment should be made in comparison to other relevant prior art. This may sometimes compel applicants. Therefore, not improvements should be made as early as possible through the harmonization of examination system application.

5.2 Considerations for Filing Applications with the JPO

As described above, the JPO judges support and enablement requirement violations more strictly than the USPTO and the EPO. In an effort to obtain patents extensively in Japan, therefore, the applicant should endeavor to provide more than one example with adequate variation for "any invention for which a patent right is most wanted," and to fully explain the invention described in the scope of claims to an extent that allows a person skilled in the art solve the problem, while accurately to identifying the portion that is advantageous over the prior art (characterizing portion of the invention). In particular, as described above, the JPO tends to judge WDRs based on the description of the examples, and the description of examples may be especially important in Japan in comparison with the US and Europe. The JPO also seems to take the stance that the applicant should bear the burden of proof that support and enablement requirements are fulfilled^{[7] [13] [14]}. In this sense, it is necessary for the applicant to keep in mind that they should try to disclose information in the specification sufficiently and logically.

In addition, the applicant needs to pay attention to describing the essential portion of the invention clearly and completely in preparing a specification, and to explaining specifically and logically that the entire scope of claims is supported by the specification. However, the applicant also needs to be careful not to deny the inventive step of his/her own invention due to excess awareness of the aforementioned specific and logical assertion.^{[15]-[18]} In this sense, it may be desirable to assert based on the examples to the extent possible. Even if it is impossible to assert based on the examples, however, the applicant should try to avoid novelty violations being pointed out in exchange for WDR fulfillment by, for example, explaining clearly that the logical constitution itself is a novel original invention by the applicant.

As described above, descriptions in the examples are more important for the JPO than for the USPTO and the EPO. In addition, it may also be useful when fulfilling support requirements to describe in the specification a certain tendency of "results provided in the examples" and "operation and effect," or to describe the mechanism and cause-and-effect relationship. For example, the applicant may logically explain that descriptions in the specification support the scope of the patent to be granted, by comparing the examples in the specification with each other and then describing that they can be expanded or generalized; specifically, that "those with the same functions and properties can be more generic."

Furthermore, it should also be noted that whether to determine an enablement or support requirement violation depends on the level of ordinary skill in the art.^[19] For example, some of the cases researched by the Subcommittee were judged as enablement requirement violations as a result of determining the level of ordinary skill in the art as low. The applicant should examine prior art literature and other objective evidence to accurately identify the level of ordinary skill in the art in the technical field of the claimed invention. It is probably valuable to consider what has been mentioned above in response to notice of reason for refusal.

5.3 Considerations for Filing Applications with the USPTO and EPO

The 2013 research reveals that the USPTO and the EPO tended to point out clarity requirement violations more frequently than the JPO. For example, F-IV, 4.10 of the EPO's Guidelines for Examination states that, as a general rule, claims which attempt to define the invention by a result to be achieved should not be allowed except in special cases. Under this provision, a clarity requirement violation may be pointed out if the claims contain the advantageous effect of the invention. The 2013 research also identifies cases where only the EPO pointed out clarity requirement violations under the guidelines above (in the field of machinery and electric appliances). To avoid clarity requirement violations being pointed out by the EPO, the claims should contain the minimum advantageous effect of the invention even if it is difficult to identify the advantageous effect of the invention only with specified elements

of it in particular.

According to the research, the USPTO and the EPO tended to point out support and enablement requirement violations less frequently than the JPO. In many cases, if application documents are prepared in a manner that satisfies support and enablement requirements in Japan, these WDRs in the documents may be judged by the USPTO and the EPO to be fulfilled.

However, even if the application has been filed in accordance with Japan's examination practices, WDR violations may, in some cases, be pointed out by the USPTO and the EPO. In the 2013 research, there were a small number of cases where no (or only minor) WDR violations were pointed out by the JPO, but WDR violations were, in fact, pointed out by the USPTO or the EPO.

For example, the EPO sometimes judges and points out WDR violations from the standpoint of "whether the characterizing portion of the invention is described." Examples include applications in compoundrelated inventions which the EPO has judged as improper WDRs (violation of EPC Article 84) because the extracted technical features necessary to obtain the effect based on the descriptions of the examples (comparative examples) did not reflect the claims. If embodiments that cannot obtain the effect are exemplified in comparative examples, the applicant should appropriately identify technical matters that contribute to the failure to obtain the effect, and be careful not to contain such embodiments in the claims. To obtain patent rights in Europe, applicants should be mindful of clearly identifying the characteristic part of the invention before describing the claims.

In chemical compound inventions for medicinal uses, the USPTO judges that enablement requirements for solvates are not fulfilled if the specification does not contain examples of solvates. Furthermore, in electric circuit inventions, the USPTO judges that enablement requirements are not fulfilled if the specification does not contain specific circuit diagrams. These judgments seem to be applied relatively rigidly. To obtain patent rights in the US to a chemical compound invention to the extent of including solvates, therefore, the application should describe examples of the solvates in the specification. Similarly, to obtain patent rights in the US to an electric circuit invention, the applicant should describe specific circuit diagrams in the specification.

