UNITED STATES
PATENT AND TRADEMARK OFFICE



# Patent Quality Chat Application readiness: Assessing incoming applications

February 19, 2020



To send in questions or comments during the webinar, please email:

## PatentQuality@uspto.gov

#### www.uspto.gov/patentquality

#### Patent Quality

Providing high-quality, efficient examination of patent applications is paramount to <u>our mission</u> at USPTO. To ensure we continue to issue high-quality patents that will fuel innovation well into the future, the <u>Office of the Deputy Commissioner for Patent Quality</u>, along with our partners across the Patents organization, promotes and supports the continuous improvement of patent products, processes and services through collaboration with internal and external stakeholders of the intellectual property community.

#### **Highlights**



#### Patent Quality Chat

Join us for the first event in our 2020 Series "Application Readiness: Assessing Incoming Applications" on Wednesday, February 19, 2020.

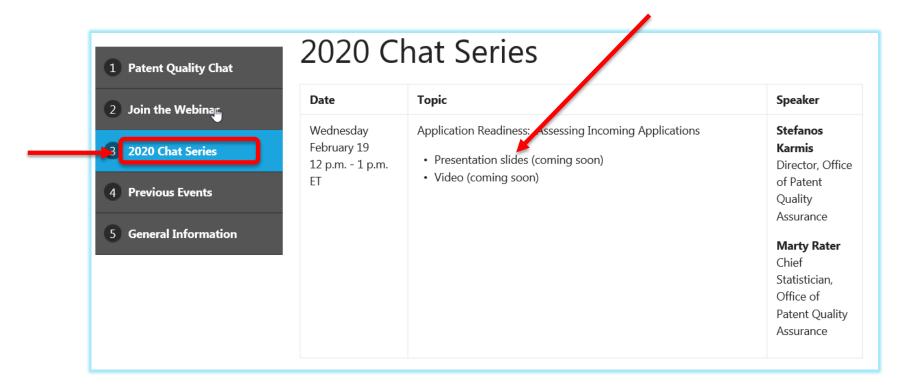
#### Stakeholder Training on Examination Practice and Procedure (STEPP)

Sign up for an upcoming training developed for those interested in a better understanding of the examination process at the USPTO.

#### Resources

To aid our goal of continuous patent quality improvement, we provide a collection of some patent quality <u>resources</u> to assist in our stakeholder's understanding and ability to use our patent system.

#### www.uspto.gov/patent/initiatives/patent-quality-chat



Stefanos Karmis, Director, Office of Patent Quality Assurance

Martin Rater, Chief statistician, Office of the Deputy Commissioner for Patent Quality

### **Speakers**

#### Assessing incoming applications

- Phase I: Identify patent application attributes critical to examination
- Phase II(a): Application scoring
- Phase II(b): Diagnostic interview pilot
- Phase III: Readability
- Next steps



#### Assessing incoming applications

- Filing a high quality application helps examiners with their search and overall prosecution quality
- Application readiness studies
  - Attributes integral to the patent application file that enhance the ability of examiners to efficiently and effectively navigate through examination

## Phase I: Identify patent application attributes critical to examination

- Examiner perception survey (850 responses)
  - Identified application attributes that examiners felt best enhanced their ability to efficiently and effectively navigate through examination
- Attributes measured on scale of zero to 10
  - Importance (need) scale ranged from
    - "Not necessary" (0) to "Almost essential" (10)
  - Frequency (experience) scale ranged from
    - "Almost never" (0) to "Almost always" (10)



## **Summary of findings**

#### Top Needs

10p 14ccas		Need	Experience	Gap
Specifications	Having the inventive concept clearly set forth	8.07	5.06	3.0
	Having the specification clearly describe the referenced features in the drawings	7.89	6.88	1.0
	Having the Drawings show the inventive concept	7.83	5.94	1.9
	Having the "Detailed Description of the Invention" expand on the invention disclosed in the "Summary"	7.59	7.07	0.5
	Having the preferred embodiments described in detail	7.43	6.07	1.4
	Using clear terms and correct grammar and syntax	7.74	5.50	2.2
Claims	Having claims that are clear and correct in syntax and grammar	8.76	5.85	2.9
	Having independent claims that capture the same inventive concept disclosed in specification	8.59	4.77	3.8
	Having claim terminology that is highly correlated with language disclosed in the specification	8.23	5.92	2.3
	Having claims that are solely directed to the inventive concept (not broader than the inventive concept)	7.45	3.08	4.4
	Having a reasonable/manageable number of claims	8.74	4.97	3.8
IDS	Having all citations in IDS in English (translations are provided with submission)	7.53	3.91	3.6
	Having a reasonable/manageable number of references cited in IDS	7.88	5.37	2.5



