

**STUDY MANDATED BY THE TEGERNSEE HEADS**  
**18-MONTH PUBLICATION**

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## **I. Introduction**

The practice of publishing patent applications at 18 months from the earliest effective filing date (including any claimed priority) is a common fixture in many of the world's patent systems, and represents a balance of interests between inventors and third parties, including the public. On the one hand, 18 months is thought to represent a reasonable period of time after filing of the application for the inventor to make an assessment whether to continue prosecution of the application or to withdraw or abandon it. On the other hand, 18 months is believed to be a reasonable period of time for third parties to wait to obtain information about a new technology.

There are many policy considerations that underlie this balance. One such policy is to ensure that third party competitors have timely notice of new developments, so they can make informed decisions about, e.g., whether to continue pursuing a similar technology, or designing around the subject matter disclosed in the application. This, in turn, promotes a more effective allocation of research investments and a corresponding reduction in costly and time consuming litigation. Another underlying policy is to allow the inventor to make a suitably informed decision whether to continue seeking patent protection or to keep the information as a possible trade secret. 18-month publication also increases the efficiency of allocating patent rights by enabling an early assessment of prior art with respect to conflicting applications.

However, 18-month publication is not without its consequences. The availability of potentially lucrative information during the period of time between 18-month publication and grant of the patent provides competitors worldwide the opportunity to copy or design around technologies that are stuck in examination backlogs. A system that requires 18-month publication may also deprive the applicant of an opportunity to withdraw an application in favor of keeping the information in it a trade secret if search or examination results are not provided before publication sufficient to enable the inventor to make a reasonable assessment of the likelihood of obtaining patent protection. This could particularly disadvantage small and medium sized enterprises, for whom trade secrets may represent a more cost-effective and therefore, realistic, form of IP protection.

## **II. State of 18-Month Publication Among Tegernsee Group Members<sup>1</sup>**

### **A. EUROPEAN PATENT OFFICE (EPO)**

#### **1. Legal Requirements**

##### **a. General rule under the EPC**

Publication of applications at 18 months at the EPO is governed by Art. 93 EPC. The general rule set forth in Art. 93(1)(a) EPC stipulates that European patent applications shall be published by the EPO as soon as possible after the expiry of a period of 18 months from the filing or priority date of the application. However, at the request of the applicant, the European application may be published prior to that date (Art. 93(1)(b) EPC). Finally, where the European application is ready for grant prior to the expiry of the 18-month period, the application and the specification of the European patent as granted will both simultaneously be published early, pursuant to Art. 93(2) EPC. (See *Guidelines for Examination in the EPO*, A-VI, 1.1). From the time of the publication of the European application onward, pursuant to Art. 93 EPC, third parties may inspect the related file upon request (Art. 128(4) EPC).

Under the EPC, there are no exceptions to this rule: all European applications pending at the date provided for in Art. 93(1)(a) EPC are published by the EPO.

##### **b. Consequences of 18-month publication**

The publication of an application at 18-months has three consequences:

##### **1. Entry into the state of the art under Art. 54(1) EPC**

From the date of publication of the application, its subject-matter is made available to the public, thus entering the state of the art under Art. 54(1) EPC and allowing competitors to make informed decisions in relation thereto.

##### **2. Secret prior art under Art. 54(3) EPC**

For an earlier filed co-pending application to enter the secret prior art under Art. 54(3) EPC and form an obstacle to the novelty (but not the inventive step) of a subsequent application, it must be both pending and published at 18 months from the filing or priority date, pursuant to Art. 93 EPC.

##### **3. Provisional protection**

According to Art. 67(1) EPC, as of the date of its publication under Art. 93, the European patent application provisionally confers the protection provided under Art. 64 EPC to the applicant in the Contracting States designated in the application. Pursuant to Art. 67(2) EPC, the scope of

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<sup>1</sup> Non-publication due to national security screening procedures is excluded from this Study as being beyond the scope of general application of 18-month publication, to which this Study is directed.

such protection is left up to the national law of the EPC Contracting States, but may not be less than that provided for under national law to published national applications and must provide at the very least "reasonable compensation" from the date of publication onwards. By virtue of Art. 69 EPC, the European patent as granted determines retroactively the protection conferred by the application, insofar as such protection is not thereby extended. Accordingly, whilst warning letters may be sent referring to the pending application prior to grant, infringers may be sued only once the patent has actually been granted.

A. Withdrawal of an application prior to the expiry of the 18-month period

1. Prior to completion of technical preparations for publication

Where the European application is finally refused, withdrawn or deemed to be withdrawn prior to the expiry of the 18-month period, and before the termination of the technical preparations for publication, the European application will not be published (Rule 67(2) EPC).

2. After completion of technical preparations for publication

Such technical preparations for publication are determined by the President (see Rule 37(1) EPC) to be completed at the end of the day 5 weeks before the 18th month from the priority date, if priority is claimed, or of the filing date, where no priority is claimed or where a priority claim has been abandoned. (*See Guidelines*, A-VI, 1.2) Where the application is withdrawn after this date, the EPO will try everything within reason to prevent publication, but non-publication cannot be guaranteed. The standard for the efforts of the EPO in this regard is set by the EPO Legal Board of Appeal: "whether it seems justifiable for the office to intervene in light of the stage which the publication process has reached" (J 05/81, OJ 1982, 155, p. 159).

Where the applicant withdraws his application later than the date of completion of technical preparations for publication, to take into account the possibility that it may not be possible for the EPO to halt publication, he may make such withdrawal subject to the proviso that the application is not made known to the public. Thus, if the application's publication cannot be prevented, the application will remain pending, will constitute a prior right for applications subsequently filed, and may be prosecuted further.

## 2. Policy Considerations

Mandatory publication of applications at 18-months is widely accepted as a standard element of modern patent systems. The introduction of this rule in Europe has had a number of decisive consequences for the structure and practice of the European patent system, and it is perhaps helpful to review the origin of the rule in order to explain that it is not simply an isolated rule with public policy connotations, but is part of the "warp and weft" of the European patent system.

a. Origin of the rule and adoption in Europe

Originally, in most if not all countries in Europe, patents were published upon grant, which was also the time at which protection under the patent began. However, in the fifties, patent offices in Europe found themselves battling record levels of applications. As backlogs grew and pendency times lengthened, patent offices were under pressure, applicants were left without protection whilst they awaited grant and the legal uncertainty for third parties associated with the lengthy secrecy of pending applications became an additional serious problem.

At the time, policy concerns were expressed that an application could be pending without third parties being able to ascertain the latest state of the art in a given field, and in particular, whether a particular invention, which might have already gone into widespread use, was in the process of being appropriated. In particular, resources could be allocated to R&D projects duplicating those covered by pending applications, resulting in a loss of investment.

In 1964, the Netherlands (NL) became the first country in Europe to introduce mandatory 18-month publication of patent applications. The intention was to introduce the option of deferred examination for workload-related reasons. However, simultaneously, to address the discrete public interest issues inherent in the secrecy of pending patent applications and reduce the existing period of uncertainty, mandatory 18-month publication from the filing or priority date was also provided.

