# WSC Recommendations to Patent Offices for Improving Patent Quality

The quality of patents is crucial to the continued growth and innovation of the semiconductor industry. The WSC recognizes the importance of improving patent quality and has been working with WIPO and the patent offices of GAMS members to encourage the collection and dissemination of standardized statistical metrics bearing on patent examination quality. Set forth below are ten recommendations from the WSC for improving patent examination quality, along with some suggested benchmarks for measuring performance on each recommended practice:

### 1. Examination Quality Review

<u>Background</u>: Even when armed with adequate technology, legal knowledge and support, there is no guarantee that an examiner's performance will be up to standard. <u>Recommendation</u>: The WSC recommends that POs set up proper performance review program, with an objective measurement scale, to periodically evaluate examiners' examination quality. Poorly-performing examiners should be given support and closer supervision, and where poor performance continues should be transitioned away from examination duties.

<u>Applicable Metrics</u>: Actual average examination time per application (from filing until issuance as patent or abandonment) in the prior year, Average case load per examiner (Patent apps/examiner) in the prior year, Examiner turnover ratio in the prior year, Overturned internal appeals v. total internal appeals.

# 2. Appropriate Workload

<u>Background</u>: Even the best, most efficient examiners need enough time to review and examine applications, conduct prior art searches, communicate with applicants and to do the necessary administrative work. Certain technologies may take examiners longer to review.

<u>Recommendation</u>: The WSC recommends that POs should determine the average time for properly examining a patent application and recruit enough examiners based on the number of annual patent applications filed within the previous year or as forecasted.

<u>Applicable Metrics</u>: Actual average examination time per application (from filing until issuance as patent or abandonment) in the prior year, Average number of hours allocated to examine an application.

### 3. Adequate Funding

<u>Background:</u> All factors bearing on patent quality are dependent on adequate funding. Without adequate funding, it may not be possible for POs to hire an appropriate number of examiners, to adequately train them, and arm them with the necessary resources and technology to perform at a high level. Adequate funding is therefore crucial. Yet funding needs should not impose an undue burden on applicants by way of fees such that they become an obstacle to innovation. On the other hand, fees collected from the applicants by the POs should not be used for other purposes than supporting the work of the POs

<u>Recommendation</u>: The WSC recommends that Governments should provide sufficient funding to POs to maintain adequate headcount, up-to-date hardware, software and technology, and adequate training and periodic evaluation. The WSC stands ready to lend its support to any PO in advocating for adequate budgets from its responsible authority.

<u>Applicable Metrics</u>: All metrics referenced in these Recommendations relevant to adequate funding.

### 4. Resources and Support

<u>Background</u>: Probably most important among patent quality factors is the accuracy of the patent scope (patent claims). In order to determine what the "newly invented" technology is, examiners need to find the most relevant existing technologies (the prior arts) for purposes of comparison. The internet provides access to worldwide documents, but convenience sometimes also causes trouble - too many references for the examiners to choose from. In addition, when a new application relates to cutting-edge or highly specialized technology, examiners may have difficulty properly evaluating the value of the new invention.

Recommendation: The WSC recommends that POs should provide examiners with access to all important technology databases, in addition to patent databases. Examiners should keep a record of searched database for each case and statistics should be collected and made publicly available. POs should also consider ensuring up-to-date technology, such as the best search engine, is available for examiners to use. POs should implement an internal support system so that examiners can easily seek internal help. If appropriate, POs should also consider outsourcing all or part of the prior-art search work to reliable third party search firms. POs should use best practices in using outside experts for technology support in examination and post-grant review processes.

Applicable Metrics: Average number of database searched per case

## 5. Training and Qualification Requirements

<u>Background</u>: Examination of patent applications requires examiners to evaluate technical documents under legal standards. Technology evolves over time, as do legal standards. Examiners should be equipped with up-to-date technology and legal knowledge.

<u>Recommendation</u>: The WSC recommends that POs should regularly review and modify their training programs, and qualification processes for new examiners. POs should set up objective evaluation processes and standards to qualify new examiners, and only those who pass the evaluation should be allowed to examine patent applications. POs should also design and implement continuing education courses for all active examiners. Poorly-performing examiners should be given support and closer supervision, and where poor performance continues should be transitioned away from examination duties.

<u>Applicable Metrics</u>: Number of apps pending, Full time/part time examiner ratio in the prior year, Examiner turnover ratio in the prior year, Number of technical training hours per year/examiner.

