# Alternatives in Patent Search and Examination





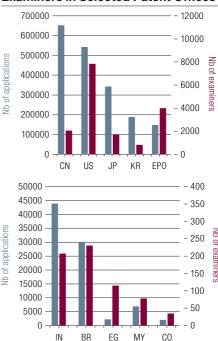
### Policy Guide – Alternatives in Patent Search and Examination

One of the important tasks of a patent office is to decide whether a patent shall be granted, or an application shall be refused, based on the procedures and patentability requirements under the applicable national law. Making such decisions accurately, effectively and efficiently is a complex mission, since many patent offices receive a constantly growing volume of patent applications of increasing complexity.

The size of each patent office and the scale of its operation differ considerably from one patent office to another. As an illustration of the issue, one patent office received more than 600,000 patent applications in 2012, while another patent office received six patent applications in the same year.1 The number of patent examiners employed per patent office varies widely: from only a handful of patent examiners to, with respect to at least one patent office, over 7,000 examiners. The international legal framework, such as the Paris Convention for the Protection of Industrial Property and the Agreement on Trade-related Aspects of Intellectual Property Rights (TRIPS Agreement), leaves Member States much room to maneuver in introducing any particular approach to prior art search and examination by their patent offices.

 World Intellectual Property Indicators 2013, WIPO

Fig. 1 Number of Patent Applications
Filed and Number of Patent
Examiners in Selected Patent Offices



CN: China; US: United States of America; JP: Japan; KR; Republic of Korea; EPO: European Patent Office; IN: India; BR: Brazil; EG: Egypt; MY: Malaysia; CO: Colombia

Sources: WIPO Statistics Database; IP5 Statistics; IP India Annual Report 2011-2012; Brazil's Patent Reform, Center for Strategic Studies and Debates (2013); WIPO document PCT/h/40/4; WIPO Regional Seminar on Effective Utilization of the Patent Cooperation Treaty (PCT) and International Work Sharing Initiatives (November, 2013); and the website of the Superintendencia de Industria y Comercio (Colombia)

The purpose of this Policy Guide is to illustrate various options available to countries for the search and examination of patent applications. The choice of a search and examination system in each country should be based on its national policy and strategy, in accordance with its specific circumstances. This Guide therefore addresses non-exhaustive technical factors which may assist shaping such national strategic consideration. As economic, social and geo-political environment of each country may develop over time, the Policy Guide is intended to support Member States in selecting a best option suitable for each country.

#### **Policy Orientation**

Hiring enough patent examiners with the requisite expertise, providing them with the latest prior art search tools and constantly training them to upgrade their skills could increase the likelihood of the validity of patents, although it does entail a high administration cost. From the broader policy perspective in designing a patent system, however, hiring patent examiners *per se* cannot be a goal in itself.

Designing patent granting procedures in a patent office, such as patent search and examination, has to be considered in the context of the entire patent system. including the judiciary body, which has the ultimate competence to decide on the validity of patents, if they are challenged. Within limited national resources, patent offices conduct search and examination with the aim of ensuring that invalid patents are either not granted or else can be removed easily and effectively. In other words, patent search and examination within a patent office should support the broader policy goal of maximizing the social gains from the patent system against the social costs for maintaining the patent system. In that regard, a country's allocation of costs among a patent applicant, third parties, a patent office and a judicial body has to be carefully evaluated, taking into consideration socio-economic development and the way the patent system is utilized in the country.

In the past, alternatives in patent search and examination tended to be discussed. from the perspective of a legal and institutional framework: (i) formality examination only: (ii) formality examination and prior art search; and (iii) formality examination, prior art search and substantive examination. While they constitute basic types of search and examination frameworks, there are also various other equally important ways to operate search and examination work in patent offices. Countries are free to conduct substantive examination in limited fields of technology or with respect to the compliance with certain patentability requirements. Further, various international cooperation mechanisms, programs and initiatives have been developed and employed in order to maximize efficiency and productivity of national patent offices.

To operate effectively and sustainably, a patent office should be innovative in finding the best option available within its resources and according to its specific circumstances.