In turn, the interest of the public to have rapid access to technology and early legal certainty had to be balanced against the interest of applicants to be able to make an enlightened decision allowing them to preserve valuable trade secrets should their invention prove not to be patentable. The original Report of 1954 which had initially proposed modifications to the patent system in NL, suggested to divide the patent granting process into two phases: a search for relevant prior art, drawn up prior to the publication of the application, and examination, which could then be deferred if the applicant so wished. It was suggested that publication of the application at 18 months would strike the appropriate balance, allowing the applicant to receive an appraisal of the novelty of his invention, but also to withdraw his application in time if chances for a meaningful grant were low.

In any event, the concept of 18-month publication was taken up by the Committee elaborating a harmonized Scandinavian model patent law in 1962, and was also discussed in great detail and rapidly endorsed by the “Patents” Working Group of the European Council in 1964, so that this concept flowed early into the discussions on the creation of the European Patent System. In the meantime, mandatory publication of applications at 18 months was adopted in 1968 by Denmark, Finland, Norway, Sweden, as well as by Germany and by France in 1969, before being included in the EPC which was signed in 1973.

b. Impact on the patent system

The introduction of mandatory 18-month publication of applications has influenced the European patent system in several respects:

(1) Under earlier national patent systems in Europe, patent protection arose only upon grant. There could be no recovery of damages for acts which would have constituted infringement, but were carried out during the pendency period. The introduction of 18-month publication allowed applicants to be granted earlier protection for their inventions, through provisional protection under the application. Applicants are also afforded a degree of control in this respect as they may opt for even earlier publication where they have an interest in sending warning letters to early infringers.

(2) Prior to the introduction of mandatory 18-month publication, in many countries in Europe, prior rights could only be assessed once the patent on the earlier co-pending application was granted. Since now prior rights are defined as earlier filed applications still pending and published at 18-months, this allows greater celerity in the assessment of secret prior art and thus of the patentability of subsequent applications. In this regard, the norm is considered to assume a pivotal role in the definition of novelty in the European patent system.

(3) Even though today the EPO issues a search report along with a written opinion, the two-phased system adopted as a result of the introduction of 18-month publication still remains to some degree. This, combined with the prioritization of first filings, results in search reports for first filings being issued on average within 6 months of the filing date. The aim is to give applicants early information going to the patentability of their invention, and thus, the necessary means to plan their strategy in terms of world-wide protection within the priority year, but also to allow applicants to choose whether to withdraw prior to publication, so as to preserve any information in the application which is not in the public domain. In addition, the early availability of the search enables competitors to better assess the chances of success of the application as well as the potential scope of the claims. This approach also dovetails well with the timeliness demands inherent in current work-sharing schemes world-wide.

(4) Finally, publication of the application at 18 months also has the advantage that it allows third parties to file pre-grant observations on the patentability of the invention covered by the application pursuant to Art. 115 EPC, thus enhancing the quality of the granting procedure.

### **3. 18-Month Publication in Practice**

It is of interest here to mention a few statistics. 100% of European applications pending at the expiry of the period of 18-months from either the filing date or, where priority has been claimed, the priority date, are published by the EPO. There are no exceptions.

Early publication is relatively rare. In the last 3 years, at the EPO, early publication was requested by 150 applicants, for 0.1% of applications, almost all of which were Euro-direct applications.

Most applicants are in a position to assess the patentability of their invention well before the 18-month publication date. In 2011, 70% of all European applications were published as “A1” publications, meaning that the pending applications were published at 18 months along with the search report drawn up by the EPO, giving third parties the added benefit of access to the

necessary information to assess the potential scope of protection which may result from the application.

In the case of first filings, 59% of them were still pending at 18 months and 95% of those first filings published under Art. 93 EPC were "A1" publications simultaneously publishing the search report. The other 41% of first filed applications were either withdrawn or deemed to be withdrawn, or replaced by second filings (with causality relating to the search report received being difficult to establish - but some of them undoubtedly a result of the prohibition against added subject matter of Art. 123(2) EPC).

In the case of second filings, 98% of them are still pending at 18 months and published, with 60% of them constituting "A1" publications comprising the search report.

Moreover, it is argued that the possibility of obtaining accelerated processing at the EPO through PACE, free of charge and without additional burden for the applicant, means that no applicant is forced to face 18-month publication without at least a search report and written opinion as to the patentability of his invention.

Accordingly, it is concluded that losing the possibility of exploiting the invention through trade secret protection if the European application is published at 18 months and the patent ends up not being granted, does not appear to be a major issue for applicants at the EPO.

#### **4. Policy Arguments**

From a European perspective, it is perceived that the 18-month mandatory publication of applications rule strikes the right balance between competing interests in this regard.

##### **a. Competitors and industry**

For industry, early publication has a two-fold advantage: it allows industry to build early on the easily searchable technology published for further R&D purposes, and it allows industry to investigate whether it is free to use technology or not at an early stage, allowing for a reduction in the duplication of innovation processes and lower-risk investment in R&D.

##### **b. The general public**

The efficient allocation of scarce resources in the context of R&D is also in the interest of the public. In this regard, the mandatory 18-month publication rule can be argued to minimize the inherent social costs of the patent system. In addition, the public also has an interest in the early adoption of new technology, and it can be argued that 18-month publication creates the necessary conditions of legal certainty for this to occur at arguably the optimal moment from a systemic viewpoint.



c. The applicant

For the applicant, 18-month publication may mean that “early engineering-around” may occur. On the other hand, for the general public, there may be some gains, as such innovation may be beneficial in that it may result in incremental improvements, which then arguably occur earlier in time.

Early publication may enable competitors to ascertain at a much earlier date the inventions and interests of applicants. However, when this happens, important ground will already have been staked out by the applicant, and in Europe, this strategic disadvantage is not perceived to inhibit the incentive function of the patent system to the point of outweighing the benefits to the public of such early publication.

On the other hand, particularly in systems where no term extension is provided in the case of protracted prosecution, as under the EPC, one advantage of the rule is that it gives the applicant provisional protection, giving him much closer to a 20-year term than would be the case if protection commenced at grant only.

More problematic is the issue of the bargain theory of the patent system, according to which there is system failure if after publication of the application at 18 months, the application fails to proceed to grant for reasons which may or may not be within the control of the applicant. The applicant has disclosed his invention to the public, but received no rights in return. This is intuitively difficult to argue away: where the patent is not already granted at 18 months - which is the norm - the applicant assumes the full risk that his assessment of his chances of success may not be accurate. Particularly small inventors and SMEs appear vulnerable in such a situation.

## **B. UNITED KINGDOM (UKIPO)**

### **1. Legal Requirements**

In the UK, section 16 of the Patents Act 1977 and rule 26 of the Patents Rules 2007 require all applications which are given a filing date to be published as soon as possible after the end of 18 months beginning with the declared priority date (or where there is none, the filing date), unless the application is withdrawn or refused before preparations for its publication have been completed. Where the application is withdrawn after the preparations for its publication have been completed, there is no discretion in the Patents Act which allows the UK IPO to attempt to prevent publication and so the publication of the application will go ahead as usual

According to section 16, the application should be published as filed, including not only the original claims but also any amendments to the claims. The fact that the application has been published and the date of publication must be advertised in the Patents Journal.

Section 16 also provides that the application may be published sooner if so requested by the applicant (see statistics provided below).

There is no provision in the UK by which an applicant can opt out of 18-month publication. The only way that an applicant can avoid such publication taking place is by withdrawing their application prior to the date on which the preparations for publication are complete.

