#### UNITED STATES PATENT AND TRADEMARK OFFICE



## Patent Public Advisory Committee Quarterly Meeting

#### **Examination Time Analysis (ETA)**

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## **Examination Time Analysis (ETA)**

Comprehensive analysis of examination time.

#### Goals:

- Enable the organization to have a better comprehension of factors that impact examination time
- Make more informed decisions about examination time
- Devise methodologies to streamline future updates to examination time

## Why?

"We will establish the optimal pendency and quality levels for both patents and trademarks that will enable us to operate efficiently and effectively in a steady-state maintenance mode, while considering the expectations of the IP community."

**USPTO Strategic Plan 2014-2018** 

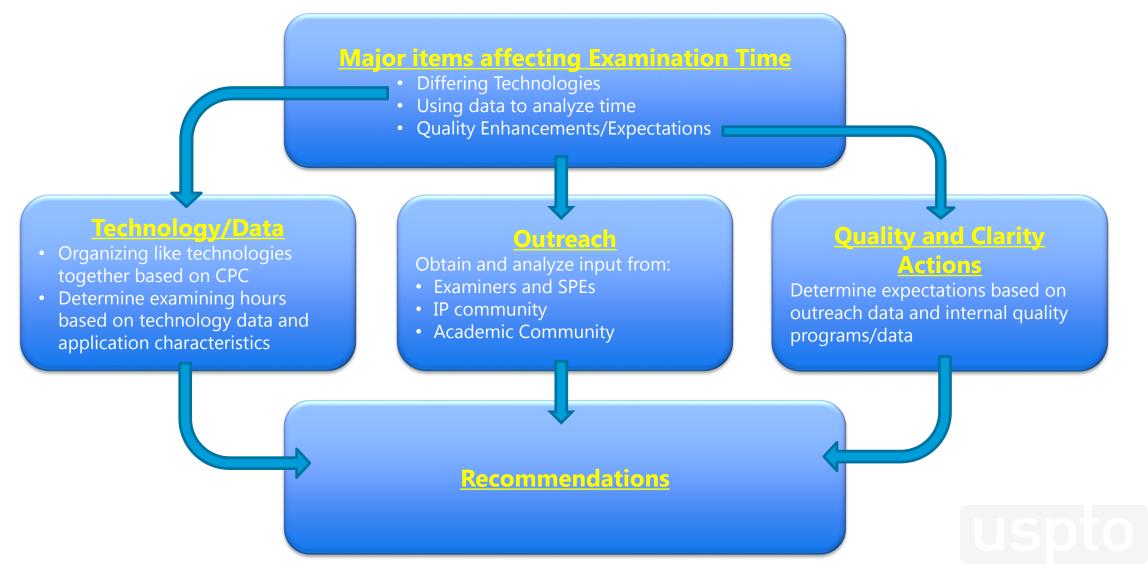


## Why now?

- Properly calibrated examination time is critical for establishing optimal pendency and quality levels.
- Patent prosecution has substantially changed since goals were established.
- Oversight bodies, such as the General Accounting Office and Office of the Inspector General, have recommended that the USPTO reevaluate examination time.



#### **Major Items Affecting Examination Time**



## **OUTREACH EFFORTS**



### ETA Examiner & SPE Survey

- Gather the ideas, experiences, and priorities concerning individual productivity and the production system
  - Examiner point of view impediments and enhancements to effectively examine in a timely manner
  - SPE point of view impediments and enhancements to effectively manage in the current production system
- All examiners and SPEs were invited to participate in the survey.
  - Examiner Respondents: 6,912 (83% of examiners)
  - SPE Respondents: 425 (68% of SPEs)



## Productivity and Ability to Examine in a Timely Manner

#### Tasks/characteristics/resources that **most enhance**

- 1. Well drafted applications
- 2. Appropriate number of claims
- 3. Relevant Information Disclosure Statements (IDS)
- 4. Related cases
- 5. International search reports.

#### Activities/examining parameters that **most impair**

- 1. Evolving application complexity
- 2. Poor application quality (e.g. poorly written specification or claims)
- 3. Changes in examination policy or practice
- 4. IT issues
- 5. Multiple inventions present in an application

## **Indicators of Time Requirements**

Variables that indicate an application will take **more time** than average to examine

- 1. Greater than the typical number of claims
- 2. Complexity of application subject matter
- 3. Poor claim quality (e.g. 112 issues)
- 4. Greater than typical number of independent
- 5. Extensive claim amendments

Variables that indicate an application will take **less time** than average to examine

- 1. Fewer than the typical number of claims
- 2. RCE
- 3. Part of application family (continuation, divisional)
- 4. Pertinent IDS
- 5. Personal expertise in the claimed art



## **Additional Survey Takeaways**

- Quality improvements can best be achieved by investing more time early in prosecution, in particular, in performing the initial search
- Top benefits/advantages for enhancing productivity
  - Flexibility (e.g. work schedules, ability to plan work)
  - Personal expertise in the claimed art
  - Effective management/staff support
- Dissatisfied with time allotted for tasks after final rejection

#### **Goals of Public Outreach**

- Gather public feedback regarding expectations of the IP community
- Understand interests regarding quality, pendency, and cost for services
- Shed light on characteristics of patent applications which lead to a more time-consuming examination