## BOX 1: Search and Examination Policy – a Dynamic Concept

The choice of a search and examination system in a particular country may depend on economic, social and geographical factors in and surrounding that country. Thus, with the development of its surrounding environment. an ideal search and examination system will evolve with time. Further, countries are free to introduce a step-by-step approach with respect to patent search and examination. Patent search and examination work heavily depends on skills and competencies of each examiner, which can be developed mostly through his/her experiences. Therefore, gradually enlarging the scope and extent of patent search and examination is an option for patent offices, particularly those that have limited experience in this area.

## Factors Determining the Choice of a Search and Examination System

The ideal patent search and examination system may differ from one office to another. To choose from various options available for designing a search and examination system, the following factors, although non-exhaustive, may be taken into account.

## Workload and the Origin of Applications

The demand for patents in the country concerned, as measured, for example, by the number of patent applications, shapes what constitutes an adequate administrative system. The size of the market, the type and extent of industrial activities or the overall population of the country, may relate to the number of patent applications filed in that country. Since the number of patent applications and patent grants directly affect fee income, the demand for patents in the country concerned relates to the financial sustainability of the patent office's search and examination system. For example, if the number of patent application is very small or concentrated mainly in one technological field, employing qualified substantive examiners across all fields of technology may require justification.

The main origin of the incoming applications, i.e., whether applications are filed by residents, by non-residents using the Patent Cooperation Treaty (PCT) system or by non-residents who file national applications directly with the office, is another factor to be considered. If the majority of applications are filed by non-residents, the likelihood is higher that search and examination work products prepared by other offices on the same invention are available, and consequently international cooperation may be beneficial.

#### National Policy and Rational Allocation of Resources

Substantive patent examination is often regarded as a gatekeeper that prevents frivolous and substandard patents to be granted. Therefore, the introduction of search and examination process in the national patent system has been highlighted in the context of national development and innovation policies.

At the same time, a patent office needs significant financial and human resources to conduct search and examination by itself. A high degree of technical and legal expertise - not only to understand the technical aspect of inventions, but also to interpret the legal scope of patent claims and to analyze the compliance with the legal requirements prescribed in a patent law - is required to carry out a full set of patent examination. Consequently, there is an opportunity cost in not being able to employ highly skilled scientists and engineers in R&D in national priority areas. Moreover, a sufficient technical infrastructure (such as databases) need to be maintained in a patent office to conduct a thorough prior art search.

Share of patent applications filing at selected offices, 2012 PCT National Phase entries Resident direct filings Non-resident direct filings 100% 90% Share of applications 80% 70% 60% 50% 40% 30% The state of the s 20% 10% This W Sissi Patent offices

Fig. 2 Share of Resident and Non-Resident Patent Applications

Source: WIPO Statistics Database, June 2014

These costs should be weighed against the various advantages that the search and examination process could bring to the patent system, for example, increased legal certainty.

#### The Availability of International/ Regional Frameworks and the Possibility of Cooperation

The availability of international and regional frameworks that assist national search and examination affects the design of national search and examination practices since, in general, international and regional frameworks reduce the administrative burden of the countries involved and support a better output of the patent system, both in terms of quality and efficiency. For example, the availability of a regional patent organization<sup>2</sup>

that has a solid substantive examination team in all fields of technology influences filing behaviors of applicants and has a significant impact on national strategy regarding patent search and examination.

2 For example, the African Intellectual Property Organization (OAPI), African Regional Intellectual Property Organization (ARIPO), Eurasian patent Office (EAPO), European Patent Office (EPO) or the Patent Office of the Cooperation Council for the Arab States of the Gulf (GCC Patent Office). However, the possibility of international cooperation depends on many factors. For example, since search and examination reports are prepared in the language of each patent office, examiners with the same linguistic ability can facilitate greater international cooperation among offices.

## Options for a Search and Examination Framework

The following parts of this Policy Guide describe various legal, procedural and practical options in the area of patent search and examination.

In general, patent search and examination can be categorized into three frameworks: (i) formality examination only; (ii) formality examination and prior art search; and (iii) formality examination, prior art search and substantive examination. Each framework has its advantages and disadvantages, as depicted in Fig.3.