Section 16 applies to divisional applications in the same way as any other application – they are published as soon as possible after the end of 18 months beginning with the declared priority date. Since many divisional applications will be due for publication immediately after they are filed, divisional applications are, as far as possible, given priority over other applications for search and publication.

In relation to PCT applications which enter the UK national phase, section 89B(2) of the Patents Act 1977 states that if the application has been published in accordance with the Treaty then the application is treated as if it has been published under section 16 when the national phase of the application begins. The IPO re-publishes such applications so as to provide a UK publication number; however, this is an administrative act which is not required by the legislation.

One final aspect which is relevant to the question of 18-month publication is the matter of provisional protection. Section 69 of the Patents Act 1977 is so framed as to have, as nearly as practicable, the same effect in the UK as EPC Article 67 and PCT Article 29. Section 69 provides that the publication of an application before grant may give rise to a right to bring proceedings for pre-grant infringements, although this right cannot be enforced until after grant. Such infringement proceedings are successful only if the act in question would have not only infringed the patent as granted but also fell within the scope of the claims included in the published application.

## **2. Policy Considerations**

As already discussed in the introduction, 18 months is generally considered to strike an appropriate balance between (i) providing a sufficient period of confidentiality for the applicant to consider whether they want to continue with the applicant or withdraw, in light of any commercial developments and the search report and (ii) providing timely warning to third parties about potential future rights.

In addition, publication prior to grant provides the opportunity for third parties to file observations on the patentability of the invention and to draw the examiner's attention to any relevant material, thereby improving the efficiency of the examination process and helping ensure that invalid patents are not granted.

## **3. 18-Month Publication in Practice**

a. In the UK, where the patent application is ready for grant prior to the expiry of the 18-month period, grant is delayed until at least 3 months after publication have elapsed. This is to provide an opportunity for third parties to file observations on the patentability of the invention. (There are however two exceptions to this rule – where the application is a national phase entry from a PCT application then grant is delayed until 2 months after re-publication have elapsed; and where the application is a divisional and the invention

claimed was claimed in the published parent application giving third parties at least three months to file observations in respect of that invention, then the three month period can be waived entirely.)

b. All UK patent applications are published with a search report. The UK IPO issued 92% of search reports within four months of request in 2011/12, and hence the vast majority of applicants had many months in which to decide, on the basis of the search report, whether to proceed with their application or withdraw prior to publication. In addition, the UK offers various acceleration options at no additional cost to the applicant (such as combined search and examination), enabling the results of the examination to also be taken into account when making this decision.

c. The below figures indicate the proportion of UK applications published earlier than 18 months after priority (upon request by the applicant).

<b>Publication Year</b>	<b>Total publications</b>	<b>Published before 18 months</b>	<b>% Published before 18 months</b>
<b>2005</b>	12123	158	1.3%
<b>2006</b>	11839	215	1.8%
<b>2007</b>	11836	213	1.8%
<b>2008</b>	11047	256	2.3%
<b>2009</b>	10554	257	2.4%
<b>2010</b>	9993	278	2.8%

The figures are taken from the October 2011 version of Patstat which has publication data until May 2011. The data for January-May 2011 demonstrates that 2.6% of applications published in that period were published prior to 18-months (150 applications of 5763 published).

The data shows that there is clear demand for such early publication, albeit in relation to a fairly small percentage of applications.

b. Case studies

At a stakeholder consultation meeting on June 11, 2012, UK users were asked whether they had experienced any particular issues in relation to non-publication of an application at 18 months. The general feeling of those present was that there are not many examples of ‘late’ publication being an issue, and that this would be likely to remain the case whilst the percentages of applications opting out of 18-month publication in the U.S. remained small.

Users also pointed out that defensive publication is a well-known strategy and often people want to publicise their inventions. This point is consistent with the observation that a proportion of applicants opt for early publication in the UK.

Users also pointed out that strategies will simply adapt to any changes in patent law in this regard – an example given was that in the U.S. an applicant can file a provisional application and immediately publish, giving themselves a year to overcome any sufficiency problems safe in the knowledge that their earliest date is fixed.

## **C. FRANCE (INPI)**

### **1. Legal Requirements**

#### **a. General rule under the IPC**

Publication of applications at 18 months at INPI is governed by Art. L. 612-21 IPC (Intellectual Property Code). The rule stipulates that patent applications shall be published by INPI on expiry of 18 months from the date of filing or from the priority date, where priority has been claimed. At the simple request of the applicant patent application may be published prior to expiry of that period. The publication is made in the Official Bulletin of Industrial Property.

When applications are published they have been released by the National Defense. Some inventions could however be of interest for the national defense; in that case these inventions may be “retained” and are not published, unless the ban ends.

#### **b. Specificity:**

##### **1. Application under priority**

Where priority has been declared inadmissible or when the applicant has withdrawn this priority before the start of technical preparations for the publication of the application, it will be published only after a period of 18 months from the filing date or, if priority remains, as the date of this priority.

##### **2. Divisional application**

The publication of a divisional application occurs 18 months from the date of filing of the initial application or of the earliest date it receives (the priority date if applicable), unless the division is filed after the expiration of that period. In the latter case, the publication occurs after the expiry of the deadline for designating the inventor

**3. The patent application is not published if it has been rejected or withdrawn before the technical preparations undertaken for the publication (6 weeks), unless it concerns:**

- a. an application that gave rise to a division
- b. an application from which the benefit of the filing date was required in a subsequent application, unless the applicant waives this benefit.

#### **c. Consequences of 18-months publication**

The publication of an application at 18-months has four consequences:

1. Entry into the state of the art under art. L. 611-11 IPC

From the date of publication of the application, its subject-matter is made available to the public, thus entering the state of the art under Art. L. 611-11 IPC.

2. Secret prior art under Art. L. 611-11 IPC

For an earlier filed co-pending application to enter the secret prior art under L. 611-11 IPC and form an obstacle to the novelty (but not the inventive step) of a subsequent application, it must be both pending and published at 18 months from the filing or priority date.

3. Provisional protection

According to art. L. 615-4 IPC as of the date of its publication under Art. L. 612-21 IPC a provisionally protection is conferred to the patent application. However, from the date of the publication of patent application to that of publication of the grant of the patent, the patent shall only be enforceable if the claims have not been extended after the first of those dates. The Court hearing infringement proceedings based on a patent application shall reserve judgment until the patent has been granted.

4. Third parties observations

Publication prior to grant provides the opportunity for third parties to file observations on the patentability of the invention and to draw the examiner's attention to any relevant material, thereby improving the efficiency of the examination process and helping ensure that invalid patents are not granted.

## 2. Policy Considerations

As UK indicated, 18 months is generally considered to strike an appropriate balance between (i) providing a sufficient period of confidentiality for the applicant to consider whether they want to continue with the applicant or withdraw, in light of any commercial developments and the search report and (ii) providing timely warning to third parties about potential future rights.

## 3. 18-Month Publication in Practice

The below figures indicate the proportion of FR applications published earlier than 18 months after priority (upon request by the applicant).