## **Public Outreach Approach**

- Published a <u>Federal Register Notice</u>
- Conducted 4 roundtables in Alexandria and the USPTO regional offices in Dallas, Denver, and San Jose
  - Approximately 90 participants
- Collected written comments:
  - 36 emailed (27 individuals, 6 companies, 3 IP Organizations)
  - 6 comments on <u>IdeaScale</u>
- Analyzed comments from the roundtable events and written submissions to identify trends



#### **Priorities from Public Comments**

- Measurable quality
- Thorough, high-quality searches
- Effective oral communication, including formal interviews and calls/discussions, early and throughout prosecution
- Examiners with a thorough understanding of the examined technology and applicable law



## Impacts to Complexity, Time, & Quality

Examiner-related factors	<ul> <li>Experience in the technology</li> <li>Time in office/seniority</li> <li>Sufficiency of expectancy</li> <li>Legal training</li> <li>Search training</li> </ul>	
Applicant-related factors	<ul> <li>Interdisciplinary inventions</li> <li>Claim breadth</li> <li>Length of the application</li> <li>Language used to describe the invention</li> <li>Globalization – filing in multiple countries</li> </ul>	
Office-influenced factors	<ul> <li>Proper classification of the application</li> <li>Consistent application of statutes</li> <li>Consistent consideration of evidence</li> <li>Degree of supervisory oversight</li> </ul>	
The court system	New case law (101)	
Rapidly developing technology	<ul><li>Established field/terminology</li><li>Volume of prior art</li></ul>	uspto

# Common Observations Across Examiners, SPEs, & IP Community

- Benefit of examiners' expertise in the claimed art
- Importance of clear communication between applicant and examiner
- Importance of thorough search
- Many factors can influence the complexity of an application, the time needed to prosecute the application, and the quality of the examination

#### **Academic Outreach**

• ETA Team and Chief Economist's Office collaborated to host an information gathering session with scholars with expertise in personnel economics, business and human resource management, and organizational incentive mechanisms.

#### Goals of outreach:

- To find out what is currently known in the academic literature about incentives for knowledge workers, such as examiners
- To get ideas about how to improve our current incentive system
- To get ideas about how empirical studies (i.e. data, research designs, and methods) could be used to analyze current and new incentives at USPTO



## Considerations Identified in Academic Outreach

- Trade-offs between examination time and examiner performance
- Variety of incentives available and potential impacts
- Impact of aligning quality measurements, monitoring mechanisms, and agency objectives
- Importance of effective management practices and employee-management relationships

# QUALITY & CLARITY of ACTIONS



## **Quality and Clarity of Actions**

 Capture Quality Activities as they apply to today's examination practices

Identify key priorities regarding quality and clarity

Analyze potential impacts to examination time



# IMPACTS of TECHNOLOGY & CPC



#### **Examination Complexity**

- Identify factors that influence examination complexity from historical data and input from examiners, SPEs, and IP community
- Considerations for Quantifying Complexity
  - What is the best method for defining factors that impact complexity?
  - What factors increase or decrease complexity?
  - Do the factors or level of impact vary across technologies?
  - What other variables may impede or enhance an examiner's ability to effectively examine in a timely manner?



## **Examples of Factors Affecting Complexity**

#### **EXAMPLES**

#### **Application Factors**

#### Specification

Number of Pages

#### Claims

Total number

**Total Pages** 

Number of

Dependent/Independent

#### **Drawings**

Number of sheets/figures

Number of pages

#### Other

**Entity Size** 

Number of Patents in Continuity

Chain

#### **Search Factors**

#### CPC/USPC

Number of documents in relevant field

(volume of search)

Number of CPC symbols

Pages/# of PTO-1449

Pages/# PTO-892

#### Other

Number/Pages of Search Notes

Number/Pages of NPL

Number/Pages of Foreign Priority

Documents

Number/Pages of Foreign References

#### **Prosecution Factors**

Restrictions

Number/Pages

**Applicant Remarks** 

Number/Pages

**Amendments** 

Number of CLM documents

**Number of Amendments** 

Number/Pages of After finals

Number/Pages of Appeals

**Number of Interviews** 

Office Actions

Number/pages of non-finals

Number/pages of Finals

Number/pages of Allowances

**Petitions** 

Number of RCEs

Actions in disposal

#### **CPC Considerations**

The ETA team is evaluating a number of approaches for assigning time in a manner compatible with Cooperative Patent Classification (CPC):

- Application specific correlations between USPC and CPC
- Technology relationships between different CPC symbols within the scheme
- Diversity of CPC symbols on an application
- Fields of Search with CPC



### **Next Steps**

- Continue to evaluate factors impacting examination time
- Consider potential changes to examination time
- Seek to devise methodologies to streamline future updates to examination time

## Thank you!

Thank you to the multiple, cross-functional ETA team members and support:

- TC Directors
- SPEs
- POPA representatives
- Patent Quality, International Patent Cooperation, Patent
   Examination Policy, and Patent Administration representatives
- PPAC, particularly members who participated in the public roundtable panels

## **Questions and Comments**

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