

## **Patent Cooperation Treaty (PCT) Working Group**

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PCT KAIZEN (FROM PARTIAL TO TOTAL OPTIMIZATION)

*Document submitted by Japan*

### **BACKGROUND**

1. In the past, we, the International Bureau (IB), Contracting States and International Authorities (Authorities), have worked together to make the PCT a better framework through PCT Reform and various revisions. As a result of these efforts, the PCT system has expanded in size, seeing an increase in the number of applications being filed under the PCT, an increase in the number of applications being filed by emerging countries, and an increase in players involved with the PCT system based on the increased number of Contracting States and Authorities. The PCT is now indisputably established as a global infrastructure for applicants to file their patent applications worldwide.

2. However, despite such efforts, there are still signs that the PCT does not lead to reducing work load, as designed, through eliminating duplicated procedures for both applicants and IP Offices or that predictability of patent acquisition for applicants (and third parties) is not sufficiently ensured. This is based on the fact that work products of the international phase are not being thoroughly and efficiently utilized in the national phase. Therefore, the benefits<sup>1</sup> of the PCT system, which were anticipated at the time it was established, are not being fully achieved.

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<sup>1</sup> “[T]hat a resolution of the difficulties attendant upon duplications in filings and examination would result in more economical, quicker, and more effective protection for inventions throughout the world thus benefiting inventors, the general public and Governments” (see BIRPI document CEP/II/12, paragraph 46).

3. There are various causes for this present condition and they can be analyzed in many ways. In addition, there are various opinions about them. In this respect, Japan considers the following to be the primary cause: emphasis has been placed on only “partial optimization”. In other words, emphasis has been placed on optimizing each element and function<sup>2</sup> constituting the PCT system without full consciousness of “total optimization” of the whole system<sup>3</sup>, which is designed to optimize the efficiency and productivity of the entire system by looking at it as one big process and coordinating each element and function. That is, in general terms, no matter how many times partial optimizations are carried out, they will not result in total optimization.

4. Pursuing both partial optimization and total optimization is actually a corporate management approach that is taken for granted at companies. However, we may have given very little consideration as to “managing” the PCT system, even though it is made up of complicated elements and also serves as a standardized function as one big business process. In other words, with the PCT system maturing, we need to be aware of this fact even stronger.

### **BASIC CONCEPT OF “PCT KAIZEN”**

5. Using this awareness, Japan would like to propose advancing the discussion on improving the PCT from the perspective that the IB, Contracting States and Authorities look at the PCT system as a whole while being strongly aware of the need for managing the PCT system. We need to consider how to skillfully coordinate each element and function so as to maximize the benefits expected of the PCT system.

6. That is, the basic concept of “PCT Kaizen”, which Japan is proposing in this document, is to maximize the benefits expected of the PCT system based on the idea of total optimization. In this regard, the IB, Contracting States and Authorities should make efforts and cooperate to continuously improve the system from the point of view of their respective roles as business managers, employees and customers, and furthermore, work to improve the environment designed for that purpose.

7. Japan would like to emphasize the need to continue promoting Kaizen as a successful business administrative means when taking the basic concept into account and ensure that the Plan-Do-Check-Act (PDCA) cycle continues to move smoothly. In particular, it is of utmost importance that Check and Act serve as effective functions in promoting Kaizen.

### **ESSENCE OF PROPOSALS**

8. Annex I expresses the concept of reviewing the “Higher Quality International Search Report (ISR)” approach. Based on these perspectives, Japan regards this as the most significant element in maximizing the benefits of the PCT system. Japan considers the Higher Quality ISR approach as the main driving force enabling Kaizen to become a reality. For that purpose, Japan proposes three specific items for advancing further consideration and implementation in this document: “(1) Improving quality of search/examination at the international phase”; “(2) Promoting linkage between the international phase and the national phase”; and “(3) Refining Collaborative Search and Examination”.

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<sup>2</sup> “Element and function” refers to the multiple elements and functions involved in the PCT system such as the process of accepting applications, the function of certifying the international filing date, the action of conducting international searches, the work-products themselves such as ISR, and the 30-month time limit for entering the national phase.

<sup>3</sup> For example, when considering processes involved with “establishing ISR by the due date”, there is the perspective of considering all the multiple elements and functions involved with establishing ISR and thinking about what to do in order to achieve maximum results from the various processes. This not only means speeding up searches by ISA but also includes a whole series of processes such as the sending of search copies to ISA from receiving Offices.

9. Further, in driving forward Kaizen, it is essential to create valuable intelligence<sup>4</sup> acquired by processing factual information for a specific purpose, while putting continuous emphasis on gathering conventional factual information, such as names of people concerned, dates and amount of money related to PCT procedural events. Intelligence can be used in making decisions for conducting a business analysis of the PCT system. Therefore, Japan proposes “(4) Creating intelligence designed for analyzing and improving the PCT process” as a mechanism for collecting information necessary to create such intelligence and driving forward Kaizen through conducting a business analysis of the PCT by using the information.

10. To ensure that the PDCA cycle continues to cycle globally as designed within in the network of all IP Offices and the IB, and not only at individual IP Offices, it is vital that we develop a mechanism for sharing information for that purpose, and that mechanism is IT infrastructure. Therefore, in order to enable information to be shared through networks and other means, Japan proposes “(5) Creating an IT infrastructure that is conducive to PCT Kaizen (Development of the Global Dossier)”.

## PROPOSALS

### (1) IMPROVING QUALITY OF SEARCH/EXAMINATION AT THE INTERNATIONAL PHASE

11. Discrepancies between results of the international phase with those of the national phase are believed to occur because of various factors. These discrepancies are expected to be reduced by implementing specific measures designed to deal with each of the factors. In particular, when the discrepancies might be attributable to the searches/examinations being conducted in the international phase, Japan believes that the quality of search/examination can be improved by providing feedback both on search/examination results of designated Offices (DO) and on the analysis of these results to examiners. Therefore, recognizing the importance of developing the following two frameworks, Japan proposes that cooperation among International Searching Authorities (ISAs) begin first as a starting point for advancing them:

- framework under which ISA analyze and utilize feedback on written opinions of the ISA(WOISA)/ISR from DO that conducted First Actions;
- framework under which the results of analysis conducted by ISA are shared with the DO, as well as with other Offices when appropriate.

