

## **ADOPTION OF METRICS FOR THE ENHANCEMENT OF PATENT QUALITY FISCAL YEAR 2011**

### **I. SUMMARY**

The United States Patent and Trademark Office (USPTO or Office) is adopting new procedures for measuring the quality of patent examination. The USPTO, in consultation with the Patent Public Advisory Committee (PPAC), 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 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. The factors that have been modified from 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, and (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, and (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 procedures will be implemented at the start of fiscal year 2011. At periodic intervals, the USPTO will disseminate the results of the composite metric as well as the scoring of each individual metric. The USPTO recognizes that this joint initiative into improving the quality of the examination process relies upon a commitment not only by the USPTO, but also by the public as stakeholders in the patent system. Therefore, where practicable, the data used in the calculation of each metric will also be made public along

with the results of the metric. Through publication of these data, patent stakeholders will be able analyze the underlying data and investigate other possible relationships between the data and quality patent examination. It is anticipated that such transparency in the quality initiative will encourage the public to assist in periodic refinements of the composite metric in optimizing the measurement of overall patent quality.

## II. OVERVIEW

The U.S. Patent and Trademark Office (USPTO), in conjunction with the Patent Public Advisory Committee (PPAC) has undertaken a project to better identify, measure, and track indicators of overall patent quality. During the course of this project, the USPTO has consulted a wide variety of sources to identify meaningful indicia of patent examination quality. Such sources include current practices, key USPTO statistics, blogs, PPAC outreach, applicant and practitioner surveys, foreign offices, past USPTO studies, non-USPTO studies, and public comments. As part of this initiative, the USPTO published a notice regarding this joint patent quality initiative in the Federal Register on December 9, 2009. See Request for Comments on Enhancement in the Quality of Patents, 74 Fed. Reg. 65040 (Dec. 9, 2009), 1350 Off. Gaz. Pat. Office 46 (Jan. 5, 2010). This notice requested public comment on methods to measure and improve overall patent quality.

The USPTO received feedback and suggestions from 71 entities, including individuals, law firms, corporations, associations, intellectual property organizations, and government agencies. The comments are available on the USPTO's Internet Web site at <http://www.uspto.gov/patents/law/comments/patentqualitycomments.jsp>, and are summarized at [http://www.uspto.gov/patents/init\\_events/qualitycommentssummary.pdf](http://www.uspto.gov/patents/init_events/qualitycommentssummary.pdf). The comments from stakeholders expressed enthusiasm for measurement of quality throughout the examination process, rather than solely at the endpoint of prosecution of the application. The comments also suggested using a balanced metric to address errors of both allowance and rejection, and placing increased emphasis on compliance with proper search and restriction practices.

As a result of these comments, the USPTO developed six proposed quality metrics to identify and measure indicia of overall patent quality. These proposed quality metrics were based upon current USPTO quality measures and upon indicia suggested by public comment. The proposed metrics combined data currently collected and used by the USPTO, data currently available but not employed by the USPTO for quality purposes, and new sources of data not previously monitored by the USPTO. These proposed quality metrics were posted on the Internet Web site on April 23, 2010, at [http://www.uspto.gov/patents/init\\_events/metrics\\_for\\_roundtable\\_20100423.pdf](http://www.uspto.gov/patents/init_events/metrics_for_roundtable_20100423.pdf). The USPTO also published a notice in the Federal Register on April 27, 2010, informing the public of the availability of the proposed quality metrics on the USPTO's Internet Web site, and announcing that the USPTO was conducting two roundtables and requesting public comment on methods to measure and improve overall patent quality. See Notice of Roundtables and Request for Comments on Enhancement in the Quality of Patents and

on United States Patent and Trademark Office Patent Quality Metrics, 75 Fed. Reg. 22120 (Apr. 27, 2010), 1354 Off. Gaz. Pat. Office 174 (May 18, 2010).

The USPTO conducted the two roundtables in May 2010 and obtained stakeholder input from diverse organizations and individuals on proposed USPTO quality metrics. On May 10, 2010, the first roundtable moderated by Commissioner for Patents Robert Stoll and PPAC member Marc Adler was held at the Los Angeles Public Library. On May 18, 2010, the second roundtable moderated by Undersecretary of Commerce for Intellectual Property and USPTO Director David Kappos and PPAC member Marc Adler was held at the USPTO and available via webcast on the USPTO's Internet Web site at <https://uspto.connectsolutions.com/p29255780>.

Based upon the feedback from the roundtable discussions and from further public feedback and suggestions, and taking into account administrative issues such as ease and reliability of data gathering, the USPTO has refined the previous proposals and feedback into a new quality measurement procedure comprising a composite quality metric. The previous list of six proposed metrics has been expanded to include a seventh metric, which measures the quality of the initial search. The composite quality metric combines seven individual metrics, weighted in accordance with their perceived impact and reliability as an indicator of quality, into a single quality indicator as described below. Each individual metric is described in detail below.

The seven metrics which comprise the composite quality metric are as follows:

| Composite Quality Metric Components        |                                                                                                                |
|--------------------------------------------|----------------------------------------------------------------------------------------------------------------|
| Final Disposition Compliance Rate          | propriety of final dispositions of applications                                                                |
| In-Process Compliance Rate                 | propriety of Office actions on the merits during the prosecution                                               |
| First Action on the Merits Search Review   | degree to which the search conforms with the best practices of the USPTO                                       |
| Complete First Action on the Merits Review | degree to which the first action on the merits in an application conforms with the best practices of the USPTO |
| Quality Index Report (QIR)                 | statistical representation of quality-related events in the prosecution of the patent application              |
| External Quality Survey                    | experiences of patent applicants and practitioners with USPTO personnel and examination issues                 |

|                         |                                                                             |
|-------------------------|-----------------------------------------------------------------------------|
| Internal Quality Survey | experiences of examiners with internal and external interactions and issues |
|-------------------------|-----------------------------------------------------------------------------|

These metrics, described in detail below, combine to present a balanced view of quality issues at the USPTO. The first four of the metrics are based upon data from review of specific applications; the last three are global. The first four of the metrics are measured by the Office of Patent Quality Assurance (OPQA) at the USPTO, the fifth metric (QIR) relies upon objective statistical data taken from the USPTO PALM database, and the last two metrics are formed from surveys performed by an independent party. The metrics measure the quality of not only rejections and allowances, but also indicators such as searches, restrictions, and interviews.

OPQA is involved in reviews of actions for this quality initiative, which seeks to investigate areas for improvement in patent examination. The sample size of these reviews is not designed to provide a statistically valid basis for Art Unit-level or individual-level data such that it would be representative of an Art Unit's or examiner's work product. While OPQA also performs internal quality control functions, those internal reviews are separate and distinct from the seven metrics presented here. The purpose of these metrics is to better educate and enable participants in the patent process to identify and follow the best practices in the patent examination process.

The composite quality metric is being implemented at the beginning of fiscal year 2011. These metrics are expected to be redefined on a periodic basis, taking into account both internal and external feedback in order to better serve the needs of patent quality enhancement. Following implementation, the quality metrics data will be used to identify target areas where quality can be improved. Quality improvement efforts may include examiner training, revisions to examination procedure, and/or practitioner tips for best practices.

### **III. COMPOSITE QUALITY METRIC FOR FY 2011**

#### **A. FINAL DISPOSITION COMPLIANCE RATE**

The first metric, final disposition compliance rate, is a measure of the propriety of the final disposition of individual applications; i.e., allowance or final rejection. This compliance rate is performed by random sampling of USPTO actions that either allow or finally reject an application. The compliance rate is the percentage of reviewed applications in which no deficiency is found with respect to the Office's final determination concerning the patentability of the claims. A list of the factors measured in this metric is included in attachment 1.

Deficiencies are determined by a clear error standard. A clear error in the allowance of a claim is an unreasonable failure to make a rejection of the claim for one or more reasons provided in the patent laws. A clear error in making a rejection, objection, or other

requirement in a final rejection is the making of an unreasonable rejection, objection, or other requirement. If the action preferred by the SPE differs from the action taken by the examiner, it is considered a difference of opinion and not a clear error as long as the action taken by the examiner is reasonable. Where any clear error is found in the reviewed action which sets forth the final disposition of the application, that action is considered to be non-compliant. The number of compliant actions is divided by the total number of reviewed actions to yield the final disposition compliance rate.

