### ARTICLES

Suggestions Regarding a New Divisional Application System —Focusing on the protection of front runners and international harmonization of patent systems—\*

The First Subcommittee

The First Patent Committee

#### (Abstract)

In the process of making Japan a nation built on intellectual property, with the objective of achieving expeditious and accurate patent examination at the level of the highest global standards and promoting flexible patent examination according to applicant needs, the Patent Strategy Working Group established under the Patent System Subcommittee of the Intellectual Property Policy Committee of the Industrial Structure Council held intensive discussions and prepared a report regarding the divisional application system and the amendment system, which is closely related thereto. In this text, the subcommittee, while taking into consideration the conclusion reported by the working group, reviews the current status and methods of using the existing divisional application system from the perspective of protecting front-runners and promoting international harmonization, and makes various recommendations on this issue.

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<sup>\* &</sup>quot;CHIZAI KANRI" (Intellectual Property Management), Vol. 55, No.11, pp. 1593-1608 (2005)

### 1. Introduction

As seen in the formulation of the "Intellectual Property Strategic Program 2004," vigorous efforts have been made in recent years toward making Japan a nation built on intellectual property. In particular, with the objective of achieving "expeditious and accurate patent examination at the highest global standard" and promoting "flexible patent examination according to applicant needs," the Working Group on Patent Strategy Plan Issues (hereinafter referred to as the Patent Strategy Working Group") was established under the Patent System Subcommittee of the Intellectual Property Policy Committee of the Industrial Structure Council, and intensive discussions were held from September to December 2003 so as to fulfill the objective.<sup>1)</sup> Subsequently, discussions continued regarding the divisional application system and the amendment system, which is closely related thereto, from various perspectives including: (1) supporting strategic and multilateral efforts of front-runners to obtaining patent rights; (2) promoting international harmonization of patent systems; (3) reducing the burden on applicants and the JPO in the process of obtaining or granting patent rights; (4) ensuring equal treatment of applicants. In October 2004, the outcome of discussions was publicized as a report entitled "Direction of the Review of the Amendment System and the Divisional Application System."<sup>2)</sup>

However, in order to achieve the goal of making Japan a nation built on intellectual property in the true sense, special emphasis should be placed on strengthening the protection of frontrunners and international harmonization of patent systems, and further discussion is needed from the viewpoint of companies that frequently use these systems.

Based on this awareness, the First Subcommittee of the First Patent Committee for FY2004 has enhanced the contents of the working group's report and considered an ideal framework for a new divisional application system, which will (1) make it easier to create basic inventions and obtain basic patents and (2) respond promptly and appropriately to the recent business trend of companies that operate business not only domestically but also on a global scale. The subcommittee has also investigated the current status of the existing divisional application system from the viewpoint of users (companies), and conducted analysis and held discussion on methods of using the divisional application system and problems concerning the existing system from various perspectives.

This report presents the current status and methods of using the existing divisional application system as well as problems with the system, and makes various recommendations on this issue

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### 2. Current Status of the Divisional Application System

#### 2.1 Use of the divisional application system

Figure 1 shows the number of divisional applications filed in Japan and in the United States each year from 1998 to 2003 (bar chart), and the proportion of the number of divisional applications out of the total number of applications (line chart). Both the number and propor-

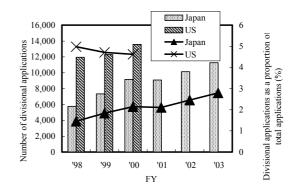


Figure 1 Number and proportion of divisional applications (Japan/US)

tion of divisional applications filed in Japan have doubled in the past six years. As in the United States, where the divisional application system has long been popular, the system has recently also started to be actively used in Japan, which may be because its usability has become more widely recognized.

### 2.2 History of Patent Law and Examination Guideline Revisions

Table 1 shows the history of the Patent Law and Examination Guideline revisions in relation to divisional applications.

Provisions for divisional applications first appeared in the 1921 Patent Law (old law). There was no time limit for the filing of divisional applications until the 1959 Patent Law (new law) came out. The partial amendment of the law in 1970 provided for a time limit, which was then relaxed to some extent by the 1994 law on partial amendments. Meanwhile, the first Examination Guidelines on divisional application were published in 1977.<sup>3)</sup> Subsequently, a revised version of the guidelines published in 1983 prohibited the filing of a divisional application claiming an invention that is identical to the invention claimed in the parent (original) application as violation of the requirements for division<sup>4)</sup>, but the supplementary version published

in April 1995 prohibited such a filing as a violation of the prohibition of double-patenting under Section 39.

### 2.3 Comparison with existing divisional application systems in major countries

Table 2 shows the result of a comparative study of existing divisional application systems in Japan, the United States, the area covered by the European Patent System (EP area), and four other countries, namely China, South Korea, France, and Germany (in terms of applicable legal provisions, whether a divisional application may be filed before or after the grant of a patent based on the parent application, the period during which a divisional application may be filed, and the admissibility of the filing of a divisional application claiming an invention that is substantially identical to the invention claimed in the parent application).

Regarding the period during which a divisional application may be filed before and after patent registration is made (notice of the granting is given) based on the parent application, Japan and Sough Korea set a time limit for the filing before the registration, and a divisional application may be filed only within the time limit for amendments to the parent application. The filing of a divisional application is not al-

Date	Patent Law (main points)	Examination Guidelines (main points)		
1921 (old law)	Section 9: No time limit for the filing of divisional applications (Note 1)			
1959 (new law)	Section 44	-		
1970 (revision)	Time limit added (Note 2)	-		
1967 (revision)		First version (general guidelines)		
May 1983 (revision)		Revised version	Prohibition of divisional applications for identical inventions	
1994 (revision)	Time limit relaxed to some extent (Section 17-2)			
April 1995 (revision)		Supplementary version	Application of Section 39 for identical inventions	
Note 1: Where a p	atent application comprising two or more i	nventions is divided i	nto two or more applications	
	cant may divide a patent application compr s only within the time limit by which the do nended.	-		

