Standing Committee on the Law of Patents

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PROPOSAL BY THE DELEGATION OF THE UNITED STATES OF AMERICA

Document prepared by the Secretariat

1. The Annex to this document contains a proposal submitted by the Delegation of the United States of America concerning quality of patents, for consideration under item 6 of the revised draft agenda: Quality of Patents, including Opposition Systems.

2. The members of the Standing Committee on the Law of Patents (SCP) are invited to consider the contents of the Annex.

[Annex follows]
PROPOSAL OF THE UNITED STATES OF AMERICA ON THE QUALITY OF PATENTS

Background

During the 16th session of the SCP the UK and Canada introduced a proposal for a work program on the “Quality of Patents, Including Opposition Systems”, which was set forth in document SCP/16/5. The session concluded with a call for comments and proposals from the member states on specific aspects of a work program that could be implemented by WIPO on the topic of quality of patents.

The United States welcomes this opportunity to study and discuss this very important topic, because in our view granting high quality patents is fundamental to having a well functioning patent system that promotes innovation, economic growth, employment and the general welfare. Low quality patents are wasteful; they drain resources, for example by inhibiting others from marketing certain products that would otherwise be brought to the market, and by fostering unnecessary litigation costs.

The United States has recently passed a sweeping overhaul of its patent laws, in the form of the America Invents Act (Leahy-Smith America Invents Act (AIA), Pub. L. No. 112-29, 125 Stat. 284 (Sept. 16, 2011)). The AIA reflects an historic change in the patent laws of the United States, and brings about the most far reaching and important revision to the patent laws in years.

Several provisions of the AIA will positively influence the quality of patents issued by the USPTO. Some provisions directly relate to patent quality, by creating more certain and viable property rights in the innovation marketplace and by providing greater legal certainty about the validity and value of patent rights. These include adopting the First-Inventor-To-File (FITF) standard and creating an in-house post-grant review process for challenging patents that is a faster and significantly cheaper alternative to costly and protracted litigation. An additional provision will improve quality by making greater use of third-party submissions to ensure our examiners have the best prior art before them. Many other issues are addressed by the AIA, which will also directly or indirectly improve patent quality.

It is generally settled that a high quality patent is the desired outcome of the patenting process. However, defining what is a high quality patent is a much more ambiguous concept, which is open to different interpretations in different national IP systems.

In fact, defining what is a high quality patent is difficult, and often is counter intuitive. And it is a moving target, because different users of the system or users of different national systems will define quality differently, in view of their historical, cultural, geographic, technological and other points of view.

Even with respect to observers of similar backgrounds, the assessment of quality can be difficult. If monetary value is considered a factor, one finds that in some cases high value patents may not be those that have been particularly well written. Some patents are valuable precisely because during their lifetime they are found to cover broader portions of technology than was envisioned during examination. This is often due to a measure of ambiguity in the drafting of the patent, while still meeting the national legal requirements for grant, for validity and for enforceability.

Another measure of patent quality may be the ability to survive scrutiny in litigation. However, typically patents of questionable validity are the ones litigated, not those that are considered strong. There is a high risk in infringing a strong patent, meaning one that is seen as likely to be found valid and enforceable. Third parties often avoid potentially infringing activities and the ensuing litigation. Strong patents are thus not often litigated, and the outcome of litigation is thus not a good indication of high quality.
National Goals of a Patenting System

In view of the challenges of defining a high quality patent, a first aspect of the USPTO proposal on quality is to attempt to determine the various elements that different national offices consider important to high quality patents. The USPTO thus proposes a work program in which offices of member states are invited to reflect upon and to share the high-level goals that they consider crucial to a patenting system that produces high quality patents. These goals will necessarily vary from country to country, and will be affected, among other factors, by national industrial policies, the nationally determined balance between the rights of inventors and those of users, and the premium placed on legal certainty and clarity in the respective national systems.