#### Phase II(a): Application scoring

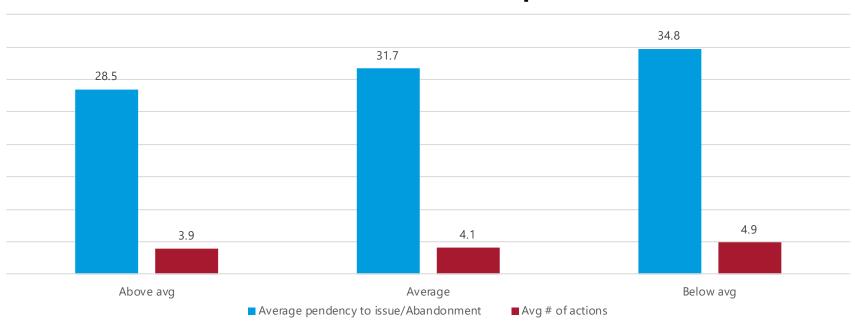
- Developed a review form that scored 24 questions based on application attributes identified from the examiner survey
- Questions were rated on a scale of 1 (Very poor) 5
   (Excellent) relative to an "average" application
  - Some questions rated on a binary scale of Yes (three points) or No (zero points)
- 600 applications were assessed using the scoring form

#### Phase II(a): Preliminary findings

- No statistically significant correlations were found between the scoring methodology and prevalence of 112 rejections made or compliance of rejections rates from first office actions
- The scoring of certain attributes appears to correlate with an impact on pendency, the average number of applications to final disposition, and the likelihood of final disposition being an allowance versus an abandonment

#### Phase II(a): Preliminary data

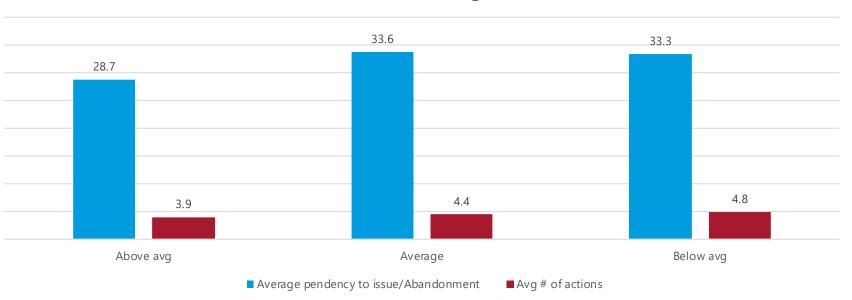
#### Differences between invention and prior art described





#### Phase II(a): Preliminary data

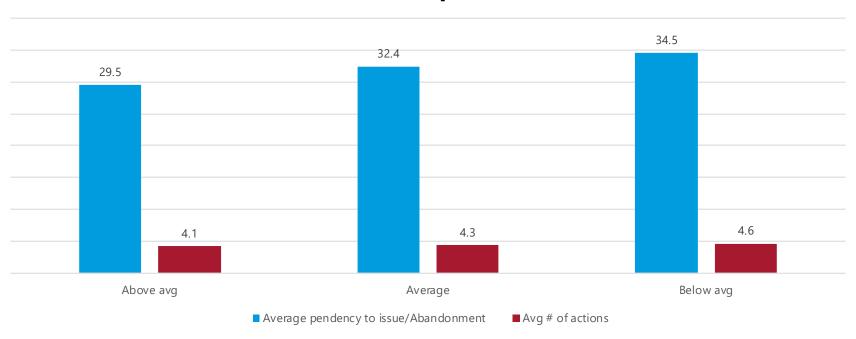
## Application presents a problem that the invention is addressing





#### Phase II(a): Preliminary data

#### Inventive concept is set forth





#### Phase II(b): Diagnostic interview pilot

- Examiners identified applications in which a diagnostic interview would help clarify misunderstandings and facilitate a more focused search
- Readability data of the claims and specification of applications in the pilot were analyzed for trends



## Phase II(b): Diagnostic interview pilot readability

 Preliminary findings suggest a correlation between the "difficulty" of the readability of the claims and specification and diagnostic interview requested by examiners

	Average Flesch- Kincaid Grade Level: Specification	Average Flesch- Kincaid Grade Level: Claims	Average Number of Claims
Interview Needed	16.1	21.6	18
No Interview	15.1	16.9	19.5
Grand Total	15.6	18.9	18.9



## Phase II(b): Diagnostic interview pilot readability

- 79% of the applications in which the examiner felt an interview was needed scored above average readability difficulty for either the specification, claims, or both
- Examiners were three times more likely to request an interview when both the specification and claims scored above average for readability difficulty



### **Phase III: Readability**

- 2000 applications were scored to identify if readability correlations exist throughout prosecution:
  - Average number of office actions to final disposition
  - Prevalence of rejections under 35 U.S.C. 112
  - Number of pages in the specification
  - Total number of claims
  - Priority claims
  - Final disposition of application



### **Next steps**

- Continue to work with applicants and examiners on improving the quality of incoming applications
- Identify opportunities for IT to assist with quality enhancements early in the process



### Conclusion/summary

- What other quality or prosecution trends should we assess?
- How do applicants evaluate the readiness of a patent application before filing?
- What barriers do applicants face when preparing a patent application for filing?



## Let's chat about application readiness

- **Stefanos Karmis**, Director, Office of Patent Quality Assurance
- Martin Rater, Office of the Deputy Commissioner for Patent Quality





## Thank you!

**Patent Quality Chat** 

Webinar Series 2020

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