#### Formality Examination Only

A patent may be granted, or a patent application may be refused, following formality examination during which compliance with the formality requirements (for example, form and contents of a patent application, submission of required statements and documentation) is examined. In general, no technical or scientific background is required to conduct formality examination. With the development of automated business processes for IP administration, formality examination is more and more facilitate by computer software.

Since no prior art search and substantive examination are conducted by a patent office, granted patents may or may not meet the substantive patentability criteria. If a patent does not comply with all the patentability requirements, third parties, such as competitors, can file a

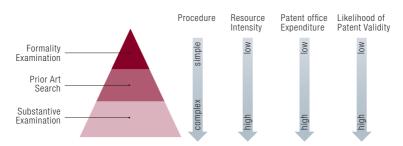


Fig. 3 Search and Examination Frameworks

request for the review of the decision made by the patent office. Such a request is usually filed with a court either by an interested third party for nullification of a patent or by the alleged infringer, as a defense, in an action for infringement.

This type of so-called registration system defers substantive examination on patentability until a patent is actually litigated. On the one hand, the patentability requirements are evaluated by a court with respect to commercially relevant inventions only, thus this framework leads to considerable social cost-saving in terms of the patent office's spending, allowing the country to allocate its resources to other areas of priority. However, the costs for evaluating the patentability of inventions are transferred to the post-grant phase. In particular, courts have to deal with correction of erroneously granted patents, and patent owners and third parties must bear a greater uncertainty of the validity of granted patents as well as litigation costs. If, however, the number of court cases is very small, shifting the costs for evaluating the patentability of inventions

to the post-grant phase may lead to an efficiency gain for the society at large.

## Formality Examination and Prior Art Search

Once a patent application is filed and the formality requirements are checked, an examiner establishes a search report following a prior art search. If the formality requirements are met, a patent may then be granted without substantive examination as to the patentability of the invention, and the search report is published together with the granted patent.

On the one hand, the procedure is less complex than that of a full substantive examination. On the other hand, the patent office should have the resources necessary to maintain up-to-date prior art databases. In general, technical or scientific background is required to conduct prior art search. Examiners should have a general understanding on the patentability requirements and a skill to interpret patent claims. Although the search reports do not contain a detailed analysis on compliance

with the patentability requirements, published search reports that list relevant prior art documents allow third parties to better assess the validity of the granted patents.

### Formality Examination, Prior Art Search and Substantive Examination

Once a patent application is filed and the formality requirements are checked and met, an examiner conducts a prior art search and substantive examination. If all the requirements under the applicable law are met, a patent will be granted. In addition to the expertise required for prior art searches, examiners should have a competence for analyzing the scope of patent claims and relevant prior art as well as for determining the compliance with the legal requirements prescribed in a patent law.

Since compliance with legal requirements is fully examined before grant of a patent, granted patents enjoy a higher likelihood of validity if challenged. This provides legal certainty for both patentees and third parties, and increases confidence in the patent system by society at large. However, maintaining a search and examination system requires substantial human and financial resources, for example, to hire and continuously train qualified examiners in all fields of technology, while maintaining and upgrading the technical infrastructure (such as databases) for prior art searches.

The challenges for patent offices with limited resources may be addressed in different ways. For example:

- · carrying out substantive examination, fully or partly, in cooperation with technical experts outside a patent office (for example, scientists in universities and research institutions), while maintaining the autonomy of the patent office to make a final decision on grant of a patent. In order to successfully utilize the technical knowledge of external experts for patent search and examination, examiners should be fully trained on the applicable patent law and patent search and examination skills. Appropriate measures should also be taken in order to maintain the confidentiality of information contained in patent dossiers, especially by way of a contractual framework;
- limiting substantive examination to certain strategic fields of technology for the country concerned. Applications relating to other fields of technology may be subject to formality examination only or to outsourcing either within or outside the country.