For example, the high-level goals that define a high quality patent system may include how well the national patent system supports the national industrial policy, how thoroughly inventions must be described in a disclosure, the type of subject matter that is suitable for patenting, the promptness of examination and grant decisions, the balance of rights between patent owners and others, the amount of economic activity generated by the patents and other factors.

In essence, these high-level goals represent the office-specific targets against which the quality of national patents and patent examination is measured. The patent system goals specified by the offices of member states will be useful in shaping a discussion of what is meant by a high quality patent, and what qualities must be possessed by a national patenting infrastructure that generates high quality patents.

Specific Metrics for Measuring Quality

A second part of the USPTO proposed work program involves an analysis of how national offices currently assess the quality of granted patents, and determine how well the goals set by the office-specific targets are met. This aspect of the proposal is directed to the operations and procedures that are employed in the various national offices to ensure that quality patents are granted.

Accordingly, we invite the national offices to share the specific metrics they use in evaluating granted patents and the work of the examiners, and to include a description of the quality assurance mechanisms they employ. Examples of the metrics used may include the completeness of search, the correctness of the decisions made by the examiner on the legal requirements for grant, the speed of the process and surveys of the applicants, among others.

The information on the specific quality metrics used by national offices will be useful in discussions aimed at improving the patents granted by all offices by compiling a list of best practices regarding patent quality. The offices would be free, if they so wish, to adopt some of the metrics or best practices, to use in their own operations.

USPTO Patent Quality Assurance

The USPTO would like to present in some detail the patent quality program implemented by the USPTO Office of Patent Quality Assurance, as an example of a system that has been put in place to evaluate and improve the work of examiners and the quality of granted patents. This is not meant to imply that other offices should follow the same practices, but rather as information that may be useful in a discussion on quality assurance systems.

In the USPTO, the quality of patents is measured and evaluated by the Office of Patent Quality Assurance (OPQA), which falls under the direction of the Associate Commissioner for Patent Examination Policy. The OPQA Director performs office oversight. Direct supervision of the employees responsible for the review and assessment of examination quality is performed by Supervisory Review Quality Assurance Specialists (SRQAS).
The individuals that review patent examiners’ work product are referred to as Review Quality Assurance Specialists (RQAS). RQAS and SRQAS positions are technology-dependent, meaning those individuals review patent applications pertaining to their area of expertise, generally defined as biotechnology, chemistry and chemical engineering, electrical engineering, or mechanical engineering.

The Quality Office is composed of a highly skilled staff that has technical and procedural skills that cover all areas of patent prosecution. The quality review staff is comprised of 34 Review Quality Assurance Specialists (RQAS) and 7 Supervisory Review Quality Assurance Specialists (SRQAS). Program staff also includes a statistician and database manager.

These specialists have spent a substantial number of years as primary patent examiners in the general technical area in which they review; many have served as Supervisory Patent Examiners for at least several years.

The Quality Office conducts work product reviews that are used to generate the official USPTO examination quality metrics. Metrics are reported out in the Office’s Annual Performance and Accountability Report.

The specific goals of the Quality Office include:
- Providing timely, reliable and meaningful indicators of examination quality
- Identifying trends in examination quality
- Identifying opportunities for improvement
- Developing data-driven improvement strategies
- Assisting the Patent Operation business unit in training of examiners and implementation of quality initiatives

The measure of quality at the USPTO has changed over time. Prior to FY 11, the USPTO reported quality metrics that were based only upon reviews of two application types (allowances, in-process applications) conducted by the Office of Patent Quality Assurance. Prior to FY 05, the USPTO reported a single quality metric, the allowance error rate. In FY 05 the USPTO adopted a second metric, the In-Process Compliance rate and between FY 05-09, reported two quality metrics; the allowance compliance rate and the IPR compliance rate (based upon a sample of final and non-final rejections).

