

Meeting of International Authorities under the Patent Cooperation Treaty (PCT)

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COLLABORATIVE SEARCH AND EXAMINATION PILOT PROJECT - SECOND PILOT PROJECT

Report prepared by the European Patent Office and the Korean Intellectual Property Office

INTRODUCTION

1. At its third session in June 2010, the PCT Working Group endorsed a series of recommendations to improve the functioning of the PCT as listed in document PCT/WG/4/3. The recommendation under paragraph 165(b) mentions trials of arrangements whereby examiners in Offices with complementary skills work together to establish a report. In that respect, 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 the project was to allow examiners from different Authorities in different regions and with different language specialties to work together on one PCT application with the aim of establishing a high quality international search report and written opinion.
2. At the Meeting of International Authorities (PCT/MIA) held in Moscow in March 2011, the EPO informed about the successful completion of the CS&E first pilot project in September 2010, and the plans for the second pilot (document PCT/MIA/18/16).
3. The first pilot project had a small scale as 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 / disadvantages* from a *qualitative point of view*. The *second pilot project of a larger scale* builds on the lessons learnt during the first pilot project in order to allow a *more quantitative assessment* of the approach and a fine-tuning of an operational working model.

4. This document is a progress report of the second pilot and including the views of the EPO participants as well as evaluation by the KIPO. The initial plan was to complete the first part of this second pilot by the time of the PCT/MIA beginning of February 2012. There have been some delays due to the appointment of the examiners, some difficulties to find suitable files in certain technical fields, as well as workload for some examiners that did not allow them to dedicate more time to this pilot.

5. The second pilot project went well and was completed in October 2012. A detailed evaluation by the participating offices will follow with the aim of reporting the results at the PCT/MIA.

BUILDING ON THE FIRST PILOT PROJECT

6. The main conclusions for the first pilot project were:

- CS&E is a *realistic concept*.
- The collaboration between examiners brings a clear added-value regarding the *quality* of the ISR and WO-ISA. As a consequence, legal certainty increases.
- No major additional *time investment* would be required in regional/national phase as a result of the collaboration in the international phase.

7. Based on these main conclusions from the limited scale first pilot, the Offices KIPO, USPTO and EPO decided to launch the second pilot with duration of one year and involving more examiners and more PCT applications. The size of this second pilot was as follows:

- Eight examiners per participating Office, with a total of *24 examiners involved* in the pilot.
- Each examiner treating a total of eight PCT applications as first examiner (responsible for the applications - see Annex I), and collaborating in another 16 PCT applications of the two counterparts.
- The total number of PCT applications treated in the pilot is 192 (each Office treating 64 PCT applications as ISA and collaborating in another 128).

8. The second pilot was split in two parts: A first part was conducted from October 2011 to March 2012 with four PCT applications per examiner acting as first examiner. The second part was conducted from April to September 2012 with four additional PCT applications per examiner acting as first examiner.

OBJECTIVES FOR THE SECOND PILOT PROJECT

9. The objectives of the CS&E pilot were:

- (i) To define the conditions under which examiners of different ISAs in different regions can co-produce the ISR and the WO-ISA for PCT applications. This includes testing the fine-tuned methodology to identify how collaboration could be implemented in an operational environment in a wider deployment within the Offices.
- (ii) To evaluate from a *qualitative* and *quantitative* point of view the benefits and disadvantages of the collaborative approach in terms of *quality* and *efficiency*. The approach towards measuring the quality and efficiency effects of collaborating in the production of the ISR and WO-ISA is explained in Annex II.

PILOT DESIGN

10. The pilot was designed for testing the concept of collaborative search and examination according to the objectives set forth in paragraph 9 above. Arrangements for testing other objectives, such as improvement of the ISA timeliness or mastering PCT workloads should be kept outside of the scope of the CS&E pilot.

11. A balance has been found between leaving some discretion to the examiners involved in the pilot for finding the most efficient *modus operandi* and the need for guidance in order to ensure that the pilot operates in a harmonized way among the different Offices and examiners in different technical fields.

12. The legal framework is the PCT and all its related provisions. Namely, all participating Offices will continue to act as ISA under the relevant PCT provisions and to endorse the responsibility for the ISR and WO-ISA produced under the pilot for their own PCT applications treated in the pilot.

