#### **United States Patent and Trademark Office**

# **Response to SCP Circular 8625**

#### Question1

How does your office understand the term "quality of patents"?

#### Answer 1

The USPTO considers a quality patent to be one that is correctly issued in compliance with all the requirements of our patent statutes as interpreted by our judiciary at the time of issuance. That means, in part, that the application meets the requirements for patentable subject matter (35 U.S.C. §101), novelty (35 U.S.C. §102), non-obviousness (35 U.S.C. §103) and disclosure / enablement (35 U.S.C. §112).

As part of its quality assurance efforts, the USPTO trains all examiners on these legal requirements, including through new examiner training and through mandatory training for all examiners on new developments in the law. The USPTO also has quality management mechanisms in place to ensure that examiners properly apply these legal requirements in a manner that results in issued patents meeting all requirements of the United States Code.

The USPTO's recent effort on quality, the Enhanced Patent Quality Initiative (EPQI) was developed to ensure the office continues issuing high-quality patents well into the future. The program is focused on improving the quality management mechanisms by institutionalizing best practices and strengthening the USPTO's work products, processes, and services at all stages of the patent process. Specifically, as part of the EPQI, the USPTO has implemented a number of quality-focused programs, structured around three core pillars, namely excellence in work products (Pillar 1), excellence in measuring patent quality (Pillar 2), and excellence in customer service (Pillar 3).

These quality-focused programs include:

- Pre-examination and Search Enhancement Programs including a pilot program to provide an early, automated pre-examination search of relevant prior art in advance of examiner review and raising examiner awareness of available search tools.
- Prosecution Enhancement Programs including developing best practices for examiners to enhance the clarity of the prosecution record, establishing points of contact to facilitate applicant-examiner interviews, and improving existing after-final programs to reduce the number of issues that might be raised in an appeal.
- Post-examination Enhancement Programs including improving the quality of images in published design patents and identifying and making available to examiners prior art raised in post grant proceedings that is relevant to related pending applications.
- Evaluation Enhancement Programs including developing a consistent and transparent process and form to capture minable data about the correctness and clarity of examiners' work products; developing enhanced metrics to measure, understand and evaluate examiners' work products; and engaging stakeholders to identify new topics for case studies.

The USPTO also recognizes that quality is a very broad concept that can be interpreted differently by different stakeholders. The discussion above is primarily valid in the context of patent offices engaged in the grant of high quality patents. With respect to users not engaged in the grant of patents, different definitions of patent quality may be appropriate.

For example, ability to survive a court challenge, being successfully licensed, usefulness in developing a new product are some of the other legitimate measures of a patent's quality, from the point of view of different users of the patent system. These and other measures of quality may all be appropriate in their specific context, however one should not expect that every measure of patent quality will be valid or meaningful in every situation and for all users.

## Question 2

What types of cooperation with other patent offices does your office have with respect to search and examination?

Those types of cooperate on may include, for example, access to documents/databases of other offices, use of search and examination work products, expertise and resources available in other offices, collaborative search and examination, outsourcing search and examination etc.

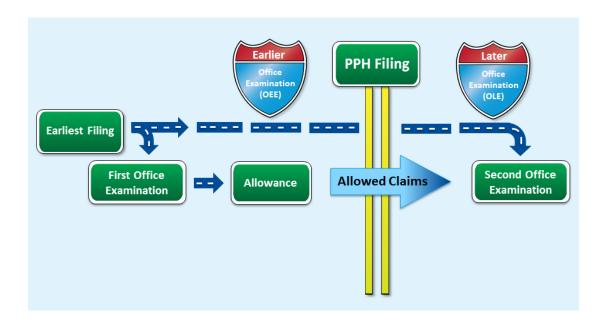
#### Answer 2

The USPTO takes part in a variety of programs that involve work sharing. In its simplest form, work sharing means that an office of later examination reuses the work product from another office that carried out an earlier search and/or examination in a related application. More or less formalized arrangements to carry out work sharing have been used by examiners for a long time, and more recently formal work sharing has become an important topic for all the major offices.

# **Patent Prosecution Highway (PPH)**

Next to the PCT, the most successful and ubiquitous work sharing program in which the USPTO takes part is the Patent Prosecution Highway (PPH). The PPH provides a mechanism to accelerate the examination process for corresponding applications, under certain conditions, filed in participating intellectual property offices.