<b>Publication Year</b>	<b>Total publications</b>	<b>Published before 18 months</b>	<b>% Published before 18 months</b>
<b>2010</b>	14 142	76	0.53%
<b>2011</b>	14 585	73	0.50%

## **D. JAPAN (JPO)**

### **1. Legal Requirements**

The JPO's publication of patent applications is governed by Article 64<sup>2</sup> of the Japanese Patent Law. This Article requires that all applications be published 18 months from the day in which the applications are filed. Note, however, that for an application to the JPO claiming priority right, the date of publication will be 18 months from the day of the filing of an application on which the said priority claim is based.

In principle, this Article that stipulates the publication of applications applies to all the applications, except for the following cases.

- a. Where an application becomes no longer pending at the JPO prior to the passage of 18 months from the date on which the applications were filed.

An application which is no longer pending at the JPO before its publication will not be published. Patent applications that have been withdrawn or abandoned by applicants, as well as those that have been declined or refused by the final decision will not be published.

- b. Where gazettes containing the patents are published prior to the passage of 18 months from the date on which the applications were filed.

According to the laws, gazettes containing the granted patents should include information that is necessary for the public to understand the content of patent rights clearly, and therefore, patent applications which have been already laid open in the gazettes containing the granted patents are excluded from the 18-month publication of applications. However, since pre-examination search is usually conducted based on publications of un-examined applications, patent applications that have been laid open in the gazettes containing the granted patents are also published along with other un-examined applications based on the 18-month publication rule, as a part of administrative services. This service started from 1997.

As is clear from the above explanations, in Japan, there is no provision, which can be seen in the U.S., by which applicants can opt out of having their applications published by making requests when their applications are pending at the JPO. And then, all application will be published at 18 months from the filing date. Just for information, the Japanese patent law also provides a system to make an application published earlier than the passage of 18 months from the filing date based on a request from the applicants.<sup>3</sup>

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<sup>2</sup> See Appendix D, Japanese Patent Law, Article 64

<sup>3</sup> See Appendix D, Japanese Patent Law, Article 64-2

## 2. Policy Considerations

Due to heightened technological competition, the number of patent applications being filed has increased and the claims being made in patent applications are becoming more complex and more technically upgraded. However, this heightened technological competition is not something that started just today, as it already existed in 1970, the year in which the Japanese Patent Law was revised to introduce the “18 Month Publication System”. Under these circumstances, the pendency period in Japan had become longer. At that time, the average time it took to examine patent applications had reached five years.

From the point of view of the applicants, the growing pendency period for examination that was attributed to the increase in patent filings created a huge disadvantage for them because there was always the risk of third parties copying their ideas during the long period of time they spent waiting for their patents to be granted.

Also, this situation imposed disadvantages on third parties as well. Since the patent content or claims were not being released over long periods of time, third parties would end up doing double-work. In other words, they were researching and investing in the same areas without knowing it. And even if they wanted to commercialize the results of their activities, they might later be faced with a situation in which they wouldn’t be able to use the technology commercially because of patent rights being granted in later stage. Therefore, because the patent contents were being disclosed after such long periods of time, third parties activities were facing a lot of uncertainty. Furthermore, the overlapping research and investments made by third parties were not only losses to them alone but also to the entire national economy of Japan. To add further to this issue, these overlapping research activities and investments resulted in a loss to the JPO as well, since they created an overlap in application filings.

Under these circumstances, Japan revised its Patent Law in 1970 and introduced the “18 Month Publication System” from 1971. It can be said in short that the 18 Month Publication System in Japan is aiming not only to ensure the interests of applicants earlier but also to prevent loss to third parties and the entire Japanese economy by eliminating redundant research activities and investments in advance.

Nevertheless, with the 18 Month Publication System in place, there still existed the issue of third parties willfully utilizing publicized inventions. To combat this issue, applicants were given provisional protection of rights related to the publications of applications.<sup>4</sup>

As a means to compensate applicants for losses incurred when their inventions are utilized by third parties, provisional protection ensures the rights of applicants to claim compensation against any parties who utilize the published inventions created by the applicants. More specifically, after the patent application has been publicized, where the applicant for the patent has given such third party warning with documents stating the contents of the invention claimed in the patent application, applicant has the right to claim an amount of compensation (an amount equivalent to the licensing fee) against the third party who have utilized published inventions of

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<sup>4</sup> See Appendix D, Japanese Patent Law Article 65

the said applicants for commercial purposes after the warning and prior to the registration establishing a patent right.

Also, when revising the Japanese Patent Law to introduce 18 Month Publication System, an opinion had been raised that the disadvantages to applicants could not be sufficiently covered only under this provisional protection when third parties would copy the applicants' inventions as a result of mandatory publication for patent applications. Taking into account this opinion, in conjunction with the introduction of the 18 Month Publication System, Japan also introduced the preferential examination system especially for applications with which applicants would have possibilities to suffer disadvantage due to commercial utilization of their invention by third parties.<sup>5</sup>

## **E. UNITED STATES (USPTO)**

### **1. Legal Requirements**

Publication of patent applications filed in the United States is governed by 35 U.S.C. § 122.<sup>6</sup> The statute requires each application to be published promptly after the expiration of a period of 18 months from the earliest filing date for which benefit is sought, including claims for foreign priority. However, at the request of the applicant, the application may be published before 18 months and under certain circumstances applicants can forgo pre-grant publication. The statute permits an applicant, upon filing, to certify that the invention disclosed in the U.S. application has not and will not be the subject of an application filed in another country, or under a multilateral international agreement, that requires publication of applications 18 months after filing. Once an applicant makes this certification, the application will not be published. This nonpublication or "opt-out" request may be rescinded at any time. An applicant who has opted-out but later files in a foreign country or under a multilateral international agreement must notify the Director of the USPTO of such filing no later than 45 days after the date of the filing of the foreign or international application. If the applicant fails to provide notice within the prescribed period of time, the application will be treated as abandoned, unless it is shown to the satisfaction of the Director that the delay in submitting the notice was unintentional. Further, if an applicant rescinds an opt-out request, the application will be published on or as soon as practical after the 18 month date.

35 U.S.C. § 154(d) affords patent owner provisional protection if the claims in the pre-grant application publication are substantially similar to the patented claims and there is actual notice given of the published application.

### **2. Policy Considerations**

The legislative history of the publication provisions of 35 U.S.C. § 122 indicates Congress's desire to adopt an 18-month publication system consistent with other jurisdictions while making reasonable accommodations for certain stakeholders concerned about the impact of a one-size-fits-all approach to publication. Citing fears of unscrupulous copying by foreign competitors,

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<sup>5</sup> See Appendix D, Japanese Patent Law, Article 48-6

<sup>6</sup> See Appendix A.



proponents of the opt-out provision argued that the cost of prosecuting foreign infringers made private enforcement impractical, particularly for small or less well-resourced entities. Thus, an opt-out option for U.S.-only filers was adopted as a compromise exception to the basic rule that U.S. applications will be published promptly after the expiration of 18 months from the earliest effective filing date.

It should also be noted that while the Leahy-Smith America Invents Act (AIA) enacted in September 2011 made a number of historic and significant changes to U.S. patent law, such as the transition from first-to-invent to first-to-file, it did not alter the 18-month publication opt-out regime and therefore maintained the practice of an opt-out provision, reinforcing that this practice is critical to protecting small entity innovators.