13. The methodology agreed by the participating Offices is depicted in Annex I.

EVALUATION OF PROGRESS IN THE EUROPEAN PATENT OFFICE

14. Out of the expected 192 PCT applications, 137 were actually completed. The general perception is that the pilot is teaching very relevant aspects about the collaboration between examiners in remote locations, with different cultures, operational constraints, etc. This collaborative approach being a new way of treating applications and never tested before the launch of the CS&E pilots, the learning phase is very important and will certainly still last until the end of the second pilot.

15. Some of the main general lessons learnt to date are summarized in the points below:

- *Operational constraints* within each Office have an important impact in the collaboration. Examples of these constraints are the workload of an examiner, the incentives to dedicate time to this pilot, different priorities defined by the Offices for the treatment of applications.
- The success in the collaboration varies from group to group, each group being composed of one examiner per participating Office. The lack of progress by one member in a group, for whatever reason this is, has a big impact on the progress of the group, as this, according to the current methodology, blocks the whole group. *Progress* is determined by the least responsive / least active participant in the group.
- *Differences in practice* in the PCT procedure for aspects such as claims directed to medical use or to method of treatment are an issue which needs to be tackled. Thus, where a convergent approach is not possible for examiners from the different Offices, the solution is to specify the different opinions in the WO-ISA with a standard explanation as provided for in the pilot methodology.
- Email is the main *communication means* for the collaboration. It seems that the examiners' pace for handling applications as well as the time difference between the Offices makes email the preferred option. Video-conference, chat and telephone have been tested, however are not often used.
- Collaboration highly improves once the participants in a specific group have worked together for a certain period of time and know what to expect from the counterparts.

- *Different classification* schemes make it difficult to trust the searches performed by other offices. It is anticipated that this problem will largely be solved with the Cooperative Patent Classification (CPC) scheme.
- *Separate presentation of the different Offices' opinions* in the ISR/WO-ISA would be very interesting for applicants as it would give them a complete overview of what might happen when entering regional/national phases and thus enable them to adapt their strategy to regional market constraints.
- Collaboration needs to be supported by a *collaboration tool* that automatically keeps the "state" of the often multiple threads and, even, multiple applications treated by a group at the same time. Functionalities such as generation of reminders to provide feedback, making visible that one participant is not available for a period of time.

16. The evaluation of the pilot project has two different components: (1) Views of the participants, (2) Views of the applicants. The following sections explain how these different evaluations have been planned and the results.

EVALUATION BY THE EPO PARTICIPATING EXAMINERS

17. The participants within an Office were asked to provide feedback on a regular basis and to fill in a questionnaire after they complete an application, either as first examiner or as peer examiner (see Annex I for clarification about the roles). The objective of this pilot was to gather quantitative results, and the questions to the participants focus, therefore, on the quantitative aspects of the *quality* and *efficiency* when treating an application according to the CS&E approach.

Quality

18. The quality of the consolidate ISR and WO-ISA was compared to the quality of the provisional ISR and WO-ISA (the results of the first examiner as sent to the peers).

19. The views of the EPO participants for their *work as first examiner*, e.g. receiving feedback, on the work done until now and making abstraction of the operational issues associated to a pilot:

- In more than 60 per cent of the applications the feedback received included comments to the search strategy, interpretation of the claims and prior art or patentability. In 30 per cent of the applications the feedback received included *additional search hints*, e.g. classes, keywords, databases.
- In *87 per cent* of applications, the feedback resulted in *citations added* by the first examiner to the final search report. In *27 per cent* of applications, the feedback resulted in *amendments to the WO-ISA*.
- Similar to the 2011 pilot results, in almost all of the cases handled (*92 per cent*), first examiners perceived the final product (final ISR and final WO-ISA) *improved* as a result of collaboration with peer examiners, while in more than a third of cases, a significant improvement was noted.

Efficiency

20. The views of the EPO participants based on the work done and making abstraction of the operational issues associated to a pilot:

- When acting as first examiner, and comparing the CS&E collaboration with a normal search of a PCT application, for most of the cases around 15 to 25 per cent additional time was needed.
- When acting as peer examiner, and by comparison with a normal search, the *time overhead* was found to be *negligible* (less than 10 per cent) in *50 per cent* of cases.