Patent offices participating in the PPH agree that, when an applicant receives a ruling in a first patent office indicating that at least one claim is allowable, the applicant may request fast track examination of corresponding claim(s) in a corresponding patent application pending in a second office. PPH leverages fast-track examination procedures already in place among participating patent offices to allow applicants to reach final disposition of a patent application more quickly and efficiently than would be possible in standard examination processing. This process is illustrated in the diagram below.



On January 6, 2014, the USPTO launched two pilot programs aimed to simplify access to participating PPH offices. The two new pilots, referred to as the Global PPH and the IP5 PPH, supplant many existing bilateral PPH programs, and replace the forms and procedures that were unique to each PPH country pairing with one form and common rules for all participating countries.

The Global PPH and IP5 PPH pilot programs run concurrently and are substantially identical, differing only with regard to their respective participating offices. Because the USPTO has elected to participate in both the Global PPH pilot program and the IP5 PPH pilot program, a PPH request may be filed in the USPTO based on the work product of any office participating in either pilot program. Furthermore, because the respective requirements for the Global PPH and IP5 PPH pilot programs are equivalent, USPTO applicants need not specify which pilot program is being utilized. The USPTO treats all incoming PPH requests the same, whether they originate in a Global / IP5 member or in an office with a bilateral agreement.

Under the Global PPH Guidelines, all earlier positive results (whether PCT or national work product) from any of the participating IP offices may potentially form a basis for petitioning to enter the PPH in the USPTO. Applicants having corresponding applications with claims deemed to be allowable in any of the countries listed below can use the standardized PPH request form.

As of January 2017, the following countries / offices participate in the Global / IP5 PPH program in addition to the United States:

Australia (IPAU); Austria (APO); Canada (CIPO); China (SIPO); Denmark (DKPTO); EPO, Estonia (EPA); Finland (NBPR); Germany (DPMA); Hungary (HPO); Iceland (IPO); Israel (ILPO); Japan (JPO); Korea (KIPO); Nordic Patent Institute (NPI); Norway (NIPO); Poland (PPO); Portugal (INPI); Russia (ROSPATENT); Singapore (IPOS); Spain (SPTO); Sweden (PRV); United Kingdom (UKIPO).

In addition to the Global PPH and IP5 PPH pilot programs, the USPTO has PPH agreements with the following Intellectual Property Offices around the world. These countries are not yet included in the Global PPH so applicants must use the special forms noted for each bilateral office.

The following countries / offices had bilateral PPH agreements with the USPTO as of January 2017:

Argentina, Brazil, Colombia, Czech Republic, Mexico, Nicaragua, Nicaragua, Philippines, Romania and the Taiwan Intellectual Property Office.

# PPH in the PCT system

The USPTO, together with the UKIPO and KIPO, has proposed that the PPH program be made a formal part of the PCT system. This was originally proposed as part of the PCT 20/20 set of improvements to the PCT system.

A majority of the PCT member states was in favor of formally incorporating the PPH in the PCT system, however some delegations in the past have repeatedly expressed opposition to the concept, and have blocked the proposal.

In our view, opposition to the PPH proposal is not warranted. The PCT is perhaps the first and most successful work sharing system in operation with respect to patents. As member states gain more experience with the PCT, in particular while functioning as PCT International Authorities, we think that the benefits of such system and the lack of drawbacks will become evident. Work sharing programs are designed to maintain the sovereignty of the participating states, since patentability decisions are made by the national offices. There are no provisions for automatically giving "full faith and credit" to the decisions of a foreign patent office.

The benefits of work sharing programs such as the PCT and the PPH in quality and efficiency have been extensively documented.

For these reasons, we believe that the time is now ripe for formally including the PPH in the PCT system, so as to give to the participating offices and to applicants the benefits that could ensue from a better PCT system.

## **Collaborative Search Pilot Program (CSP)**

The PPH is not the only work sharing program in which the USPTO is active. The Collaborative Search Pilot Program (CSP) is also being actively pursued and evaluated. The CSP is designed to evaluate different approaches to collaboration between multiple offices in the initial steps of examination of patent applications.

The USPTO signed two independent collaborative search pilot Memoranda of Cooperation (MOCs) – one with the Japan Patent Office (JPO) and another with the Korean Intellectual Property Office (KIPO). The purpose of these two pilots is to provide stakeholders with search results from two Offices early in the examination process, so the applicants can determine their strategy in prosecuting their applications. Both pilots are expected to run for two years, ending in late 2017, with an option to be extended or revised.