### **3. 18-Month Publication in Practice**

Appendix B shows non-publication requests between 2002 and 2009.<sup>7</sup> The data suggest that the rate of non-publication requests has been substantially declining. In the seven years for which data was collected, the percentage of applications which have opted out of 18-month publication has steadily decreased. In 2002, 9.83% of applications were opted out of publication at 18 months, whereas in 2009, the rate was only 5.93%.<sup>8</sup> Accordingly, in 2009 the USPTO published nearly 95% of all patent applications within 18 months of filing.<sup>9</sup>

The data also indicate that the opt-out requests are fairly evenly distributed among different sized entities and across a broad range of technologies. Of the applicants that opted out between 2002-2009, 52% qualified as small entities. A diverse range of technologies are represented in the opt-out data, with no single technology examination center representing more than one quarter of all opt out requests (e.g., TC 3600 recorded the most opt outs with 22% of all requests, followed by TC 1600 with 18% of requests).<sup>10</sup>

## **III. Discussion of Results**

### **A. Contribution from EPO**

It is argued that under the EPC and the practice of the EPO, the system is structured to ensure that the diligent applicant may receive the necessary information in a timely manner to make an enlightened decision as to whether to pursue the prosecution of his patent or not. It is not considered necessary that the patent must already have been granted for it to be reasonable to request the applicant to make the decision to proceed with the prosecution of the application and have it published, or not.

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<sup>7</sup> Data is provided through 2009 as this is the most recent year which reliable data could be ascertained.

<sup>8</sup> See *Appendix B*.

<sup>9</sup> These opt-out statistics take account of non-publication requests that were rescinded, presumably so that the application could be filed in foreign jurisdictions.

<sup>10</sup> See *Appendix C*.

If the applicant is in doubt as to either the patentability of the invention or the chances of obtaining meaningful protection through claims of appropriate scope, much turns on the nature of the invention and of the information contained in the application.

Should the subject-matter of the application be such that it is easy to conceal and thus, conversely, the detection of infringement would be difficult, then indeed, the applicant must carefully weigh his options and decide whether to withdraw his application in due time to retain the possibility of keeping any trade secrets disclosed in the application.

Arguably, at the other end of the spectrum, where the invention is a product which, upon sale, enables the invention and can be easily reverse-engineered and/or engineered around, the issue is moot anyway: whether patented or not, exploiting the invention will make it available to the competition. Thus, early publication at 18 months coupled with ultimate failure in obtaining patent rights is arguably not a catastrophic outcome, if the invention could not be kept secret anyway.

Far more damaging to competitors and the general public is the converse situation in which a successful patent application resulting in grant is allowed to remain pending in secrecy for a lengthy period of time, whilst third parties either (a) "re-invent", misallocating investment and resources in endeavors which duplicate existing knowledge, or (b) use and invest in the available technology without knowing its status, and without being able to ascertain whether it is being legitimately appropriated, despite all due diligence and good faith, in both cases running the risk of losing their investment if a patent is then granted which encompasses that very technology.

The potential economic cost to society of such a situation is considered in Europe to outbalance the interest of inventors to keep their options open to both apply for rights and safeguard their trade secrets, even in borderline situations of patentability.

However, there is also another area of concern. Under the EPC, conflicting applications are defined as applications which have an effective filing or priority date prior to that of the subsequent application being examined, which was published as a pending application at 18 months. Thus, the 18-month publication mechanism in Europe allows for an early cut-off date by which the applicable secret prior art for subsequent applications can be determined. The EPO's understanding is that one of the consequences of the "opting-out" possibility in the US is that where an application having an effective earlier filing date remains unpublished, such confidentiality must be maintained even vis-à-vis conflicting subsequent applications. If under the AIA the delayed publication of the earlier application will cause a corresponding delay in determining the patentability of the subsequent application in view of the contents of the earlier application, this is viewed as another drawback of the possibility to "opt-out", as it appears to unduly privilege the first applicant at the expense of the subsequent applicant.

The EPO is aware that a bill proposing mandatory publication at 18 months was introduced in the US Congress in the past, which was then amended so as to result in the system which exists today. In the view of the EPO, the present system is a considerable improvement over the situation existing prior to the amendment to § 35 USC 122 through the America Inventors Protection Act in 1999, and we are sensitive to current inherent political limitations in the US.

However, we feel it is perhaps useful and necessary to report on the results of recent European user consultations in regard to the issue of mandatory 18-month publication (February 2012; May 2012 and June 2012). Their views may be summarized thus: (1) Mandatory 18-month publication is so prevalent as to constitute an "international standard" in the global patent community; (2) Systems allowing opting out "allow the rights of the few to impact on legal uncertainty for the many"; (3) "No international treaty on substantive patent law harmonization should be considered unless it contains a mandatory 18-month publication clause."

Although no official figures have been received, our users have estimated that the absolute numbers of applications for which the opting-out option is exercised by the applicant at the USPTO and are thus not published at 18-months is around 25,000 per year.<sup>11</sup> European users report anecdotal evidence that in some areas such as business methods, involving subject-matter which is patentable in the US but not abroad, this results in a concentration of potential submarine applications which constitutes a serious economic risk to users in the US. For this reason, we are grateful to the USPTO for releasing the breakdown of opt-outs according to technology sector, as this brings additional clarity to the situation overall.

We are aware that the debate in the US appears to be focused on the issues raised by the impact on individual inventors and SMEs of the mandatory disclosure of an invention which then may not be successfully appropriated. In Europe, policymakers were aware of this problem and tried to minimize the impact on applicants by enhancing the decision-making ability of applicants in strategic terms through the swift delivery of preliminary assessments of the patentability of their inventions prior to the 18-month mark. In this vein, it should be emphasized that all applicants at the EPO have the option of requesting PACE (accelerated prosecution of their application free of charge) should they feel this is necessary to help them make the strategic decision of proceeding with prosecution or withdrawing prior to publication. Ultimately, it is a policy decision, but in Europe, the flexibilities of users in this regard in a harmonization context, as mentioned above, appear to be limited.

From a European perspective, the current mandatory 18-month publication under Art. 93 EPC strikes an appropriate balance between the competing interests of the applicant, competitors and the general public in the innovation and patenting processes.

## **B. Contribution from Japan (JPO)**

Currently, many countries such as Japan and those in Europe have introduced an 18-month publication system for all patent applications without an "opt-out" option. The United States, on the other hand, has a system in which an "opt-out" option is allowed, in other words, certain applications will be allowed not to be published based on the applicants' requests, rather than a system that discloses all patent applications without exception. In either case, there may be advantages and disadvantages. Below, the JPO would like to make comments as to its thoughts on the advantages and disadvantages of the 18-month publication system without an "opt-out" option.

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<sup>11</sup> According to the latest United States Patent and Trademark Office's statistics for the most recent year for which data was available (2009), 19,796 applications were not published due to opt-out.

## 1. Advantages of 18-Month publication system without opt-out option

Under the 18-month publication system without an opt-out option, all patent applications without exception will be laid open after a certain period of time has passed after the patent applications have been filed and the entire contents of them will be made disclosed to the public. This system is expected to provide the following advantages:

Advantage:

1. For third parties, the system ensures higher stability in their business activities because third parties are able to know entire contents of all of patent applications and this also dispels concerns about problems with so-called submarine patents (*See Appendix E*).
2. Also, by knowing the entire contents of all of patent applications, third parties can avoid duplication in research and/or investments more certainly, so as to enable them to ensure conducting more efficient business activities.
3. Reducing duplications in research and/or investment with more certainty is advantageous also for overall domestic economies.