Allowance compliance is determined by conducting a review of an application after a notice of allowance has been mailed but prior to patent grant. The focus of this review is on the Office's decision to allow the application. An allowed application is considered to be compliant if none of the allowed claims are found to be unpatentable for any reason provided in the patent laws. Review for allowance compliance will include, for example, inquiries as to whether any rejection that could have been made was omitted, and whether all claims were properly treated.

Similarly, finally rejected applications are considered to be compliant if they are free of any unreasonable rejection, objection, or other requirement that has a significant adverse impact on the ability of applicant to advance the prosecution on the merits of the application. The review also determines whether rejections that should have been made were omitted, and determines the correctness of indications of allowability. Review for final rejection compliance includes, for instance, inquiries as to whether the final rejection was premature and whether a rejection was maintained where the applicant's response was sufficient to overcome the rejection. Furthermore, as suggested by stakeholders, the review considers, for example, whether the rejection contains only objections or other issues that could have been addressed through a personal or telephone interview, and whether any claims that have been restricted from examination have been properly addressed.

Sampling of applications for this metric is performed by the USPTO's Office of Patent Quality Assurance (OPQA). The OPQA sample size is designed to yield Corps-level estimates of examination quality. The OPQA reviews are application-based and shared with SPEs and examiners. When an allowed application is found to contain a clear error in an allowed claim, the notice of allowance is rescinded and corrective action is taken. When a final action is found to contain a clear error in a rejection, objection or other requirement, if further prosecution ensues, correction is made when the application is next taken up for action.

Feedback is provided to the Patent Examining Corps through Corps-wide or Technology Center-specific training provided on a regular schedule that addresses the most frequently noted deficiencies. The final disposition compliance rate therefore attempts to measure the quality of the end product of patent examination and address problems on a Patent Examining Corps-wide basis.

## **B. IN-PROCESS COMPLIANCE RATE**

The second metric, in-process compliance rate, is a measure of the propriety of the actions taken during the course of examination in individual applications; *i.e.*, first and subsequent actions on the merits by the examiner. The compliance rate is the percentage of reviewed actions in which no deficiency is found in matters impacting the disposition of the case, such as rejections, indications of allowability, or restriction requirements. This compliance rate is established by random sampling of USPTO actions that are not final actions or allowances. A list of the factors measured in this metric is included in Attachment 1.

Deficiencies are instances of clear error (discussed with respect to final disposition compliance rate) that result in unnecessary expenditure of resources by either the USPTO or the applicant.

In such situations in which a clear error exists in the Office action, the review looks further into the consequences of the error. Where the error will result in multiple non-final actions, reopening of prosecution, the need on the part of applicant to file additional responses, a Notice of Appeal or a Request for Continued Examination (RCE), the consequence of the error will be increased costs both to the applicant and the Office. This metric seeks to measure instances where a clear error exists in an action that results in such unnecessary expenditure of resources. Review of actions for errors of any size or consequence is performed in the complete First Action On the Merits (FAOM) metric, as described in the next section, which complements the review performed in this metric.

Examples of situations that result in unnecessary expenditure of resources by either the USPTO or the applicant are clear errors that cause applicant to repeat a previously presented and non-responded to argument in response to a repeated rejection, point out that a claim limitation upon which patentability is clearly predicated is not found in the applied art, or point out that a reference is not prior art because of its date.

In contrast, examples of errors that are not counted as deficiencies include, for example, an inappropriate rejection of claims under 35 U.S.C. § 112 that also properly rejects the affected claims under 35 U.S.C. § 102 or 103 (a reply from the applicant would have been necessary regardless of whether an inappropriate rejection under 35 U.S.C. § 112 is present), or an inappropriate rejection based on a reference that is prior art under 35 U.S.C. § 102 but based upon the wrong statutory section (*e.g.*, 35 U.S.C. § 102(a) rather than 35 U.S.C. § 102(b)). In these situations, the deficiency would not be expected to have a negative impact on advancing prosecution.

If an action is taken that contains a clear error and would result in the unnecessary expenditure of resources by either the USPTO or the applicant, the action is considered deficient, and it is counted as non-compliant in this metric. The number of compliant actions is divided by the total number of reviewed actions to yield the in-process compliance rate.

Review for in-process compliance includes, for instance, inquiries as to whether the rejections made on art include a clear matching of limitations to the disclosure of the art, whether any interviews that were performed have been properly made of record in the file, and whether rejections should have been made but were not. Furthermore, as suggested by stakeholders, the review inquires into such topics as whether any restriction requirements were properly made and whether rejections based upon any grounds were reasonable and formulated in a clear manner.

Sampling of actions for this metric is also performed by the USPTO's Office of Patent Quality Assurance. The sample is designed to yield Corps-level estimates of examination quality, and the aggregate data will be used in training and for public dissemination. Where an action is found to contain a clear error in a rejection, objection, or other requirement, if further prosecution ensues, correction is made when the application is next taken up for action.

Feedback is provided to the Patent Examining Corps through Corps-wide or Technology Center specific training provided on a regular schedule that addresses the most frequently noted deficiencies. The in-process compliance rate therefore attempts to measure the quality of the actions taken by the examiner during patent examination, and address any issues on a broad Patent Examining Corps-wide basis.

### **C. FIRST ACTION ON THE MERITS (FAOM) SEARCH REVIEW**

The third metric is a detailed measure of the degree to which the initial search performed by the examiner conforms with the best practices of the USPTO. The FAOM search review will be performed by random sampling of first actions on the merits in applications currently undergoing examination. This review analyzes the examiner's search in these cases, thus providing the first USPTO quality metric focused solely upon the Office's initial search. A list of the search-related factors measured in this metric is included in Attachment 2.

Stakeholder input received during the course of this quality initiative indicated that the quality of the initial search is an extremely important indicator of the quality of the examination process. The determination of best practices for the examiner's initial search of the application has been made based upon Office experience and stakeholder input. Practices noted by the Office as resulting in useful search results include constructing the search to include inventive concepts to which the claims appear to be directed, selection of relevant classifications, and recordation of the search performed. Practices noted by stakeholders include proper use of synonyms, careful evaluation of art submitted by applicant, and the re-use of work product from other patent Offices. These noted practices have been collected for use in this metric.

Each sampled application will be measured against factors representing these best practices. For example, the re-use of work product from other patent Offices, noted by stakeholders as a best practice for examination, will be measured through two factors in

the examiner's recorded search. One factor will be associated with the proper consideration of a search report from another Office. A second factor will be associated with the examiner's notation of searching other Offices for actions taken on related cases, through a computerized system available to examiners known as the USPTO "Passport" system.

Under this FAOM search metric, individual applications are assigned a score based upon their compliance with best practices at the USPTO. The initial search in each sampled application will be measured against the list of factors based upon best practices assembled from stakeholder and USPTO input. For each of the "best practices" that are exhibited in the search, the application will receive a certain number of points. 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 factor.

For example, recordation of an inventor name search, appropriate classes and subclasses, and consideration of the references in an applicant's information disclosure statement will each accord points for that application. These points are summed for each application into a total score for that individual application. This metric is calculated as the average of the individual scores of the reviewed applications chosen by random sampling.

In a similar manner to the currently-used metrics discussed above, sampling will be performed by the USPTO's Office of Patent Quality Assurance. Feedback will be provided to the Patent Examining Corps through Corps-wide or Technology Center specific training provided on a regular schedule that addresses the most frequently noted deficiencies.

#### **D. COMPLETE FIRST ACTION ON THE MERITS (FAOM) REVIEW**

The fourth metric is a detailed measure of the degree to which the first action on the merits in an application conforms with the best practices of the USPTO. The complete FAOM review will be performed by random sampling of first Office actions on the merits in applications currently undergoing examination, providing a similar analysis to the in-process review but in much greater detail. This review analyzes the Office's action on a claim-by-claim basis. This type of sampling will identify and measure issues relating to the Office's treatment of applications not currently measured by the in-process or final disposition reviews. A list of the factors measured in this metric is included in Attachment 1.

Stakeholder input from the roundtable discussions indicated that there are extremely important indicia of quality present in the first action on the merits. Both stakeholders and the USPTO agree that a high quality first action on the merits can lower pendency by eliminating the need for unnecessary further actions. The USPTO also received stakeholder input that the USPTO's patent quality measures should include a measure of the propriety of restriction requirements.

