

# WIPO



PCT/A/35/5

ORIGINAL: English

DATE: July 31, 2006

WORLD INTELLECTUAL PROPERTY ORGANIZATION  
GENEVA

## INTERNATIONAL PATENT COOPERATION UNION (PCT UNION)

### ASSEMBLY

#### Thirty-Fifth (20<sup>th</sup> Extraordinary) Session Geneva, September 25 to October 3, 2006

#### QUALITY OF INTERNATIONAL SEARCHES

*Document prepared by the International Bureau*

#### SUMMARY

1. Contracting States, applicants and third parties alike expect the international search to provide a good basis for any national Office<sup>1</sup> to assess the validity of a PCT application according to the applicable national law. Since the PCT was adopted, developments in the extent and the linguistic and geographical distribution of the prior art, in searching techniques, as well as in the use of the patent system, have changed users' expectations of the system and the challenges involved in delivering a search of appropriate quality.
2. This document reviews, for information, a number of measures which have been taken or are under consideration. Together, they seek to ensure that the international search is appropriate to the developing requirements of the international patent system and makes best use of the resources which are available, taking into account the scope of the search, work done on equivalent applications in different Offices, the information made available concerning the search which has been carried out and quality management systems to enhance confidence in the processes of search by the International Authorities.

---

<sup>1</sup> References in this document to "Articles" and "Rules" are to the corresponding provisions of the Patent Cooperation Treaty (PCT) and the Regulations under the PCT ("the Regulations"), or to such provisions as proposed to be amended or added, as the case may be. References to "national laws", "national applications", "the national phase", etc., include reference to regional laws, regional applications, the regional phase, etc.

## BACKGROUND

### *Objectives of the PCT System*

3. Conducting a high quality search for prior art is among the most difficult and time-consuming tasks for a national Office in the process of deciding whether a patent should be granted. Correspondingly, this is also one of the largest factors in the official fees that are required to be paid, even though in some States the national search fee is set significantly lower than the cost to the Office of providing the service. Quite apart from official fees, a sound knowledge of the prior art at an early stage can avoid unnecessary costs for the applicant in making amendments and preparing translations which could have been avoided if the application had been amended to take account of the prior art at an early stage, or else abandoned altogether.

4. One of the objectives of the PCT, set out in the preamble to the Treaty, is “to simplify and render more economical the obtaining of protection for inventions where protection is sought in several countries”. Articles 15 and 16 provide for an international search to be conducted on each international application by an International Searching Authority. According to Article 15(2), the objective of the international search is to discover relevant prior art. Rule 33 goes on to define the relevant prior art and disclosures which should be mentioned in an international search report as including *any* disclosure which it can find that may be relevant to the issues of novelty or inventive step in *any* Contracting State, irrespective of whether it would be relevant according to the laws under which the International Searching Authority operates as a national Office. Ideally, the international search should be of a quality such that designated Offices do not consider it necessary to repeat the search in the national phase and that, even if such a search is carried out in the national phase, the applicant should rarely be faced with significant<sup>2</sup> prior art not found in the international search.

5. One of the main benefits of the PCT seen at the time of its adoption was that examining Offices would be able “to make substantial economies since the system renders superfluous, for most applications filed by foreigners, all or most of the work of searching” and that “[e]ven national Offices which are distrustful ... as to the quality of the international search reports, and which subject them to a certain control, have a ‘flying start’ in their work, since such work is rather in the nature of completing, checking and criticizing than starting from scratch in complete isolation as national Offices do at present” (document PCT/PCD/2, paragraphs 86 and 87).

6. Among the principal objectives of the reform of the PCT begun by the Assembly at its 29th session in September–October 2000 were “reduction of costs for applicants, bearing in mind the differing needs of applicants in industrialized and developing countries, including individual inventors and small and medium-sized enterprises as well as larger corporate applicants” and “avoiding unnecessary duplication in the work carried out by PCT Authorities and by national and regional industrial property Offices” (document PCT/R/1/26,

---

<sup>2</sup> A particular aspect of technology will often be described in many different publications and in this case an examiner would not be expected to cite all of them. An uncited piece of prior art would only be significant if it disclosed (or made obvious) claimed features of the invention not shown by the cited pieces of prior art.

paragraph 66). These objectives pointed towards improving the quality of the international search and reviewing its operation, taking into account factors relating to the changing nature of the body of technical publications, new methods of searching and the current requirements of applicants and Contracting States, as discussed below.