Applicants taking part in these programs must consent to permit the USPTO and its partner Offices to share information under portions of 35 USC 122. Specifically, they must give permission for sending to

and receiving from KIPO search results in U.S. applications, and for receiving KIPO/JPO search results and commentary in published U.S. applications.

The application must satisfy the following requirements to be part of the program: it must be based on the First Action Interview (FAI) Program, have a maximum of 3 independent/20 total claims which are directed to a single invention, the claims must correspond between Offices, the earliest priority date must be post-America Invents Act (AIA), the application must be still unexamined in both Offices, and a Petition to participate must be granted in both Offices. In addition, the applications must share a common earliest priority date and the disclosures must support the claimed subject matter as of the common date.

# The JPO-USPTO pilot:

The USPTO and JPO examiners will exchange search and evaluation results identifying the best prior art and will provide a work product that incorporates the efforts of the two Offices. In this pilot, when the USPTO carries out the first search, the U.S. examiner searches and examines the claims and then sends the results to the JPO. A JPO examiner carries out an extended collaborative search, and sends the results to the USPTO. The U.S. examiner evaluates the JPO search results before continuing prosecution.

The JPO Pilot began August 1, 2015 and is expected to include 200 applications per year per office of first search.

## The KIPO-USPTO pilot

The KIPO and the USPTO will conduct two independent searches and provide both work products to the applicant for consideration. When the USPTO completes the action first, the results are sent to KIPO. The USPTO then waits for the search results from KIPO and, once they are received, sends both sets pf results to the applicant.

The KIPO Pilot began September 1, 2015 and is also expected to involve 200 applications for each office of earliest priority.

# **PCT Collaborative Search and Examination**

At its third session in June 2010, the PCT Working Group endorsed a series of recommendations to improve the functioning of the PCT. The recommendation included trials of arrangements whereby examiners in International Authorities with complementary skills would work together to establish a high quality report.

In view of the recommendations, the Korean Intellectual Property Office (KIPO), the United States Patent and Trademark Office (USPTO) and the European Patent Office (EPO) launched a first pilot project on collaborative search and examination under the PCT (CS&E) in May 2010. The objective of that project was to allow examiners from different International Authorities in different regions and with different working languages to collaborate on one PCT application with the aim of establishing a high quality international search report and written opinion. The first pilot project had a small scale, since its main objective was to test basic assumptions related to the feasibility of a collaborative approach between examiners and a general assessment of the benefits and disadvantages from a qualitative point of view. Its results were positive, indicating that further exploration of the concept was desirable.

A second pilot project of a larger scale was developed, based on the lessons learned during the first pilot project and focused on a quantitative assessment of the approach and a fine-tuning of an operational working model. Both pilots concluded with an overall very positive outcome in terms of improved quality of the collaborative search report and efficiency of the collaborative scheme for both the participating Offices and users whose applications were treated under the pilots.

The overall success of both pilots led to a preliminary proposal by KIPO, presented at the PCT Meeting of International Authorities in 2014, to introduce the CS&E as a new PCT service. During the discussions, it was concluded that at that time it was premature to include it in the Regulations under the PCT, as the two pilot phases only tested the CS&E concept at operational level with a limited number of applications selected by the participating Authorities.

The EPO conducted an in-depth and thorough internal assessment of the CS&E concept based on the results of the preceding two pilot phases, to assess the CS&E concept, the need for a third pilot phase, and to determine the goal and methodology of a third pilot phase to fully assess the concept. The assessment concluded that a third pilot phase was necessary, to further test the concept in particular to determine the actual business interest for such a product by applicants and the expected efficiency gains for Offices.

On June 2, 2016, the IP5 Heads endorsed the "IP5 Cooperation Framework on Collaborative Search and Examination under the PCT" which is a document setting the underlying principles and main features of the third pilot. A governance body, the "Collaborative Search and Examination Pilot Group" (or "CS&E Pilot Group") was established on the basis of that document to develop and monitor this project.

The main features of this third pilot project are:

Applicant-driven approach: the applications which will be processed during the third pilot will be selected by the applicants.

Balanced workload distribution among all collaborating International Authorities: each Office will process at least 100 international applications.