Another way of responding to the challenges posed by limited resources is to restrict substantive examination to checking the compliance with some, but not all, of the criteria to be met for a patent to be granted, for example, patentable subject matter, unity of invention and the disclosure requirement. In order to examine those requirements, patent offices do not

need to maintain prior art search tools, which can be costly. Examiners, however, need comprehensive knowledge of the applicable patent law in order to make sound decisions on compliance with the above requirements, which are not necessarily easy to apply. Another option to limit substantive examination could be to verify compliance with novelty and industrial applicability, but not obviousness or inventive step. This would require prior art search tools, but examiners don't need to carry out a complex analysis of the involvement of inventive step (obviousness).

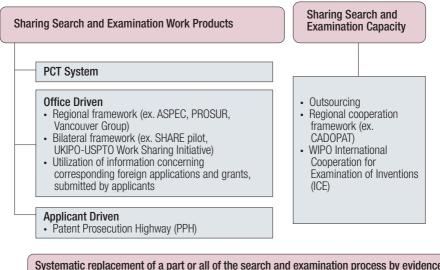
# Practical Options and International Cooperation in Conducting Search and Examination

For patent offices that have chosen to conduct search and substantive examination, international cooperation may be available to assist them in conducting search and examination more effectively and efficiently. A number of patent offices are using search and examination expertise and work products of other offices, and are working together in various ways.

The most conventional and well-known cooperation mechanism in the international patent system is the Patent Cooperation Treaty (PCT).3 Other cooperation mechanisms include regional patent organizations, in which search and examination of regional applications are carried out and patents are granted for Member States of the region. Some patent offices have concluded bilateral agreements with other offices, under which one office takes advantage of the search and examination capacity available in another office. In addition, since, in many cases, a significant number of incoming applications have been filed with another or

3 The Patent Cooperation Treaty (PCT) assists applicants in seeking patent protection internationally for their inventions, helps patent offices with their patent granting decisions, and facilitates public access to a wealth of technical information relating to those inventions. By filing one international patent application under the PCT, applicants can simultaneously seek protection for an invention in around 150 countries throughout the world.

Fig. 4 International Cooperation in Search and Examination



Systematic replacement of a part or all of the search and examination process by evidence indicating the equivalent work done by certain other offices (modified examination).

#### Examination by a Regional Patent Office

several other patent offices, a number of offices have been utilizing the external search and examination work products of such other offices and other information regarding the prosecution of corresponding foreign applications and patents (for example, information made available during the opposition procedure).

Cooperation among patent offices can be carried out under a formal framework such as a treaty or a bilateral agreement between countries. They can also cooperate in a more informal setting, such as exchanging or allowing access to search and examination data under a memorandum of understanding (MOU) between patent offices. Even in the absence of such formal or informal agreements, many patent examiners unilaterally use, if appropriate, search and examination reports as well as other useful information issued by other offices in order to facilitate the examination of corresponding national applications.

International cooperation in the area of search and examination does not imply the automatic recognition of examination decisions made by foreign patent offices. Each patent office retains its autonomy and sovereignty to decide to grant

a patent or to refuse a patent application based on its applicable law. International cooperation on search and examination is intended to assist examiners to make more informed decisions by providing additional prior art information and analytical findings of other examiners. Examiners use such additional information only to the extent possible and as applicable under the respective national law, and may perform further examination work as necessary.

There are challenges in implementing international cooperation. In order to effectively retrieve and utilize search and examination work products of other offices, examiners need the knowledge and skills sufficient to understand the divergence of national, regional and the PCT rules and practices, for example, regarding claim interpretation and assessment of amended claims. In addition, search and examination reports may be unavailable in a timely manner for subsequent use by other offices due to differences in patent prosecution and examination procedures among countries. Therefore, international cooperation initiatives often incorporate educational and exchange programs for examiners from participating offices. Further, as offices normally produce their communications and reports in their official language, examiners in other countries may face difficulties in using such documents.

The following paragraphs describe various options that have been deployed by patent offices.

#### **Utilization of PCT Work Products**

The Patent Cooperation Treaty (PCT) offers applicants an alternative route advantageous for filing applications abroad. One of the aims of the PCT is to increase the likelihood of granting high quality patents through international cooperation. High quality patents are likely to withstand a validity challenge in the national court system by meeting all the conditions of patentability under the applicable law.

