



Office of Policy and
International Affairs



Roundtable on International Harmonization of Substantive Patent Law

November 19, 2014
USPTO, Alexandria VA

REPORT AND RECOMMENDATIONS

Roundtable on International Harmonization of Substantive Patent Law Report and
Recommendations

United States Patent and Trademark Office

CONTENTS

<i>Section Title</i>	<i>Page</i>
Executive Summary	2
I. Introduction.....	5
II. Background.....	6
III. Discussion.....	7
A. Definition and Scope of Prior Art.....	7
B. Prior Art Effect of Published Applications.....	8
(i) Use of Secret Prior Art for Novelty and Non-Obviousness.....	8
(ii) Applicants’ Previously Filed Patent Applications	10
(iii) PCT Applications.....	11
C. Prior Art Not Affecting Patentability: Grace Period.....	12
(i) Duration of the Grace Period	13
(ii) Formalities Requirements for Invoking the Grace Period	13
(iii) Grace Period and 18-Month Publication.....	14
D. Conditions for Patentability	14
(i) Novelty.....	14
(ii) Obviousness	15
E. Topics to Consider for Further Harmonization.....	15
IV. Recommendations.....	16
Appendix A: List of Roundtable Panelists.....	17

EXECUTIVE SUMMARY

On November 19, 2014, the United States Patent and Trademark Office (USPTO) hosted a Roundtable on International Harmonization of Substantive Patent Law. The Roundtable was prompted by renewed interest in international harmonization of patent law following several important developments in the global patent system, including the signing into law of the Leahy-Smith America Invents Act (AIA) in the United States, the progress toward the Unitary European Patent and Unified Patent Court regimes in Europe, revisions to the patent law of Japan, and ongoing international discussions in various fora, such as the so-called “Tegernsee Group,” the “IP5,” and “Group B+.”

Particularly in view of the relevance of harmonization to the efficient examination and grant of high quality patents, the desire on the part of applicants for more consistent patentability determinations in different jurisdictions, and the interest of the USPTO and other patent offices in reutilization of work, or “work sharing,” the Roundtable focused on key patentability issues including: the definition and scope of prior art; conflicting applications or so-called “secret prior art”; the grace period; and novelty and inventive step/obviousness. Roundtable participants included a broad spectrum of U.S. stakeholder interests, ranging public and consumer advocacy groups, academia, industry representatives and individual practitioners.

With regard to the first discussion topic, whether U.S. law is effectively harmonized with the definition of prior art in other major patent systems (e.g., Europe and Japan) as a result of the changes made by the Leahy-Smith America Invents Act (AIA), the panelists noted that U.S. courts had not yet issued interpretive rulings on key aspects of the new law, particularly what it means for disclosed subject matter to be “publicly available.” The panelists agreed, however, with a suggestion by the moderator that harmonization efforts in this area could instead focus on

more limited, practical examination matters, such as public accessibility of printed publications, rather than on more esoteric issues unlikely to arise during examination, such as oral communications.

With regard to the issue of so-called “secret prior art,” i.e., earlier-filed, later published applications by another applicant, panel views were mixed as to whether such conflicting applications should have prior art effect for novelty only, as is the case in Europe; for novelty and inventive step/obviousness, as is the practice in the United States; or a middle ground, “novelty-plus” approach, as in Japan. The majority of panelists, however, favored U.S. practice. On the related issue of same- or related-applicant conflicting applications, i.e., cases of “self-collision,” the panelists expressed general support for the U.S. practice of providing for anti-“self collision” through the use of terminal disclaimers. With respect to the prior art-effective date of PCT applications, the panelists expressed widespread support for the U.S. approach under the AIA of considering PCT applications as “secret prior art” as of their international filing date or, if applicable, foreign priority date, upon designation of the United States in the international application, without further requirements, as is the case, e.g., in Europe or Japan, that the application enter the regional/national phase and/or meet any associated translation requirements.

On the subject of the grace period, the panelists expressed strong, widespread support for an internationally harmonized grace period of 12 months covering at least pre-filing disclosures by or derived from the inventor or joint inventor. The panelists similarly indicated a strong preference for the grace period to apply by operation of law, i.e., without a mandatory requirement that the applicant declare entitlement to the grace period with respect to specific disclosures, in order not to undermine the functioning of the grace period in the case of erroneous disclosures.