Table 1 History of the Patent Law and Examination Guideline revisions

	Applicable provisions	Before the granting of a patent (notice of grant) based on the parent application		After the granting of a patent (notice of grant) based on the parent application		Admissibility of divisional	
Country		Allowed or prohibited	Time limit	Period of division	Allowed or prohibited	Period of division	application on the identical invention
Japan South Korea	Sections 44 and 17-2 Section 52	0	Limited	While amendments may be made	×	By the time the decision of grant is sent	×
United States Europe	Sections 120 and 121, Rule 1.53(b) Section 76, Rule 25(1) (Note 1)		Not limited	While the parent application is pending at the patent office	0	By the time the patent is published	× (Note 2) × (Note 3)
China	Section 42					Within two months from the date of receipt of the notice of grant	
France	Section 612-4 (Rule 612.33-35)					By the time fees for issuing and printing of the patent specification are paid	×
Germany	Sections 39 and 60)					By the time the patent is published or post- registration objection proceedings terminate	
Note 1	Rule 25(1): The applicant may file a divisional application relating to any pending earlier European patent application						
Note 2	The applicant can avoid double patenting by disclaiming part of the term for one patent so that the terms of the two patents will end at the same time (terminal disclaimer).						
Note 3	An application may be filed claiming subject matter in combination with the subject matter claimed in another application.						

Table 2 Comparative study of existing divisional application systems in major countries

lowed after the granting of a patent (=after the decision to grant a patent is delivered to the applicant) based on the parent application. On the other hand, in some other countries, i.e. the United States, the EP area, China, France, and Germany, albeit with some differences in details of their systems, there is no time limit and a divisional application may be filed at any time before the grant of the patent as long as the parent application is pending at the patent office, and the filing of a divisional application is also allowed after the grant of the patent  $^{5)-8)}$ . Thus, with the exception of South Korea, Japan has the most restrictive system for divisional application and needs to improve this system.

Regarding the admissibility for filing of a divisional application claiming an invention that is substantially identical to the invention claimed in the parent application, such a filing is not allowed in Japan, the EP area, China, South Korea, France, and Germany (with the exception that a divisional application may be filed in the EP area in cases where an application claims a subject matter in combination with the subject matter claimed in another application and the inventions claimed in these applications are substantially identical). Meanwhile, in the United States, refusal due to the obviousness arising from the identical nature of inventions may be avoided by disclaiming part of the patent term (terminal disclaimer; USC § 253), and therefore it is possible to obtain patent rights for both inventions claimed in the earlier and later applications without a gap even where the claimed inventions are substantially identical.

### 2.4 Analysis of the actual condition of divisional applications recently filed

Table 3 shows the list of top companies filing divisional applications, which were published in the seven years from 1998 to 2004.

### 3. Methods for using the existing divisional application system

The existing divisional application system is generally used for two major purposes, i.e. to respond to office actions notifying reasons for refusal, or to take strategic measures for proactive reasons.

Category	Parent application	Number of divisional applications	Number of applications published	Rate of division	
General electric appliance	Hitachi	3,956	54,959	7%	
General electric appliance	Matsushita Electric	3,644	88,490	4%	
Information equipment	Seiko Epson	2,581	30,512	8%	
General electric appliance	Toshiba	1,670	56,885	3%	
General electric appliance	Sony	1,483	53,826	3%	
Information equipment	Canon	1,248	1,248 67,637		
Game machine	Sanyo Group	1,055	2,487	42%	
General electric appliance	Mitsubishi Electric	1,024	41,461	2%	
Information equipment	Fujitsu	997	24,725	4%	
Semiconductor	Semiconductor Energy Laboratory	974	2,657	37%	
General electric appliance	Sharp	973	27,502	4%	
Game machine	Sankyo	874 4,431		20%	
Precision equipment	Olympus	864	14,627	6%	
Information equipment	Ricoh	856	41,759	2%	
General electric appliance	Sanyo Electric	829	29,449	3%	
General electric appliance	Victor Japan	781	7,137	11%	
General electric appliance	NEC	660	40,008	2%	
Agricultural equipment	Iseki	614	4,905	13%	
Agricultural equipment	Yanmar	530 3,390		16%	

Table 3 Top companies filing divisional applications

### 3.1 Responding to office actions notifying reasons for refusal

(1) To avoid refusal by reason of violation of the requirements for unity (Section 37)

A divisional application is filed to avoid refusal by reason of violation of the requirements for unity of an application under Section 37 of the Patent Law. The divisional application system is also available in cases where an application, which satisfied the requirements for unity at the time of filing, no longer satisfies them due to an amendment made in response to the examiner's decision of refusal by reason of violation of the requirements for patentability under Section 29 (e.g. novelty, inventive step).

(2) To separate a highly-patentable invention (Section 29)

Where an application satisfies the require-

ments for unity but is refused by reason of violation of the requirements for patentability under Section 29 (e.g. novelty, inventive step), a divisional application is filed to separate part of the claimed invention that is more likely to be patented from another part that is less likely to be patented, so as to avoid refusal with respect to the invention as a whole.

(3) To respond to limitation of amendment (Section 17-2)

An amendment may be made to a very limited extent when responding to a final office action notifying reasons for refusal or filing an appeal against the examiner's decision of refusal (Section 17-2(4) of the Patent Law). Where the applicant has difficulty in obtaining patent rights as intended due to such a limitation that prevents him from making a necessary amendment, or seeks to expand or change the scope of the invention for strategic reasons, he can file a divisional application in order to continue the procedure for obtaining patent rights while avoiding such limitation.

#### 3.2 Strategic use

(1) To obtain multilateral protection (build a patent network)

The divisional application system is also used for the strategic purpose of obtaining multilateral protection or building a patent network.

(A) Where the parent application contains a wide scope of claims and the patent rights to be granted are expected to be transferred or licensed to two or more companies, divisional applications are filed to obtain two or more patents and transfer or license them to different companies.