International applications under the PCT are subject to international search by International Searching Authorities, and upon request by an applicant, international preliminary examination by International Preliminary Examining Authorities. Those Authorities, i.e., patent offices whose expertise in the matter of searching and examining patent applications is generally recognized, issue the PCT International Search Reports, Written Opinions and International Preliminary Reports on Patentability. Such reports, while not binding on offices of PCT Contracting States, can be used by the offices for the determination of patentability of inventions, once a PCT international application enters into the national phase. The Reports are all translated into English and established in a standard format.

The cooperation mechanism established by the PCT allows patent offices to have a "flying start" in their search and examination work by using international Reports, rather than starting search and examination from scratch in complete isolation. At the same time, patent offices have full control over national procedures, and their patent granting decisions are based on the substantive patentability criteria prescribed in their respective national law.

The PATENTSCOPE website provides all the information concerning PCT international applications, including international reports and written opinions, as well as the national phase entry data of some patent offices. Accordingly, additional search and examination information of counterpart applications in the national phase is also available for examiners. Such additional national information has a value complementary to the International Search Reports, Written Opinions and International Preliminary Reports on Patentability.

At the global level, the share of PCT international applications entering into the national phase out of the total number of non-resident applications was around 55% in 2012. This share varies across individual offices. For example, the share at the patent offices of Brazil, Israel, Malaysia, South Africa and Vietnam were above 85%. Since the PCT is a major tool for filing patent applications abroad, the benefits that derive from the utilization of the PCT work products should be fully explored and enjoyed by its Contracting States.

### BOX 2: PCT as a Tool for Effective Search and Examination

The likelihood of granting high quality patents at the national phase follows from International Search Reports, Written Opinions and International Preliminary Reports on Patentability that meet high level of internationally regulated standards. The high level of standards applies to not only the contents of such international Reports, but also the timeliness of the preparation of those Reports and the quality management system deployed by International Searching and Preliminary Examining Authorities. Efforts continue on improving the PCT so that the system can function more effectively for the benefit of all stakeholders.

The United Kingdom Intellectual Property Office (UKIPO), for example, shows a high level of confidence to the PCT system. In the United Kingdom, applicants may request accelerated examination in the national phase, if their PCT international application has received a positive International Preliminary Report on Patentability.

## Sharing and Utilization of Search and Examination Work Products Prepared by Other Offices

Compared with other industrial property rights such as trademarks and industrial designs, patents have an international character in the sense that patent applications exhibit the highest share of non-resident applications – at the global level, 35%.

In general, the share of non-resident applications is very high in developing countries. For example, it is above 90% in the offices of the countries, such as Guatemala, Mexico, Philippines and South Africa. Most non-resident applications are filed in more than one country, claiming the priority of an earlier application. Although many of them are filed via the PCT route. in certain countries, a significant number of foreign applications are filed directly with a patent office (Paris4 route). Although corresponding foreign applications might contain a different set of claims and the substantive patentability criteria may be implemented differently under the relevant national laws, information concerning prior art search, grant or refusal of corresponding foreign applications may provide additional information which can be utilized by examiners to assist or improve the search and examination of national applications.

Some patent offices have set up mechanisms that allow systematic exchange of such useful information between them. Further, in some countries, applicants are required to submit such information to their patent offices. Development of information and communication technology makes it easier for patent offices to store, share and retrieve information gathered during the prosecution of patent applications, including information that is relevant to patent search and examination.

4 The Paris Convention for the Protection of Industrial Property.

For example, the WIPO Centralized Access to Search and Examination (WIPO CASE) provides a web-based platform to share information with regard to search and examination among participating patent offices. Any patent office may join the WIPO CASE system by notifying WIPO according to the Framework provisions of the system. The office will choose whether it wishes to be a depositing office (making available its search and examination documentation to other offices) or only an accessing office (access to search and examination documentation uploaded by other offices).

#### Modified examination

Some countries (for example, Australia and Malaysia) allow the systematic replacement of a part or all of the national search and examination process by evidence that equivalent work has already been done by another (recognized) patent office with respect to the same invention claimed in a counterpart application.