As to the issues of novelty and obviousness, panelists were generally of the view that the laws in various jurisdictions were already fairly aligned. Several panelists noted, however, that despite similarities at the legal level, administrative practices may lead to divergent outcomes, suggesting that further work could be done at the practice level to achieve greater harmonization.

I. Introduction

The United States Patent and Trademark Office (USPTO) hosted a Roundtable on International Harmonization of Substantive Patent Law at the USPTO headquarters in Alexandria, Virginia on November 19, 2014. The Roundtable was prompted by renewed interest in international harmonization of patent law following several important developments in the global patent system, including the signing into law of the Leahy-Smith America Invents Act (AIA) in the United States, the progress toward the Unitary European Patent and Unified Patent Court regimes in Europe, revisions to the patent law of Japan, and ongoing international discussions in various fora, such as the so-called “Tegernsee Group,” the “IP5,” and “Group B+.” Particularly in view of the relevance of harmonization to the efficient examination and grant of high quality patents, the desire on the part of applicants for more consistent patentability determinations in different jurisdictions, and the interest of the USPTO and other patent offices in reutilization of work, or “work sharing,” the USPTO sought input from a broad spectrum of U.S. stakeholders on key examination issues, including the definition and scope of prior art; the grace period; and standards for assessing novelty and obviousness/inventive step.

The Roundtable featured a panel discussion moderated by noted patent law expert, Mr. Robert Armitage, on the topics mentioned above. The panelists represented an array of U.S. stakeholder interests, from public and consumer advocacy groups, to academia, to industry representatives and individual practitioners. A complete list of panelists is included in Appendix A of this Report.

II. Background

For decades, the United States has participated in international efforts to harmonize substantive patent law around the world. The most recent discussions toward this end have been conducted under the auspices of the “Tegernsee Group,” which is comprised of leaders and patent law experts from the patent offices of Denmark, France, Germany, Japan, the United Kingdom, and the United States, as well as from the European Patent Office. The Group was formed in 2011 to consider the state of patent law harmonization in view of important developments such as the AIA in the United States, and to facilitate progress toward greater harmonization by means of fact finding and information gathering.

Since 2011, the Tegernsee Group has met several times to consider work done by patent experts from each office analyzing comparative aspects of each jurisdiction’s patent law and practice on four issues of particular interest: the grace period; publication of applications; treatment of conflicting applications; and prior user rights. The Group published a final report in June 2014 entitled “Consolidated Report on the Tegernsee User Consultation on Substantive Patent Law Harmonization,” which consolidated stakeholder views on these issues across various jurisdictions. The Consolidated Report is available at http://www.uspto.gov/ip/global/patents/tegersee_survey/tegersee_final_consol_report_june_2014.pdf. The Tegernsee Group is currently on hiatus pending further developments.

In parallel with the Tegernsee Group discussions and other efforts focused on substantive harmonization, the USPTO has also been actively engaged with other patent offices on several work sharing initiatives, such as the Patent Prosecution Highway (PPH). Work sharing allows one office to leverage work done by another office on a corresponding application in order to

improve quality and reduce duplicative search and examination efforts. However, work sharing efficiency is greatly limited by differences in applicable patent laws of different jurisdictions.

Past USPTO studies and experiences indicate that the areas of substantive patent law that are most relevant for work-sharing purposes are those related to the search and application of prior art, primarily because prior art issues tend to be determinative of patentability in most cases, and also since prior art searching is a critical aspect of examination process. It is for these reasons that the Roundtable focused on the following key issues related to the identification and application during examination of prior art: the definition and scope of prior art; the grace period; and standards for assessing novelty and obviousness/inventive step.

III. Discussion

A. Definition and Scope of Prior Art

A key tenet of patent law is that patents should be granted for contributions to the fund of human knowledge, i.e., placing in the hands of the public information that had not been previously known. It is therefore critical that the scope of the prior knowledge -- the prior art-- is properly defined to ensure that the subject matter for which exclusive rights are granted truly represents a contribution to, and not an encroachment on, the public domain.