All-inclusive concept: all collaborating International Authorities are expected to contribute to the establishment of the CS&E work products.

Common set of quality and operational standards, which will be applied by all collaborating International Authorities when processing PCT applications.

Use of a "collaboration tool", i.e. an IT infrastructure allowing exchanges among Offices in a secure environment and automated data collection.

Applications filed in languages accepted by the participating International Authorities (other than English) will also be considered in the third pilot.

The CS&E Pilot Group, constituted of representatives of the IP5 Offices and the International Bureau, has been entrusted in particular with the following tasks:

Further specifying the collaboration framework established by the IP5 Cooperation Framework on CS&E;

Monitoring the pilot, evaluating the results and reporting back to the IP5 and PCT meetings;

Preparing a final assessment concerning the proof of concept; and

Coordinating the communication on the pilot.

#### Conclusion

Work sharing among patent offices is a way that expertise in patent examination can be applied across a family of internationally filed applications to provide a more consistent examination result and more efficient operations for the offices. Current work sharing programs, such as the Patent Prosecution Highway, the PCT Collaborative Search and Examination, and previous programs such as JP First, FLASH and others have consistently demonstrated the benefits that work sharing provides to offices and applicants.

For the future, we expect that work sharing will continue to be a mainstay of the offices processing the largest number of applications, and that all offices will consider the benefits that they could obtain by participating in work sharing programs.

## Question 3

When performing on-line prior art search, patent examiners prepare a set of search queries to find relevant prior art. Does your office share (for example, via an official website), or exchange, such search queries with other offices?

#### Answer 3

The USPTO makes available search strategies and queries to the interested public. When performing an on-line prior art search, USPTO examiners prepare a set of search queries to find relevant prior art, and these search histories are publicly available after publication of the application via the USPTO's Patent Application Information Retrieval (PAIR) system and, for PCT applications, via WIPO's Patentscope system. As such, any office searching and examining an application filed in their office which has a related application which has been searched and examined in the USPTO may access and review the search queries used by the U.S. examiner.

We believe that the search queries and strategies used by a first examiner in a family of applications can be very helpful to a subsequent examiner. Access to the earlier query may be especially useful when the second examiner has limited experience in the area of technology of the application, and is able to leverage the knowledge and access to information of an earlier examiner to carry out a better search. Also, such information is valuable in evaluating the adequacy of the earlier search.

Additionally, the USPTO is taking part in several work sharing pilot programs where our examiners collaborate with examiners from other offices to search and examine either the same application (as in the PCT Collaborative Search and Examination Pilot, now in its third phase) or related applications (as is the case with our Collaborative Search Pilots with the JPO and KIPO). Under these pilots, the search queries prepared by the examiners from each of the offices are shared with the examiners from the other cooperating offices. The examiners participating in the pilots have indicated that they have found

the availability of those queries to be very helpful in the course of the search and examination both in making their work more efficient and in increasing the quality of their final work product.

In the context of PCT discussions, the USPTO has long been a proponent of making full search strategies of record in international applications based on the belief that their availability to the national offices would increase confidence in the international work product thereby increasing the amount of potential reuse of the international work product and aiding the examiners in the national phase, while at the same time providing a transparency mechanism. We continue to support efforts to establish a mechanism whereby all of the PCT International Authorities would make their search strategies available.

## **Question 4**

In order to facilitate the cooperation, what kinds of platforms and tools to share information on search and examination are available in your office? Such platforms and tools include, for example, WIPO CASE, databases allowing other offices to retrieve information and external databases used to retrieve information.

- (i) Platforms and tools provided by your office
- (ii) Platforms and tools used by your office

#### Answer 4

The USPTO provides the following services and tools for sharing information on search and examination, which can be utilized by offices taking part in work sharing programs:

## **Global Dossier**

The Global Dossier is a set of business services that provide publically available dossier information on related U.S. application and counterpart foreign applications that share a common priority claim. The dossier information provided by the Global Dossier includes searching and examination results, such as office actions, search strategies and search notes, along with information on cited references. Machine translations of offices actions and certain other document types is also provided for applications filed at the JPO, KIPO, and SIPO

Currently, the Global Dossier provides dossier information to applications filed in the IP5 Offices. USPTO examiners received access to the IP5 dossier information as part of the PE2E rollout beginning in the spring of 2015, and have had access to dossier information from available WIPO CASE member Offices since the end of 2016.