Based on stakeholder input, this factor has been modified from its originally proposed format as published on the USPTO's Internet Web site on April 23, 2010. The original proposal set forth two options, one focused on applications currently undergoing examination, the other focused on applications following their ultimate disposition; i.e., those that have been patented or abandoned.

In accordance with the stakeholder emphasis on quality from the beginning of the examination process, this metric has been tailored to provide an in-depth review of the first actions on the merits so as to result in a detailed score of the action representing compliance with all aspects of the initial examination process. Additionally, the focus on first actions permits this metric to be compared on a yearly basis, as the metric will measure a representative sample of first actions issued within a single fiscal year. In this way, this metric will be responsive to the yearly effects of USPTO initiatives, training, and changes in the legal framework upon examination. While an end-to-end forensic analysis of a small set of disposed cases was also considered, stakeholder feedback and administrative review indicated that an enhanced focus on first actions in a single year would address the factors most noted as important to the prosecution process, and permit year-to-year comparisons that facilitate a quick response by the USPTO to any quality issues identified by the metric.

This metric is calculated as the average of the individual scores of the reviewed applications chosen by random sampling. Under this metric, individual applications are assigned a score based upon their compliance with best practices at the USPTO. Best practices are based upon USPTO experience and stakeholder input, and include, but are not limited to, factors such as proactive use of interviews to resolve issues, propriety of all rejections, requirements (including restriction requirements), and objections, and compliance with statutory requirements, Manual of Patent Examining Procedure (MPEP) guidelines, and compact prosecution principles.

Each measured factor is assigned points commensurate with its estimated impact on the examination process. 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. For factors addressing the propriety of rejections and indications of allowable subject matter, each claim will be addressed, and the action will receive points based on the percentage of claims without an improper or omitted rejection.

In a similar manner to the currently-used metrics discussed above, sampling will be performed by the USPTO's Office of Patent Quality Assurance. When an allowed application is found to contain a clear error an allowable claim, the Notice of Allowance is rescinded and corrective action is taken. In the instance where a final action is found to contain a clear error in a rejection, objection, or other requirement, if further prosecution ensues correction is made when the application is next taken up for action.

Feedback will be provided to the Patent Examining Corps through Corps-wide or Technology Center specific training provided on a regular schedule that addresses the most frequently noted deficiencies.

## **E. QUALITY INDEX REPORT**

The fifth quality metric, quality index report (QIR), is a measure of the degree to which actions in the prosecution of all patent applications reveal trends indicative of quality concerns. This new index is based on data currently available through the USPTO's Patent Application Locating and Monitoring (PALM) internal tracking system. This index is calculated by statistical analysis of occurrences of certain types of events as recorded in PALM; *e.g.*, instances of reopening of final rejections, second non-final actions, and the filings of RCEs, from a data set that includes events (actions by the USPTO) taken during the prosecution of all of the applications pending before the USPTO in a reporting period.

The USPTO PALM system records and tracks the types of events in each prosecution by associating a specific code with each type of event. For example, each action on the merits by an examiner is given a code, and different codes distinguish between non-final actions, final actions, and notices of allowance. Similarly, codes are associated with filings by applicant, such that a filed response to an Office action is distinguished from a filed information disclosure statement. The PALM system can be used to track and count specific occurrences of these codes, such as the number of first actions on the merits and the number of allowances. Additionally, PALM can be used to track and count more sophisticated occurrences, such as the number of occurrences of consecutive non-final rejections, or the number of occurrences where a Quayle action followed by a non-final rejection.

The index applies an algorithm that computes numerical factors, wherein each factor quantifies the occurrence of designated events during prosecution that are reflective of the quality of the patent examination. This algorithm then processes the raw statistical data into a single number, the QIR. The USPTO will measure and make available, on a regular basis, the single QIR number as well as the factors upon which it is calculated, as described in detail below.

For example, one of the factors in the QIR metric is an action reopening prosecution after a final rejection. This type of action has been identified by patent stakeholders as indicating an issue relating to the quality of that final rejection. While there may be specific circumstances in individual applications such that the reopening of prosecution is not related to a defect in the quality of examination, the aggregate number of actions reopening prosecution after final rejection reflects a measure of the general quality of final rejections. This aggregate number is measured on a yearly basis, and standardized against a percentage of the total number of final rejections issued in that year, resulting in a numerical factor representative of reopened final rejections.

Each of the various factors is given equal weighting in the QIR composite number. The factors are then summed to result in the QIR composite number. The factors comprising the QIR are as follows:

| Quality Index Report (QIR) Factors |                                                                         |
|------------------------------------|-------------------------------------------------------------------------|
| Actions Per Disposal               | % employees averaging less than 3 actions per disposal                  |
| RCEs of Total Disposals            | % disposals that are not RCEs                                           |
| Reopenings After Final             | % final actions not reopened                                            |
| Non-FAOM Non-Final Actions         | % non-final actions that are not second or subsequent non-final actions |
| Restrictions After First Action    | % total restrictions not made on second or subsequent action            |

The first factor, actions per disposal, is the percent of employees in the entire examination corps who have averaged less than three actions per disposal during the reporting period. For this factor, a disposal is an action that is an allowance, an abandonment, an examiner's answer, an International Preliminary Examination Report under PCT Chapter II, or an interference action. The second factor, RCEs of total disposals, is the percent of total disposals that are not RCEs; *i.e.*, those disposals that are not the disposal credit consequent to the filing of an RCE. The third factor, reopenings after final, is the percentage of final actions that are taken and not subsequently reopened within the reporting period. The fourth factor, non-FAOM non final actions, is the percent of non-final actions that are not second or subsequent non-final actions. The last factor, restrictions after first action, is the percent of total restrictions that are made in an action other than a second or subsequent action on the merits.

The use of global data provides an alternative to the approach of sampling applications to see whether there was extended prosecution and making individual determinations of whether the USPTO was the cause of the extended prosecution. This approach permits the USPTO to base this measure on a review of the examination quality for all applications and without the need for subjective individual determinations. Furthermore, the use of a global dataset permits analysis of trends within targeted subgroups; for example, within hoteling examiners or within primary examiners.

The data used in the QIR calculation will exclude those examiners with less than one year of service at the beginning of each fiscal year. This exclusion is due to significant differences found for that subgroup as compared to the general USPTO population. These differences result, in large part, from the dependence of the QIR data on a full examination docket, including disposals and RCEs, which takes time to fully develop.

The QIR will be used to indicate examination trends discernable from the global data, and is expected to be used to develop and disseminate targeted examination guidance. Such a QIR is anticipated to be particularly useful in identifying outlier data representing the need for focused review of an issue in order to address potential quality concerns.

In initiating this QIR metric, data will be obtained from the USPTO's PALM internal tracking system, processed through the designated algorithms, tested for reliability, and then stored in a form designed for rapid retrieval. Data gathering thus occurs on a Patent Corps-wide scale and represents a "big picture" view of the quality of the examination process. QIR data will be analyzed to identify outlier populations that may signal the presence of quality or procedural issues that need to be addressed. The QIR is intended to complement the application-specific quality measures such as final disposition review and in-process review, and additionally may be used to gauge the effectiveness of USPTO initiatives to address quality issues identified by the application-specific quality measures. QIR data may additionally be used to identify superior examination practices, from which best practices can be identified and shared.

#### **F. EXTERNAL QUALITY SURVEY**

The sixth metric, external quality survey data, is a measure of the degree to which the experience of patent applicants and practitioners reveal trends and issues indicative of quality concerns. Quantitative external quality survey data will be gathered through responses to posed questions requiring rating of the respondent's experience on a numerical scale. Such external quality surveys have been used previously to gather quality data, and the prior experience with formulating questions and analyzing survey data will be applied to the use of such surveys as a quality metric. The USPTO will measure an external perception of quality to complement and support the measures listed above through issuing targeted surveys to patent applicants and practitioners. A sample external quality survey is included in attachment 3.

The USPTO will commission semi-annual surveys to ascertain applicant and practitioner perception of issues addressed by the composite quality metric. External quality surveys of this nature have been conducted since the beginning of fiscal year 2007 and are currently in their 13th round of administration. The surveys have been developed and administered by a contractor having extensive experience in survey design, administration, and analysis. All Office of Management and Budget (OMB) procedures and requirements have been satisfied.