(B) At the stage of exercising patent rights against a competitor for patent infringement, where the allegedly infringing product differs from the patented product in some constituent features or a difference arises in the construction of the scope of rights, the patent holder would face a non-infringement argument presented by the competitor, and fail to end the dispute without bringing it to court. In this case, if multiple patents have been obtained beforehand, the patent holder can lead the negotiations with the competitor by exercising multiple patent rights. One possible way to achieve this is to file as many divisional applications as possible based on the parent application from various perspectives (e.g. category, function, peripheral structure) after determining the negotiation target, thereby obtaining as many patents as possible. In this way, it is possible to lay siege to the competitor's product with multiple patents and have the upper hand in the negotiations.

(C) An invention that need not be patented at the time of filing or invention that was excluded from the scope of claims in the application as filed might be evaluated differently later due to the product trends of competitors or the release of competitors' products. In preparation for such a situation, divisional applications can be filed in advance with respect to inventions described in the parent application as filed.

(D) Where the parent application is filed with respect to an invention relating to a characteristic process for manufacturing a particular substance, divisional applications are filed with respect to individual intermediates of the substance and separate patents obtained for such intermediates. In this way, even where a third party attempts to avoid employing the patented manufacturing process, the patent holder can demand elimination of infringement as long as the party manufactures the substance by using these intermediates.

#### (2) To obtain more patents

In addition to the case mentioned in (C) above, divisional applications are also filed to obtain more patents for various purposes in the following cases:

The parent application is filed to obtain a patent with respect to an invention expressed in a generic concept, and then depending on developments regarding competitors' market entry, divisional applications are filed to obtain more patents with respect to inventions relating to the modes of carrying out the parent invention (inventions expressed in subordinate concepts). In this case, it is necessary to describe a wide range of modes of carrying out the invention claimed in the parent application.

The parent application is filed with respect to an invention expressed in a generic concept that also covers inventions expressed in subordinate concepts (peripheral inventions or improved inventions), and then upon competitors' market entry, divisional applications are filed to obtain more licensable patents so as to have the advantage in cross-licensing negotiations with competitors.

Applications are filed intensively with respect to technical elements that are expected to be dominant in the technical field where competition takes place, and then when the schedule for putting the technical elements into practice is arranged, divisional applications are filed to obtain more patents with respect to the technical elements so as to have the advantage in crosslicensing negotiations with competitors.

Divisional applications are also filed to obtain more patents with the aim of participating in a patent pool that is established by multiple patent holders (licensers) pooling their patents in a particular management organization, which then licenses the patents to the members (licensees). By contributing more patents to the patent pool, patent holders can earn more royalties depending on the number of patents contributed.

(3) To maintain the pendency of the application at the patent office

Divisional applications can also be filed for the purpose of maintaining the pendency of an application at the patent office. For instance, by filing divisional applications repeatedly in advance in light of the possibility that the parent application is refused by the examiner or appeals examiner, the applicant can prevent his application from being refused conclusively.

(4) To obtain a patent term extension for the parent application in the pharmaceutical field

In the pharmaceutical field, in order to obtain the maximum patent term extension of five years, the pharmaceutical product should be patented at least five years prior to marketing authorization of the product (Section 67(2) of the Patent Law). Based on this rule, if it is impossible to obtain a patent five years prior to the authorization due to the broad scope of claims, the applicant can narrow the scope of claims to cover the pharmaceutical product alone in order to obtain a patent at an early stage while filing divisional applications for the remaining broad scope of claims as a measure to prevent competitors from patenting. In this way, a patenting strategy can be carried out on a long-term basis.

(5) To divide a joint invention among joint applicants

Where multiple companies file a joint application with respect to an invention that they have created through joint efforts, they may seek to obtain different types (categories) of rights. However, if they file patent applications independently on different dates, the later application would be refused on the grounds that the claimed invention is identical to the invention claimed in the earlier application (Section 29-2 of the Patent Law). In order to avoid such a situation, where multiple companies seek to file applications containing the same invention and it is difficult to prove that the invention contained in these applications is created by the same inventor, they first file a joint application, and then file divisional applications to divide the invention claimed in the joint application into

the part to be shared and the part not to be shared. They can further clarify their own rights by changing the name of the applicant.

### 4. Problems with the existing divisional application system

### 4.1 Problems concerning the time limit for filing divisional applications

(1) Filing of a divisional application after the examiner's decision of refusal

In response to the examiner's decision of refusal, the application may be amended only to narrow the scope of claims (Section 17-2(4) of the Patent Law). Therefore, in order to expand or change the scope of claims, the applicant should file a divisional application before making an amendment. Under the existing system, a divisional application may be filed within the time limit by which an amendment may be made to the specification, claims or drawings attached to the request (Section 44 of the Patent Law). If the applicant intends to file a divisional application after the parent application is refused, he should first appeal against the examiner's decision of refusal in order to obtain the opportunity to make an amendment.

Under the existing divisional application system, even in cases where the applicant seeks to file a divisional application with the intention of avoiding the restriction of amendment or maintaining the pendency of the application, he has to appeal against the examiner's decision of refusal only for the purpose of obtaining the opportunity to file a divisional application. This imposes a burden on the applicant. The existing system also has problems in terms of international harmonization mentioned in 2.3 above.

(2) Filing of a divisional application after the grant of a patent

Under the existing system, a divisional application shall not be filed after a patent is granted based on the parent application. Therefore, if a patent is granted based on the parent application without any office action notifying reasons for refusal, the applicant would be deprived of the opportunity to amend the scope of claims or file a divisional application, and therefore he would not be able to review the scope of rights as appropriate from various perspectives or obtain adequate protection for the invention for multilateral purposes. To avoid this situation, the applicant has to take preventive measures such as filing a divisional application upon requesting examination of the parent application or including dummy claims in the parent application intentionally so that an office action will be given to notify reasons for refusal of the parent application. This imposes a burden on the applicant. The existing system also has problems in terms of international harmonization mentioned in 2.3 above.

(3) Filing of a divisional application after the appeal examiner's decision of refusal

Under the existing system, a divisional application shall not be filed after the appeal examiner makes a decision of refusal. Therefore, if the parent application is refused by the appeal examiner and no divisional application has been filed beforehand, the applicant has no choice but to appeal to the high court. However, when appealing to the court, the applicant has no opportunity to amend the patent claims and needs to spend a large amount of legal costs. For these reasons, in most cases, the applicant is forced to accept the examiner's decision of refusal.