12. In developing the above-mentioned two frameworks, it is expected that a more effective framework can be efficiently built when ISA cooperate and share their expertise with each other. As a result, it is expected that: (i) quality of search/examination will be improved through providing feedback to examiners; as well as (ii) progress on measures for resolving the problems will be accelerated through sharing individual issues on search/examination identified by analyzing the factors that cause the discrepancies. It will also be possible to operate the PDCA cycle for continuous quality improvement of search/examination at the international phase.

13. A detailed explanation of this proposal is attached as Annex II “Utilization and Analysis of Feedback on WOISA/ISR and Sharing of Analysis Results”.

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<sup>4</sup> Intelligence is employed by an organization for its effective and high value decision-making and is often formulated by "Business Intelligence (BI)" that is a set of theories, methodologies, processes and activities to transform factual data into meaningful intelligence.

## (2) PROMOTING LINKAGE BETWEEN THE INTERNATIONAL PHASE AND THE NATIONAL PHASE

14. Measures for strengthening the linkage between the international phase and the national phase, such as enhancing utilization of work products at the international phase in the national phase, is vital for improving predictability of patent acquisition for the users and eliminating unnecessary duplication of work by Authorities and DO. While each IP Office has already implemented measures to strengthen the linkage under their current legal frameworks, Japan proposes the following measures to further strengthen the linkage from the viewpoint of the ISA and the DO.

### (A) Sharing and Analyzing Measures by the ISA

15. The measures to be taken by the ISA are: (i) utilizing relevant examination results of national applications for basic priority applications etc.; and (ii) preparing work products that will be easily utilized at the subsequent national phase.

16. With regard to the former, in the PCT Regulations there is a Rule called "Taking into Account Results of Earlier Search<sup>5</sup>". This Rule requires the ISA to take the results of earlier searches into account at the international phase upon the request of applicants. Therefore, widely sharing and analyzing the present state of measures being taken at ISA to promote the linkage between the international phase and the national phase, such as how this Rule is applied in practice at each ISA, would be beneficial in ensuring that the PDCA Cycle continues to function under the concept of PCT Kaizen.

17. As for the latter, although it is needless to restate the importance of measures that are being taken in terms of formal aspects such as making the wording of work products (WOISA/ISR) easily understandable for DO/applicants, and in terms of substantial aspects, such as achieving higher quality prior art searches, it is also beneficial to widely share and analyze the present state of measures (self-improvement) being taken by each ISA with other IP Offices. For instance, measures for providing easily understandable wordings would facilitate other IP Offices in understanding the work products. However, there is a limit in terms of the degree of self-improvement measures alone, making it essential to listen to opinions of those who take the ISR into consideration.

18. Therefore, Japan proposes that ISA share and analyze these measures to consider best practices as well as share the knowledge obtained not only with ISA but also with various IP Offices.

### (B) Sharing and Analyzing Measures by the DO

19. The measures to be taken by the DO are: (i) to voluntarily utilize the work products of the international phase as much as possible; and (ii) to promote the users' voluntary actions in accordance with the search/examination results of the international phase.

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<sup>5</sup> Regulations under the PCT provide that where the applicant has requested the ISA to take into account the results of an earlier search and the search was carried out by the same ISA, or by the same Office as that which is acting as the ISA, the ISA shall, to the extent possible, take those results into account in carrying out the international search (Rule 41.1) and where the ISA takes into account the results of an earlier search in carrying out the international search, the Authority shall refund the search fee paid in connection with the international application to the extent under the conditions provided for in the agreement under Article 16(3)(b) (Rule 16.3).

20. With regard to the former, as the DO also functions as an Authority, it is important for such DO to actively utilize its own work products at the international phase, applying such work in the national phase, which is also referred to in PCT/WG/3/2 and PCT/WG/4/3. The European Patent Office (EPO), for example, requires an applicant to respond to negative opinions made by EPO in the international phase at the time of entering the national phase. Furthermore, it is important to fully utilize the work products established by other Authorities at the national phase. In this regard, the Japan Patent Office (JPO) formulates the guideline<sup>6</sup> not only for utilizing its own prior art search/examination results but also for utilizing other Authorities' results to encourage the utilization of work products of the international phase.

21. As for the latter, there are measures, such as giving incentives to applicants to make informal comments to WOISA and/or to make amendments at the international phase. In particular, from the perspective of encouraging amendments at the international phase so as to enable applicants to obtain rights at an early stage, measures can be considered for increasing the number of IP Offices participating in the PCT-PPH and integrating the PPH into the PCT. The PCT-PPH is a framework enabling applications, which were determined as patentable at the international phase, to undergo accelerated examinations at the national phase through simplified procedures. It has the effect of increasing the grant rate<sup>7</sup>, accelerating examinations, and reducing costs in obtaining rights for the users.

22. Some of these measures have already been implemented and have produced certain effects while others are still at the proposal stage and require further scrutiny. Therefore, Japan proposes sharing and analyzing knowledge gained from these measures, as well as heightening discussions on each proposal.

23. The JPO and the IB plan to set up the PCT/WG e-forum so as to share the information concerning these measures through this e-forum. Japan would like a lot of Offices to share their measures on the e-forum, which promote the linkage between the international phase and national phase. Japan would like to deepen the discussion on this issue based on the analysis of the shared information at next year's PCT meetings.

### (3) REFINING THE COLLABORATIVE SEARCH AND EXAMINATION

24. Japan has insisted that, since ISR should be established by each ISA in a responsible way as a basic principal, it is important for this purpose to improve the capacity of individual ISA. On the other hand, although contrary to this principal, it is true that the Collaborative Search and Examination—for which a pilot project has been started—has the possibility of achieving higher quality ISR. In addition, cooperation among examiners at various ISA makes it possible for them to share search/examination methods of other ISA. This will lead to improving the individual capacity of each ISA, which is expected to play a role in implementing the global PDCA cycle.

25. Aside from having the advantages of achieving higher quality prior art searches at the international phase and reducing the work load at the national phase, there is a certain amount of user needs involved in Collaborative Search and Examination. On the other hand, in terms of actually providing Collaborative Search and Examination as an option under the PCT system, there are concerns about some practical disadvantages, such as increased work loads (including translating) and the costs to both the users and Authorities at the international phase. Furthermore, discussions will be necessary in light of observing the due date for establishing ISR.

