Patent Quality

Jim Dwyer
Acting Director, Office of Patent Quality Assurance, USPTO
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How to Assess Patent Quality?

**Product Indicators**
- Include metrics on the **correctness** and **clarity** of our work products.
- Are formulated using data from reviews using the **Master Review Form (MRF)**.

**Process Indicators**
- Assist in tracking the efficiency and consistency of our internal processes.
- Focus on analyzing **reopening of prosecution** and **rework of Office actions** as well as improving **consistency of decisions making** (e.g. allowance rates).

**Perception Indicators**
- Are formulated from solicited **internal and external survey data** to validate/verify other metrics; the data can also be used for root cause analysis.
Data for Product Indicators

- Master Review Form (MRF) and Integrated Quality System (IQS)
- 15,000 reviews completed to date
- 18,000 targeted for FY17
- **Compliance** targets for FY17 were established based on FY16 reviews
  - Statutory Compliance reviews started midyear FY16
- MRF data is being analyzed for development of **compliance** goals and possibly **clarity** goals for FY18
Product Indicators

• Patent examination quality requires correctness and clarity:
  – Application satisfies all requirements of Title 35 U.S.C.;
    o considering relevant case law at time of action;
  and
  – Rejections provide sufficient evidence to support any conclusions of unpatentability
Product Indicators and Compliance

• Determining non-compliance
  – In allowance reviews:
    o omission of a proper rejection
  – In final and non-final reviews:
    o omission of a proper rejection; or
    o incorrect rejection; or
    o lack of evidence to support rejection made
Compliance Rate Calculation

• Denominator is all cases reviewed for a particular category (action type, TC, etc.)
  – Why?
    • All applications require examiner to analyze for compliance with all patent statutes
  – MRF data delineates between omitted and improperly made rejections
Compliance in 35 USC §102

MRF Reviews 10/1/16 – 5/31/17

- Non-Final: 92.6%
- Final: 95.8%
- Allowance: 96.3%
- Total: 94.0%
- Goal: 95.0%
- Goal: 90.0%
Compliance in 35 USC §103

MRF Reviews 10/1/16 – 5/31/17

- Total Compliance: 93.0%
- Non-Final: 90.0%
- Final: 89.2%
- Allowance: 91.9%
- Goal: 97.7%
Compliance in 35 USC §101

MRF Reviews 10/1/16 – 5/31/17

NON-FINAL  FINAL  ALLOWANCE  TOTAL  GOAL

95.7%  97.0%  97.3%  96.3%  98.0%

93.0%  90.0%  91.0%  92.0%  93.0%  94.0%  95.0%  96.0%  97.0%  98.0%  99.0%
Compliance in 35 USC §112

95.4%
91.6%
92.0%
87.0%

MRF Reviews 10/1/16 – 4/26/17
Prior Art Compliance by Discipline

35 USC §102
(Goal: 90-95%)
- Chemical: 95.7%
- Electrical: 92.4%
- Mechanical: 94.5%

35 USC §103
(Goal: 88-93%)
- Chemical: 93.8%
- Electrical: 90.4%
- Mechanical: 91.5%
101 and 112 Compliance by Discipline

35 USC §101 (Goal: 93-98%)
- Chemical: 99.0%
- Electrical: 93.9%
- Mechanical: 98.1%

35 USC §112 (Goal: 87-92%)
- Chemical: 89.6%
- Electrical: 92.8%
- Mechanical: 89.4%
Process Indicators

• Reopening – after prosecution is closed
• Rework – multiple (a) restriction requirements, (b) non-final rejections, or (b) final rejections during prosecution
• Consistency – varying decisions among similarly-situated examiners
Process Indicators: Reopening

How many times does an examiner reopen prosecution in a given period?
Process Indicators: Rework

How many times does an examiner do rework in a given period?
Process Indicators: Consistency

How much variance is there in allowance rates among similarly-situated examiners?
Perception Indicators

• Surveys to solicit examiner and external customer perceptions on a semi-annual basis:
  – Internally send to 750 randomly selected patent examiners
  – Externally send to 3,000 of our frequent-filing customers

• Data from these surveys are the basis for analysis
Alignment with Customer Perceptions

Applicant-perceived quality should track with USPTO quality data

Perceptions vs USPTO Quality Data

- % Customers Rating Quality as Good or Excellent
  - Chemical: 59%
  - Electrical: 44%
  - Mechanical: 56%
- % Cases in Compliance
  - Chemical: 83%
  - Electrical: 76%
  - Mechanical: 81%

Today: By Discipline

Today vs EOY15
Historical Alignment with Perceptions

Technically, Legally, and Logically Sound Rejections by Statute
How are customers' perceptions on technically, legally, and logically sound rejections trending since 2013?