The surveys will request the applicant or practitioner to answer certain questions relating to their experiences over the prior quarter; *i.e.*, over the preceding three month period. Surveys will ask the respondent to rate, on a numerical scale, their perception of the quality of the decisions on allowed patents, their perception of the quality of rejections made on a first action on the merits, and their perception of the quality of final rejections. Respondents will then rate each category based upon their personal prosecution experience for that year. Furthermore, as suggested by stakeholders, the USPTO will

request respondent perception of such issues as the quality of search performed by examiners.

As another example, questions in surveys commissioned by the USPTO will seek to ascertain an external perception of issues not addressed by any other factors, to thereby present a more complete representation of the patent process. Such survey questions can address issues of the respondent's experience with patent examiners, supervisors, and Technology Center directors, as well as the effects of recent training initiatives such as examiner training on formal interviews.

Furthermore, as suggested by stakeholders, applicants' and practitioners' experience will be gauged by addressing specific experiences; for instance, with examiner interviews. Since communication between the examiner and the applicant or practitioner has been identified by patent stakeholders as playing a vital role in effective examination, survey questions will address whether the interview involved the presence of a negotiating authority and/or the inventors, as well as the extent of the examiner's application of relevant standards and laws and the examiner's overall preparedness for the interview.

Each question will ask respondents to rate their experience with a specific issue on a numeric scale, typically, from 1 (poor) to 5 (excellent). For a 5 point scale, a response of 1 or 2 represents a negative experience, and 4 or 5 represents a positive experience; for a 4 point scale, 1 or 2 represents a negative experience, and 3 or 4 represents a positive experience. The ratio of positive to negative experiences will be calculated for each question, and ratios for each question, as well as the raw tabulated data, will be made available on the USPTO's Internet Web site. One question will be directed to the overall examination quality, and the ratio of positive to negative responses for this question will be used as the score for the external quality survey metric.

## **G. INTERNAL QUALITY SURVEY**

The seventh metric, internal quality survey, is a measure of the degree to which the experience of patent staff such as patent examiners and supervisory patent examiners (SPEs) reveals trends and issues indicative of quality concerns. Quantitative internal quality survey data will be gathered through responses to questions in which the examiners rate, on a numerical scale, their experiences over the prior quarter; *i.e.*, over the preceding three month period. A sample internal quality is included in Attachment 4.

The USPTO will commission semi-annual internal quality surveys containing questions mirroring the questions in external quality surveys, as well as questions specific to the examination experience. The USPTO intends to use the same experienced contractor as for the external quality surveys to develop and administer the internal quality surveys. It is expected that this process will be concluded in sufficient time to allow the first internal quality survey to be administered concurrently with the next round of administration of the external quality survey.

Survey questions will inquire into the examiners' experience with supervisory patent examiners, examination tools such as e-Red folder, and the effects of recent training initiatives such as examiner training on formal interviews. Surveys will also inquire into such issues as the quality of IDS filings and the extent to which applicants and/or their representatives effectively used interviews to advance prosecution.

Furthermore, based on stakeholders' input from the May 2010 roundtable discussions and written comments, this review will inquire into the examiners' experience with the quality of claim drafting, such as over breadth, compliance with 35 U.S.C. § 112, second paragraph, and the extent to which claims are drafted to capture the concept of the invention. Both the stakeholders and the USPTO strongly believe that the implementation of such a review and the data collected therefrom, will prove to be a valuable aid in to the USPTO in gauging and improving patent examination quality.

Each question will ask examiners to rate their experience with a specific issue on a numeric scale, typically, from 1 (poor) to 5 (excellent). For a 5 point scale, a response of 1 or 2 represents a negative experience, and 4 or 5 represents a positive experience; for a 4 point scale, 1 or 2 represents a negative experience, and 3 or 4 represents a positive experience. The ratio of positive to negative experiences will be calculated for each question, and ratios for each question, as well as the raw tabulated data, will be made available on the USPTO' Internet Web site. One question will be directed to the overall examination quality, and the ratio of positive to negative responses for this question will be used as the score for the internal quality survey metric.

#### **IV. THE ANNUAL COMPOSITE QUALITY METRIC**

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.

The composite quality metric, as well as each individual metric, will be revisited on a periodic basis. Regular stakeholder feedback on the usefulness of particular metrics as quality tools, including the presence of any unexpected side-effects of a particular metric acting detrimental to quality, is critical to the success of the composite quality metric as a tool for improving the patent process.

The composite quality metric is designed to yield a comprehensive picture of overall patent quality. Stakeholders have noted that any metric based solely on a single factor, such as an allowance rate, is prone to unintended effects. If only the allowance rate is considered, pursuit of improvement in that area may unintentionally result in an increase in improper rejections in order to reach a target allowance goal. The composite metric being implemented imposes a balanced response to quality concerns, such that the overall quality of the patent process will be improved.

Another objective of the USPTO's 2010-2015 Strategic Plan is that increased quality be coupled with communicating to the stakeholder community a clear understanding of the meaning of a quality patent, with transparent metrics that are meaningful to all stakeholders. This desire for transparency in quality procedures was expressed as being desirable by stakeholders in the comments and roundtable discussions. Therefore, in addition to the composite quality metric, the USPTO will publish the scores for each component on the USPTO's Internet Web site.

By making the quality measurement process as transparent as practicable, the USPTO is inviting and encouraging public participation in the process. In particular, the public is encouraged to find new correlations and suggest improvements to the quality measurement process. For example, at least two elements of the complete FAOM metric reflect examiner re-use of work from other patent Offices. Should a stakeholder discover a correlation of these elements with overall quality, or with a different element such as actions per disposal, or with a recent training initiative, such a correlation could lead to a refinement of quality measurement and to improved examination and prosecution procedures.

#### **A. CALCULATION OF THE METRIC**

The composite quality metric is calculated by determining the progress in each component metric towards the desired five-year goal, applying a weighting factor to each metric and summing the weighted progress in each metric to determine the overall progress towards the composite quality goal. The composite metric is designed to quantify the total progress made over all of the seven metrics. Therefore, the composite quality metric is designed to combine the results for each of individual metrics, which are directed to different types of measurements. The first two metrics involve subjective determinations of "clear error," and the third and fourth metrics involve subjective determinations of compliance with "best practices"; whereas the fifth metric uses objective data on types of actions issued, and the sixth and seventh metrics measure subjective perceptions of the quality of examination. In order to present a single measure of all of these varied types of metric data, the composite quality metric looks at the progress made in each individual metric over the reporting period. The composite quality metric therefore reports the overall progress made in achieving a higher standard of examination quality.

To determine the progress in each individual metric, each component of the composite quality metric is correlated with a base goal and a stretch goal. A stretch goal is differentiated from a performance target in that reaching a stretch goal requires some innovative change from current process. In terms of this metric, a quality stretch goal is one that is unlikely to be reached absent application of the results of the quality metric towards creating new Office initiatives addressing the identified quality concerns.

In calculating the composite quality metric, both the base goal and the stretch goal are calculated with reference to the value of the composite quality metric at the time a new

quality period is defined. For the five-year period beginning in FY 2011, values for the base goal are based on actual data where available, and estimated data for metrics or factors not previously used by the USPTO. The stretch goal is calculated relative to the base goal, and is set to encourage efforts to advance the quality of the patent process, while taking into account that effort beyond a certain level will offer only diminishing returns.

The progress in each metric is a function of the current metric value ( $C_1$ ), the base year metric value ( $B_0$ ) and the stretch goal metric value ( $S_0$ ), wherein the progress to the stretch goal ( $CS_1$ ) is expressed by the formula  $[1 + ((C_1 - B_0) / (S_0 - B_0))] * 100$ . The current metric value  $C_1$  will be established quarterly for each of the metrics based on gathered data.

The base year metric value  $B_0$  is the value of the metric at the initiation of the quality metric. For the five-year period beginning in FY11,  $B_0$  is taken from actual data where available; *i.e.*, for the final disposition, in-process, QIR, and external quality survey metrics. The value of  $B_0$  is estimated where unavailable; *i.e.*, for the FAOM search review, complete FAOM review, and internal quality survey metrics.

The stretch goal metric value  $S_0$  is the desired value of the metric at the end of the five-year period. For the five-year period beginning in FY11,  $S_0$  has been set to represent an aspirational increase in quality for each metric.

The composite quality metric is then calculated by weighting each progress value  $CS_1$ , and summing the weighted values to result in the composite quality score. The calculation is shown below, using mock, not actual, data for illustration purposes only: See table in Attachment 5.