#### *Use of the PCT System*

7. Since the PCT first became operational in June 1978, there have been enormous changes in the quantity, origin and nature of the use of the system. There were around 2,500 international applications made in the first full year compared to around 134,500 in 2005. Fourteen out of the top twenty PCT States by volume of international applications filed at their receiving Office in 2005 were not even party to the Treaty when it began. Applications had to be filed in a language accepted by an International Searching Authority which was competent to search international applications filed at the relevant receiving Office so that there was less diversity of language of filing. There were five languages of publication, compared to eight now. Some States were not originally bound by Chapter II of the Treaty (relating to international preliminary examination). While all current International Authorities act both as an International Searching Authority (ISA) and as an International Preliminary Examining Authority (IPEA), there have been Offices which in the past acted only as ISA and not IPEA or *vice versa*.

8. These factors have led to changes in the work which needs to be done by the International Searching Authorities and especially to difficulties in performing the ever-increasing volumes of searches required from some Authorities, taking into account also the similar increases in the number of national applications in many States.

#### *Prior Art*

9. There have similarly been significant increases in the volume, linguistic diversity and practical availability of patent and non-patent literature since the PCT was concluded in 1970. In addition, the wider range of Contracting States and developments in a variety of technological fields have brought to the fore the importance of ensuring that the international search takes into account prior art from a wide variety of sources.

10. The number of patent publications has increased significantly in most countries since 1970, other than those where regional systems have replaced multiple national publications at least in part. However, of particular note is that the regional and linguistic distribution of first filings has changed significantly so that there is a great deal of patent prior art which is originally (and sometimes only) published in languages which are working languages of few, if any, of the International Searching Authorities.

11. The volume of non-patent literature is also growing at an ever-increasing rate. Modern technology, and in particular the Internet, means that a great proportion of publications are now available in electronic form. However, it has also resulted in an increasing number of different significant sources of technical information, which may be difficult to search in an efficient and confidential way, and for which reliable dates of publication may sometimes be difficult to establish.

12. The recent prominence of inventions related to traditional knowledge, where the relevant prior art may exist only as non-patent literature of types which have not traditionally formed part of the search collection of most patent offices, has raised the awareness of the importance of ensuring the most comprehensive search feasible, taking in a sometimes very diverse range of sources.

## RECENT, CURRENT AND POSSIBLE MEASURES

### *Review of PCT Minimum Documentation*

13. The PCT minimum documentation has been under continual review in different ways since the PCT came into operation. The list of non-patent literature has been updated numerous times, most recently in 2005 to add six further traditional knowledge-related periodicals in addition to those which had been added the previous year. With regard to patent literature, Rule 34 was amended in 1985 to allow for the inclusion of Spanish-language patent documents and the Assembly agreed last year also to include the patent documentation of the Republic of Korea with effect from April 2007. Moreover, Rule 36 was amended in 1992 to take account of the fact that the minimum documentation was increasingly being held and consulted in electronic form.

14. A task force of the Meeting of International Authorities Under the PCT is now conducting a comprehensive review of the PCT minimum documentation with a view to making more far-reaching changes to take account of the changing sources and languages of technical disclosures.

15. Apart from the strict definition of PCT minimum documentation, International Searching Authorities are also sharing information on recommended further databases for searching different fields of technology as thoroughly as possible. Examples of this include the United States Patent and Trademark Office's "search templates"<sup>3</sup> and the work done by the Meeting of International Authorities in preparation for a "Search Guidance Intellectual Property Digital Library" (document PCT/MIA/11/8).

### *Tools Available to International Searching Authorities*

16. The International Searching Authorities have developed specialized electronic databases allowing them to conduct extremely sophisticated searches on very large collections of patent and non-patent literature in an efficient manner. Some of these systems are used by several Authorities. In addition, they have access to many paper resources and commercial databases to search information extending well beyond their own collections.

17. To address the difficulties of searching patent documents in a wide range of languages and the reliance on English language abstracts, several of the Authorities have been developing or assisting in the development of machine translation systems, with the aim of examiners being able to search and understand the content of the full text of patent specifications in a variety of languages with which they may not be familiar. The quality of such translations is improving rapidly, such that these should provide invaluable tools in coming years.

---

<sup>3</sup> See [www.uspto.gov/web/patents/searchtemplates/searchtemplates.htm](http://www.uspto.gov/web/patents/searchtemplates/searchtemplates.htm).

*Quality Management*

18. At its 31st session, held in September–October 2002, the Assembly approved a proposal by the United Kingdom that a common quality framework be developed for International Searching and Preliminary Examining Authorities in order to foster confidence amongst interested parties in the work done by others (paragraphs 52 to 65 of document PCT/A/31/10). This has led to assessment and development of quality management systems by the various International Searching and Preliminary Examining Authorities. Details concerning the current status of reporting in accordance with this framework can be found in document PCT/A/35/3.

*Supplementary International Searches*

19. The Treaty originally envisaged the establishment of a single large International Authority to conduct all international searches (Articles 16(2) and 56(3)(ii) and (iii) and statements by many delegations and observers in the *Records of the Washington Diplomatic Conference on the Patent Cooperation Treaty*). However, in practice the number of International Searching Authorities has increased from the six appointed at the first session of the Assembly to twelve Offices which are currently operating in that role.