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<sup>6</sup> "Guidelines for the Use of Prior Art Search Results and Examination Results Provided by Foreign Patent Offices" [http://www.jpo.go.jp/tetuzuki\\_e/t\\_tokkyo\\_e/Guidelines/9.pdf](http://www.jpo.go.jp/tetuzuki_e/t_tokkyo_e/Guidelines/9.pdf) (P23-25).

<sup>7</sup> The final grant rate for PCT - PPT applications received by the JPO was 94.9% (compared to 65% for normal applications; the rate is for applications examined from July 2011 to June 2012.)

26. It is needless to say that, while evaluating the above-mentioned advantages and disadvantages based on actual results of pilot projects, providing the Contracting States with information for considering (i) whether the present Collaborative Search and Examination is appropriate as an option to be provided under the PCT system, and (ii) if it is not appropriate due to some cause, whether it is possible to eliminate the cause so as to refine the system and make it further suitable, would occupy an important role of the pilot project.

27. Therefore, we look forward to a follow-up evaluation that plays a major role in analyzing the balance between the various costs needed for Collaborative Search and Examination practices with the advantages that the searches offer, focusing on the disadvantages involved with Collaborative Search and Examination practices, such as increased work loads and costs to both users and Authorities. In conducting the follow-up evaluation, Japan believes that it is necessary to conduct it from the perspective of making an empirical analysis as to the effect that reducing work load has on the national phase.

28. Japan welcomes discussions for the purpose of exploring the potential of Collaborative Search and Examination practices and refining them.

#### (4) CREATING INTELLIGENCE DESIGNED FOR ANALYZING AND IMPROVING THE PCT PROCESS

29. Under the concept of PCT Kaizen, continuity is the main focus for improving the PCT system. To this end, we will need to conduct a business-like analysis of PCT operations based on various items of information available to us; and conduct it as if we were analyzing the PCT system using a corporate management approach. In carrying out a business analysis on the PCT system, especially in terms of finding ways to ensure its smooth operations, we must uniformly grasp the information that will enable us to see the current circumstances of PCT operations.

30. At present, information maintained by the PCT system is comprised of static information that is mainly facts on bibliographies of international applications as well as chronological records of international applications. However, such information is not necessarily information that can be used for analyzing the present state of the procedures, or collected based on the idea that it will continuously improve the PCT system, i.e. Kaizen. As a result, intelligence that can be used for analyzing the PCT processes (e.g. how an international application has been processed or how long it took for a particular process to be completed) can be considered to be information to which attention will not be directed under the current idea of collecting information.

31. We have addressed various issues regarding the system in the past in order to have more users utilize the PCT system. Lately, we are holding a number of higher-level discussions focused on the state of the quality of PCT work products, in addition to working on resolving individual business matters. Japan believes that it is necessary to administer the PCT system in the future by taking a corporate management approach based on having individual business solutions and the ability to process and manage analyzing the soundness of the PCT processes while taking a bird's eye view of the whole system to make sure it runs smoothly. As stated before, we believe that both partial optimization (solution of procedural obstacles, introduction of new systems, etc.) and total optimization (continuous improvement, checking the soundness of the procedural processes, judging whether the system is truly addressing the current users' needs, etc.) are necessary for continuously improving the system dealing with international applications, making sure it has the flexibility to adapt to the times.

32. In light of the above, we propose the following. We have attached a document describing the specific examples of intelligence stated in this proposal. It is Annex III (Specific examples of intelligence for analyzing and improving the PCT process).

(A) Collecting and Increasing Intelligence for Analyzing and Improving the PCT Process

33. Static information collected and accumulated in the PCT system such as dates, number of cases, numerical statistics is valuable for checking the progress of processes. However, much of the information collected so far, even when it is right before our eyes, does not explain “the why or the purpose”. This is because that information is not intelligence. When we combine, process, and add value to information, it becomes intelligence, and intelligence is what starts to tell us “what the causes are for the timeliness problem” and “what part of the PCT system should be improved”. The first point we want to emphasize in this proposal is that such intelligence is the very thing that supports administering the PCT system in the future.

34. For instance, the ISR issuance date by itself is the date on which an ISA finished preparing the ISR. This is simply an item of past information telling us whether the date was either before or after the deadline that was set for preparing the ISR. What we really need to analyze, however, is the reason why the ISA was not able to meet the due date, if that was the case. It is necessary to identify the reasons for the delay, which could be, for example, that the ISA took time to prepare the ISR, the applicant was late in paying the search fees (Rule 23.1 (a)), or the receiving Office (RO) was late in sending the search copy to the ISA. Furthermore, we would need to analyze the trend in regard to whether the ISA just happened to miss the due date for a particular international application, in order to analyze the reason why the ISA failed to meet the deadline. Analyzing this enables us to learn for the first time how the PCT system is being managed and what actions are necessary for improving the PCT system. Intelligence is created by integrating various items of information through these processes. We believe that using the intelligence acquired to analyze the PCT system provides us analyzed results about the PCT management. For example, due to recent changes in the content of international applications, it is taking longer to prepare ISR compared to the past or due to the increase in PCT international applications RO are taking longer to process documents compared to the past.

35. If we broaden this concept, information about customer satisfaction such their giving a general “good job” rating to basic commercial services in terms of how the work products of the international phase is evaluated by users or national Offices has the potential to become intelligence that will be sought in the future. If we can obtain evaluations on the PCT work products based on feedback from applicants, we can expect to bridge the international and the national phases of the PCT procedures, reduce redundant work, and achieve further improvement (Kaizen).

36. Meanwhile, the second point we want to emphasize in this proposal is the following, which we believe is necessary. All interested parties involved in the PCT system have to consider what type of intelligence is required in the PCT system. Also, they have to build awareness and a mechanism for considering what type of intelligence is to be processed based on integrating information. This proposal is not intending to propose specific intelligence, in order to get approval for it. In fact, we would like to once again state the importance of the Contracting States and IB cooperating together in considering what type of intelligence is required for us, in order to analyze the current state of the PCT system. We also have to think of how to address the needs of the users. In the process of identifying the required intelligence, it is inevitable that we will come to realize that existing information is insufficient. In doing so, we would also like to consider how to collect the information and how to process it into intelligence under the proposed mechanism. We believe that it is necessary to continuously conduct business analyses on the PCT system, especially now that the PCT system has matured, using these various items of intelligence.