Meanwhile, if the applicant is allowed to file a divisional application after the appeal examiner's decision of refusal, it would take a long time to carry out appeal proceedings, increasing the monitoring burden imposed on a third party.

### 4.2 Problems concerning addition of new matters

(1) Addition of new matters

It is often the case that after filing an application with respect to an invention, the applicant continues efforts to improve the invention, and finally reaches the true completion of the invention or creates an improved invention after one year has elapsed from the filing. Such cases seem to occur frequently in cutting-edge research fields.

However, under the Japanese domestic priority system, new matters may be added only within one year from the filing date of the original application, and therefore domestic priority may not be claimed when filing an application with respect to an improved invention after one year has elapsed from the filing date of the original application.<sup>9)</sup> Furthermore, under the divisional application system, it is not allowed to include new matters in a divisional application, which prevents sufficient protection of inventions.

(2) Advantage and disadvantage of the CIP system, and problems that may arise from the introduction of a Japanese version of the CIP system

In the United States, there are systems under which it is possible to continue the procedures for obtaining a patent after the filing of the parent application, such as the continuation application (CA) system, the divisional application (DA) system, the continuation-in-part (CIP) application system, and the request for continued examination (RCE) system.<sup>6)</sup> Among these systems, the CIP system is similar to the Japanese domestic priority system, but it differs from the latter in that it has no time limit for the addition of a new matter to the parent application, enabling the applicant to add descriptions of the effect of the invention, working examples of the invention, and an improved invention at any time<sup>10)</sup>

However, under the CIP system, the parent application can remain pending even after a CIP application is filed. Therefore, if many CIP applications containing new matters are filed, the patent office would have to examine multiple related inventions, suffering more examination workload. Furthermore, if a new purpose or effect of the invention is described in a CIP application, this would also increase the monitoring burden imposed on a third party in terms of the construction of the scope of rights for the invention.

(3) Results of the questionnaire survey on the US CIP system

In light of the need to hear frank opinions on the CIP system from employees in charge of intellectual property affairs at Japanese companies, the subcommittee conducted a questionnaire survey on the status of use of the US CIP system. The survey targeted a total of 103 companies with the membership in the First and Second Patent Committees of the Japan Intellectual Property Association, and obtained responses from 65 companies. It should be noted that the responses are based on the respondents' personal views, understanding, and judgment, and the survey results (Figures 3 to 5) represent responses relating to one application that each respondent chose at random from the CIP applications filed by their companies.

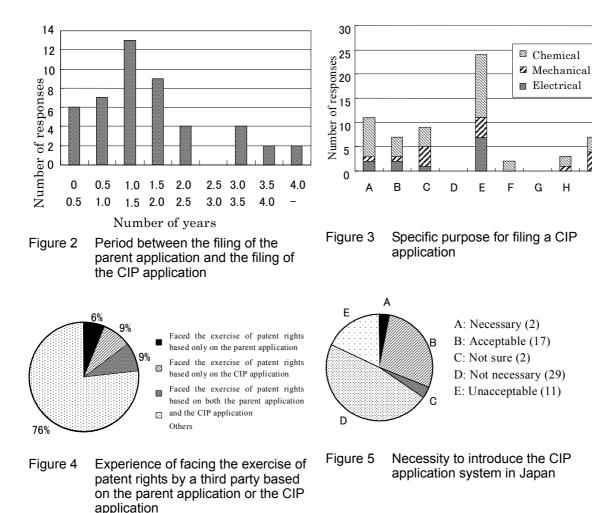
Representative responses to the questionnaire are shown below.

Figure 2 shows responses to the question on the length of the period between the filing of the parent application and the filing of the CIP application. This indicates the tendency to file a CIP application at an early stage after the filing of a US application.

Figure 3 shows responses to the question on the specific purpose of filing a CIP application.

Figure 4 shows responses to the question on the experience of facing the exercise of patent rights by a third party based on the parent application or the CIP application. Figure 5 shows responses to the question on the necessity to introduce a CIP application system in Japan. A large part of the respondents have negative views about introducing a CIP application system in Japan.

A: Correct defects in descriptions; B: Describe an additional effect of the invention in order to overcome the reason for refusal in terms of obviousness; C: Describe an additional working example of the invention in order to overcome the reason for refusal in terms of obviousness; D: Avoid double patenting as requested by an office action notifying reasons for refusal; E: Add an improved invention; F: Consolidate two or more applications; G: Make amendments voluntarily regarding a publicly-known invention that the applicant himself has found; H: On the occasion of filing a divisional or continuation application; I: Others



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#### 4.3 Problems concerning a divisional application claiming an invention that is identical to the invention claimed in the parent application

As shown in Table 4, divisional applications can be roughly divided into the following four types: a divisional application claiming an invention that is completely identical to the invention claimed in the parent application; a divisional application expanding the scope of claims of the parent application; a divisional application narrowing the scope of claims of the parent application; a divisional application changing the scope of claims of the parent application. In the following four cases where the invention claimed in the divisional application is completely identical [(iv)] or substantially identical [(i)-(iii)] to the invention claimed in the parent application, the divisional application shall be refused under Section 39(2) of the Patent Law.

- (i) The divisional application is filed to delete a well-known or common matter that brings about no new effect (Case 3).
- (ii) The divisional application is filed to add a well-known or common matter that brings about no new effect (Case 5).
- (iii) The divisional application differs from the parent application only in terms of the expression of the category, e.g. expressing the invention with a product claim or with a product-by-process claim (Case 7).
- (iv) The divisional application is completely identical to the parent application (Case 1).

As mentioned above, the existing divisional application system, which does not allow patenting based on a divisional application claiming an invention that is substantially identical to the invention claimed in the parent application, cannot afford adequate protection for applicants as front-runners. The admissibility of such a filing of a divisional application that is substantially identical to the parent application is discussed in 5.2 below.