In FY 10 the USPTO adopted as its metrics (1) the Final Disposition compliance rate (based upon a sample that consisted of allowances and final rejections in order to assess the correctness of the examiners’ decisions regarding the patentability of the claims through the decision to finally reject or allow) and (2) a non-final IPR compliance rate.

In addition, the review sample design was modified to include a proportionately larger volume of non-final actions relative to allowances and final rejections, in order to place greater emphasis on building quality early in prosecution rather than focusing heavily on the end product.

The Final Disposition and Non-Final IPR Compliance Rates, while useful, were considered by both the USPTO and its stakeholders to be insufficient to present a balanced and comprehensive picture of quality. As a result, the United States Patent and Trademark Office has adopted new procedures for measuring the quality of patent examination at the end of FY 2011.

The USPTO, in consultation with the Patent Public Advisory Committee, has formulated a composite quality metric which greatly expands the previous procedures for measurement of examination quality. This composite quality metric is designed to reveal the presence of quality issues arising during examination, and to aid in identification of their sources so that problems may be remediated by training, and so that the presence of outstanding quality procedures may
be identified and encouraged. This metric is based upon a USPTO-PPAC initiative in which the public has aided in identifying potential indicia of quality and worked alongside the USPTO in refining those indicia into distinct, measurable factors.

The Composite Quality Metric

The new composite quality metric is composed of seven total factors that take into account stakeholder comments, including three factors drawn from the USPTO’s previous quality measurement procedure, and four new factors that focus upon data never before acquired and/or employed for quality measurement purposes.

Specifically, the factors that have been carried on and modified from the previous procedure measure:

1. The quality of the action setting forth the final disposition of the application.
2. The quality of the actions taken during the course of the examination.
3. The perceived quality of the patent process as measured through external quality surveys of applicants and practitioners.

The newly added factors measure:

1. The quality of the examiner’s initial search.
2. The degree to which the first action on the merits follows best examination practices.
3. The degree to which global USPTO data is indicative of compact, robust prosecution.
4. The degree to which patent prosecution quality is reflected in the perceptions of the examination corps as measured by internal quality surveys.

The previous focus on the correctness of actions taken by an examiner in an individual application has been widened to better encompass the entirety of the patent application and examination process. The composite quality metric will measure performance in each of the seven areas over each reporting period. The relative performance in each of the areas will be weighted and combined to result in a measure of the overall examination quality over that period. By selecting varied metrics to provide a comprehensive picture of patent examination quality, it is intended that any issues identified will be met with a comprehensive and balanced action on the part of the USPTO to address these issues.

The new composite metric is designed to yield a comprehensive picture of overall examination quality and to impose a balanced response to quality concerns such that the overall quality of the patent process will be improved.

The actual Patent Quality Metrics being used in the composite metric are as follows, listed with their relative weights:

Final Disposition Compliance Rate (20%)
In-Process Compliance Rate (15%)
FAOM Search Review (10%)
Complete FAOM Review (10%)
Quality Index Report (QIR) Information (20%)
External Quality Survey (15%)
Internal Quality Survey (10%)
The following describes in greater detail the seven Quality Metrics which were introduced above.

- **Final Disposition Compliance Rate**

This is determined on the basis of a review of a randomly selected sample of allowed applications and finally rejected applications. An allowed application is considered to be compliant if none of the allowed claims are found to be unpatentable. Finally rejected applications are considered to be compliant if they are free of "in-process examination deficiencies" or IPEDs, which are instances of clear error, as defined by the examiners' performance appraisal plan (PAP), that have a significant adverse impact on the ability of applicant to advance the prosecution on the merits of the application.

The Final Disposition Compliance Rate is the percentage of reviewed allowance and finally rejected applications that do not contain the above-noted deficiencies

- **In-Process Compliance Rate**

The Non-Final IPR Compliance Rate is determined on the basis of a review of a randomly selected sample of non-finaly rejected applications. Examination deficiencies, which are termed "in-process examination deficiencies" or IPEDs, are instances of clear error, as defined by the examiner’s performance appraisal plan (PAP), that have a significant adverse impact on the ability of applicant to advance the prosecution on the merits of the application.