(B) Development of a Mechanism for Formulating and Utilizing Intelligence

37. In terms of improving the PCT system, the above-mentioned intelligence cannot be enriched by the IB alone or just by its IT technology. It is necessary to build a mechanism under which intelligence is routinely formulated and utilized by involving the Contracting States.

38. Thus, for collecting the information and sharing the intelligence, Japan would like to suggest a mechanism by which the IB, IP Offices and applicants share and circulate intelligence, using the ePCT promoted by the IB as a hub. By utilizing the ePCT, it may become possible to manage and technically sort intelligence offered into it for the benefit of both applicants and IP Offices. It is our understanding that PATENTSCOPE International Application Status Report could be used as a platform for offering information and intelligence, if appropriate.

39. Furthermore, this new idea of intelligence can be considered as a perfect opportunity to take a second look at the current *PCT Applicant's Guide*. Japan would also like to take the opportunity to reanimate the Guide, as requested by users, by adding to existing information (information mainly related to the Offices and Authorities themselves) and adding information inherent to national procedures in DO. Such information could include certificates that DO request applicants to submit in their national procedures, outside the framework of the PCT system, and based on domestic laws of the Contracting States. Despite the fact that there has been such a great demand from applicants for such information, it has not been included in the Guide so far.

(5) CREATING AN IT INFRASTRUCTURE THAT IS CONDUCIVE TO "PCT KAIZEN"  
(DEVELOPMENT OF THE GLOBAL DOSSIER)

40. To truly achieve PCT Kaizen, it is necessary to create an IT infrastructure that enables IP Offices in the world (and in some cases also public users) to easily share application and examination information (dossier information), including prior art search results.

41. Therefore, Japan proposes organic cooperation between the PCT system and the Global Dossier that the Five IP Offices (IP5)<sup>8</sup> and WIPO are mainly starting to consider. The Global Dossier is a concept which will virtually integrate dossier information maintained by each IP Office and provide various services in a unified manner.

42. It can be taken as an example of organic cooperation with the PCT system. For example, we can consider building a common user interface that enables dossier information at the international phase, such as ISR, and at the subsequent national phase in various countries to be displayed on one portal site through a dossier access system that provides seamless and instant access to information based on using ePCT. As a result, the following effects can be expected:

- the instant sharing of examination information on WOISA/ISR by DO enables several countries to make maximum, efficient use of work products of the international phase during their national phase, which in the short term reduces redundant work as well as decreases discrepancies in decisions reached at the international phases with those reached at the national phase (achievement of "(2) Promoting linkage between the international phase and the national phase").

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<sup>8</sup> The European Patent Office (EPO), the JPO, the Korean Intellectual Property Office (KIPO), the State Intellectual Property Office of the People's Republic of China (SIPO), and the United States Patent and Trademark Office (USPTO).



- sharing of search/examination methods and expertise in other Offices, in the long term, enables us to raise the quality of ISR as well as discrepancies in quality of ISR among ISA (achievement of “(1) Improving quality of search/examination at the international phase”).

43. Furthermore, if the dossier access system and the search system for PATENTSCOPE and such are linked together, it will become possible to interactively access patent gazettes and related dossier information. For example, it will be possible to view related dossier information from patent gazettes referred to in prior art searches, and get cited documents such as patent gazettes while referring to dossier information of other Offices. This will eliminate the trouble of entering each document number, as in the past, to a minimum and facilitate acquiring useful information while conducting prior art searches. As a result, we can look forward to greater efficiency in the search process.

44. Besides the above proposals, taking into account outcomes of the 1st Global Dossier Taskforce Meeting of January 2013, the national phase entry procedure using ePCT has been explored by mainly WIPO. This could be further promoted to utilize PCT-PPH. For example, when submitting a request for PCT-PPH, ePCT would enable applicants to submit requests for PCT-PPH to all the desired countries at one time, along with the national phase entry procedure. Furthermore, this is expected to ease the burden on applicant in terms of filing procedures and achieve smooth business processing at the Offices by sharing documents required for PCT-PPH requests among the Offices via Global Dossier.

45. As stated above, Japan proposes making simultaneous studies on both the PCT system and applicable infrastructure such as the Global Dossier, with the prospect of using the latter as the common infrastructure for achieving the global PDCA cycle.

## **FUTURE VISIONS**

46. Japan hopes that this proposal will not be limited to only what has been mentioned above. It further hopes that the above will be refined based on constructive discussions by Contracting States. Japan also intends to continue contributing, as it has in the past, to international discussions for achieving the future vision of the PCT system, making it a truly attractive system for users all over the world.

47. *The Working Group is invited to comment on the proposals set out in this document.*

[Annexes follow]

## PCT KAIZEN (ACHIEVING HIGHER QUALITY PRIOR ART SEARCHES)

### **I. RAPID GROWTH OF PATENT APPLICATIONS GLOBALLY AND THE ROLE OF THE PCT (PATENT COOPERATION TREATY) SYSTEM**

1. With economic activities becoming more globalized, the need for acquiring intellectual property rights globally has been rising, and the number of patent applications worldwide has also been increasing. In particular, when an application claiming one invention is filed, examined and patented in many countries, this causes redundancies in application and examination procedures in all the Offices in the world, adding a greater workload to examinations at IP Offices as well as increasing the burden on system users.

2. Under such circumstances, the PCT application system, namely a system under which international patent applications are filed and which is being used more widely through the years, has now become a major tool for applicants who are aiming to acquire patents globally. The PCT system is a framework to implement prior art searches and it is anticipated that, if the search results can be effectively used in examinations in the national phase in each country, the above-mentioned workload and burden will be eased, thus creating a more efficient and effective global patent application system.