The composite quality metric thus rates current performance against historical statistical achievements and progression towards desired levels of performance. Every component of the composite is standardized to values that range from 0 to 200, and the ratios of change are normalized to represent progression towards a superior level of service. A component or composite score of 100 represents the statistical achievement in the base year used for comparison (in the example, the base year is established as FY09). A component or composite score of 200 represents attainment of a superior level of performance identified as the stretch goal. The component and composite scores can be reported as percentage changes from the base year (cumulative progression) or as percentage changes from a previous reporting period (annual performance) much like common indices such as the Consumer Price Index are reported. The illustrative data used above would indicate progression toward the stretch goal.

## **B. REPORTING THE METRIC**

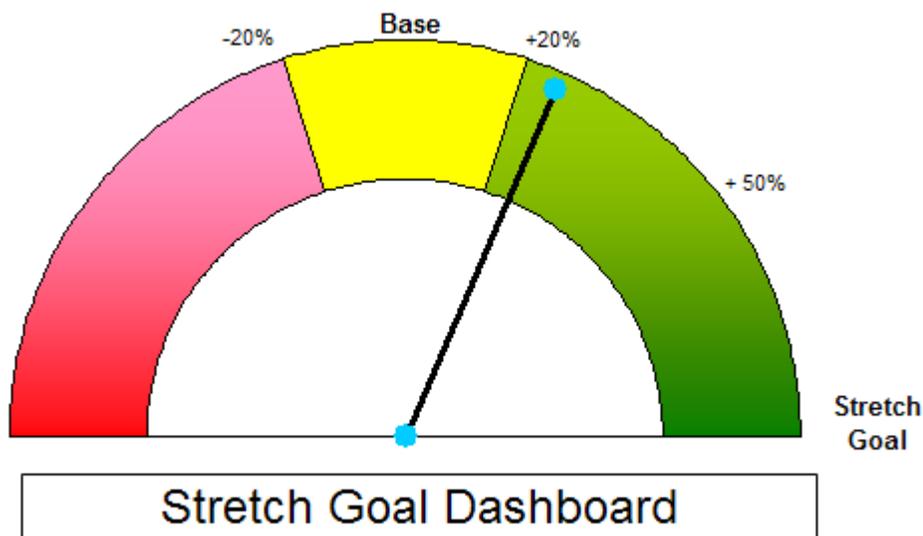
The USPTO is fully committed to full transparency with respect to patent quality measurement. To that end, the USPTO is creating a “dashboard” of progression meters that represent the composite quality metric, each of the seven component metrics, and

other patent quality data to the extent practicable. Patent quality data can practicably be made public to the extent that the data is not linked to any specific application. For example, data comprising the QIR factors, to the degree that associations with specific applications are not revealed, will be made public.

Furthermore, the reporting level of the composite will be limited to lowest reporting level of any one component. The lowest reporting level will be discipline-level (or combination of similar Technology Centers) since the external quality survey does not provide statistically-valid indications beyond that level of organization. For the most part, any component metric that is obtained through sampling methods will only be available to be reported at the discipline or Corps-level. Sample sizes necessary to provide accurate and precise indications of these metrics at the TC, art unit, or examiner level are cost-prohibitive. While every attempt will be made to provide as much reporting detail as possible for each component, reporting of such details will only be done when there is sufficient data to ensure perceived differences between organizational levels are statistically valid.

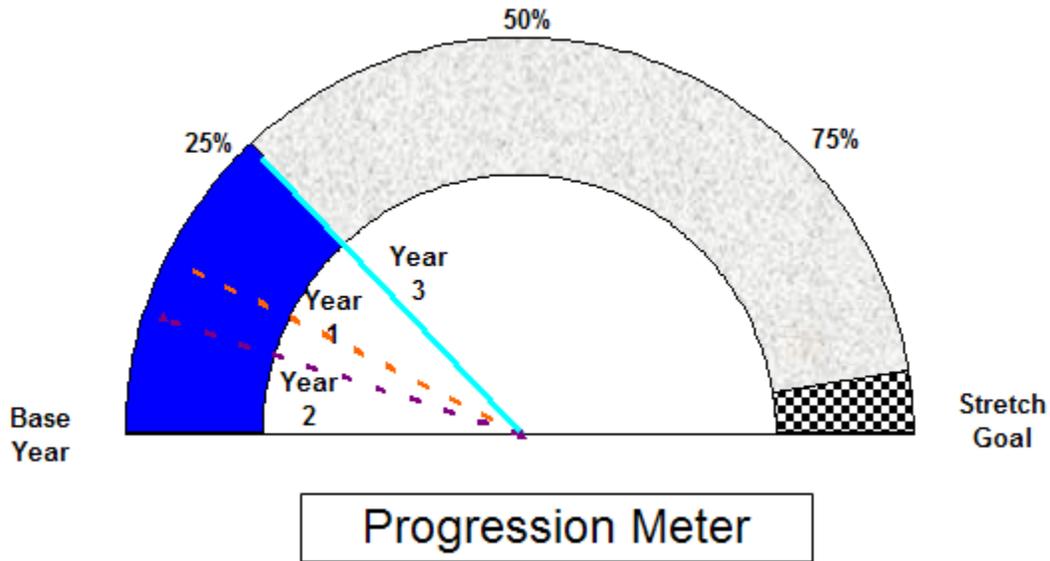
The dashboard, which will be posted on the USPTO's Internet Web site and updated on a monthly basis, will display the seven individual metrics, and the composite quality metric, as a progression towards the five-year quality goal. For each individual metric, and for the composite metric, a progression meter will graphically display the progression towards the base and stretch goals. This progression meter will provide a simplified visual depiction of the progress towards the quality goals during a given fiscal year.

The metric progression meter will provide a graphical display of data; an exemplary display is shown below:



The dial represents deviation from the Base Period in terms of progression towards meeting the stretch goal. A dial reading in the red zone indicates that quality is below the established baseline. A dial reading in the green zone indicates that adequate progress is being made towards the stretch goal.

Additionally, another progression meter will track the year-by-year progression towards the five-year goal:



In this progression meter, the solid bar represents the current progression towards the stretch goal. The total dial represents the distance between the base period and the Strategic Plan stretch goal. Dashed lines indicate progression distance (% of stretch goal achieved) at the end of a given fiscal year.

The use of a progression meter provides the USPTO and the patent community with a forward-looking view of quality as a continual effort to improve, rather than merely a rearview image of past quality. The use of progressive quality measurements encourages efforts by both the USPTO and the stakeholders in the patent community to continually improve procedures in patent examination and prosecution. Such improvements may take the form of examiner training, revisions to examination procedure, and/or practitioner tips for best practices in prosecution. Implementation of this composite quality metric thus constitutes the next, but not the final, step in the joint USPTO-PPAC project relating to overall patent quality.

Attachment 1:

**In-Process, Final Disposition, and Complete FAOM Reviews**

|                                                     | Complete FAOM Review   |   | In-Process                   |   | Final Disposition            |                       |                              |
|-----------------------------------------------------|------------------------|---|------------------------------|---|------------------------------|-----------------------|------------------------------|
|                                                     |                        |   | IPR Form Non-Final Actions   |   | IPR Form Final Rejections    | Allowance Review Form |                              |
| <b>Omitted Rejections</b>                           |                        |   |                              |   |                              |                       |                              |
| 35 U.S.C. 102                                       | <i>Per Claim basis</i> | ✓ | <i>Per Application basis</i> | ✓ | <i>Per Application basis</i> | ✓                     | <i>Per Application basis</i> |
| 35 U.S.C. 103                                       |                        | ✓ |                              | ✓ |                              | ✓                     |                              |
| 35 U.S.C. 112 1 <sup>st</sup> , Written Description |                        | ✓ |                              | ✓ |                              | ✓                     |                              |
| 35 U.S.C. 112 1 <sup>st</sup> , Enablement          |                        | ✓ |                              | ✓ |                              | ✓                     |                              |
| 35 U.S.C. 112 2 <sup>nd</sup>                       |                        | ✓ |                              | ✓ |                              | ✓                     |                              |
| 35 U.S.C. 101 (Utility)                             |                        | ✓ |                              | ✓ |                              | ✓                     |                              |
| 35 U.S.C. 101 (Non-Statutory)                       |                        | ✓ |                              | ✓ |                              | ✓                     |                              |
| Double Patenting                                    |                        | ✓ |                              | ✓ |                              | ✓                     |                              |
| Other                                               |                        | ✓ |                              | ✓ |                              | ✓                     |                              |
| <b>Rejections Made - Reasonableness</b>             |                        |   |                              |   |                              |                       |                              |
| 35 U.S.C. 102                                       | <i>Per Claim basis</i> | ✓ | <i>Per Application basis</i> | ✓ | <i>Per Application basis</i> |                       |                              |
| 35 U.S.C. 103                                       |                        | ✓ |                              | ✓ |                              |                       |                              |
| 35 U.S.C. 112 1 <sup>st</sup> , Written Description |                        | ✓ |                              | ✓ |                              |                       |                              |
| 35 U.S.C. 112 1 <sup>st</sup> , Enablement          |                        | ✓ |                              | ✓ |                              |                       |                              |
| 35 U.S.C. 112 2 <sup>nd</sup>                       |                        | ✓ |                              | ✓ |                              |                       |                              |
| 35 U.S.C. 101 (Utility)                             |                        | ✓ |                              | ✓ |                              |                       |                              |
| 35 U.S.C. 101 (Non-Statutory)                       |                        | ✓ |                              | ✓ |                              |                       |                              |
| Double Patenting                                    |                        | ✓ |                              | ✓ |                              |                       |                              |
| Other                                               |                        | ✓ |                              | ✓ |                              |                       |                              |
| <b>Rejections Made - Clarity</b>                    |                        |   |                              |   |                              |                       |                              |
| 35 U.S.C. 102                                       | <i>Per Claim basis</i> | ✓ | <i>Per Application basis</i> | ✓ | <i>Per Application basis</i> |                       |                              |
| 35 U.S.C. 103                                       |                        | ✓ |                              | ✓ |                              |                       |                              |
| 35 U.S.C. 112 1 <sup>st</sup> , Written Description |                        | ✓ |                              | ✓ |                              |                       |                              |
| 35 U.S.C. 112 1 <sup>st</sup> , Enablement          |                        | ✓ |                              | ✓ |                              |                       |                              |
| 35 U.S.C. 112 2 <sup>nd</sup>                       |                        | ✓ |                              | ✓ |                              |                       |                              |
| 35 U.S.C. 101 (Utility)                             |                        | ✓ |                              | ✓ |                              |                       |                              |
| 35 U.S.C. 101 (Non-Statutory)                       |                        | ✓ |                              | ✓ |                              |                       |                              |
| Double Patenting                                    |                        | ✓ |                              | ✓ |                              |                       |                              |
| Other                                               |                        | ✓ |                              | ✓ |                              |                       |                              |

|                                                                            | Complete<br>FAOM<br>Review | In-Process<br>IPR Form<br>Non-Final<br>Actions | Final Disposition               |                             |
|----------------------------------------------------------------------------|----------------------------|------------------------------------------------|---------------------------------|-----------------------------|
|                                                                            |                            |                                                | IPR Form<br>Final<br>Rejections | Allowance<br>Review<br>Form |
| <b>Rejections Made - Other</b>                                             |                            |                                                |                                 |                             |
| 35 U.S.C. 102: Claim limitations matched to the art                        | ✓                          |                                                |                                 |                             |
| 35 U.S.C. 102: Statement of inherency clearly explained                    | ✓                          |                                                |                                 |                             |
| 35 U.S.C. 102: Statement of inherency clearly explained                    | ✓                          |                                                |                                 |                             |
| 35 U.S.C. 103: Claim limitations matched to the art                        | ✓                          |                                                |                                 |                             |
| 35 U.S.C. 103: Differences clearly stated                                  | ✓                          |                                                |                                 |                             |
| 35 U.S.C. 103: Modification or combination of references clearly explained | ✓                          |                                                |                                 |                             |
| 35 U.S.C. 103: Motivation/reasons for obviousness present                  |                            |                                                |                                 |                             |
| 35 U.S.C. 103: Inherent teachings clearly explained                        | ✓                          |                                                |                                 |                             |

|                                                                                                  | Complete<br>FAOM<br>Review | In-Process<br>IPR Form<br>Non-Final<br>Actions | Final Disposition               |                             |
|--------------------------------------------------------------------------------------------------|----------------------------|------------------------------------------------|---------------------------------|-----------------------------|
|                                                                                                  |                            |                                                | IPR Form<br>Final<br>Rejections | Allowance<br>Review<br>Form |
| <b>Other Prosecution Matters</b>                                                                 |                            |                                                |                                 |                             |
| Interviews: Record of interview is clear and complete                                            | ✓                          |                                                |                                 |                             |
| Interviews: Interview was examiner-initiated and substantive in nature                           | ✓                          |                                                |                                 |                             |
| Examiner properly handled Sequence Compliance Issues                                             | ✓                          |                                                |                                 |                             |
| Examiner properly handled Restriction issues                                                     | ✓                          |                                                |                                 |                             |
| Examiner properly treated Claims for Priority                                                    | ✓                          |                                                |                                 |                             |
| Examiner properly treated matters of substance in papers filed by applicant prior to examination | ✓                          |                                                |                                 |                             |
| Search report from another office present and properly evaluated                                 | ✓                          |                                                |                                 |                             |
| Early and correct indication of allowable subject matter                                         | ✓                          |                                                |                                 |                             |
| Action provides correct suggestions to overcome rejection(s)                                     | ✓                          |                                                |                                 |                             |

|                                                                                                              | Complete<br>FAOM<br>Review | In-Process                       | Final Disposition               |                             |
|--------------------------------------------------------------------------------------------------------------|----------------------------|----------------------------------|---------------------------------|-----------------------------|
|                                                                                                              |                            | IPR Form<br>Non-Final<br>Actions | IPR Form<br>Final<br>Rejections | Allowance<br>Review<br>Form |
| <b>In-Process Examination Deficiency (IPED)</b>                                                              |                            |                                  |                                 |                             |
| Reason for IPED: Clear error in 102 or 103 rejection                                                         |                            | ✓                                | ✓                               |                             |
| Reason for IPED: Clear error in 101, 112 1 <sup>st</sup> paragraph, or ODP rejection                         |                            | ✓                                | ✓                               |                             |
| Reason for IPED: A 131 or 132 affidavit or declaration was not properly treated                              |                            | ✓                                | ✓                               |                             |
| Reason for IPED: Rejections are substantially repeated without substantively addressing applicant's response |                            | ✓                                | ✓                               |                             |
| Reason for IPED: Omitted rejection                                                                           |                            | ✓                                | ✓                               |                             |
| Reason for IPED: Clear error in requirement for Restriction                                                  |                            | ✓                                | ✓                               |                             |
| Reason for IPED: Other item captured as serious problem                                                      |                            | ✓                                | ✓                               |                             |

Attachment 2:

**FAOM Search Review**

|                                                                                                                                                                     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| The FAOM Search Review involves a review of the following search-related factors:                                                                                   |
|                                                                                                                                                                     |
| Search covers an appropriate combination of sources: US Patents and PGPubs                                                                                          |
| Search covers an appropriate combination of sources: Foreign Patents                                                                                                |
| Search covers an appropriate combination of sources: Non-Patent Literature                                                                                          |
| Specialized tools relevant to the technology have been utilized where appropriate                                                                                   |
| Inventor name search performed                                                                                                                                      |
| Search is recorded in the OACS "Search Notes" page                                                                                                                  |
| Print out including all search queries and names of files searched is present                                                                                       |
| If appropriate to technology, search includes a combination of text search with other criteria to identify relevant art                                             |
| Classified Search includes required classes/subclasses                                                                                                              |
| Backwards and Forwards searches used as appropriate                                                                                                                 |
| Text Search: Synonyms for terms used in application included                                                                                                        |
| Text Search: Proximity and Boolean operators properly applied                                                                                                       |
| Text Search: Truncation used                                                                                                                                        |
| Text Search: Alternative spellings included                                                                                                                         |
| Text Search: No typographical errors                                                                                                                                |
| Text Search: Search terms are of reasonable breadth and are combined in a manner so as to capture of the invention without excluding potentially relevant prior art |
| Applicant's Information Disclosure Statement(s) considered                                                                                                          |
| Prior art cited in foreign counterpart application(s) considered                                                                                                    |
| Examiner consulted Passport and annotated                                                                                                                           |

## Attachment 3: External Quality Survey



# Winter 2010

## United States Patent and Trademark Office

### Quality Survey

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According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number of this information collection is 0651-0057. The time required to complete this information collection is estimated to average 10 minutes per response, including the time to review instructions, search existing data resources, gather the data needed, and complete and review the information collection. If you have any comments concerning the accuracy of the time estimate(s) or suggestions for improving this form, please write to: Chief Information Officer, U.S. Patent and Trademark Office, Washington DC 20231. If you have comments or concerns regarding the status of your individual submission of this form, write directly to: Martin Rater, U.S. Patent and Trademark Office, Patent Quality Assurance, 600 Dulany Street, Alexandria, VA 22314.