Table 4 Admissibility of the filing of a divisional application claiming an invention that is substantially identical to the invention claimed in the parent application

### 5. Recommendations

# 5.1 Protection of front-runners and equal treatment between the front-runner and a third party

As mentioned above, the existing divisional application system is useful for obtaining rights in detail and in a broad scope and for other strategic purposes. At the same time, it requires cumbersome procedures, e.g. after the examiner makes a decision of refusal, the applicant has to appeal only for the purpose of obtaining the opportunity to file a divisional application. The existing system does not sufficiently afford multilateral protection for front-runners. In terms of procedures, relaxation of the time limit for the filing of divisional applications is one major issue to be resolved from the perspective of international harmonization.

On the other hand, too much emphasis on the protection of front-runners would cause problems in relation to the equal treatment between the front-runner and a third party. For instance, if the applicant is allowed to file a divisional application claiming an invention that is substantially identical to the invention claimed in the parent application, it would be possible to obtain more patents with the intention of securing advantageous terms in licensing contracts. This would be unduly favorable to well-financed applicants or patent holders. Therefore, although it is necessary to ensure strong protection for patent holders, it is also necessary to take measures to prevent the abuse of rights.

From these viewpoints, we have made various recommendations below.

# 5.2 Admissibility of the filing of a divisional application claiming an invention that is substantially identical to the invention claimed in the parent application

As mentioned in 4.3 above, a divisional application claiming an invention that is substantially identical to the invention claimed in the parent application shall be refused under Section 39(2) of the Patent Law in cases where: (i) the divisional application is filed to delete a well-known or common matter that brings about no new effect; (ii) the divisional application is filed to add a well-known or common matter that brings about no new effect; (iii) the divisional application differs from the parent application only in terms of the expression of the category.

Table 4	Admissibility of the filing of a divisional application claiming an invention that is
	substantially identical to the invention claimed in the parent application

	Existing system					Possibility to file a divisional application on the identical invention		
No		Divisional application				Application of	Comment	
1.00				Specific	examples	Section 39(2)*	from the standpoint of	Comment from the
	Co	Contents of divisional application		Claim of the parent application	Claim of the divisional application	O: Applicable ×: Not appli- cable	the applicant (patent holder)	standpoint of a third party
1	Claiming an invention completely identical to the invention claimed in the parent application		ntical to the ed in the	Process of manufacturing surface-treated steel plate by dipping steel plate in NaOH solution and then applying heat treatment at 500 degrees C or a higher temperature	Same as the left column	O (Completely identical)		Complete double patenting
2	of claims	Express the invention generic constraints of the second se	in a	Process of manufacturing surface-treated steel plate by dipping steel plate in <u>NaOH</u> <u>solution</u> and then applying heat treatment at 500 degrees C or a higher temperature	Process of manufacturing surface-treated steel plate by dipping steel plate in <u>alkali</u> <u>solution</u> and then applying heat treatment at 500 degrees C or a higher temperature	×	Expand the scope of rights	
3		Delete specific matters of the invention	Delete well- known or common matters (with no new effect)	Process of manufacturing surface-treated steel plate by dipping steel plate in NaOH solution and then <u>applying heat</u> <u>treatment at 500 degrees C or a</u> <u>higher temperature, and also</u> <u>applying XX treatment (well- known; no new effect)</u>	Process of manufacturing surface-treated steel plate by dipping steel plate in NaOH solution and then <u>applying heat</u> <u>treatment at 500 degrees C or a</u> <u>higher temperature</u>	O (Substantially identical)	Expand the scope of rights	Unable to distinguish the invention of the divisional application from the invention of the parent application (double patenting)
4		Limit spe- matters of invention		<u>Process of manufacturing</u> <u>surface-treated steel plate</u> by dipping <u>steel plate</u> in NaOH solution and then applying heat treatment at 500 degrees C or a higher temperature	Process of manufacturing surface-treated steel plate by dipping <u>steel plate containing</u> <u>1% or more Si</u> in NaOH solution and then applying heat treatment at 500 degrees C or a higher temperature	×	Increase the number of patents Clarify the scope of rights	
5	Narrow the scope of claims	Add specific matters of the invention		Process of manufacturing surface-treated steel plate by dipping steel plate in NaOH solution and then applying heat treatment at 500 degrees C or a higher temperature	Process of manufacturing surface-treated steel plate by dipping steel plate in NaOH solution and then <u>applying heat</u> <u>treatment at 500 degrees C or a</u> <u>higher temperature, and also</u> <u>applying XX treatment (well- known; no new effect)</u>	O (Substantially identical)	Increase the number of patents Clarify the scope of rights	Unable to distinguish the invention of the divisional application from the invention of the parent application (double patenting)
6	Na		Add characteris tic matters	Process of manufacturing surface-treated steel plate by dipping steel plate in NaOH solution and then applying heat treatment at 500 degrees C or a higher temperature	Process of manufacturing surface-treated steel plate by dipping steel plate in NaOH solution and then applying heat treatment at 500 degrees C or higher temperature, and <u>also</u> <u>applying XX treatment</u> (characteristic treatment)	×	Increase the number of patents Clarify the scope of rights	
7	Change the scope of claims	Add a category	Merely change expres- sions	"Process claim" Process of manufacturing surface-treated steel plate by dipping steel plate in NaOH solution and then applying heat treatment at 500 degrees C or a higher temperature	Add "product claim" <u>Surface-treated steel plate</u> <u>manufactured by dipping steel</u> <u>plate in NaOH solution and</u> <u>then applying heat treatment at</u> <u>500 degrees C or a higher</u> <u>temperature</u>	O (Substantially identical)	Expand or change the scope of rights	The parent application fails to disclose the invention as a "product" effectively
8	Change the :		Add substantive contents	"Process claim" Process of manufacturing surface-treated steel plate by plating steel plate with Ni and then applying heat treatment at XX degrees C or a higher temperature	Add "product claim" Surface-treated steel plate manufactured by plating steel plate with Ni via a NiFe layer on the plate surface	×	Expand or change the scope of rights	

\* Examination Guidelines on Section 39 of the Patent Law (3. How to determine whether the claimed invention is identical to the invention claimed in any earlier application)

If the applicant is allowed to file a divisional application claiming an invention made merely by deleting a well-known or common matter that brings about no new effect from the invention claimed in the parent application or adding such matter to the invention claimed in the parent application ((i) and (ii)), the invention claimed in the divisional application cannot be distinguished from the invention claimed in the parent application, which results in double patenting. Unnecessary constituent features should not be included in the application as initially filed, and this issue should be resolved by using the domestic priority system and the amendment system.