Historical Perspective on Overall Patent Examination Quality
How are customers' perceptions on overall patent examination quality trending since 2009?
Current Quality Metrics Activities

- Reporting
  - Internal dashboard
  - *Coming soon*... published statistics on USPTO.gov
- Exploratory analysis
  - Investigate any links between clarity and correctness (e.g. if action is clear, it is 3X more likely to be correct)
  - Investigate any links between process indicators and compliance
- Supporting corps-wide studies and evaluations
  - Examination Time Analysis, Clarity Pilot, etc.
- Supporting TC-specific quality initiatives
  - Action plans and own exploratory analysis
Applicants Role in Quality Examination

- Drafting clear claims
- Keeping applications patently distinct
- Clear responses to Office actions
- Preparedness for interviews
- Application readiness
- Send us your feedback to QualityMetrics@uspto.gov
Clarity of the Record Pilot
Pilot Goals

- Identify Examiner Best Practices
- Find Correct Balance for Appropriate Recordation
- Use Data/Feedback to Assist Other Programs
- Enhance Clarity of Prosecution Record
Areas of Focus

• More detailed interview summaries
• More precise reasons for allowance
• Pre-search interview – Examiner’s option
• Enhanced documentation of 7 areas of claim interpretation:
  – Special definitions of claim terms
  – Functional language
  – Intended use or result (preamble and body of claim)
  – "Means-plus-function" (35 U.S.C. §112(f))
  – Optional language
  – Non-functional descriptive material
  – Computer-implemented functions that invoke 35 U.S.C. §112(f) ("specialized" or "non-specialized")
Clarity of the Record Training: Improving Clarity and Reasoning in Office Actions

ICR Training
Improving Clarity and Reasoning – ICR Training Program Goals

• To identify particular areas of prosecution that would benefit from increased clarity of the record and develop training

• To enhance all training to include tips and techniques for enhancing the clarity of the record as an integral part of ongoing substantive training
## ICR Training Courses

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Details</th>
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<tr>
<td>35 U.S.C. 112(f): Identifying Limitations that Invoke § 112(f)</td>
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<td>35 U.S.C. 112(f): Making the Record Clear</td>
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<td>35 U.S.C. 112(f): Broadest Reasonable Interpretation and Definiteness of § 112(f) Limitations</td>
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<tr>
<td>Evaluating Limitations in Software-Related Claims for Definiteness under</td>
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<td>Broadest Reasonable Interpretation (BRI) and the Plain Meaning of Claim Terms</td>
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<td>Examining Functional Claim Limitations: Focus on Computer/Software-related Claims</td>
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<td>Examining Claims for Compliance with 35 U.S.C. 112(a): Part I Written Description</td>
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<td>Examining Claims for Compliance with 35 U.S.C. 112(a): Part II – Enablement</td>
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<tr>
<td>35 U.S.C. 112(a): Written Description Workshop</td>
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<td>§ 112(b): Enhancing Clarity By Ensuring That Claims Are Definite Under 35 U.S.C. 112(b)</td>
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<td>2014 Interim Guidance on Patent Subject Matter Eligibility</td>
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<td>Abstract Idea Example Workshops I &amp; II</td>
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<tr>
<td>Enhancing Clarity By Ensuring Clear Reasoning of Allowance Under C.F.R. 1.104(e) and MPEP 1302.14</td>
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<td>35 U.S.C. 101: Subject Matter Eligibility Workshop III: Formulating a Rejection and Evaluating the Applicant’s Response</td>
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<td>Advanced Legal Training Part I: Understanding Case Law and the Federal Court System</td>
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<td>Advanced Legal Training Part II: How to Analyze and Respond to Case Law Related Arguments</td>
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Post Grant Outcomes
Post Grant Outcomes Program

• This program is to develop a process for providing post grant outcomes from various sources, such as the Federal Circuit and Patent Trial and Appeal Board (PTAB), to the examiner of record and the examiners of related applications.

• Post Grant Outcomes Pilot: April-August, 2016
  – Identify those patents being challenged at the PTAB under the AIA trials that have pending related applications in the Patent Corps
  – Provide the examiners of those pending related applications access to the contents of the AIA trial
Pilot Statistics – Relevant Art For Child Case

In the Office action of the child case, did the examiner refer to any of the references cited in the AIA trial petition of the parent case?

- No: 56%
- Yes: 44%

Based on 323 Survey Responses
Post-Prosecution Pilot (P3)
Post-Prosecution Pilot (P3) Overview

• Retains popular features of the Pre-appeal Brief Conference Pilot and AFCP 2.0 programs:
  – Consideration of 5-pages of arguments
  – Consideration of non-broadening claim amendments
  – Consideration by a panel

• Adds requested features:
  – Presentation of arguments to a panel of examiners
  – Explanation of the panel’s recommendation in a written decision after the panel confers