## PURPOSE OF THE UNITED STATES PATENT AND TRADEMARK OFFICE (USPTO) QUALITY SURVEY

This United States Patent and Trademark Office Quality Survey is an instrument designed to measure your opinions about the services that we provide for you. The results from this voluntary survey will assist us in guiding improvements and enhancements in the future.

### Survey Completion Instructions

Please complete the survey based upon your overall experience working with U.S. Patent Examiners *over the past 3 month time period.*

We estimate that it will take no longer than 10 minutes to complete the survey. If you have any questions, please call Howard King at Westat, at 1-888-516-1169 or send an email to [USPTO-QS@westat.com](mailto:USPTO-QS@westat.com).

Your participation is entirely voluntary, and if you choose to complete the survey, all of your responses will remain completely **confidential**.

### Special Internet Option:

You have the option of responding to this survey over the Internet. Please see the materials that accompanied this survey for instructions. If you respond using the Internet, please discard this survey.

## Thank you for your assistance.

# Winter 2010 USPTO Quality Survey

## QUESTIONS ABOUT YOU

1. What is your affiliation?
  - ① Law Firm or Sole Practitioner
  - ② Corporation
  - ③ Independent Inventor
  - ④ Other (University, Federal Government, etc.)
  
2. Which technology field listed below best describes the majority of patent applications you have filed over the past 3 months? (SELECT ONLY ONE)
  - ① Chemical (Technology Centers 1600 or 1700)
  - ② Electrical (Technology Centers 2100, 2600, or 2800)
  - ③ Mechanical (Technology Centers 3600 or 3700)
  - ④ Designs (Technology Center 2900)
  - ⑤ Did not file a patent application in the past 3 months
  
3. Approximately how many Office Actions have you received during the past 3 months?
  - ① 1 to 10
  - ② 11 to 20
  - ③ 21 to 30
  - ④ 31 to 50
  - ⑤ 51 or more
  - ⑥ Have not received an Office Action in the past 3 months
  
- 4a. How often have you communicated over the telephone or in person with USPTO Patent Examiners in the past 3 months?
  - ① Have not communicated with patent examiners in the past 3 months → **Skip to pg. 6**
  - ② Only once
  - ③ Rarely
  - ④ Occasionally
  - ⑤ Often

## YOUR INTERACTIONS WITH PATENT EXAMINERS

Consider your experiences over the past 3 months. Please think about the in person or telephone conversations that you initiated with the Office.

4b. To what extent was/were the **non-supervisory** Patent Examiner(s):

|                                                    | Not At<br>All | Small<br>Extent | Moderate<br>Extent | Large<br>Extent | Don't<br>Know/Not<br>Applicable |
|----------------------------------------------------|---------------|-----------------|--------------------|-----------------|---------------------------------|
| 1. Available to resolve your issues                | ①             | ②               | ③                  | ④               | ⑤                               |
| 2. Attentive to your concerns                      | ①             | ②               | ③                  | ④               | ⑤                               |
| 3. Responsive to your inquiries                    | ①             | ②               | ③                  | ④               | ⑤                               |
| 4. Properly prepared to discuss the issues at hand | ①             | ②               | ③                  | ④               | ⑤                               |
| 5. Able to facilitate a positive resolution        | ①             | ②               | ③                  | ④               | ⑤                               |

4c. To what extent was/were the **Supervisory** Patent Examiner(s):

|                                                    | Not At<br>All | Small<br>Extent | Moderate<br>Extent | Large<br>Extent | Don't<br>Know/Not<br>Applicable |
|----------------------------------------------------|---------------|-----------------|--------------------|-----------------|---------------------------------|
| 1. Available to resolve your issues                | ①             | ②               | ③                  | ④               | ⑤                               |
| 2. Attentive to your concerns                      | ①             | ②               | ③                  | ④               | ⑤                               |
| 3. Responsive to your inquiries                    | ①             | ②               | ③                  | ④               | ⑤                               |
| 4. Properly prepared to discuss the issues at hand | ①             | ②               | ③                  | ④               | ⑤                               |
| 5. Able to facilitate a positive resolution        | ①             | ②               | ③                  | ④               | ⑤                               |

4d. To what extent was/were the **Group Director(s)**:

|                                                    | Not At<br>All | Small<br>Extent | Moderate<br>Extent | Large<br>Extent | Don't<br>Know/Not<br>Applicable |
|----------------------------------------------------|---------------|-----------------|--------------------|-----------------|---------------------------------|
| 1. Available to resolve your issues                | ①             | ②               | ③                  | ④               | ⑤                               |
| 2. Attentive to your concerns                      | ①             | ②               | ③                  | ④               | ⑤                               |
| 3. Responsive to your inquiries                    | ①             | ②               | ③                  | ④               | ⑤                               |
| 4. Properly prepared to discuss the issues at hand | ①             | ②               | ③                  | ④               | ⑤                               |
| 5. Able to facilitate a positive resolution        | ①             | ②               | ③                  | ④               | ⑤                               |

## PATENT EXAMINERS' DECISIONS

5. Consider your experiences over the past 3 months. Please think about the rules and procedures Patent Examiners must adhere to in their decisions. To what extent did the Patent Examiners you worked with adhere to the following rules and procedures with respect to:

|                                                              | Not At<br>All | Small<br>Extent | Moderate<br>Extent | Large<br>Extent | Don't<br>Know/Not<br>Applicable |
|--------------------------------------------------------------|---------------|-----------------|--------------------|-----------------|---------------------------------|
| a. Citing appropriate prior art                              | ①             | ②               | ③                  | ④               | ⑤                               |
| b. Treating all claims                                       | ①             | ②               | ③                  | ④               | ⑤                               |
| c. Providing enough information to advance prosecution       | ①             | ②               | ③                  | ④               | ⑤                               |
| d. Substantively addressing your responses to Office Actions | ①             | ②               | ③                  | ④               | ⑤                               |
| e. Following appropriate restriction practice                | ①             | ②               | ③                  | ④               | ⑤                               |

## REJECTIONS PRACTICE

6. Consider all rejections you have received over the past 3 months. How often do you think the rejections made under the following statutes were reasonable in terms of being technically, legally, and logically sound with respect to:

|                                             | Rarely | Some of<br>the<br>Time | Most of<br>the<br>Time | All of<br>the<br>Time | Don't<br>Know/Not<br>Applicable |
|---------------------------------------------|--------|------------------------|------------------------|-----------------------|---------------------------------|
| a. 35 U.S.C. 101 Rejections                 | ①      | ②                      | ③                      | ④                     | ⑤                               |
| b. 35 U.S.C. 102 Rejections                 | ①      | ②                      | ③                      | ④                     | ⑤                               |
| c. 35 U.S.C. 103 Rejections                 | ①      | ②                      | ③                      | ④                     | ⑤                               |
| d. 35 U.S.C. 112 Rejections,<br>Paragraph 1 | ①      | ②                      | ③                      | ④                     | ⑤                               |
| e. 35 U.S.C. 112 Rejections,<br>Paragraph 2 | ①      | ②                      | ③                      | ④                     | ⑤                               |

**OVERALL EXAMINATION QUALITY**

7. In the past 3 months, how would you rate overall examination quality....

- ① Very Poor
- ② Poor
- ③ Fair
- ④ Good
- ⑤ Excellent

8. In the past 3 months, has overall examination quality....

- ① Significantly Declined
- ② Slightly Declined
- ③ Stayed the Same
- ④ Slightly Improved
- ⑤ Significantly Improved

9. In the past 3 months, have you experienced problems with the consistency of examination quality from one examiner to another?

- ① Yes, to a large degree
- ② Yes, to a small degree
- ③ No

**RECENT EXAMINER TRAINING ON FORMAL INTERVIEWS**

10. The Office has recently provided training for examiners on conducting formal interviews in an effort to facilitate patent prosecution. Please provide any comments you may have about perceived changes in the examiners' willingness to conduct such interviews and their preparedness and helpfulness during the interviews.