### **II. CURRENT STATUS OF THE PCT SYSTEM**

#### **(1) NECESSITY FOR IMPROVING THE QUALITY OF PCT SEARCH RESULTS AND DETAILS OF DISCUSSIONS**

3. On the other hand, the prior art search results in the international phase under the PCT system have not been actively used in the national phase of each country. Accordingly, there is a certain criticism that, contrary to the above-mentioned expectation, workload requirements of both users and IP Offices in the international phase have caused redundancies also in the national phase of each country. Also, in some cases under the PCT system, although users trusted decisions made in the international phase, the decision was overturned in the national phase. As a result of such cases, the reliability of the PCT system may be decreasing.

4. Based on these circumstances, discussions at various international forums, such as the Trilateral Heads Meetings, the IP5 Heads Meetings and at WIPO, have been conducted to improve the PCT system. As a result of these discussions, revisions to the PCT system, including the creation of WOISA, have been made in order to enhance the quality of the search results in the international phase. In this context, recent discussion on improving the PCT system has been promoted at the working level based on various types of specific proposals which were agreed at the PCT Working Group of WIPO in 2010.

#### **(2) RESUMPTION OF DISCUSSIONS ON PCT IMPROVEMENT BY THE UK/US AND EPO PROPOSALS**

5. After that, in 2012, UK/US and the EPO, suggested specific proposals to the PCT Working Group of WIPO in May for improving the PCT system. We offer many thanks to the dedicated efforts of these IP Offices for setting the framework to enable fruitful discussions toward improving the PCT system to be resumed. We believe that now is the right time to discuss the direction toward improving the PCT system by imagining what an attractive PCT system should be like in the future.

### III. WHAT SHOULD THE PCT BE LIKE IN THE FUTURE?

6. Based on the experience gained from discussions made at WIPO so far, Japan believes that we should create a flexible framework based on voluntary cooperation by each IP Office.

7. On the other hand, the issue of achieving a higher level of quality in terms of PCT prior art searches is a theme which we should continue pursuing. Consequently, by having PCT search results accepted at the national phase in each country, the level of user satisfaction will be increased, and thus eventually the workload imposed on IP Offices as well as on users will be reduced.

8. Accordingly, based on the perspective of users who use the system, and being aware of costs at all times, the future PCT should be aimed at increasing options that are truly attractive for users and which meet their diversified needs reflecting their awareness of costs.

9. In searching for a flexible framework based on the voluntary cooperation of each IP Office, we firmly believe that pursuing high quality prior art searches for the PCT and working to include options that meet the various needs of users, such as being cost sensitive, will certainly result in the efficient reduction of the workload imposed on both the users and the IP Offices. In addition, it will work toward establishing a truly effective global patent application system.

10. While it is possible to consider several specific measures, we consider the following to be the three most important pillars.

#### PILLAR (1): SELF IMPROVEMENT ACTIVITIES TOWARD GAINING THE ABILITY TO ENABLE INDEPENDENT ISA TO CONDUCT HIGH-QUALITY INTERNATIONAL SEARCHES

11. In order to make the PCT system more attractive to users, it is especially important to improve the quality of search results at the international phase. For this purpose, as Japan has been maintaining so far, it is at the heart of the PCT system that a single ISA/International Preliminary Examining Authority (IPEA) should be enabled to heighten its capability of searching multilingual prior art documents in order to improve the quality of international search results and to make the system more attractive and trustworthy. Furthermore, conducting international searches by using individual ISA under this principle may be a very reasonable solution for many users who want to fully enjoy, at minimum cost, the advantages of the system, such as languages and grace periods for translation.

12. One essential measure is to have each ISA/IPEA continue conducting self-improvement activities according to each situation in terms of various issues such as: (i) facilitating a system that can store, translate, and search multilingual documents; (ii) introducing training programs and quality-assurance mechanisms to improve the ability of examiners to search; and (iii) fostering the institutions that can conduct prior art searches.

13. At the same time, by sharing information worldwide on the current status of self improvement activities at each agency, thus by fostering common recognition on the quality level which should be aimed at by each of independent prior-art search agencies, it will be possible to create a flexible and organic PDCA cycle to cultivate the ability of both IP Offices and ISA to conduct prior art searches, and therefore enhance the quality of prior art searches worldwide.

14. Furthermore, it will be quite effective if such PDCA cycle is operated not only by individual ISAs but among a number of IP Offices. For example, it will be effective to investigate the correlation between the prior art search results of the PCT international phase with those of the national phase and analyze the factors for any discrepancies. In addition, it will be important to share and utilize the results among a number of IP Offices. This will contribute to the PDCA cycle being operated not only by individual ISA but also IP Offices worldwide, and thus achieve higher quality prior art searches.

## PILLAR (2): HIGHER QUALITY PRIOR ART SEARCHES THROUGH MUTUALLY SHARING SEARCH RESULTS OF SEVERAL ISA

15. In addition to the necessity of each ISA continuing to take action as stated regarding Pillar (1) above, expanding the framework of the PCT system and presenting other options for providing higher quality searches for the international phase that meet user needs is also useful for enhancing the attractiveness and credibility of the PCT system.

16. One of the options is to adopt the measure of “sharing the search results at the international phase in a supplementary manner among ISAs.” This measure may be ideal for applicants who might consider it efficient in the end to acquire search results from several ISAs at the international phase, even at the expense of paying the costs and dealing with time/languages constraints at the international phase, in order for the results to equally influence the national phase.

17. This measure is further divided into (i) “a collaborative search and examination” system in which ISA collaborate in real time to prepare a single ISR and (ii) “a supplementary international search (SIS)” system in which users ask for the preparation of additional ISR as required. The former is still at the trial stage. And even though the latter has been adopted, it has not been used much. Both systems still have room for improvement. Taking into account that there is positive feedback on both systems from users, it is necessary to further refine and improve the efficiency of these frameworks to meet the cost-consciousness of the users.

18. Furthermore, one of the important results expected from these measures is a detailed analysis of what should be strengthened in order for an individual ISA to further improve the quality of conducting prior art searches by using the knowledge obtained by following the measures stated here. In addition, it is important to widely share the information with IP Offices and to give feedback to the ISA. This should lead to enhancing the capability of each Office and ISA to conduct prior art searches, and also enable them to play a role in creating a flexible and organic PDCA cycle that promotes higher quality prior art searches worldwide.