For the Patent Offices, the smaller the duplication in research and/or investment activities of business and other sectors become, the less overlapping patent applications for the same inventions are filed. As a result, it can be expected that workloads of patent office will be reduced more.

Also for the patent offices, the system without the opt-out option has some advantages from the perspective of facilitation of work-sharing among offices. If one applicant choose opting-out with regard to his/her application file with the first office, there can occur the situation where, at the first office, a patent examiner examines a later filed application and finds a reason for refusal for it citing on the prior file application as a secret prior art for which the applicant has requested opting-out of publication. In this situation, an examiner at other patent office cannot cite the unpublished prior application filed with the first office as a prior art and cannot utilize the examination result of the first office. If the 18-month publication system without the opt-out option is adopted in the jurisdiction where the first office is located, examiners in the first office cite less unpublished patent applications as secret prior-arts and examiners in other patent offices can utilize more results of examination in the first office.

## 2. Disadvantages of the 18-Month Publication System without opt-out option

Although the 18-month publication system without an opt-out option has advantages as mentioned above, it has also the following disadvantages:

Disadvantage:

- 1) For applicants, during period of the time from publication of applications to grant of patents, they are exposed to possibilities that third parties may copy the contents of their published

pending applications and develop the relevant art. Without the opt-out option, all of applicants could be exposed to such risk regardless of applicants' will.

2) For applicants, there are cases where they want to decide whether the contents claimed in their applications should be protected as patents or as trade secrets, through receiving and utilizing examination results before the publication of their pending applications. If it were not for the opt-out option and if they could not have received such results before the publication, they might lose opportunities to make such decisions regardless of their will.

There are some opinions that the disadvantages mentioned in 1) and 2) above are considerable ones, especially for small-sized business entities that have insufficient financial resources.

Further considerations on the disadvantages:

In the 18-month publication system without the opt-out option, the above mentioned disadvantages are expected to occur especially in the case of small sized business entities that have insufficient financial resources. However, it can be said that it will be possible to take some measures to deal with these concerns.

#### 1. Concern about copies of inventions by third parties through publication

This concern about copies of inventions by third parties was discussed when the 18-month publication system was introduced in Japan. In order to deal with this concern in Japan, it was decided that the provisional protection would be granted to pending applications published under the 18-month publication system. Needless to say, at present, the same kind of provisional protection did exist not only in Japan but also in Europe; as well as in the United States whose publication system has the opt-out option.

Moreover, Japan has introduced a system to provide the preferential examination especially with applications with which applicants would have possibilities to suffer disadvantage due to commercial utilization of their invention by third parties (see Article 48 (6) of the Japanese Patent Law). Currently in Japan, in addition to this preferential examination, the JPO provides the accelerated examination which every small- and medium-sized enterprise applicant can make use of without charge.

#### 2. Loss of opportunity to select trade secret protection

As mentioned above, the JPO provides the accelerated examination for free, and every small- and medium-sized enterprise applicant can make use of this. If there is such accelerated examination system, depending on applicants' needs, they can receive examination results for their patent applications before the publication which is made after passing 18 months from the filing, and based on these examination results, they can consider whether the contents in their applications should be protected as patents or as trade secrets.

In addition to this accelerated examination, in an effort to support small and medium enterprises, the JPO is providing services to advise on prior art search and patent application. Also in other

countries, it may be possible to implement this kind of supportive measures without changes to the legal systems.

Other than providing certain applicants with information on patentability before the publication of applications, giving them sufficient time to consider pursuing patent protection or withdrawing the application might be worth considering. Specifically, this idea would be allowing applicants to postpone the publication of application until the end of a certain period of time longer than 18 months and obliging them to decide whether they make requests for examination or not within the period time. In accordance with this idea, although not all patent applications would be made public at 18 months from the filing date, all patent applications would be published at certain point of time. This might bring more legal certainty to third parties than allowing certain applicants to opt-out publication of application.

### 3. Other Discussion related to the 18-Month Publication

One of the reasons why Japan introduced the 18-month publication system was to resolve the problems that occur when applications were not disclosed for a long time as a result of the long waiting time for granting patents.

If examinations for all applications could be finished in a shorter time and the contents of inventions granted patents could be published, then early publication for all applications could be realized substantially. In other words, if examinations for all applications could be finished in a shorter time, it would be needless to discuss any more whether or not the 18-month publication system should allow the opt-out option of publication.

However, although most of patent offices in the world are making efforts to shorten the time, it takes for them to conduct patent examinations, and it would be very difficult to complete examinations for all applications and publish the contents of granted patents during the 18-month period after filing. Also, depending on applicants or on contents of applications, applicants sometimes prefer obtaining patent at appropriate timing as they wish rather than obtaining them at early stage. When considering the current volume of patent applications and variety of needs of applicants, it might be difficult to adopt an option for all patent offices to finish examinations of all applications and publish their contents before 18 months have passed after filing.

#### **C. Contribution from United States (USPTO)**

Consistent with every other jurisdiction that has contributed to this Study, U.S. law requires, as a general rule, that applications be published promptly after the expiration of 18 months from the filing or priority date. Many of the same policy considerations expressed by other Offices regarding the adoption of similar regimes in other jurisdictions underlie the U.S. approach. Thus, in nearly all respects the U.S. system is aligned in terms of operation and underlying policy with other publication regimes represented in the Tegernsee Group. The major difference continues to be, even post-AIA, that the U.S. system permits U.S.-only filers to opt out of publication at 18 months, in which case publication takes place at grant. This deviation from the publication approach in other jurisdictions represents a delicate balance of interests among stakeholders in the United States, for reasons explained above. As previously mentioned, one of

the policy considerations behind the opt-out provision is to reduce negative impacts on innovators, particularly small- and medium-sized entities, associated with divulgation of the application contents at 18 months even if patentability of the invention has not yet been established.

The U.S.'s opt-out provision is exercised with increasing rarity, having declined from about 10% of filings in 2002 to only about 5% in 2009. In other words, the USPTO currently publishes about 95% of all applications at 18 months, equating in raw numbers to 333,668 published U.S. applications in 2009. Moreover, the percentage of opt-outs is expected to decrease further as the USPTO continues to consider operational improvements to reduce pendency and decrease examination backlogs. The USPTO's strategic plan, for instance, calls for a reduction in first action pendency to 10 months and overall pendency to 20 months by 2016. Furthermore, the AIA provides a mechanism for prioritized examination and final disposition within 12 months upon payment of an additional fee. These procedural changes should substantially mitigate, if not effectively eliminate, opt-outs, as a result of more applicants being provided with more information about patentability of the invention in advance of the 18-month publication mark. Even if opt-outs are not entirely eliminated, and while acknowledging that some anecdotal complaints of a non-specific nature have been raised about this practice, it is worth noting the absence of any empirical data or other "hard" evidence demonstrating that opt-outs, even at current rates, are creating any substantial localized or systemic problems requiring a rebalancing of interests under the U.S. approach.