Countries and regions thus currently examine under their own respective standards. It goes without saying that the key to successful obtainment of patent rights in each country or region is for applicants to thoroughly consider examination practices at the Trilateral Offices.

6. Conclusion

Continuing from 2012, the research compared and examined the Trilateral Patent Offices' WDR judgments in notices of reason for refusal in examinations. This year the scope of comparison was limited to PCT applications filed with the JPO as the receiving office. As a result, the JPO tended to point out, in particular, more support and enablement requirements than the EPO and the USPTO. This agrees with the usual impression of actual practice and opinions given in published reviews.^{[1] [5] [6]} However, given that most of the applications were filed by Japanese applicants, the number of WDR violations pointed out by the JPO may be regarded as unexpectedly large.

As described above, the differences in WDR judgments may contribute to the varying scope of patents, depending on the country. If the scope varies from country to country, the procedures will become more complicated for the applicant from the viewpoint of patent right use and patent management. At the very least, the presence of differences in legal regulations and their application among the Trilateral Offices may pose not a small burden on the applicant. Therefore, it is hoped that early harmonization can be achieved with regard to the handling of WDRs so as to lessen the burden on applicants.

Notes

1) Document published by the Japan Patent Office: A comparison of examination practices among the Trilateral Offices / A case study on written description requirements (in Japanese) (title of the original document: Comparative Study on Hypothetical/Real Cases: Requirement for Disclosure and Claims), published June 2008.

(http://www.jpo.go.jp/torikumi/kokusai/kok usai3/pdf/sinsa_jitumu_3kyoku/kisai_honbu n.pdf, accessed March 22, 2013)

- The Third Subcommittee, the First Patent Committee: A discussion of Japanese, American, European, Chinese, and Korean judgments concerning written description requirements for the specification, etc. (in Japanese). Intellectual Property Management Vol. 58, No. 8 (2008), pp. 1019–1031.
- The Second Subcommittee, the First Patent Committee: Comparison of judgments concerning written description requirements among responding families on the basis of US court decisions and examinations (in Japanese). Intellectual Property Management Vol. 59, No. 12 (2009), pp. 1615–1629.
- The Second Subcommittee, the First Patent Committee: Comparison of judgments concerning written description requirements among responding families on the basis of European appeal/trial decisions (in Japanese). Intellectual Property Management Vol. 60, No. 10 (2010), pp. 1633–1650.
- 5) Fiscal 2007 JPO Industrial Property Issue Research Report: Survey of patent examination practice (description requirements): An investigational study of description requirements in the field of biotechnology, pp. 173–201. (http://www.jpo.go.jp/shiryou/toushin/chous a/pdf/zaisanken/1904bio_honpen.pdf, accessed March 22, 2013)
- European Commission: 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 March 22, 2013)
- Naosuke Miyamae: Practical study of judgments by the Intellectual Property High Court dealing with written description requirements for inventions defined by numerical ranges (further report). Patent, Vol. 65, No. 7 (2012), pp.60–69
- 8) Yukihiro Tsuda: Are improper support requirements deficient enough to invalidate patents? A comparative study of judgments

at home and abroad, and recent trends in judgments in the machinery field. Bessatsu Patent, No. 9, (2013), pp.122–133

- 9) The Second Subcommittee of the First JIPA: Trilateral Patent Committee, Comparison of written description requirements in Notices of Reasons for Refusal-Comparison of Tendencies in Reasons for Refusal among the Trilateral Intellectual Offices—. Property Management, Vol. 63, No. 9 (2013), pp.1493-1508
- 10) In the 1990 "Gyo-Ke" Case No. 243, for example, it was stated that "It is commonly recognized by those skilled in the art that it is generally difficult to predict the utility of a chemical substance invention merely from the chemical structure thereof, which structure cannot be revealed without testing, and this is a fact that is prominent to the present court of justice. Therefore, to know the utility of the chemical substance invention, it is necessary to demonstrate the utility by making an actual test, or for those skilled in the art to be able to recognize the utility from results of the test."
- 11) In the Grand Panel decision in what is called the polarizing film case [2005 "Gyo-Ke" Case No. 10042], it was stated that "It should be said to constitute a violation of the spirit of the patent system (a patent is not granted for an invention unless the invention is to be published, and is unacceptable) to expand or generalize the content disclosed in the detailed explanation of the invention in an attempt to fulfill support requirements specification by submitting for the experimental data after filing the application so as to supplement the content outside the specification, while no examples are disclosed in the detailed explanation of the invention to the extent that allows those skilled in the art to recognize the resolvability of the problem of the invention, so the content disclosed in the detailed explanation of the invention can neither be expanded nor generalized to the scope of the claimed invention even in light of common general knowledge as of the filing of the application in this case," ruling out the of fulfillment of support assertion requirements by the ex post addition of experimental data. On the other hand, in the 2007 "Gyo-Ke"

On the other hand, in the 2007 "Gyo-Ke" Case No. 10131, for example, the applicant's assertion of fulfillment of enablement requirements by the submission of a certificate of experimental results was accepted.