## PILLAR (3): HIGHER QUALITY PRIOR ART SEARCHES THROUGH MUTUALLY SHARING SEARCH RESULTS IN NATIONAL OFFICES

19. As mentioned before, there may be many users that give higher priority to the advantages they receive under the PCT system without being restrained by costs or time/language constraints at the international phase, and not requiring the search results of the international phase from several ISA. For such users, developing a mechanism for “the timely sharing of search results of IP Offices for the national phase” with each ISA and national Offices making self improvements in the course of action stated regarding Pillar (1) is especially important.

20. As a platform for such a measure, it is imperative to build an IT infrastructure for sharing dossier information such as prior art search results at the IP Offices. We would like to add that, to achieve this, the JPO together with the USPTO has initiated studies based on the framework of the IP5 Meeting in cooperation with WIPO in creating the “Global Dossier” concept. It continues to actively work on this concept.

21. Furthermore, WIPO is advancing studies on creating a mechanism for providing feedback when the DO finds documents other than those presented in the ISR to the ISA that prepared the ISR.

22. It is needless to say that these concepts and mechanisms will form the infrastructure for creating the above-mentioned PDCA cycle that promotes higher quality prior art searches on a global basis.

23. As indicated by these three pillars, the important theme in extending the possibilities of the PCT system is to pursue higher quality prior art searches for PCT applications under a flexible framework based on voluntary cooperation by each IP Office and to refine these menus which suggest different courses of actions that meet users' various needs reflecting their cost-consciousness through discussions among the Contracting States, and sublimate it into a user friendly and organic framework.

24. At a time when the role of individual IP Offices will become increasingly significant, improving the prior art searching capacity of IP Offices in the world and pursuing interests of users all over the world through such an approach is a role that the PCT system should play in aiming at establishing a truly efficient and effective global filing system.

#### **IV. PCT SYSTEM THAT CONTINUES TO IMPROVE**

25. Discussions on the improvement of the PCT system are not limited to the above. In the discussions, it is also required to deal with user needs (such as their cost-consciousness) that will be increasingly diversified and to continue proposing new options while pursuing higher quality prior art document searches for PCT applications under a flexible framework. And, ultimately, discussions are required so as to provide a more efficient and effective global patent application system. Japan, as in the past, intends to continue to contribute to international discussions toward achieving a truly attractive PCT system for users worldwide.

[Annex II follows]

## UTILIZATION AND ANALYSIS OF FEEDBACK ON WOISA/ISR AND SHARING OF ANALYSIS RESULTS

### SUMMARY

1. Recognizing the importance of developing the following two frameworks, Japan proposes that cooperation among ISAs begin first as a starting point for advancing them as we aim to improve the quality of PCT work products and thereby make the PCT system an effective and efficient global patent application system:

- Framework under which ISA analyze and utilize feedback on WOISA/ISR from DO that conducted First Actions;
- Framework under which the results of analysis conducted by ISA are shared with the DO, as well as with other Offices when appropriate.

2. This proposal does not force any ISA to develop the two frameworks, but simply suggests that ISA willing to develop such will consider doing so voluntarily.

3. In addition, Japan proposes that Offices cooperate in taking measures, which include existing projects and new proposals for improvements, to deal with points identified for improvement in the analysis. Doing so would enable continuous improvements of the PCT system to be made.

4. In working toward developing these frameworks and ensuring the continuous improvement of the PCT system, we are confident that both the feedback and the analysis will prove to be useful, based on the results of Phase 3<sup>9</sup> of the Trilateral Collaborative Study on Metrics, which the EPO and the JPO will begin from 2013. This Phase 3 will be positioned as Step 1 in developing the frameworks, in that it will attempt to determine the degree of discrepancies between the international phase and the national phase first actions at the EPO and JPO and seek to identify some of the underlying reasons for the discrepancies.

### I. BACKGROUND

5. Nowadays issues dealing with improving the PCT are actively being discussed on a global scale. Under this current circumstance, projects aiming for improvement are earnestly being advanced in international cooperative activities by the Trilateral Cooperation and IP5. One of these projects is the Trilateral Collaborative Study on Metrics<sup>10</sup>. This study was started in 2010 and has been led by the EPO. In November 2012, it was agreed for the EPO and the JPO to start Phase 3 of the study. Phase 3 is a collaborative study on reviewing files for which there

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<sup>9</sup> Phase 3 of the Study will involve a more detailed collaborative review of a sample of files selected during Phase 2, for which there is significant discrepancy (an extreme example would be grant by Office A and refusal by Office B). The selected files will be reviewed to establish root causes and related frequencies. For example

- different legal requirements; or different practices;
- classification;
- documentation;
- translation and other language issues;
- differing interpretation of claims between examiners.

<sup>10</sup> Please see paragraphs 9-14 of report of PCT/MIA/19/14.

are discrepancies between work products (WOISA/ISR) at the PCT international phase and examination results of First Action in the national phase<sup>11</sup>. Some Offices expressed considerable interest in Phase 3 at the PCT MIA in 2012.

6. Discrepancies between results of the PCT international phase with those of the national phase are believed to occur because of various factors. These discrepancies are expected to be solved by taking specific measures to deal with each of the factors so that the quality of ISR and reusability of ISR would be improved. In this regard, Japan recognizes that Phase 3 and similar detailed analysis are useful to improve the PCT system.

## II. SUMMARY RESULT OF DETAILED ANALYSIS OF THE DISCREPANCY CONDUCTED BY THE JPO

7. In light of the usefulness of the detailed analysis, the JPO conducted an analysis by randomly extracting files in which decisions made in the international phase by the JPO and national phase by other Offices differed. The JPO then conducted a detailed analysis of the causes for the discrepancies. This analysis differs from that to be conducted in Phase 3, since this analysis was not conducted jointly with another Office, but conducted solely by the JPO. Even though the JPO's analysis was small scale, the JPO confirmed the following cases, identifying the detailed causes of discrepancy for each file:

- (a) cases in which search/examination results by the DO were appropriate;
- (b) cases in which search/examination results by the DO were deemed to be not necessarily appropriate;
- (c) cases in which XY citations in the JP-ISR were not used by the DO for First Actions due to language issues:
  - (i) (c-1) the citations were Japanese patent literatures with no foreign family;
  - (ii) (c-2) the citations were Japanese, non-patent literatures;
- (d) cases in which neither the ISA nor the DO were deemed to be at fault:
  - (i) (d-1) differences in laws or Office practices;
  - (ii) (d-2) differences in interpretations of claimed inventions.