In cases where the parent application claims an invention relating to a characteristic process for manufacturing a product, and a divisional application is filed while claiming the product itself that is expressed with product-byprocess claims in the parent application ((iii)), such a divisional application should not be accepted because the parent application does not effectively disclose the invention as a "product." If the applicant seeks to obtain a patent for the "product," he should add data that can specify the "product" in the parent application under the domestic priority system, or file another application containing such data before the parent application is published. Allowing the filing of a divisional application in this case would lead to excessive protection for patent holders.

Even after the parent application is filed, the applicant has the opportunity to amend the claims within the scope described in the specification as initially filed (Section 17-2 of the Patent Law). The restrictions on the filing of a divisional application mentioned above do not seem to be particularly disadvantageous to applicants, and therefore it may not be necessary to allow the filing of a divisional application claiming an invention that is substantially identical to the invention claimed in the parent application.

However, when two or more patents are granted for inventions that are determined to be substantially identical to each other, the problem of coexistence of multiple patents can be solved by treating such patents as one patent effectively.

More specifically, this problem can be solved by establishing new systems aimed at ensuring equal treatment between the patent holder and a third party. For instance, (i) the patent rights based on the divisional application and the patent rights based on the parent application should be exercised together; (ii) the patent rights based on the divisional application and the patent rights based on the parent application should not be transferred to different parties; (iii) if either the patent rights based on the divisional application or the patent rights based on the parent application are extinguished, the other patent rights should also be deemed to be extinguished.

These systems will not provide undue advantage for well-financed patent holders in negotiating for licensing or exercising patent rights, and will ensure equal treatment between the patent holder and a third party.

From the standpoint of applicants, if the applicant is allowed to file a divisional application claiming an invention that is substantially identical to the invention claimed in the parent application in order, within the scope of claims described in the specification of the parent application as initially filed, to (i) delete unnecessary constituent features of the invention, (ii) change the category of claims (e.g. from product-byprocess claims to product claims), or (iii) add a category covering a wider scope of rights, the applicant can definitely obtain all-embracing patent rights without a gap or omission, and the invention disclosed in the specification of the parent application as initially filed can enjoy strong protection. Such measures to strengthen protection for applicants will create an environment where it is easy to create basic inventions and obtain basic patents, and this will contribute to creation of a legal system suitable for a nation built on intellectual property. Allowing the filing of a divisional application claiming an invention that is substantially identical to the invention claimed in the parent application is also significant in strengthening protection for applicants as front-runners, because the descriptions of the parent application as initially filed are not always perfect. Furthermore, if the applicant is allowed to file such a divisional application, he can obtain more patents and have the upper hand in licensing negotiations.

Thus, from the perspective of strengthening protection for front-runners, allowing patenting based on a divisional application claiming an invention that is substantially identical to the invention claimed in the parent application means a great deal. Therefore, while also considering the possibility to establish a new system aimed at ensuring the equality between the patent holder and a third party, there is enough room to consider allowing the filing of a divisional application claiming an invention that is substantially identical to the invention claimed in the parent application.

#### 5.3 Proposal of the overlap disclaimer system

#### (1) Statement of the issue

In the report entitled "Direction of the Review of the Amendment System and the Divisional Application System" mentioned above, the Patent Strategy Working Group discussed the "introduction of the CIP system," "patenting based on a divisional application claiming an invention that is substantially identical to the invention claimed in the parent application" as effective measures to protect front-runners. The working group also pointed out that deliberate consideration should be given to a possible increase in the monitoring burden, the adverse impact on a third party, and international harmonization. In light of this, we propose measures to support front-runners in obtaining rights for strategic purposes, which will be able to respond to such concerns and will be simple and compatible with various existing systems.

(2) Consideration of the front-runner protection effects

Before proposing new measures, we consider the front-runner protection effects of the "CIP system" and "patenting based on a divisional application claiming an invention that is substantially identical to the invention claimed in the parent application."

The "CIP system" is effective in "obtaining all-embracing patent rights without omission" and "omitting determination on whether the parent application satisfies the enablement requirement." "Patenting based on a divisional application claiming an invention that is substantially identical to the invention claimed in the parent application" is effective in "obtaining all-embracing patent rights without omission."

Regarding the effect of "obtaining all-embracing patent rights without omission," the CIP system enables the applicant to obtain all-embracing patent rights for one broad invention that covers all inventions claimed in the parent application and the CIP application. If the CIP system is not available, the following problems may arise: after the one-year period of domestic priority has elapsed, the applicant has to carry out the procedures for obtaining rights separately for the invention claimed in the earlier application and the invention claimed in the later application; since electrical and mechanical inventions are usually not expressed with "excluding" claims, which are generally used for chemical inventions, it is difficult to cover, by two patents, both the scope of rights based on the earlier application and the scope of rights based on the later application, which causes a gap between the two patents. The same problems occur with respect to "patenting based on a divisional application claiming an invention that is substantially identical to the invention claimed in the parent application."

