

# Software Partnership Meeting

*On Prior Art Resources*



Thursday, December 5, 2013

1:00PM – 4:30PM

Madison North Auditorium  
Alexandria, VA

# Software Partnership Meeting

## *On Prior Art Resources*



James Dwyer

Assistant Deputy Commissioner for Patent Operations  
James.Dwyer@uspto.gov

# Software Partnership Meeting

*On Prior Art Resources*



Margaret A. (Peggy) Focarino

Commissioner for Patents

# Prior Art Resources



Seema S. Rao

Technology Center Group Director, TC 2100  
Seema.Rao@uspto.gov  
(571) 272-5253



# Agenda

Time	Topic
10 minutes	Introduction & Background
70 minutes	USPTO Presentations <ul style="list-style-type: none"><li>• Brian Sircus</li><li>• Scott Beliveau</li><li>• Pamela Reynolds</li><li>• Boris Pesin</li><li>• Q &amp; A</li></ul>
15 minutes	Break
70 minutes	Stakeholder Presentations <ul style="list-style-type: none"><li>• Brad Pederson (Patterson Thunte IP)</li><li>• John Toebe (Cisco Systems)</li><li>• Dominic DeMarco (DeMarco IP, LLC and PIUG)</li><li>• Michael Messinger (Sterne, Kessler, Goldstein, and Fox)</li><li>• Q &amp; A</li></ul>
30 minutes	Open Discussion
5 minutes	Closing Remarks



## Federal Register Notice on Software Partnership 78 Fed. Reg. 292 (Jan. 2013)

- Topic: topics for the future software partnership meetings
- Comment: prior-art-based searching during examination of software and computer implemented inventions



# Identifying Related Patents Through Tags and Categories

John Toebes  
Senior Director, Intellectual Property

November 5, 2013

# Background

- Identifying good prior art requires great searching
- Tough to scale without experts
- Similar to recommendation systems such as collaborative filtering
- Companies such as Amazon figured out how to scale this problem
- Cisco has > 10,000 Issued US patents with an internal tool called CPOL which provides search capabilities
- Cisco applied tags and categories to successfully improve the ability to locate assets



# Addressing the Issue

Created Category Taxonomy to cover all assets

Tested the taxonomy with different people

Not dissimilar from CPC, but with important restrictions

1. Only three level, ~200 categories
2. Each category must expect to represent no less than 1% and no more than 5% of all assets
3. Each patent asset can have no more than 3 categories.

Scarcity and bucket size ensure that assets will at least be in the bucket everyone looks in

# User Tags

- While categories ensure that you will have the asset in the collection, tags allow for refinement.
- Tags are user defined but have types: Products, Standards and Generic
- Tags also include a description and identify the creator
- Anyone can create a tag and apply any tag to any patent asset
- Tag management tools allow for combining, marking equivalence and even retiring tags.

## Product Specific Tag

**All Telepresence endpoints**  
Cisco Telepresence endpoint

## Standards Tag

**H.264**  
H.264/AVC video coding standard

## Generic Tag

**RSVP**  
Resource Reservation Protocol

# Tag Validation

- There is no central authority for tagging
- With any set of patent assets, a tag cloud quickly tells you what it is about
- With only 10% of our assets tagged, we could readily distinguish our portfolios
- At 90% coverage it becomes easy to see outliers
- Clusters of related patents become easy to recognize

# Refining Search

- When looking for a particular asset, it is easy to start with a category even though it brings a large set.
- Turning on the Tag Cloud gives instant visibility into what else could be looked for
- Searching for a combination of tags allows prioritizing the best match

Search Categories → Tag Cloud → Tag Combinations

# Surprising Results

- It is less important who tagged something or what they tagged it with than the fact that the same person tagged multiple items.
- Given any set of found patents, you can find other similar ones by using the tags on the initial set. The weight of the frequency of the tags allows for prioritization of the matched set
- Inventors and even business organizations or assignees can be treated as virtual tags to improve the match

# Thank You!



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