# **Public PAIR**

The Patent Application Information Retrieval (PAIR) is a system provided by the USPTO to allow users to retrieve and download information regarding the status of published U.S. applications, along with dossier information such as search and examination results. This system is publicly available, so that examiners from other offices are able to access and use it as part of a formal work sharing arrangement or informally.

#### **WIPO CASE**

The USPTO became a Providing Office in the WIPO Centralized Access to Search and Examination (WIPO CASE) on October 19, 2015. The USPTO began participating in WIPO CASE as an Accessing Office on December 2, 2016. The dossier information that is made available to Accessing Offices includes: Bibliographic Data; Prosecution History; Classification Data; National stage entry application and its related PCT application information; foreign priority data; and Image File Wrapper (IFW) data. In addition, the dossier information available to the public is accessed through the USPTO's PAIR portal. These dossiers are generally those of issued (granted) or published patent applications or patent applications which are otherwise available as published under 37 CFR 1.14. The USPTO makes its dossier information available through WIPO CASE using protocols described in the One Portal Dossier (OPD) Specification.

## **TRINET**

In 1998, the USPTO alongside the JPO and EPO (the "Trilateral Offices"), launched TriNet. TriNet is a network for exchanging various types of information, such as priority documents and file wrapper information references, and accessing a retrieval system. In 2000, the Trilateral offices made the TriNet data transmission network accessible to other Patent Offices. Soon after, the Canadian Intellectual Property Organization (2001), the Korean Intellectual Property Organization (2001), and IP Australia (2004) joined TriNet. In 2003, the Trilateral offices connected TriNet, WIPONET and PatNET for broader coverage.

## PDX and WIPO DAS

In 1997, the Trilateral Offices started deliberations on a system for electronic exchange of priority documents (PDX). In this system, the Office of First Filing directly sends priority documents to other Offices on behalf of applicants, which significantly reduces the burden and costs incurred in the procedures for submission and for issuance of priority certificates to applicants. The system has been implemented between the JPO - EPO since January 1999, between the JPO - KIPO since July 2001, and between the JPO - USPTO since July 2007. Following those earlier achievements, in 2006 the WIPO General Assembly approved the establishment of a framework for a Digital Access Service (WIPO-DAS) so that priority documents can be exchanged electronically (PDX) between multiple offices. The WIPODAS PDX has been operational since 2009.

## **Common Citation Document**

The Common Citation Document (CCD) application provides single-point access to citation data supplied by more than thirty patent offices. It is a patent information tool developed by the Trilateral Offices in 2011 for the purpose of collectively providing citation information to be used by applicants and the public. More specifically, the CCD consolidates the prior art cited by all participating offices for the family members of a patent application, thus enabling the search results for the same invention produced by several offices to be viewed on a single page. The creation of the CCD application is part of an ongoing process of technical alignment at the international level aimed at establishing an appropriate infrastructure to facilitate greater integration of the global patent system. The CCD website is available to the general public. The expansion of the Trilateral CCD project to cooperation among the IP5 has been discussed, and all Five Offices have agreed to participate in this project.

# Question 5

What are the impacts of such cooperation in the area of search and examination to your office? If your office has different types of cooperation and each type of cooperation has different impacts, please indicate them separately.

#### Answer 5

Work sharing has had many beneficial effects on our office. In particular the Patent Prosecution Highway (PPH) program has provided improvements in efficiency, by reducing the time it takes to conduct a patentability search and examination of a PPH application, and by reducing the number of office actions that are issued by an examiner in order to achieve a final resolution of the examination.

Quality has also improved under the PPH, since the USPTO examiners and the examiners of other participating offices begin their search with the benefit of the work product from another office available to them.

Costs for applicants in the USPTO are reduced, due to the fewer office actions, and the speed of prosecution is greatly increased.

## Question 6

What kinds of capacity building are required for different types of cooperation between patent offices in search and examination? Please indicate any specific capacity building needs to conduct such cooperation successfully. In this context, the capacity building is understood to refer to various activities and trainings that support development of knowledge and skills of office employees for effective cooperation between offices in search and examination.

#### Answer 6

The level of capacity building needed to participate in work sharing projects depends on the offices themselves, and their operations. In general, work sharing can be done without great expense of resources. One of the main requirements is that there be some channels of communication between the offices, such as with a dossier system as described above. WIPO CASE is a good example, and is available to all offices.