The Non-Final IPR In-Process Compliance Rate is the percent of non-final actions reviewed in which no examination deficiency is found.

- **FAOM Search Review**

Stakeholder input from comments and roundtables indicated that the quality of the search is an extremely important indicator of examination quality. The First Action On the Merits Search Review is a measure of the degree to which the initial search performed by the examiner conforms to best practices. It is performed by random sampling of first actions on the merits in applications currently undergoing examination. Each assessment item is assigned a points value. Depending on how closely the search comports with best examination practices, the action may receive all, some or none of the points for a given item. The points are summed for each application into a total score for that application and are expressed as a percentage of total available points achieved.

The metric is calculated as the average of the individual scores of the reviewed applications.

- **Complete FAOM Review**

Stakeholder input also indicated that there are very important indicia of quality present in the first action on the merits. This metric is a measure of the degree to which the first action on the merits in an application conforms with the best practices of the USPTO, performed by random sampling of first Office actions on the merits in applications currently undergoing examination. This metric provides similar analysis to the in-process review but more comprehensive and in much greater detail. Each assessment item is assigned a points value. Depending on how closely the first action comports with best examination practices, the action may receive all, some or none of the points for a given factor. Points are summed for each application in to a total score for that application and are expressed as a percentage of total available points achieved.

The metric is calculated as the average of the individual scores of the reviewed applications.
• **Quality Index Report (QIR) Information**

The Quality Index Report (QIR) is a measure of the degree to which actions in the prosecution of all patent applications reveal trends that may be indicative of quality concerns. The index is based upon data taken from the USPTO PALM database and is calculated on the basis of statistical analysis of certain kinds of events such as multiple non-final actions, restrictions after first action, reopening after appeal, and the filing of RCEs. Data are analyzed to identify outlier populations that may signal the presence of quality or procedural issues that need to be addressed. QIR data may also be used to identify superior examination practices from which best practices can be identified and shared.

• **External Quality Survey and Internal Quality Survey**

The External Quality Survey is a contactor-administered survey that is conducted semi-annually and assesses the perceptions of patent applicants and practitioners related to the quality of examination and their interaction with USPTO personnel.

The metric used is the ratio of positive to negative responses on the question rating overall examination quality. The Internal Quality Survey assesses the experiences of examiners with internal and external interactions and issues that contribute to their ability to perform a high quality examination. The survey covers, for example, satisfaction with examination tools, training, the quality of incoming applications, and their interaction with practitioners. The metric is a ratio of positive to negative responses to a question relating to overall satisfaction.

The composite quality metric will function as a snapshot of the quality of the examination and prosecution of patents during a single fiscal year. As set forth in the 2010-2015 USPTO Strategic Plan, optimization of patent quality is a strategic goal. Therefore, the composite quality metric, and the seven metrics which comprise the quality metric, will be expressed as a percentage of the progression to a five-year quality goal.

**Proposal of the United States**

The USPTO believes that quality of patents is an important topic, directly related to the development of a patent system that promotes innovation, economic growth, employment and well-being. An exchange of information and ideas about quality of patents is a crucial element of developing systems that grant high quality patents.

Accordingly, the United States proposes a two element work program on the quality of patents, for consideration by the member states.

(1) **National Goals of a Patenting System**

The USPTO proposes to conduct a survey of the offices of member states inviting them to reflect upon and to share the high-level goals that they consider crucial to a patenting system that produces high quality patents. These high-level goals represent the office-specific targets against which the quality of national patents is measured.

(2) **Specific Metrics for Measuring Quality**

The USPTO proposes a questionnaire to be filled by the national offices in which they would describe the specific metrics they use in evaluating granted patents and the work of the examiners, measured against the office-specific targets described above, and describe the quality assurance mechanisms they employ.