Regarding the effect of "omitting determination on whether the parent application satisfies the enablement requirement," we take for instance the case where the applicant seeks to add experimental data because the parent application is likely to be determined not to satisfy the enablement requirement. Under the CIP system, the invention claimed in the parent application is not examined as to the enablement requirement unless the examiner finds any prior art reference published between the filing date of the parent application and that of the CIP application. On the other hand, if the CIP system is not available and the period of domestic priority has elapsed, the applicant has to first carry out the procedure for obtaining a patent based on the earlier application, which involves examination of the enablement requirement. Where the earlier application is determined to satisfy the enablement requirement but this determination is later reversed after the patent is registered, the later application has already been refused under Section 39 of the Patent Law by reason of the existence of the patent based on the earlier application, and in the end, the applicant is unable to obtain a patent. On the other hand, where the earlier application is refused due to the failure to satisfy the enablement requirement, if the applicant tries to obtain a patent based on the later application without presenting any significant argument against the refusal, and the patent granted based on the later application is declared invalid due to the prior art reference published between the filing date of the earlier application and that of the later application, the applicant is unable to obtain a patent because the refusal of the earlier application has already become conclusive.

(3) Proposal for the overlap disclaimer system

As a result of the discussion on how to create a system that achieves the front-runner protection effects of both systems mentioned above, we have come to the idea that it may be possible to cover these effects almost completely by simply allowing the applicant to disclaim the overlap between the invention claimed in the earlier (or parent) application and the invention claimed in the later (or divisional) application.

By disclaiming the overlap of the inventions, the applicant can avoid the double patenting prohibited under Section 39 of the Patent Law. Furthermore, the applicant can obtain allembracing patent rights covering a broad scope without a gap between the patents.

A disclaimer may be made by indicating the patent number of the earlier patent to be disclaimed in a new section entitled "Overlap Disclaimer" in the "Claims." If the later application contains such an indication, the part of the invention that overlaps with the earlier patent shall be automatically excluded from the scope of

[Title of the document] Claims [Claim 1] ... [Overlap disclaimer] Patent No. XX claims.

The overlap disclaimer system may be effective to a certain extent if the scope of disclaimable overlap is fixed to correspond to the whole scope of claims of the earlier patent as registered. It may be more effective for frontrunner protection if the scope of disclaimable overlap will be changed retrospectively when the scope of claims of the earlier patent is later changed by the decision of invalidation or correction. As mentioned above, where it is uncertain whether the earlier application satisfies the enablement requirement, the later patent can cover the invention containing the overlap with the earlier patent even when the earlier patent is declared invalid by reason of the failure to satisfy the enablement requirement.

A hypothetical case is shown below. The earlier patent claims rodent genes and only presents working examples relating to mouse genes, whereas the later patent claims mammalian genes (overlap disclaimed) and presents working examples relating to mouse genes and human genes. If the earlier patent is alleged to be invalid by reason of the failure to satisfy the enablement requirement, and the claimed subject matter is revised from rodent genes to mouse genes, the scope of the later patent will be expanded to cover mammalian genes including rodent genes, and excluding only mouse genes (see Figure 6).

In this case, patent examination under Section 39, etc. should be conducted with respect to the whole scope of claims including the overlap. Patents should be granted even in cases

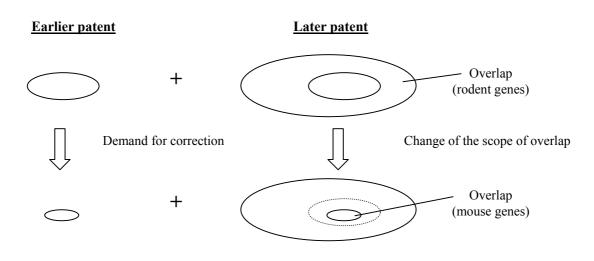


Figure 6 The scope of the later patent under the overlap disclaimer system in the case where the scope of the earlier patent is narrowed

where the scope of claims of the later patent is smaller than the scope of the overlap and nothing would remain if the overlap is excluded from the scope of claims, because the scope of the overlap might be changed retrospectively.

It is also possible to allow a disclaimer of the overlap with the earlier patent held by another party. In this case, if the later applicant obtains a patent by disclaiming the overlap with another party's earlier patent, and then successfully invalidates the earlier patent, he can expand the scope of his patent. If the applicant is only allowed to disclaim the overlap with his own patent, as in the case of a US terminal disclaimer, certain measures should be taken to restrict the transfer of the earlier patent as long as it exists, requiring cumbersome management procedures. Such measures would not be necessary if the applicant is allowed to disclaim the overlap with another party's patent. However, if the scope of disclaimable overlap is expanded to such an extent, it might be more beneficial to second-runners rather than to front-runners. It might also increase the monitoring burden imposed on a third party.

(4) Issues to be considered when creating the overlap disclaimer system

One issue to be considered when creating the overlap disclaimer system is how to minimize any disadvantage to a third party.

Under the overlap disclaimer system, a third party needs to try to invalidate two patents. In other words, even if a third party successfully invalidates the earlier patent, the scope of the later patent will be expanded, upon the invalidation of the earlier patent, to include the overlap between the earlier patent and the later patent. In this case, the third party also has to try to invalidate the later patent. If the earlier patent is invalidated by reason of the lack of novelty or inventive step, it may be easy to invalidate the later patent for the same reason but the invalidation procedures should be carried out separately. Furthermore, it would be difficult to invalidate the later patent if the earlier patent is invalidated by reason of the failure to satisfy the enablement requirement. In the case where only the earlier patent is invalidated and the later patent survives, the patent term might be extended with respect to the overlap.

Although the overlap disclaimer system

seems to be effective in strengthening protection for front-runners, such a system cannot be found in other countries and problems also remain in terms of intentional harmonization. Therefore, when creating the overlap disclaimer system, consideration should be made regarding the issues mentioned above.

## 5.4 Recommendations from the perspective of international harmonization of patent systems

Japanese companies now conduct business activities not only within their country but also beyond the national borders. In light of such globalization of business, it is necessary to enable Japanese companies to obtain patent protection for strategic purposes with respect to their R&D results at an early stage simultaneously and appropriately on a global scale. To this end, there is strong demand for system reforms so as to achieve harmonization between domestic patent systems and foreign patent systems, including divisional application systems.

In particular, in terms of the time limit for the filing of divisional applications and the admissibility to file a divisional application after the grant of a patent, the Japanese divisional application system is more restrictive than the divisional application systems in Europe and the United States. From the perspective of achieving international harmonization in order to enable Japanese companies to obtain and manage patents on a global scale, we strongly recommend system reforms, following the divisional application systems in Europe and the United States, to allow the filing of a divisional application at any time as long as the parent application is pending at the patent office and also allow the filing of a divisional application even after a patent is granted based on the parent application.