It is also something of an open question whether a one-size-fits-all time frame of 18 months is suitable for all innovations. For some technologies, 18 month publication may be an insufficient time to determine the patentability or market-worthiness of an invention (e.g., pharmaceutical innovations which may require separate approval as to safety and efficacy before being allowed on the market). In other technology areas that develop more rapidly, 18 months may exceed the innovator's actual decision-making time horizon. In fact, stakeholders representing these latter technology areas have generally been asking patent offices to render patentability decisions much earlier than 18 months, such that 18 months would exceed the entire length of prosecution. These circumstances further suggest that fixation on absolutes may defeat the goal of effective harmonization in this area.

## **Conclusion**

Every jurisdiction that contributed to this study has an 18-month publication regime, and the policy considerations underlying these regimes generally seem to track one another. In short, 18-month publication is viewed as striking an appropriate balance between allowing inventors a reasonable period of time to keep their application secret while they pursue patent protection, and the interests of third parties and the public more generally in having early access to new technological developments.

One policy consideration consistently expressed as a factor in this balance is providing the applicant with reasonable and early notice, i.e., sufficiently in advance of 18-month publication, as to the likelihood of being able to obtain a desired scope of patent protection. Having this information allows the applicant to make an informed choice as to pursuing patent protection with the consequence of having the application published at 18 months, or foregoing patent protection, withdrawing the application before publication, and perhaps retaining the information as a trade secret, which could itself have particular and substantial value to the applicant.

This policy is given different expression in different regimes. Some offices have in place examination protocols, the object of which is to provide the applicant with either a search report or search report and written opinion within a particular time frame after filing for the express purpose of providing the applicant with the above-mentioned information as to patentability. Other offices provide accelerated examination and patent application process support for free for certain applicants or for a fee. In addition, the law of the United States permits U.S.-only filers to opt out of publication at 18 months altogether.

Independently of the issue of whether there is a need for further international alignment on this issue, the Tegernsee Group may wish to investigate approaches for addressing an applicant's informational and decision-making needs in the context of an 18-month publication regime. This could include, for instance: an exchange of information and experiences regarding applicable examination practices (e.g., accelerated examination, office examination goals, etc.) and related processes (e.g., applicant consulting services); a study of delayed publication options (e.g., delaying publication pending a search report/written opinion/first examination report, or for applications directed to inventions subject to different market conditions, etc.); and developing data or other information concerning the present situation among the Tegernsee Group members.

The Tegernsee Group may also wish to consider whether there is a need for further international alignment on this issue at all, given the present and emerging circumstances referred to in this study.



## *Appendix A*

### **35 U.S.C. 122 Confidential status of applications; publication of patent applications.**

(a) CONFIDENTIALITY.- Except as provided in subsection (b), applications for patents shall be kept in confidence by the Patent and Trademark Office and no information concerning the same given without authority of the applicant or owner unless necessary to carry out the provisions of an Act of Congress or in such special circumstances as may be determined by the Director.

(b) PUBLICATION.-

(1) IN GENERAL.-

(A) Subject to paragraph (2), each application for a patent shall be published, in accordance with procedures determined by the Director, promptly after the expiration of a period of 18 months from the earliest filing date for which a benefit is sought under this title. At the request of the applicant, an application may be published earlier than the end of such 18-month period.

(B) No information concerning published patent applications shall be made available to the public except as the Director determines.

(C) Notwithstanding any other provision of law, a determination by the Director to release or not to release information concerning a published patent application shall be final and nonreviewable.

(2) EXCEPTIONS.-

(A) An application shall not be published if that application is-

- (i) no longer pending;
- (ii) subject to a secrecy order under section 181 ;
- (iii) a provisional application filed under section 111(b); or
- (iv) an application for a design patent filed under chapter 16.

(B)

(i) If an applicant makes a request upon filing, certifying that the invention disclosed in the application has not and will not be the subject of an application filed in another country, or under a multilateral international agreement, that requires publication of applications 18 months after filing, the application shall not be published as provided in paragraph (1).

(ii) An applicant may rescind a request made under clause (i) at any time.

(iii) An applicant who has made a request under clause (i) but who subsequently files, in a foreign country or under a multilateral international agreement specified in clause (i), an application directed to the invention disclosed in the

application filed in the Patent and Trademark Office, shall notify the Director of such filing not later than 45 days after the date of the filing of such foreign or international application. A failure of the applicant to provide such notice within the prescribed period shall result in the application being regarded as abandoned, unless it is shown to the satisfaction of the Director that the delay in submitting the notice was unintentional.

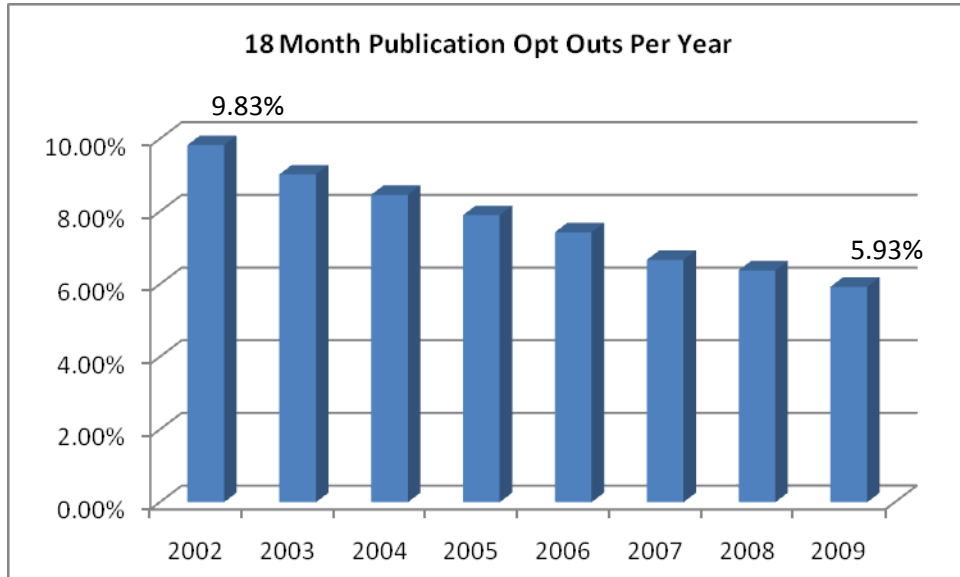
(iv) If an applicant rescinds a request made under clause (i) or notifies the Director that an application was filed in a foreign country or under a multilateral international agreement specified in clause (i), the application shall be published in accordance with the provisions of paragraph (1) on or as soon as is practical after the date that is specified in clause (i).

(v) If an applicant has filed applications in one or more foreign countries, directly or through a multilateral international agreement, and such foreign filed applications corresponding to an application filed in the Patent and Trademark Office or the description of the invention in such foreign filed applications is less extensive than the application or description of the invention in the application filed in the Patent and Trademark Office, the applicant may submit a redacted copy of the application filed in the Patent and Trademark Office eliminating any part or description of the invention in such application that is not also contained in any of the corresponding applications filed in a foreign country. The Director may only publish the redacted copy of the application unless the redacted copy of the application is not received within 16 months after the earliest effective filing date for which a benefit is sought under this title. The provisions of section 154(d) shall not apply to a claim if the description of the invention published in the redacted application filed under this clause with respect to the claim does not enable a person skilled in the art to make and use the subject matter of the claim.