Prior art is generally defined with respect to a particular date. In a first-inventor-to-file system (e.g., in the United States under the AIA), the key date is the filing or priority date of the application in question. Thus, prior art in such a system generally encompasses information accessible to the public before the filing or priority date of the application. While the major patent systems around the world embrace the basic concept described above in a fairly consistent manner, there is no universal definition of what constitutes prior art.

Accordingly, panelists were asked whether, as a result of the changes made by AIA, U.S. law is effectively harmonized with how prior art is determined in other major patent systems (e.g., Europe and Japan). Panelists expressed some uncertainty on this point, noting that U.S. courts had not yet issued interpretive rulings on applicable aspects of the AIA, particularly regarding what it means for disclosed subject matter to be “publicly available.” A representative of Knowledge Ecology International (KEI), noted that sources of prior art, like blogs and listservs, have changed over time and that the scope and content of the prior art should reflect such developments. Others, such as the representative from the Biotechnology Industry Organization (BIO), indicated that evolving business practices regarding non-disclosure agreements and employee mobility also called into question historic U.S. jurisprudential views of public availability.

The moderator, Robert Armitage, suggested that harmonization could focus on a more limited, practical subset of the definition and scope of prior art, namely prior art normally available during the examination process, such as printed publications. For example, examiners are unlikely to reject a claim on the basis of an unrecorded public conversation. Some panelists agreed that this limited focus may be a practical way forward, leaving more complex issues of public availability, such as unrecorded oral conversations, to national legal development.

B. *Prior Art Effect of Published Applications*

i) Use of Secret Prior Art for Novelty and Non-Obviousness

A general principle of patent law applied in offices around the world is that an invention will not be patentable if it was disclosed in another, previously filed, but later published or patented application in the same office. Because most patent systems maintain the secrecy of applications until they are published at eighteen months, and in view of the fact that the later

application was filed prior to the contents of the earlier application being published, the contents of an earlier application are generally referred to as “secret” prior art. The basic reason for creating this artificial category of prior art is to prevent more than one patent from issuing on the same invention in the same jurisdiction, i.e., to prevent “double patenting.”

In the United States under the AIA, earlier-filed, later-published (or patented) applications qualify as prior art as of their earliest filing, or if applicable, priority date. Moreover, U.S. law provides that “secret prior art” is applicable for determining both novelty and obviousness. In Europe, however, the European Patent Convention (EPC) provides that “secret prior art” is effective for determining novelty only with respect to the invention claimed in the later-filed application. Japan’s patent law provides a middle ground between the U.S. and EPC approach. Specifically, Japan provides a prior-filed application may be applied against a later-filed application both for what it explicitly discloses (novelty) and equivalents of what is disclosed that are within the common general knowledge of the ordinary artisan (a concept commonly referred to as “novelty-plus”).

The Roundtable discussion focused on what panelists viewed as the international best practice in terms of applicability of “secret prior art.” The majority of the organizations represented, including IPO, BIO, and BSA, indicated their support for U.S. practice of applying “secret prior art” for novelty and obviousness. One of the primary concerns they expressed with European and Japanese practice was the possibility for multiple parties to obtain patents on trivial variations of the main invention, particularly in an age of increased industrial espionage and cyber security vulnerabilities.

Hal Wegner of Foley & Lardner opined that U.S. practice on this issue departed from international norms. This led to other panelists, including the representative from AIPLA, to

suggest studying the effects of the other approaches. Panelist noted their openness for further study was in part due to a recognition that having a single rule on this issue as part of an overall harmonization package was preferable to insisting on a particular practice. IPO, however, cautioned that the system should be based on what is best for promoting innovation for all parties.

ii) Applicants' Previously Filed Patent Applications

Another key issue discussed was what to do when two or more of the applicant's own applications create prior art against each other, i.e., when they "collide." Anti-self collision generally refers to a doctrine that limits the prior art effect of an earlier filed application against a later filed application by the same (or a related) applicant containing common subject matter. Under U.S. law, while an applicant is prohibited from obtaining more than one patent on an identically claimed invention under 35 USC 101, a statutory "gap" exists when the claims in two or more applications by the same applicant (or an application and a granted patent), though not identical, are not patentably distinct. Granting a patent on a later-filed application may effectively extend the patent term of the earlier filed application or granted patent because the scope of the claims would overlap. Moreover, because the rights associated with each patent can be separately sold or assigned, the holding by multiple parties of overlapping patent rights could subject third parties to multiple lawsuits for infringement of basically the same claims. U.S. law addresses this situation and provides for anti-self collision through "terminal disclaimers." The terminal disclaimer serves two purposes: first, it prevents the unjust time-wise extension of patent term by linking the patents to the same expiration date; and second, it requires the patents to be commonly owned to be enforced, to prevent lawsuits by multiple parties for the same act of infringement.