## Regional sharing of search and examination work products

Often under an existing regional framework, some patent offices systematically share search and examination reports among themselves to support their national work. These include ASEAN Patent Examination Co-operation Program (ASPEC)<sup>5</sup>,

5 ASPEC is a work-sharing program among intellectual property offices of the Member States of the Association of Southeast Asian PROSUR<sup>6</sup> and the Vancouver Group<sup>7</sup>. Similarly, in some regional offices, where a regional patent application claims priority of an earlier national patent application filed with its Member State, a national search and examination report of the corresponding national application is utilized for examination of the regional patent application.

## Bilateral framework for sharing search and examination work products

Some patent offices have made bilateral arrangements so that search and examination work products of one office are made available to another office for reutilization. Examples of such cooperation include the SHARE pilot project between the Korean Intellectual Property Office (KIPO) and the United States Patent and Trademark Office (USPTO) and the UKI-PO-USPTO Work Sharing Initiative.

#### Unilateral use of foreign work products

Many offices unilaterally decide to use search and examination reports as well as other useful information issued by other offices in order to facilitate the examination of corresponding national applica-

- Nations (ASEAN), namely, Brunei Darussalam, Cambodia, Lao People's Democratic Republic, Indonesia, Malaysia, Myanmar, Philippines, Singapore, Thailand and Viet Nam.
- 6 PROSUR is a system for technical cooperation among industrial property offices in Argentina, Brazil, Chile, Colombia, Ecuador, Paraguay, Peru, Suriname and Uruguay.
- 7 The Vancouver Group was established between the intellectual property offices of Australia, Canada and the United Kingdom.

#### BOX 3: Submission by Applicants of Information concerning Corresponding Foreign Applications and Grants

To assist examiners in examining applications that are part of a patent family, a number of national laws require that an applicant provide information concerning corresponding foreign applications and grants. While national laws vary, typically applicants are required to submit: (i) filing dates and application/patent numbers of corresponding foreign applications and patents; (ii) a copy of any communication received by the applicant concerning the results of search or examination; (iii) a copy of any decision (patent grant or refusal) on the foreign application; (iv) a copy of any corresponding foreign patent; and (v) a copy of any decision invalidating the corresponding foreign patent. Applicants may submit comments with respect to those documents. Depending on the national law, applicants may be required to submit such information in all cases, or to do so upon request of the office, once the digitization of prosecution history information (such as search and examination reports, correspondences from applicants and office notifications) is completed, offices may be able to directly share such information on the databases, without asking applicants to submit the relevant information.

tions. Indeed, some national laws require, or give the patent office the authority to require, that applicants submit information concerning corresponding foreign applications and grants (see Box 3).

In the absence of such requirement under the national law, examiners may still retrieve at least part of such information directly from public on-line databases of some other patent offices or from sources such as PATENTSCOPE.

#### Patent Prosecution Highway (PPH)

Under the bilateral Patent Prosecution Highway (PPH) agreements, if the claims of an application are found patentable by the office of first filing (OFF), an applicant may request accelerated examination of corresponding claims in a corresponding application at the office of the second filing (OSF). The accelerated examination procedures allow applicants to reach final examination decision at the OSF more quickly. At the same time, the OSF can utilize the search and examination result of the OFF in considering the compliance with the patentability requirements under the national law of the OSF. The OSF's use of the work product of the OFF allows for a better starting point for examination at the OSF's office.

Applying the same PPH principle, some patent offices concluded agreements which integrate bilateral schemes to a plurilateral all-inclusive scheme. A multi-party PPH allows applicants to request an accelerated examination of a corresponding application at any of the participating office if the claims of the application are found allowable by any other participating office. Such initiatives are IP58 PPH pilot program and the Global Patent Prosecution Highway (GPPH) pilot.

Under some of the bilateral PPH agreements and the Global PPH, applicants may also request accelerated examination on the basis of positive results of the written opinion of the International Searching Authority, the written opinion of the International Preliminary Examining Authority or the International Preliminary Examination Report issued within the framework of the PCT.