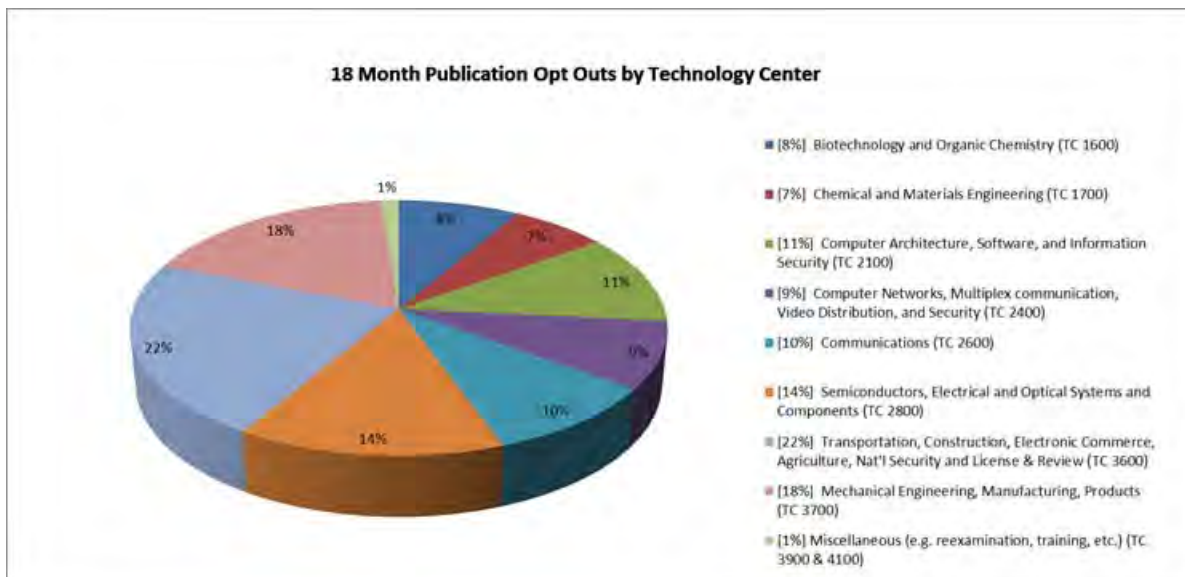
(c) **PROTEST AND PRE-ISSUANCE OPPOSITION.**- The Director shall establish appropriate procedures to ensure that no protest or other form of pre-issuance opposition to the grant of a patent on an application may be initiated after publication of the application without the express written consent of the applicant.

(d) **NATIONAL SECURITY.**- No application for patent shall be published under subsection (b)(1) if the publication or disclosure of such invention would be detrimental to the national security. The Director shall establish appropriate procedures to ensure that such applications are promptly identified and the secrecy of such inventions is maintained in accordance with chapter 17 of this title.

*Appendix B*



*Appendix C*



*Appendix D 付属書D*

Extracts of Japanese Patent Law

(Laying open of applications)

Article 64 (1) After a lapse of one year and six months from the date of the filing of a patent application, the Commissioner of the Patent Office shall lay open the patent application, except in the case where gazette containing the patent has already been published. The same shall apply where a request for the laying open of the patent application under paragraph (1) of the following Article is filed.

(2) The laying open of a patent application shall be effected by stating the following matters in the patent gazette; provided, however, that this shall not apply to the matters prescribed in items (iv) to (vi) where the Commissioner of the Patent Office recognizes that public order or morality is liable to be injured by stating such matters in the patent gazette:

- (i) the name, and the domicile or residence of the applicant(s) for the patent;
- (ii) the number and the filing date of the patent application;
- (iii) the name, and the domicile or residence of the inventor(s);
- (iv) the matters stated in the description, scope of claims attached to the application and the contents of the drawings attached to the said application;
- (v) the matters stated in the abstract attached to the application;
- (vi) in the case of a foreign language written application, the matters stated in documents in foreign language and the abstract in foreign language;
- (vii) the number and the date of laying open of the patent application; and
- (viii) other necessary matters.

(3) When anything stated in the abstract attached to the application does not comply with Article 36(7), or in cases where the Commissioner of the Patent Office finds it otherwise necessary, the Commissioner of the Patent Office may publish in the patent gazette, in lieu of the matters stated in the abstract under item (v) of the preceding paragraph, matters prepared by the Commissioner of the Patent Office.

(Request for laying open of a patent application)

Article 64-2 (1) An applicant for a patent may file a request for the laying open of the patent application with the Commissioner of the Patent Office except in the following cases:

(i) where the patent application has already been laid open;

(ii) where the patent application contains a priority claim under Article 43(1), 43-2(1) or 43-2(2), and documents relating thereto under Articles 43(2)(including its mutatis mutandis application under Article 43-2(3)) and 43(5) (including its mutatis mutandis application under Article 43-2(3)), have not been submitted to the Commissioner of the Patent Office; and

(iii) where the patent application is a foreign language written application and translations of foreign language documents under Article 36-2(2) have not been submitted to the Commissioner of the Patent Office.

(2) A request for the laying open of a patent application may not be withdrawn.

(Effect of the laying open of applications)

Article 65 (1) After the laying open of a patent application, where the applicant for the patent has given warning with documents stating the contents of the invention claimed in the patent application, the applicant may claim compensation against a person who has worked the invention as a business after the warning and prior to the registration establishing a patent right, and the amount of compensation shall be equivalent to the amount the applicant would be entitled to receive for the working of the invention if the invention were patented. Even where the said warning has not been given, the same shall apply to a person who knowingly commercially worked an invention claimed in a laid open patent application, prior to the registration establishing a patent right.

(2) ... (5) [omitted]

(Preferential examination)

Article 48-6 Where it is recognized that a person other than the applicant is working the invention claimed in a patent application as a business after the laying open of the application, the Commissioner of the Patent Office may, where deemed necessary, cause the examiner to examine the patent application in preference to other patent applications.

## *Appendix E*

### Example of “Submarine Patent”:

There are Lemelson's patents and Hyatt's patent that can be referred as case examples of the problems that arise with so-called submarine patents.

Lemelson's patents involve both the means and the equipment that can automatically analyze electronic images in order to inspect product damage etc.. Lemelson's first application was filed in December 1954, and the patent was finally granted in 1992. It was said that Lemelson and 11 Japanese automobile manufactures reached a settlement agreeing on paying totaling around \$100 million for 23 patents.

Hyatt's patent involves a single chip integrated circuit computer. The content of his patent seemed to be very general technology as of the time when his patent caused problems. The original application had been filed in 1969, and the patent was issued in 1990.

The situation has been improved by taking some measures for these problems with submarine patents, such as harmonization on 20-year patent protection from the filing date by the TRIPS agreement and introduction of an earlier publication system in the U.S.(even though it allows opting-out of publication). Moreover, in recent years, the number of patent applications which have been opted out of publication has been decreasing in U.S. and the percentage of such opted-out application was 5.93% in 2009.

However, only by the fact that the number of patent applications which have been opted out of publication has been decreasing, it cannot be said that the problem with submarine patents have been resolved. As long as non-published pending patent applications exist, there will still remain the concern about submarine patents. While it is understandable that it is not easy in the U.S. to immediately revise the relevant laws, it also should be noted that there are quite a few users calling for 18-month publication system for all patent applications without the opt out option.