In addressing this topic at the Roundtable, Mr. Armitage explained that while U.S. practice allows an applicant to avoid self-collision through the use of terminal disclaimers, in Europe, there is no anti-self-collision. Panelists generally supported the current U.S. practice, noting in particular industry's reliance on provisions of the Cooperative Research and Technology Enhancement (CREATE) Act of 2004 and their impact on anti-self-collision with respect to applications subject to joint research agreements and common assignments.

iii) PCT Applications

The PCT permits an applicant to file a single international application in a single language that has a similar effect as a regularly filed national application in the PCT member states. However, because of accommodations provided for national law under the PCT, as well as different national laws pertaining to language and publication requirements, there are differences among jurisdictions as to the prior art effective date of an earlier filed, later published PCT application. In some jurisdictions, such as in Europe under the EPC or in Japan, the PCT application only becomes prior art as of its international filing, or if applicable, priority date upon entry in to the respective regional or national phase and/or upon fulfillment of certain translation requirements. Otherwise, the application is treated as ordinary prior art as of its publication date.

In the United States, under the AIA, PCT applications designating the United States have prior art effect upon publication under the Treaty as of the earlier of the international filing date or priority date, with no prescribed language requirements. Pre-AIA, U.S. patent law required a PCT application to have designated the U.S. and have been published under the Treaty in English in order for it to be treated as "secret" prior art as of its international filing date; otherwise, it would be treated as ordinary prior art as of its international publication date.

Panelists generally agreed that the U.S. approach should be the global standard. A PhRMA representative remarked that his members wished to study the effects of the AIA's treatment of published PCT applications as the practice matures.

C. *Prior Art Not Affecting Patentability: Grace Period*

The grace period refers to the period of time prior to the application filing date during which a disclosure of the invention by the applicant is not available as prior art. This is especially important because ordinarily in a first-inventor-to-file system, any disclosure by anyone, including the applicant, prior to the application filing date, creates prior art that destroys patent rights.

U.S. law under the AIA provides a one year (12 month) grace period for disclosures by or derived from the inventor or a joint inventor that is counted back from the “earliest effective filing date,” which includes the priority date. The grace period arises by operation of law; no declaration of entitlement is necessary to invoke its benefits. Japanese law provides for a grace period of six months but requires the applicant to submit a declaration of entitlement. The EPC provides for the grace period laid out in the Paris Convention—six months for disclosures at officially recognized international exhibitions or in cases of evident abuse in relation to the applicant or his legal predecessor.

Lack of a harmonized grace period creates serious problems for inventors in an increasingly global, IP-driven economy. A U.S. inventor, for instance, may disclose an invention prior to filing in the U.S. and still be able to obtain patent rights by virtue of the U.S. grace period. However, that disclosure would prevent the inventor from obtaining patent rights abroad unless that jurisdiction provided a grace period covering that disclosure or unless the applicant filed abroad before the disclosure. Different practices throughout the world create a

trap for inventors not familiar with law and practice in other countries, which may fall disproportionately on unsophisticated actors, e.g., independent inventors.