- 12) Makoto Morioka: Recent Court Cases on Support Requirements. Patent, Vol. 60, No. 7 (2007) pp.70–79.
- 13) For example, in the Grand Panel decision in what is called the polarizing film case [2005] "Gyo-Ke" Case No. 10042], the court took the view that the applicant should bear the burden of proof for the sufficiency of support requirements, stating that "And whether the description of claims conforms the support requirements of to the specification should be judged by comparing the description of the claims and the detailed description of the invention, and examining whether the invention in the claims is identical to the invention in the detailed description of the invention, whether the detailed description of the invention provides information enough for a person skilled in the art to perceive that the problem to be solved by the invention concerned can be solved, and whether a person skilled in the art can perceive—even without detailed description or suggestion with common general technical but knowledge as of the time of applicationthat the invention could solve the problem. It is proper to construe that the patent applicant (the plaintiff of the suit against the trial decision dismissing the demand for appeal against the examiner's decision of refusal) or the patentee (the plaintiff of the suit against the trial decision revocating the patent 2.9 under Article of the Supplementary Provisions of the Act No. 47 of 2003 or of the suit against the trial decision approving the demand for a patent invalidation trial, or the defendant of the suit against the trial decision dismissing the demand for a patent invalidation trial) should bear the burden of proof for the existence of support requirements in the specification." In the 2009 ("Gyo-Ke") Case No. 10296, the court also took the same view, stating that "And whether the description of claims conforms to the support requirements of the specification should be judged by comparing the description of the claims and the detailed description of the invention, and examining whether the invention in the claims is identical to the invention in the detailed description of the invention, whether the

detailed description of the invention provides information enough for a person skilled in the art to perceive that the problem to be solved by the invention concerned can be solved, and whether a person skilled in the art can perceive—even without detailed description or suggestion but with common general technical knowledge as of the time of application—that the invention could solve the problem. It is proper to construe that the patent applicant or the patentee should bear the burden of proof for the existence of support requirements."

- 14) On the other hand, in the 2005 "Gyo-Ke" Case No. 10205, the court took the view that the applicant should bear the burden of proof for the sufficiency of enablement requirements, stating that "since it is evident that the applicant should prove in filing the patent applicant that the application satisfies enablement requirements, it is proper to construe that the applicant or the patent owner should bear the burden of pleading and proof even in an appeal against the examiner's decision of refusal, trial for invalidation, or suit against the decision of this appeal or trial. (In addition, the decision was made in the 2008 "Gyo-Ke" Case No. 10483 that the applicant should bear the burden of proof for the sufficiency of support and enablement requirements. The decision was made in the 2008 "Gyo-Ke" Case No. 10423 that the applicant should bear the burden of proof for the sufficiency of enablement requirements.)
- 15) The 3rd Subcommittee, Patent 2nd Committee: A Study of Tendencies of Court Judgments on Written Description Requirements—A Review of Suits against Appeal/Trial Decision and Infringement Suits—Intellectual Property Management, Vol. 61, No. 8 (2011) pp.1133–1149.
- 16) A.I.P.P.I., Vol. 58, No. 1 (2013), pp. 6–21
- 17) Hisao Shiomi: The role of disclosure requirements (enablement and support requirements) under the Patent Act. Intellectual Property Law and Policy Journal, Vol.16 (2007), pp.131–166

- 18) For example, in the 2001 "Gyo-Ke" Case No.140, it was stated that "It is construed that the invention in claim 1 is patented because constituent feature A is a novel component that is not in ordinary tatami sewing machines and because no person skilled in the art could easily arrive at the claimed invention. Since, as described above, constituent feature A is essential in basing the novelty of the invention in claim 1, no person skilled in the art could exploit constituent feature A unless the detailed description of the invention in the specification concerned contains a description that makes it possible to exploit it. Conversely, the novelty of the invention in claim 1 must be denied if, even without such description, a person skilled in the art could easily exploit constituent feature A only taking common general technical knowledge into account."
- 19) For example, in the 2000 "Gyo-Ke" Case No. 484, the court found that the written description requirements are fulfilled with the technical field narrowed and the level of ordinary skill in the art raised, stating that since the specifications concerned clearly specify that the technical field of the invention in question is the field of motor technology, it is proper to construe that, in this case, the 'persons ordinarily skilled in the art' set forth in Article 36.4 should refer to experts in the field of motor technology. It is hard, therefore, to find any rational reason why the scope of the term should be expanded to include experts in the field of general electric appliances. Other cases of raising the level of ordinary skill in the art include the 2001 "Gyo-Ke" Case No. 586, the 2005 "Gyo-Ke" Case No. 10080, the 2007 "Gyo-Ke" Case No. 10147, and the 2008 "Gyo-Ke" Case No. 10084.

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