### 6. Faster Administrative Procedures

<u>Background</u>: Although in average examiners spend only a few days to examine one patent application, it takes years for applicants to receive a formal disposition (grant, rejection). The administrative procedures, the backlog of older applications, and the time for applicants to respond to office actions all contribute to long delays in the examination process.

Recommendation: The WSC recommends that patent offices (POs) periodically review their internal procedures and determine which steps can be simplified and/or streamlined. POs should implement a paperless environment and should encourage applicants to use an electronic filing process, whenever feasible. It is also recommended that POs should develop a strategy to clear the backlog of pending applications periodically.

Applicable Metrics: Number of apps pending at year end, Average time of first office action (from filing to first office action or search report) in the prior year, Average period of time (in months) from filing until final disposition in prior year, Actual average examination time per application (from filing until issuance as patent or abandonment), Average case load per examiner (Patent apps/examiner) in total, and average cases added annually to case load in the prior year, Average number of hours allocated to examine an application

### 7. Post-Grant Review Mechanism

<u>Background</u>: It is, of course, unrealistic to expect all patent examinations to be perfect given limited time and resources. Some patent claims will be erroneously allowed. In recognition of this, most POs have implemented a post-grant review mechanism to invalidate erroneously granted claims, but most of these mechanisms limit the evidence that challengers can adduce in the review process. For example, in some countries challengers may only present printed publications to POs during post-grant review. It is also not unheard of that some companies use post-grant review to block competitors' patents without providing threshold evidentiary support.

<u>Recommendation</u>: The WSC recommends that POs develop and implement robust post grant review procedures, including steps to verify the legitimacy of evidence so that challengers may present various types of evidence. POs also should conduct a <u>threshold</u> review of challenge requests and determine whether there is sufficient evidence to warrant initiation of a post-grant review.

<u>Applicable Metrics</u>: Number of patents invalidated in the prior year versus patents granted.

### 8. Cooperation between POs

<u>Background</u>: The Patent Prosecution Highway (PPH) speeds up the examination process for corresponding applications filed in cooperating POs. Through PPH, an applicant who receives a positive ruling on patent claims from one participating PO can request accelerated prosecution of corresponding claims in another participating PO. This allows applicants to obtain a patentability decision in the second office more quickly. The examiner in the office of later examination (OLE) can reuse the search and examination results from the office of earlier examination (OEE), thereby reducing workload and avoiding duplication of effort. Nonetheless, the search and examination results of a rejected application can also be very useful for the examiner in OLEs to properly examine counterpart applications.

<u>Recommendation</u>: The WSC recommends that POs should actively participate in PPH programs. POs should also cooperate by sharing search and examination results of all patent applications (including rejected applications), which may require mandatory disclosure of foreign counterpart applications by the applicants.

Applicable Metrics: Number of patents issued through PPH/year

### 9. Examination Procedures

<u>Background</u>: a patent application (claim) needs to meet certain legal standards – eligible subject matter, novelty, non-obviousness (inventive step) – in order to be patentable. When there are no detailed and objective guidelines on how to apply these legal standards, examiners may tend to make judgments based on their

subjective viewpoint. Applicants also need to know the applicable guidelines in order to communicate efficiently with the examiners.

Recommendation: The WSC recommends that POs publish detailed, objective guidelines on how to properly determine the patentability of claims. These guidelines should provide step-by-step instructions into the examination procedures for each legal standard, and should be updated periodically to reflect current law. Applicable Metrics: Public availability of patentability guidelines (y/n?), and published periodic updating (y/n?).

# 10. Transparency and Cooperation with WIPO on Patent Examination Metrics Background: The WSC has been collaborating with WIPO and the patent offices of GAMS members to identify standardized statistical metrics bearing on patent quality and to encourage the annual collection and dissemination of such statistical information. The WSC has published a list of 12 patent quality metrics, and WIPO has recently amended its annual IP statistical questionnaire to add a module for collecting patent examination statistics. These metrics cover workload, examination outcome, patent examiners, pendency time and post-examination opposition procedures. [See Attachment for relevant pages from the WIPO questionnaire.] Recommendation: Mindful that the circumstances of each PO are unique, the WSC nonetheless believes that maintaining and reporting a broad array of pertinent examination-related statistics, and the comparative publication of these statistics, can serve as a useful benchmark for assessing and improving global patent examination.

The WSC urges each PO to ensure transparency of statistics related to its annual examination of patents. The WSC also urges POs to cooperate with WIPO in responding to its annual patent quality statistical questionnaire, and in periodically reviewing, augmenting and improving the statistical metrics bearing on patent examination quality. Finally the WSC commends WIPO for coordinating this statistical initiative and encourages it to continually strive to enhance its collection of patent quality statistics.