The Roundtable discussion focused on the general issue of providing a grace period and on particular aspects of the grace period, including duration and compliance with formal requirements for invoking the grace period.

i) Duration of the Grace Period

There was general agreement among the panelists that an internationally harmonized grace period was a best practice. Most panelists expressed support for a grace period of 12 months. Several panelists, however, indicated flexibility on the duration provided that an effective, internationally harmonized grace period was the result, and that it was part of a complete harmonization package. The specifics of what such a package might contain were not discussed.

ii) Formalities Requirements for Invoking the Grace Period

The main issue on this point was whether the applicant should be required to invoke or “declare” entitlement to the grace period for each pre-filing disclosure. The panelists discussed the pros and cons of such a requirement, noting on the one hand it could provide greater certainty for third parties whether a pre-filing disclosure was subject to being graced, and on the other hand that such a requirement could create a trap for unsophisticated actors. It was also noted that if the grace period was to serve as a safety net for inadvertent disclosures, a requirement to declare entitlement to a disclosure that the inventor did not know about would defeat such a purpose. Panelists did not support introducing a declaration requirement, noting, in addition to the above-mentioned drawbacks, that it would result in more cumbersome and costly procedures,

particularly for large businesses with thousands of employees all over the world to monitor employee disclosures.

iii) Grace Period and 18-Month Publication

Some commentary in Europe suggests that a grace period must be accompanied by a mandatory 18-month publication regime, so as to avoid significant legal uncertainty for third parties. While there was a brief discussion on the possible interaction between the grace period to 18-month publication, the panelists did not agree on a particular view.

D. Conditions for Patentability

i) Novelty

The patent laws of all major industrial nations provide that patents are to be granted only for inventions that are novel relative to what the prior art teaches.

When asked, however, if the concept of what constitutes novelty is sufficiently harmonized, the panelists generally agreed that most countries have the same basic legal requirements regarding novelty, but that there are differences when those laws are implemented at the practice level, i.e., during examination. Despite acknowledging such differences, some panelists suggested that focusing on harmonizing novelty practices may not be fruitful.

One specific issue of different novelty practices discussed during the Roundtable was that of “selection” inventions in chemical cases. According to practice in the United States, for instance, a generic claim cannot be allowed if the prior art discloses a species falling within the claimed genus. However, a disclosed genus does not always anticipate a claim to a species within the genus.

Representatives from BIO and PhRMA noted that “selection” inventions are of particular relevance to and key aspects of research and development of new therapies. They suggested that novelty practices as regards “selection” inventions should be the focus of further harmonization work to ensure common practice around the world.

ii) Obviousness

In addition to being novel, patent regimes around the world also require that the invention have an “inventive step” relative to the prior art. In the United States, this means that the claimed invention must not have been obvious to a person of ordinary skill in the art relative to the teachings of the prior art. Other jurisdictions have similar legal requirements but, as with novelty, there are practice differences.

Respondents generally agreed that the current legal provisions in the major jurisdictions were aligned, but there were deviations in examination practice. Panelists also agreed that consistent interpretation was fundamental to a harmonized global patent practice in which inventors could rely on obtaining the same outcome in multiple offices. Others noted that harmonized practices would better promote work-sharing among offices. Several panelists suggested that harmonization of “implementation” issues may be better suited for working-level discussions.

E. Topics for Further Harmonization Consideration

At the conclusion of the Roundtable, both panelists and audience members were given the opportunity to suggest other possible areas for harmonization. Their suggestions included issues such as prior user rights, patent eligible subject matter, written description requirements,

unity of invention, fees, continuation practice, and a sui generis system for software registration due to the short life cycle of such products.

IV. Recommendations

Based on the comments received during the Roundtable, the USPTO recommends the following:

1. The USPTO should continue engagement with key jurisdictions to advance harmonization discussions on issues related to prior art and its application during examination, giving due consideration to the views of stakeholders as expressed at the Roundtable and in written submissions.
2. The USPTO should consider separating issues that are more suitable for harmonization at the legal level from those where work at an administrative or practice level might be more fruitful.

APPENDIX A: List of Roundtable Panelists

Mr. Robert Armitage - Moderator

Panelists:

Mr. Samson Helfgott	American Intellectual Property Law Association (AIPLA)
Mr. Q. Todd Dickinson	No affiliation noted
Mr. David Korn	Pharmaceutical Research and Manufacturers of America (PhRMA)
Mr. James Love	Knowledge Ecology International
Mr. Timothy Molino	Business Software Alliance (BSA)
Mr. Hans Sauer	Biotechnology Industry Organization (BIO)
Mr. Herm Wamsley	Intellectual Property Owners Association (IPO)
Mr. Harold C. Wegner	Foley & Lardner
Mr. John M. Whealan	George Washington Law School