8. In the case of (a) and (b), above, we believe that the quality of search and examination by ISA and DO would improve if appropriate measures were taken, such as giving feedback of results of analysis to examiners.

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<sup>11</sup> Moreover, as a first step, the two Offices have been considering using structured data as a means to identify differences in outcomes between the international and national phases at the technical field level. Subsequently, areas of particular interest will be the subject of efforts aimed at explaining discrepancies in more detail.

9. In addition, it is important to deal with language issues seen in the case of (c) in order to enhance the usability of ISR. The JPO thinks that issues seen such as in the cases of (c-1) can be dealt with by (1) increasing the accuracy of machine translation, (2) describing reference points in documents for which no translations are provided, and (3) making the descriptions in WOISA and ISR easily understandable. Since these measures are closely related to the “Revision of WIPO Standard ST.14<sup>12</sup>” or “Standardized Clauses”<sup>13</sup>, Japan would like the other Offices to give feedback as to how the problems identified in the JPO’s analysis can be solved.

10. Furthermore, based on current operations dealing with non-patent literature, including the case of (c-2), titles of Japanese non-patent literatures cited in ISR are partially translated into English while the remaining parts are merely transcribed into the Roman alphabet, as shown below.

(Example)

Network-jo Kobunshi Nano Fiber no Keisei to Gas Bunri Zairyo eno Oyo  
(Underlined words are transcriptions to Roman alphabet)

11. Based on the translation described above, it is not clear if examiners in other Offices can easily identify or obtain Japanese non-patent literature. Based on this, we would like to ask comments about this from the other Offices using JP-ISR. Japan hopes that we can all consider various problems such as how ISR should be translated or how to make non-patent literatures easier for examiners to use.

12. The above is the summary of the results of the JPO’s analysis. By having DO and other IP Offices (when appropriate) share these kinds of analysis results, they can obtain analysis results that have different viewpoints from their own i.e., obtain many viewpoints from the various ISA. We believe that such sharing of analysis results is beneficial in the following aspects:

- improving search and examination quality at each Office based on utilizing analysis results conducted by ISA;
- enhancing usability of ISR and efficiency of search and examination through deepening mutual understanding among ISA and other Offices;
- cooperating on developing measures together so as to deal with issues by mutually understanding the underlying causes of discrepancies.

### III. PROPOSALS

#### (1) Developing Framework Under Which ISA Analyze and Utilize Feedback on WOISA/ISR from DO that Conducted First Actions

13. As mentioned above, we recognize that it is beneficial for ISA to utilize the analysis results dealing with the causes of discrepancies between the international phase and national phase, in order to improve the quality of ISR.

14. Therefore, Japan proposes that the ISA first begin work to advance the development of the framework for analyzing and utilizing feedback on WOISA/ISR from DO that conducted First Actions.

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<sup>12</sup> PCT/MIA/20/9,CWS/3/4  
<sup>13</sup> PCT/MIA/19/2



15. In order to establish the frameworks, it is necessary to obtain search and examination results of DO or feedback from DO. This would be done by utilizing related tools and infrastructures such as the Quality Feedback System, Common Citation Document (CCD) and dossier systems. Japan is of the opinion that Authorities should be actively involved in the development of such systems, aiming to have the systems utilized for conducting analysis in an efficient manner.

#### (2) Developing Framework Under Which the Results of Analysis Conducted by ISA are Shared with the DO and Other Offices

16. As described in Paragraphs 7 and 10, there are some cases in which it is useful to DO and other Offices to be provided analysis results conducted by ISA. For example, there are some cases under (a) and (b) in which discrepancy was due to problems related to substantial search and examination details/practices at the ISA or DO in how they conducted searches or how they determined patentability. Japan is of the opinion that the causes for these discrepancies should be dealt with over a long-term perspective, while the sharing among the Offices of details on the actual results obtained through analysis will lead to speeding up the development of measures for resolving problems, based on a unified understanding.

17. Also, we believe that some ongoing projects should be advanced after each ISA fully understands the details of the actual problems and work together for the advancement. As a result, this would lead to reaching a more beneficial outcome. Japan is of the opinion that “Standardized Clauses” and improving the formality of WOISA/ISR are examples of the projects mentioned above.

18. Therefore, in considering the development of the framework that enable analysis results by ISA to be shared among DO and other Offices when needed, Japan proposes that the development of such the framework should be advanced among ISA cooperating together, working in line with (1). In our view, it is meaningful for individual ISA to continuously cooperate to resolve the issues identified in the analyses as to the causes of discrepancy under this framework. Doing so will make the PCT system more effective and attractive for all stakeholders.

19. Moreover, Japan considers obtaining feedback not only from DO but also from users as one more PDCA cycle. Feedback from users can be obtained from user surveys and other means. Therefore, Japan also hopes to be able to discuss how the results of user surveys can be shared and utilized among ISA.

#### IV. STEPS FOR DEVELOPING THE FRAMEWORKS

20. The JPO’s analysis shown in section II was solely conducted by the JPO and the results were not provided to other Offices (DO), even though they are meaningful to the JPO as an ISA. Nevertheless, there has been no discussion on the merits of sharing analysis results, and to the extent that sharing such results would enhance the convenience to stakeholders of the PCT system. Japan expects that Phase 3 of the Metrics Study that will be conducted by the EPO and the JPO collaboratively will shed light as to the causes for discrepancy between the international and national phases. The results of the study will be shared between both Offices. As a result, we expect that discussion on the above will be possible.

21. In this context, Phase 3 to be implemented by the EPO and the JPO can be seen as the first step in developing the frameworks. While cooperating together with the EPO in following the principle objectives of the Metrics Study, we are confident that the EPO and the JPO will successfully find a useful information and outcome to consider in developing the frameworks.

22. Based on the above, Japan will report various items of information and its experience in regard to developing the frameworks to all interested ISA. In our view, Phase 3 should be advanced by taking the following items, which should be considered for developing the frameworks, into consideration:

- (a) scheme for obtaining feedback on WOISA/ISR from DO;
- (b) methodology for analyzing feedback information;
- (c) methodology for utilizing analysis results;
- (d) scheme for providing analysis results to DO;
- (e) scheme for cooperating to eliminate causes of discrepancy.