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11. You may be selected to participate in this survey again. If you are interested in completing this survey online, please provide your email address below:
- 

*Thank you for completing this survey.  
Your information will be invaluable as we improve the quality of our  
services for you!*

## Attachment 4: Internal Quality Survey

# Quality Index: Examiner Perception Component Questionnaire

1. Please indicate your current discipline

|                                 |                                     |                           |                       |
|---------------------------------|-------------------------------------|---------------------------|-----------------------|
| Biotech/Chemical<br>(1600/1700) | Electrical<br>(2100/2400/2600/2800) | Mechanical<br>(3600/3700) | Design<br>(2900)      |
| <input type="radio"/>           | <input type="radio"/>               | <input type="radio"/>     | <input type="radio"/> |

2. Please indicate your level of satisfaction over the past three months with the following tools that are needed to perform your work:

|                                                                | Very<br>Dissatisfied | Dissatisfied | Neutral | Satisfied | Very<br>Satisfied |
|----------------------------------------------------------------|----------------------|--------------|---------|-----------|-------------------|
| a. Search tools (e.g. EAST, WEST) .....                        | ①                    | ②            | ③       | ④         | ⑤                 |
| b. Office action tools (e.g. OACS, e-Red Folder) .....         | ①                    | ②            | ③       | ④         | ⑤                 |
| c. eDAN.....                                                   | ①                    | ②            | ③       | ④         | ⑤                 |
| d. Other electronic resources (e.g. MPEP, telework tools)..... | ①                    | ②            | ③       | ④         | ⑤                 |

3. Please indicate your level of satisfaction over the past three months with **access to training** required to maintain/improve the quality of your work:

|                                   | Very<br>Dissatisfied | Dissatisfied | Neutral | Satisfied | Very<br>Satisfied | NA |
|-----------------------------------|----------------------|--------------|---------|-----------|-------------------|----|
| a. Technical training .....       | ①                    | ②            | ③       | ④         | ⑤                 | ⑥  |
| b. Legal training .....           | ①                    | ②            | ③       | ④         | ⑤                 | ⑥  |
| c. Automation training .....      | ①                    | ②            | ③       | ④         | ⑤                 | ⑥  |
| d. Professional development ..... | ①                    | ②            | ③       | ④         | ⑤                 | ⑥  |

4. Please indicate your level of satisfaction over the past 3 months with the **effectiveness of training you have received** to maintain/improve the quality of your work:

|                                   | Very<br>Dissatisfied | Dissatisfied | Neutral | Satisfied | Very<br>Satisfied | NA |
|-----------------------------------|----------------------|--------------|---------|-----------|-------------------|----|
| a. Technical training .....       | ①                    | ②            | ③       | ④         | ⑤                 | ⑥  |
| b. Legal training .....           | ①                    | ②            | ③       | ④         | ⑤                 | ⑥  |
| c. Automation training .....      | ①                    | ②            | ③       | ④         | ⑤                 | ⑥  |
| d. Professional development ..... | ①                    | ②            | ③       | ④         | ⑤                 | ⑥  |

5. Consider your examination experiences over the past 3 months relating to **incoming patent applications**. To what extent did the applicants and/or their agents/attorneys facilitate high-quality patent prosecution with respect to:

|                                                                                         | Not At All | Small Extent | Moderate Extent | Large Extent | N/A |
|-----------------------------------------------------------------------------------------|------------|--------------|-----------------|--------------|-----|
| a. Clarity and completeness of specification .....                                      | ①          | ②            | ③               | ④            |     |
| b. Clarity of claims .....                                                              | ①          | ②            | ③               | ④            |     |
| c. Manageable number of claims .....                                                    | ①          | ②            | ③               | ④            |     |
| d. Claims drafted to capture concept of invention.....                                  | ①          | ②            | ③               | ④            |     |
| e. Claims vary reasonably in scope from broad to narrow to facilitate examination ..... | ①          | ②            | ③               | ④            |     |
| g. Art cited in IDS is material to patentability .....                                  | ①          | ②            | ③               | ④            |     |
| h. Clarity of translations for foreign applications .....                               | ①          | ②            | ③               | ④            | ⑥   |
| i. Clarity and completeness of drawings .....                                           | ①          | ②            | ③               | ④            | ⑥   |

6. Consider your examination experiences over the past 3 months relating to your **written and personal interactions with applicants and/or their agents/attorneys**. To what extent did the applicants and/or their agents/attorneys facilitate high-quality patent prosecution with respect to:

|                                                                                                                       | Not At All | Small Extent | Moderate Extent | Large Extent | N/A<br>(no experience within past 3 months) |
|-----------------------------------------------------------------------------------------------------------------------|------------|--------------|-----------------|--------------|---------------------------------------------|
| a. Clarity of responses to Office actions.....                                                                        | ①          | ②            | ③               | ④            |                                             |
| b. Thoroughness of responses to Office actions in addressing the specific issues set forth in the Office action ..... | ①          | ②            | ③               | ④            |                                             |
| c. Citation to the specification and/or drawings that provide support for newly added claim limitations .....         | ①          | ②            | ③               | ④            |                                             |
| d. Preparedness to efficiently and effectively conduct an interview .....                                             | ①          | ②            | ③               | ④            | ⑥                                           |
| e. Professional demeanor displayed in an interview to advance prosecution.....                                        | ①          | ②            | ③               | ④            | ⑥                                           |

7. Overall, over the past 3 months, how would you rate the combination of internal (USPTO) and external (patent applicants/agents/attorneys) factors that impact your ability to provide high-quality patent examination?

Very Poor                      Poor                      Fair                      Good                      Excellent  
 ①                                      ②                                      ③                                      ④                                      ⑤

**Attachment 5  
Quality Composite Metric**

| <b>Component Metric</b>              | <b>Definition</b>                                                                                           | <b>Weight</b><br>(sum to 100) | <b>Base Year</b><br>(Strategic Plan<br>Implementation<br>Year?) | <b>Stretch<br/>Goal</b><br>(Expiration<br>of Strategic<br>Plan) | <b>Current<br/>Level</b> | <b>Component Score</b><br>$(1 + ((C_1 - B_0) / (S_0 - B_0))) * 100$<br>[Progression from Base<br>Year to Stretch Goal,<br>with 100=Base Year] |
|--------------------------------------|-------------------------------------------------------------------------------------------------------------|-------------------------------|-----------------------------------------------------------------|-----------------------------------------------------------------|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
|                                      |                                                                                                             | <b><math>W_0</math></b>       | <b><math>B_0</math></b>                                         | <b><math>S_0</math></b>                                         | <b><math>C_1</math></b>  | <b><math>CS_1</math></b>                                                                                                                      |
| A. Final Disposition Compliance Rate | % Compliance as determined by OPQA Process                                                                  | 20                            | 94.4                                                            | 98.5                                                            | 96.5                     | 151.2                                                                                                                                         |
| B. In-Process Compliance Rate        | % Compliance as determined by OPQA Process                                                                  | 15                            | 93.6                                                            | 98.5                                                            | 95.1                     | 130.6                                                                                                                                         |
| C. FAOM Search Review                | "Average Score" as determined by OPQA review                                                                | 10                            | 60.0                                                            | 80.0                                                            | 62.0                     | 110.0                                                                                                                                         |
| D. Complete FAOM Review              | "Average Score" as determined by OPQA review                                                                | 10                            | 80.0                                                            | 95.0                                                            | 85.0                     | 133.3                                                                                                                                         |
| E. QIR                               | Average of 5 Quality Index Reporting metrics                                                                | 20                            | 86                                                              | 92.0                                                            | 88.8                     | 146.7                                                                                                                                         |
| F. External Quality Survey           | Positive: Negative "Ratio" Quality experience as determined by survey of USPTO applicants and practitioners | 15                            | 1.2                                                             | 5.0                                                             | 1.8                      | 115.8                                                                                                                                         |
| G. Internal Quality Survey           | Positive: Negative "Ratio" Quality experience as determined by survey of USPTO Patent Examiners             | 10                            | 1.5                                                             | 5.0                                                             | 1.5                      | 100.0                                                                                                                                         |
| <b>Composite Score:</b>              |                                                                                                             |                               |                                                                 |                                                                 |                          | <b>130.9</b>                                                                                                                                  |