Since the PPH procedure is triggered by a request from an applicant, it is distinct from other mechanisms that aim at sharing comprehensive search and examination work products as well as other relevant information between patent offices. In countries where nationals file patent applications predominantly in their country only, they would not be able to enjoy the accelerated examination procedure embedded in the PPH mechanism, although under certain circumstances, some offices offer accelerated examination schemes also for national applicants.

The usability of earlier examination work products in the PPH mechanism by the OSF is presumably high, since substantive examination was carried out with respect to the same or corresponding claims in the OFF. Consequently, it is expected that the examination work in

8 The European Patent Office, the Japan Patent Office, the Korean Intellectual Property Office, the State Intellectual Property Office of China and the United States Patent and Trademark office. the OSF is facilitated and a pendency period for patent examination will be reduced. The benefit of such a reduced examination pendency period can be enjoyed by all applicants, including national applicants who do not use the PPH mechanism.

## Using Other Offices' Search and Examination Capacity

#### Outsourcing

Some patent offices outsource search and examination work to other offices that are equipped for substantive examination, either paying for the service or on a voluntary cooperation basis. Outsourcing can be conducted with respect to all applications or a subset (for example, certain fields of technology) of applications. It can be based on a bilateral agreement, or a regional agreement involving a number of countries, such as CADOPAT<sup>9</sup>.

#### Regional Patent Offices

The establishment of a regional patent office by pooling the resources of its Member States makes it possible for the regional office to conduct substantive examination. The legal effect of the result of such examination is either automati-

9 Through CADOPAC created in 2007, Mexico provides substantive patent examination support services to Belize, Costa Rica, Colombia, Cuba, the Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Nicaragua, Panama, Paraguay, Uruguay, Egypt and the Member States of ARIPO. cally extended to its Member States or applicable in the Member States in which a regional patent is validated.

#### WIPO International Cooperation for Examination of Inventions (ICE) program

The Offices of developing countries and least developed countries may use the WIPO International Cooperation for Examination of Inventions (ICE) program, which is intended to assist them in examining pending applications with no priority or no search report. Upon request, a collaborating office participating in the ICE program will prepare a search and examination report.

## Options for the Procedural Aspects of Substantive Examination

In addition to the practical ways of conducting search and examination, national/regional offices may find various options for designing the procedural aspects of substantive examination, which can also improve the efficiency and effectiveness of search and examination.

## Submission of Prior Art Information by Applicants

In order to assist examiners in conducting substantive examination, some national laws require that an applicant submit to the office information about prior art documents that are known at the time of filing a patent application. In the United States of America, applicants are required to continuously supply any newly discovered prior art that the examiner would find material to the examination throughout the procedure before the office.

#### **Third Party Observations**

In order to inform substantive examination, some countries as well as the PCT system allow third parties to submit relevant prior art information. While examiners may take into account the submitted information, the third party observation mechanism typically does not trigger any specific *inter partes* procedure, and the submitted information is simply included in the file which can be consulted by the public. In general, there is no time limit

for the submission of such information, and no fee is required, although the national laws may vary in details. In some countries, an anonymous submission of information is allowed.

The third party observation system is relatively simple to implement. Once the submitted prior art information is included in the public file, even if an examiner did not use that information, it may be used by other third parties in evaluating the validity of the patent.

#### **Pre-Grant Opposition**

Some countries have introduced a pregrant opposition system in order to assist, or supplement, search and examination by patent examiners. In some countries. an opposition period is triggered by the 18 month publication and carried out before substantive examination. In other countries, an opposition period starts once a patent examiner has completed substantive examination with a positive result - the general public is thus given the possibility of challenging a positive decision of the examiner before it becomes final. National laws vary on the procedural and substantive requirements for an opposition system.

Compared with the implementation of third party observations, a pre-grant opposition system allows a thorough investigation of the case. At the same time, it requires: (i) setting up administrative *interpartes* procedures that allow participation of both applicants and third parties

in the process; and (ii) the availability of human resources capable to conduct such procedures efficiently. Pre-grant opposition is also controversial because it might increase the duration and cost of prosecution, which some feel can be gamed by competitors.