21. For the PCT applications treated in collaboration with the participants acting as peer examiner, it is interesting to note that in *70 per cent* of cases, EPO examiners would *trust both search and examination results* produced collaboratively. These results could be used directly in the regional/national phase. EPO examiners noted that in these cases additional administrative time would likely be needed (for example to replace PCT legal references with corresponding EPC references). In only 2 per cent of cases, would EPO examiners need to perform additional searches in the regional/national phase. EPO examiners considered that both search and examination was *trustworthy for EPC examination in 70 per cent of cases* and that for the remaining 30 per cent of cases, EPO examiners would require a complementary examination due to the differences in patent law.

22. *It is interesting to see that the feedback received is consistent and in line with the assumptions and outcome of the first CS&E pilot.*

EVALUATION BY APPLICANTS

23. The origin of the CS&E concept is a *proposal made by the industry* that expressed an interest for a single search report and written opinion presenting the views of the examiners of the major patent Offices. According to the views expressed by industry associations, such a report and written opinion would provide applicants with a new product which would assist them in defining the appropriate strategy for extending their IP rights worldwide for specific inventions which are key for their business development.

24. The participating offices have arranged discussions with industry associations. Particularly, the EPO has submitted a [consultation](#) on Collaborative Search and Examination which closed on November 23, 2012.

25. IP Federation represents the views of UK industry in both IPR policy and practice matters within the EU, the UK and internationally. Its membership comprises innovative and influential companies. The IP Federation believes that CS&E under the PCT will be the biggest single improvement in the PCT since it came into force in 1978. The Federation draws the following conclusions:

(1) A collaborative search between IPO's delivers a substantial improvement in quality (offering improved filing and prosecution effectiveness and efficiency to applicants).

(2) The cost to applicants of an all-IP5 PCT CSE, minus any rebates that might be given in the national / regional phases, promises to be a small multiple of search and examination by a single ISA.

For full details, see [Policy Paper PP22/12](#).

26. Please note that further substantial feedback from users is expected and will be reported at the Meeting.

EVALUATION OF PROGRESS IN THE KOREAN INTELLECTUAL PROPERTY OFFICE

27. In a similar way to the EPO, by the time of pilot closure and report preparation, not all CS&E applications were completed. Due to the organization of the pilot, it was not practicable for the KIPO to provide feedback on additional time needed for treating a CS&E application.

EVALUATION BY THE KIPO EXAMINERS ACTING AS FIRST EXAMINER

28. - In 77 per cent of the applications, *the feedback* received included additional citations found by the peer examiners. In 71 per cent of the applications, the feedback received included comments to the search strategy, interpretation of the claims and prior art or patentability.
- The *feedback* received by the first examiner was rated as *relevant in 75 per cent* of the applications treated. In only *2 per cent* of the applications, the feedback was found to be *not relevant* at all.
- In *71 per cent* of the applications, the feedback resulted in *citations added by the first examiner* to the final search report (ISR). In 46 per cent of the applications, the feedback resulted in amendments to the WO-ISA.
- In *92 per cent* of the cases, first examiners perceived *the final product* (final ISR and WO-ISA) *improved* as a result of collaboration with peer examiners.

EVALUATION BY THE KIPO EXAMINERS ACTING AS PEER EXAMINER

29. - In *all cases*, the *information* received from first examiner was *clear*.
- In *55 per cent* of the cases, *KIPO examiners* acting as peer examiners did an *additional search*. In *49 per cent* of the cases, KIPO examiners acting as peer examiners *provided comments* on the work done by the first examiner.
- In *50 per cent* of the cases, KIPO examiner feedback resulted in *citations added by the first examiner*. In *33 per cent* of the cases, KIPO examiner feedback resulted in *patentability-related* amendments in the WO-ISA.
- In *96 per cent* of the cases, KIPO examiners perceived the *final product improved* by taking their feedback into account.
- In *55 per cent* of the cases, he/she would need little time for a *complementary search*. In *29 per cent* of the cases he/she *would trust the results* of the collaboration and would only need time for administrative matters.