23. From 2014, Japan hopes to review the meaning of the frameworks based on the report, considering a roadmap for developing both the frameworks themselves and their details with other Offices.

[Annex III follows]

## SPECIFIC EXAMPLES OF INTELLIGENCE FOR ANALYZING AND IMPROVING THE PCT PROCESS

1. In order to continuously improve the PCT process, as stated in proposal (4), information that will become basis for making decisions on the PCT system from a bird's eye view will be necessary. For that purpose, the factual information obtained from the PCT process is not enough. Useful intelligence created from information processed with a certain purpose in mind is the guidance that will be the necessary for making decisions, in order to drive forward PCT Kaizen.
2. In order to picture what (information) can become intelligence, we would like to present a couple of examples. Information on the dates when ISR were issued, which is part of the existing statistics in the PCT system, enables us to see trends based on the percentage of times that ISR were able to be established by ISA before publication, based on the factual information<sup>14</sup> about priority dates and the dates ISR were sent from ISA to the IB. In order to upgrade this information into further useful intelligence, it becomes necessary to add and process further information such as the international filing date, the date an ISA received the search report from the RO, and the issuance date of an ISR.
3. At present, the date of issuance of ISR is recorded in the PATENTSCOPE as mere information on recordation of dates. However, the date the competent ISA in question received a search copy from a receiving Office is not accumulated as information in the PATENTSCOPE as it stands now. To be more precise, there is a way to learn the date, since it is possible to refer to PCT/ISA/202 notification on the PATENTSCOPE and find the date of receipt of the search copy stated on the notification. In attempting to improve the present situation of due date adherence for issuing ISR, it would be desirable to add the actual date of receipt of the search copy as information in addition to the date of issuance of ISR. By processing the two dates, it becomes possible to obtain the intelligence of substantial processing period that makes it possible to find out actually how long it took for an ISA to issue an ISR.
4. Furthermore, it is possible to envisage a situation in which an RO or ISA communicates with an applicant, but the processing time took longer than expected due to the applicant's delay in responding. More information is required for deeper analysis. This means, for example, adding information about the date applicants paid the international search fees. Through this process, it may reveal that a delay, which was due to the applicant's paying the international search fees late, caused a delay in ISA receiving search copies from RO, which in turn resulted in a delay of the ISR being issued, which caused the ISR not to be issued by the time the international publications were made. In order to enhance intelligence in the future, it will be important to possess information in a state that it can be utilized and processed, and not to obtain information simply by reading what is stated on notifications. Combining and processing various items of information under certain purposes creates intelligence that can be used to continuously improve the PCT system (Kaizen).
5. In summary, the following lists information for formulating intelligence that can be used to ensure that the deadline for issuing ISR is met. By processing these items of information and grasping the period necessary for ISA to establish ISR, and the time it takes for ISA to obtain search copies, it becomes possible to analyze which processes are taking time and in the result to lead to Kaizen. Necessary information can be further be subdivided, but it is necessary to decide which information is necessary by striking a good balance between the labor required to collect the information and the benefits to be gained from such information.

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<sup>14</sup> Timeliness of ISA to transmit ISR to IB, by ISA (<http://www.wipo.int/ipstats/en/statistics/pct/>).

- (a) International filing date
- (b) Date an ISA received a search copy from the RO
- (c) Date ISR is issued
- (d) Date an RO received the international search fee (including invitation date for search fees)

6. There are many other items of information that can become intelligence. For example, users, who are monitoring filing trends of third parties, want to know information on when applications entered into the national phase. This information can be considered as information that can create extremely useful intelligence from the perspective of PCT Kaizen.

7. At present, information on the dates in which applications entered each national phase is accessible on PATENTSCOPE. Such information is voluntarily provided to the IB by each DO, it is not sufficient in helping users know about PCT filing trends. If this information is provided to the IB to some extent in a timely manner, it may become potential information for creating various intelligence, such as letting users know in which countries all-inclusive designation PCT applications have actually entered into the national phase, whether there is a correlation between the ISA an applicant selected and the country in which the application has entered into the national phase, etc, besides the percentage of applications that have entered into the national phase at an early date without using the 30 month period.

8. There are some cases which result in duplicate work for the ISA. In other words, the present PCT procedures oblige the ISA to reissue WOISA/ISR. This issue was introduced in the proposal by the EPO at the last MIA (PCT/MIA/20/11), and Japan observed it with great interest. Our concern is that reissuing WOISA/ISR not only wastes the searches themselves, which have already been conducted, but also additional WOISA/ISR might be established sometime after the prescribed time limit. Such cases occur in situations when the modified international application no longer serves as the basis for the originally established WOISA/ISR. This is because, for example, WOISA/ISR are based on incorporation by reference of missing parts or corrections/additions of priority claims. The end result of separately introducing such user-friendly procedures into the PCT system might have actually increased the possibility for WOISA/ISR to be reissued. At this present moment, however, we have very little information that can be used to analyze what effect these procedures have on the whole PCT system. Effectively utilizing intelligence available to us might lead to fruitful discussions on how we can avoid having WOISA/ISR reissued. Collecting and processing the following information may create Intelligence that can be used to analyze the frequency, timing and the background of WOISA/ISR having to be reissued.

- (a) Whether incorporation of missing parts was made (including the date it was made)
- (b) Whether correction or addition of priority claim was made (including the date it was made)
- (c) Date the WOISA/ISR was issued
- (d) Whether the WOISA/ISR was reissued (This may be possible to be inferred, for example, through the presence or absence of an amended international search report.)

9. Lastly, we would like to state that the examples given here are merely for gaining the understanding that enhancing intelligence is absolutely necessary for analyzing and improving the PCT system. Also, intelligence should not be limited to these examples. What Japan intends to propose through PCT Kaizen is set a form for discussing issues with the Contracting States and IB, as to what kind of intelligence would be necessary for analyzing and improving the PCT system. In other words, to discuss what kind of intelligence is necessary for having fruitful discussions in the area of improvement. In addition, we hope to specifically discuss what type of information is necessary for acquiring intelligence and what should be done to collect such information.

[End of Annex and of document]