#### Request for Search and/ or Examination

In some countries, search and examination begins more or less automatically once an application is filed. However, in some other countries, a request for search and/or examination has to be submitted separately within a certain period after filing a patent application if an applicant wishes to proceed with his/her application. Depending on the national laws: (i) an applicant may request prior art search, and after the publication of an application and a search report, he/she may request examination; (ii) a search report will be prepared for all applications filed and an applicant may request examination; or (iii) an applicant may file a single request covering both search and examination.

Where deferred examination is allowed, fees are set relatively low for filing, with substantial additional fees payable at the time that search and/or examination is requested. Applicants therefore may be motivated to file patent applications and then wait, using the time to reflect on the costs and benefits of proceeding further to the search and examination stage, taking into account, for example, the commercial prospects for the technology. A

significant number of applications are abandoned by applicants through this process, allowing examiners to examine only those applications that are important for the applicants. However, deferral of examination is sometimes considered a disadvantage to competitors and the public who would like to know the allowed scope of claims at an earlier time.

#### Post-Grant Mechanisms for Reviewing Examination Results

Various options are available in designing national/regional mechanisms for reviewing patent examination decisions of patent offices. In general, the decisions made by a patent office are subject to review by competent courts. In addition, some countries provide, as a first instance, administrative procedures to challenge examination decisions made by their patent offices, for example, a post-grant opposition system and/or an administrative appeal mechanism.

Compared with court procedures, those administrative mechanisms offer, in general, simpler, quicker and less expensive possibilities to challenge decisions made by examiners. At the same time, it requires the availability of human resources capable to conduct such post-grant review. The benefits of a post-grant administrative review should be considered together with the costs to retain competent human resources in the administration as well as the number of cases brought to the post-grant administrative review.

#### Conclusion

The quality of search and examination is critical for the legal certainty of the patent system as well as for confidence in the patent system by society at large. At the same time, it is well acknowledged that no one particular search and examination system will serve all patent offices to that end.

This Policy Guide provides, in a non-exhaustive manner, various options relating to patent search and examination that can be considered by policy makers. A wide range of options are available, from the legal and institutional framework to procedures, practical operations and international cooperation. Obviously, introducing all options in the national framework does not necessarily lead to maximizing benefits from the patent system. Each option should be evaluated carefully given the national circumstances.

Both factors internal and external to a patent office may be relevant to the consideration of options. Among them, the origin of applications (for example, resident or non-resident filing, PCT filing or direct filing, countries of origin) and fields of technology of applications are essential data for evaluating the feasibility of potential international cooperation. Development of information and communication technology and digitization of patent information have played a significant role in expanding the opportunities for international cooperation in relation to patent search and examination. Technical

tools may be fully exploited in order to address national challenges in relation to search and examination.

Policy makers should be aware of the fact that a search and examination policy is a dynamic concept that evolves with time. In that context, while the legal basis has to be regulated through legislation, national laws should maintain certain operational flexibilities so that a patent office may have the possibility to choose the search and examination option most appropriate for the time and circumstances. Naturally, such a choice should be fully in line with national strategic goals and progressive development policies.

#### References

PCT – The International Patent System www.wipo.int/pct/en/

WIPO CASE – Centralized Access to Search and Examination www.wipo.int/case/en/

The International Cooperation for Patent Examination service (ICE) www.wipo.int/patentscope/en/data/developing\_countries.html

#### PATENTSCOPE

patentscope.wipo.int/search/en/search.jsf

WIPO documents CDIP/7/3 and 3ADD "Patent-Related Flexibilities in the Multilateral Legal Framework and their Legislative Implementation at the National and Regional Levels – Part II", Chapter V

WIPO document SCP/18/4 "Opposition Systems and Other Administrative Revocation and invalidation Systems"

WIPO document SCP/20/8 "Work-sharing Programs among Patent Offices and Use of External Information for Search and Examination"



For more information contact **WIPO** at **www.wipo.int** 

#### **World Intellectual Property Organization**

34, chemin des Colombettes P.O. Box 18 CH-1211 Geneva 20 Switzerland

Tel: +4122 338 91 11 Fax: +4122 733 54 28