20. Despite the sophisticated databases and machine translation tools available and under development for use by International Searching Authorities, there remains a reluctance by many national Offices to accept the results of an international search carried out by another national Office. Further searches are routinely carried out in the national phase. Indeed, some applicants consider that the number of significant citations which are found at this stage is high, resulting in additional costs due to the need to make additional amendments to the application. Sometimes, new citations may even cause them to abandon the application, having already incurred the cost of translations and national and agents' fees.

21. Consequently it has been proposed that the various strengths of different International Searching Authorities (such as different language specializations) should be made available to applicants by offering the possibility of supplementary international searches, where a search can be carried out by more than one Authority. The eighth session of the Working Group on Reform of the PCT considered two options (document PCT/R/WG/8/4 and paragraphs 35 to 64 of document PCT/R/WG/8/9, reproduced in the Annex to document PCT/A/35/1):

(a) a system where supplementary searches could be requested after the main international search report had been established (sequential supplementary search); and

(b) a system where Authorities could decide whether to offer supplementary searches which were requested at the outset, to be carried out at the same time as the main international search (concurrent supplementary search) or else sequential supplementary searches (or both).

22. A few delegations in the Working Group felt that supplementary searches were not appropriate and that the proposal diverted attention away from the desired goal of a single international search of a quality such that designated Offices were confident in accepting the results without repeating the search in the national phase. Other concerns included that it would complicate the PCT system, introduce uncertainty and affect the workload of International Searching Authorities which offered the service. On the other hand, a majority considered that the option of supplementary international searches was a practical response to an issue of quality, whether real or perceived, which was unlikely to be resolved in the near

future. However, there was a strong division of opinion on the appropriate timing and nature of the supplementary searches.

23. Some delegations felt that only sequential searches should be permitted, since these allowed the supplementary search to see the scope of the main international search and therefore be able to conduct a limited search, focussing only on areas where it is considered likely that the main international search might be deficient (such as publications in particular languages). However delegations representing some International Searching Authorities pointed out that a full search would be carried out by them in their role as designated Office during the national phase on any international application where the international search had been carried out by a different Authority. As such, there would be greater duplication of work if they also conducted a partial search in the international phase. Consequently, they would only conduct a supplementary search if its scope was the same as a complete international search and in this case, they felt that a concurrent search would give them more time in which to establish the search report. Representatives of users were more concerned about agreeing and bringing into effect a service which they could use to gain more information about the prior art during the international phase than about which particular option should be taken. Further and more detailed arguments are recorded in paragraphs 31 to 51 of document PCT/R/WG/8/9, reproduced in the Annex to document PCT/A/35/1. These issues are expected to be further considered in the ninth session of the Working Group, proposed to be convened in the next 12 months (document PCT/A/35/1, paragraph 21).

#### *Detail of Reporting of Search Strategies*

24. In most international search reports, the extent of the search conducted is indicated by recording the classification terms used and the databases consulted. Under Rule 43.6, it is permitted to include more detailed information, such as the search terms used, but this is rarely done because of the difficulty of preparing the information in a format which is useful and not misleading and fitting it into the space available on the search report.

25. Nevertheless, most of the Authorities make records of the search performed for their own files for the benefit of their examiners in the national phase, and for quality control. Some of the Authorities where these records are kept in electronic form agreed to investigate options for transmitting the records to the International Bureau so that they would become part of the file of the international application (document PCT/MIA/13/6 and paragraphs 41 to 46 of document PCT/MIA/13/8). The records could then be inspected through PatentScope by national Offices or third parties who wished to know more about the way that the search was conducted. This could give national Offices greater confidence in the quality of the international search. Even if it is decided that further searching is necessary in the national phase, it may help focus the further searching on new areas rather than simply repeating the search which had already been done.

#### *Taking Account of Earlier National Searches*

26. At present, Rules 4.11 and 41.1 permit the applicant to request the International Searching Authority to base the international search report wholly or in part on the results of an earlier international or international-type search, or else on a search of another form (usually a national search) which had been carried out by the national Office or intergovernmental organization which is the International Searching Authority competent for the international application. However, these rules do not permit the applicant to request a search performed by any other Office to be taken into account.

27. In 2005, approximately 55,000 international applications were searched by an International Searching Authority where the international application was based on a priority document from a different examining Office, where the applicant would have had an opportunity to request a search from that other examining Office (though, in many cases, the search would in fact not have been requested, or else would not have been established in time to be of use). It may be desirable to permit the applicant to submit (or, where systems permit, authorize access to) search reports relating to an earlier application where a search had been carried out by another Office in order that the International Searching Authority could take that search report into account in conducting the international search.

*28. The Assembly is invited to note the contents of this document.*

[End of document]