30. *The Meeting is invited to take note of the report.*

[Annex I follows]

PILOT METHODOLOGY

Examiners participating in this pilot should bear in mind the following methodology:

(a) The examiner of the Office acting as ISA for a given PCT application (called first examiner) analyzes the application in order to understand it. The first examiner will work on this application as for any other PCT application by preparing a search strategy (what to search, where to search and how to search) and conducting the search and examination accordingly. As a result, the first examiner will establish a *provisional ISR and WO-ISA*. This provisional work should then be transmitted to the peer examiners in the other participating Offices (called peers). In addition to the provisional ISR and WO-ISA, the first examiner should make available to the peers his/her *provisional RoSS*. The first examiner will use the standard template for the RoSS (Record of Search Strategy) adapted to the needs of the corresponding technical field.

The delivery of the provisional ISR and WO-ISA triggers a *time limit for the peer examiners of one week* to provide feedback. The peers are expected to *comment on or complement* as appropriate the provisional work of the first examiner within one week. The comments by the peers could be related to the citations, the WO-ISA or the search strategy and will be sent using the standard template for the feedback form. Complementing the search would mean providing additional search results or examination findings to the first examiner. If a peer examiner decides to complement the search the information about the *RoSS for the additional search* will be included in the feedback form.

The time needed for the peers' contribution will be assessed by each Office under the assumption that the contribution should provide added value to the work of the first examiner. It is therefore expected that the *feedback* will be in general *more substantial than a simple statement indicating that there are no comments*.

There could be more than one exchange of information between the first examiner and any of the peer examiners. For any exchange a time limit of one week also applies to the reception of feedback, either from the peer examiner or the first examiner.

(b) After reception of the feedback from the peer examiners the first examiner will proceed with the establishment of a *final ISR and WO-ISA*. This should be done not later than one week after reception of the last feedback. The final ISR and WO-ISA will be transmitted to the applicant on behalf of the ISA accompanied by a standard letter that informs that the application has been treated under the CS&E pilot.

The final ISR and WO-ISA (consolidated ISR and WO-ISA) will be the result of complementing the provisional ISR WO-ISA (the one drafted by the first examiner before having any feedback) with the comments received from the peers. A *consolidated RoSS* (provisional search strategy drafted by the first examiner + feedback from the peers) will be drafted by the first examiner and kept in the file.

The first examiner will make available to the peers a copy of the final ISR and WO-ISA as well as the consolidated search strategy when these are sent to the applicant.

(c) The final ISR will be as complete as possible by including all citations, i.e. those found by the first examiner and those provided by the peer examiners. The WO-ISA will also be as complete as possible by including the argumentations provided by the peer examiners whenever these are complementary and not contradictory. In the case of the WO-ISA, the argumentations are to be preceded by a standard sentence to help applicants understand these additional argumentations where appropriate.

[Annex II follows]

PILOT EVALUATION

This pilot allowed the participating Offices to evaluate the following aspects listed below.

Examiners: The examiners were asked to fill in a form for each completed application, either as first examiner or as peer examiner. This input from the examiners allowed the offices to assess the following aspects:

- *Quality*: The quality of the consolidated ISR and WO-ISA could be compared to the quality of the provisional ISR and WO-ISA (the results of the first examiner as sent to the peers). This was assessed by the examiners.
- *Efficiency*: The assumption on which the pilot is based is that, when examiners work together for producing the consolidated ISR and WO-ISA, they would naturally reuse this international work to a larger extent when treating the corresponding applications after entry into the national/regional phase than it is the case today.

To measure the efficiency, the first examiners and peers indicated the time invested in each application. The times were estimated as "additional time" to the standard time invested in a standard search for the first and peer examiners.

Ideally, when the application enters the national/regional phase, the time investment by the peers for this phase will be measured. However, as this will only be possible after the pilot has been completed a provisional assessment will be made on the potential savings that the examiners can expect for the entry in the national/regional phase. The final objective is to compare the total time invested by the first examiner and the peers using a CS&E model (time in international phase and time in the national/regional phase) and compare it to the time under the normal PCT path (by a first examiner) including the national/regional phases (by the peers).

Two aspects were assessed: Firstly that the results of this pilot confirm the conclusions from the first pilot project, particularly that no major investment would be needed by the examiners in national / regional phase). And secondly, a measurement of the overall additional time required when a file is treated under CS&E including the time investments in PCT and national / regional phases.

Applicants: The quality will be assessed by means of an applicant survey to be sent together with the letter that informs applicants that a specific file is treated in the framework of the CS&E.

[End of Annex II and of document]