Such system reforms will enable Japanese companies to file divisional applications and review the contents of patents at the same time at home and abroad, which will reduce their workload in application management. The reforms of the Japanese divisional application system will also have a favorable influence on South Korea that conducts legal reforms while following the Japanese patent system as an example. If both Japan and Sough Korea carry out legal reforms to allow the filing of a divisional application at any time as long as the parent application is pending at the patent office and also allow the filing of a divisional application even after a patent is granted based on the parent application, it will be possible to achieve harmonization of patent systems between Japan and Europe and the United States as well as between Japan and South Korea.

#### 5.5 Recommendations on examination procedures for divisional applications

(1) Inclusion of divisional applications in the scope of applications for which accelerated examination is applicable

A divisional application is often filed in cases where the main claims of the parent application are limited in response to an office action notifying reasons for refusal, and as a result, the sub-claims become independent claims and fail to satisfy the unity requirements. In this case, the divisional application is generally filed after several years have elapsed since the filing date of the parent application, but even if the applicant seeks to obtain a patent based on the divisional application as soon as possible, the divisional application should wait in the line for examination as an ordinary application.

Under the "Guidelines for Accelerated Examination and Accelerated Appeal Examination" revised in 2004, accelerated examination is applicable to "working-related applications" and "overseas-related applications," but not applicable to divisional applications, and exemption from the obligation to disclose the prior art and describe the difference from the prior art cannot be claimed. However, when a divisional application is filed, the patent office can be deemed to have already conducted examination and prior art search with respect to the claims of the divisional application (when examining the claims of the parent application). If examination is conducted again several years after the parent application is examined, this would reduce efficiency and cause delay in the overall examination procedures at the patent office.

For these reasons, we recommend that accelerated examination should also be applicable to divisional applications. Along with the reforms for the divisional application system, we also propose operational reforms for the accelerated examination system to simplify the procedures for requesting accelerated examination so that the applicant will be allowed to omit describing the reasons for request, the search result, and the disclosure of prior art if he indicates the application number of the parent application and will only be required to state opinions on patentability.

(2) Creation of the system of consolidated examination by the same examiner

In the present situation, where a divisional application is filed, it is often examined by an examiner who is different from the one who examined the parent application. In this case, the examination and search results for the parent application cannot be effectively utilized for examining the divisional application.

To solve this problem, we propose a consolidated examination system in which the examiner who examined the parent application should also take charge of examining the divisional application. Under such a system, it will be possible to promote early patenting based on divisional applications and strengthen protection for front-runner technology, and the efficiency in patent applications will be increased.

### 6. Conclusion

In this report, we have discussed a new framework for the divisional application system mainly from the perspective of protecting frontrunners and achieving international harmonization. Measures to strengthen protection for frontrunners should be implemented in order to create an environment where it is easy to create basic inventions and obtain basic patents, and this will contribute to creation of a legal system suitable for Japan as a nation built on intellectual property. International harmonization of patent systems is also indispensable to meet the demand for global patenting along with the globalization of business activities. For these reasons, we strongly request that the time limit for the filing of divisional applications should be relaxed as soon as possible.

We hope that this report will provide helpful suggestions for considering measures supporting the strategic and multilateral efforts of front-runners to obtain rights and create a system aimed at achieving international harmonization.

#### Notes:

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- 2) Patent Strategy Working Group, the Patent System Subcommittee, Intellectual Property Policy Committee, Industrial Structure Council, *Hosei seido oyobi bunkatsu shutsugan seido no minaoshi no hōkōsei ni tsuite* (Direction of the review of the amendment system and the divisional application system) (2004), 11-29
- Japan Patent Office, Examination Guidelines by Sector; Division of Application (May 1977) (Japan Institute of Invention and Innovation)
- 4) Japan Patent Office, General Examination Guidelines; Division of Application (revised) (May 1983) (Japan Institute of Invention and Innovation)
- JIPA First International Affairs Committee, Beikoku tokkyo wo umaku shutoku suru hōhō, dai san han (How to obtain US patents successfully) (third edition) (2003), 76-78 (Japan Intellectual Property Association)
- Henry Koda, *Beikoku tokkyohō chikujō kaisetsu,* dai yon han (Clause-by-clause commentaries on the U.S. Patent Act, fourth edition) (2001), 153-157 (Japan Institute of Invention and Innovation)
- Wilfried Stockmair and Koichi Yasuda, "Doitsu chiteki shoyūken seido no kaisetsu" (Commentary on the German intellectual property system)

(October 1996), 54-55 (Japan Institute of Invention and Innovation); Official Journal EPO (2/2002), 112-113

- 8) Under the former Implementing Regulations for the European Patent Convention, the applicant may file a divisional application until he is informed of the grant of a European patent and consents to the text (specification, claims, drawings) to which the patent is to be granted under Rule 51(4). The new Rule 25 enters into force in January 2002, and currently the applicant may file a divisional application until the European Patent Bulletin is issued with respect to the parent application as long as the parent application is pending. JIPA Third International Affairs Committee, Oshu tokkyo wo umaku shutoku suru hōhō, dai ni han (How to obtain European patents successfully, second edition) (2004), 108 (Japan Intellectual Property Association)
- 9) JIPA First Subcommittee, First Patent Committee, Pari jõyaku no yūsenkei seido to kyakutaiteki yūkõhani no toriatsukai (Priority system under the Paris Convention and the handling of the objective scope of validity), *Chizaikanri* Vo. 53, No. 11 (2003), 1723-1738 (Japan Intellectual Property Association)
- JIPA First Subcommittee, First Patent Committee, Itibu keizoku shutsugan seido no wagakuni he no dōnyū ni kansuru teigen (Study of Introducing CIP System to Japan), *Chizaikanri* Vol. 54, No. 10 (2004), 1427-1439 (Japan Intellectual Property Association)

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