

# Automated Snapshot Capture

Pilot Project Proposal for Improving  
Captured NPL Prior Art for Software Applications



**USPTO Software  
Partnership Meeting**

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December 5, 2013

# The First NPL Problem

Undated Web Postings Cannot be Relied Upon

## MPEP 2128

### Date of Availability

Prior art disclosures on the Internet or on an on-line database are considered to be publicly available as of the date the item was publicly posted. \* > *Absent evidence of the date that the disclosure was publicly posted, if < the publication > itself < does not include a publication date (or retrieval date), it cannot be relied upon as prior art under 35 U.S.C. 102(a) or (b)\**>. However <, it may be relied upon to provide evidence regarding the state of the art. Examiners may ask the Scientific and Technical Information Center to find the earliest date of publication > or posting <.

# The Second NPL Problem

## The Illusive and Ever-Changing World-Wide Web

- **Internet Archive**

- Does not crawl websites that “opt out” with “robots.txt”



- **Knowledge Bases**

- *Wikipedia*: freely changeable
- *Knowledge Graph* and *Freebase*: social/historical focus



- **Semantic Web**

- Great idea that remains mostly unrealized



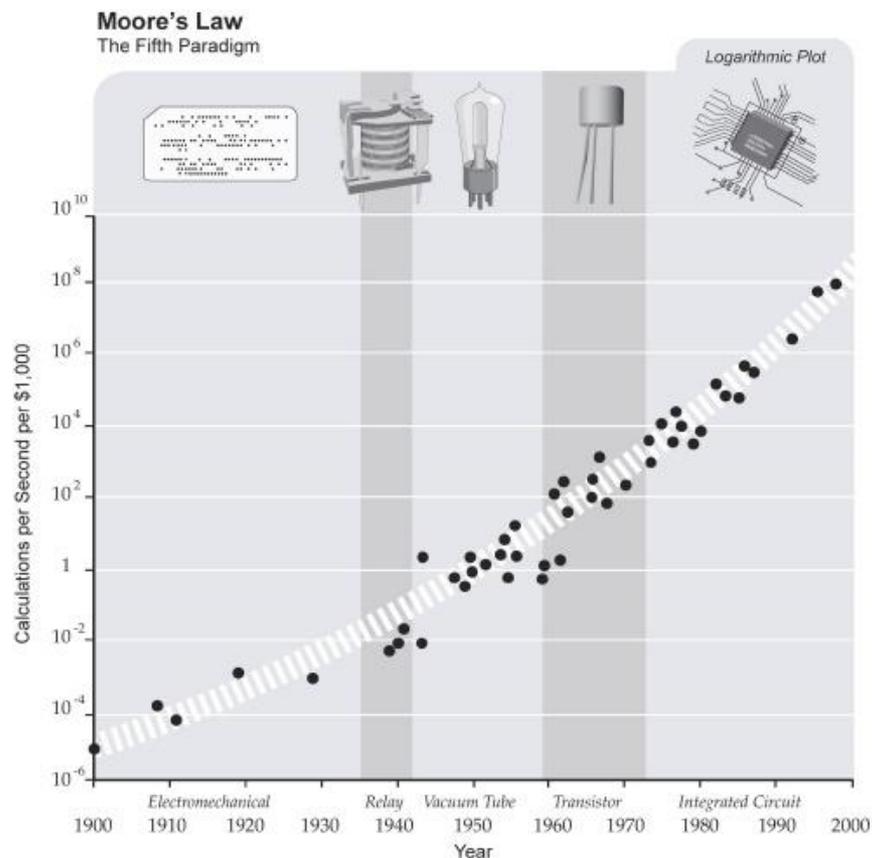
- **Deep Web**

- Harvesting below the surface web is a hard problem
- 2-3 orders of magnitude more information than surface web
- **BrightPlanet.com**

# The Underlying NPL Problem

## The Exponential Increase of Information

- **The Amount of Stored Information has Exploded**
  - “Every two days now we create as much information as we did from the dawn of civilization up until 2003”, according to Eric Schmidt in August 2010.
  - That was something like five exabytes of data in 2010.
  - By 2016, Internet traffic will be more than a zetabyte ( $10^{20}$ )
  - Exponential Increase is the Rule, Not the Exception



# The Snapshot Proposal

## Creating Time-Anchored Searchable Silos of NPL

- **Automated Ingesting of Patent Application**
  - Pilot limited to Specific Art Groups for Software cases.
  - “Opt In” by completing Electronic Form
  - Search targets generated by claim key-wording, glossification, NLP analysis of specification and optional image analysis of figures
  - Possible tuple creation for semantic search using OWL, rdf, XML and future cognitive computing analysis (Watson)
- **Search/Crawl as of Filing Date of Application**
  - Search targets used to capture specific NPL sources as of filing date
    - Wikipedia/Freebase/Knowledge Graph/Wolfram Alpha
    - IEEE/ACM/EFF blogs, RFCs
    - Inventor/Assignee web materials
  - Limited set of results from ranked search/harvest of entire web

# The Snapshot Proposal

## Creating Time-Anchored Searchable Silos of NPL

- **“Opt In” Electronic Form Includes:**
  - Suggested search classes/sub-classes for application
  - Expressly defined terms
  - Structure/steps for each means-plus-function claim element
  - Initial List of IDS references
  - Optional claim set with corresponding reference numerals
- **Searchable Silo of Results stored in Private PAIR**
  - Copyrighted material not accessible other than to applicant
- **Incentives for Participating**
  - Examiners given extra time in prosecution to analyze captured silos
  - Applicants could be given advancement in queue of pending cases
  - Applicants get bibliography of NPL that reduces add’l IDS filings

# The Snapshot Proposal

## Expanded Claim Key-Wording

- **Use Expanded Claim Sets for Key Word Frequency**
  - Utilize the inherent nature of independent and dependent claims to improve key word frequency scores.

1. A hat for an animal, comprising:  
a shell;  
a harness arrangement attached directly to the hat, including a first strap and a second strap, wherein the first strap and the second strap each have two loose ends which are movably secured to the shell of the hat; and  
the first strap and the second strap cross each other at a point below the muzzle of the animal when the hat is secured.

2. The hat of claim 1 wherein at least one of the first strap and the second strap is of a resilient material.

Vs.

1. A hat for an animal, comprising:  
a shell;  
a harness arrangement attached directly to the hat, including a first strap and a second strap, wherein the first strap and the second strap each have two loose ends which are movably secured to the shell of the hat; and  
the first strap and the second strap cross each other at a point below the muzzle of the animal when the hat is secured.

+

2. A hat for an animal, comprising:  
a shell;  
a harness arrangement attached directly to the hat, including a first strap and a second strap, wherein the first strap and the second strap each have two loose ends which are movably secured to the shell of the hat; and  
the first strap and the second strap cross each other at a point below the muzzle of the animal when the hat is secured;  
wherein at least one of the first strap and the second strap is of a resilient material.

# The Snapshot Proposal

Stored Silos Can Be Later In Examiner Searches

- **Saved Silos Facilitates Updated Searching and New Tools**
  - Different search targets can be used to generate different silos of prior art at different times
  - Future search tools (like semantic ranking) can be used
  - US Publ. Pat Appl. 2013/0282735 A1

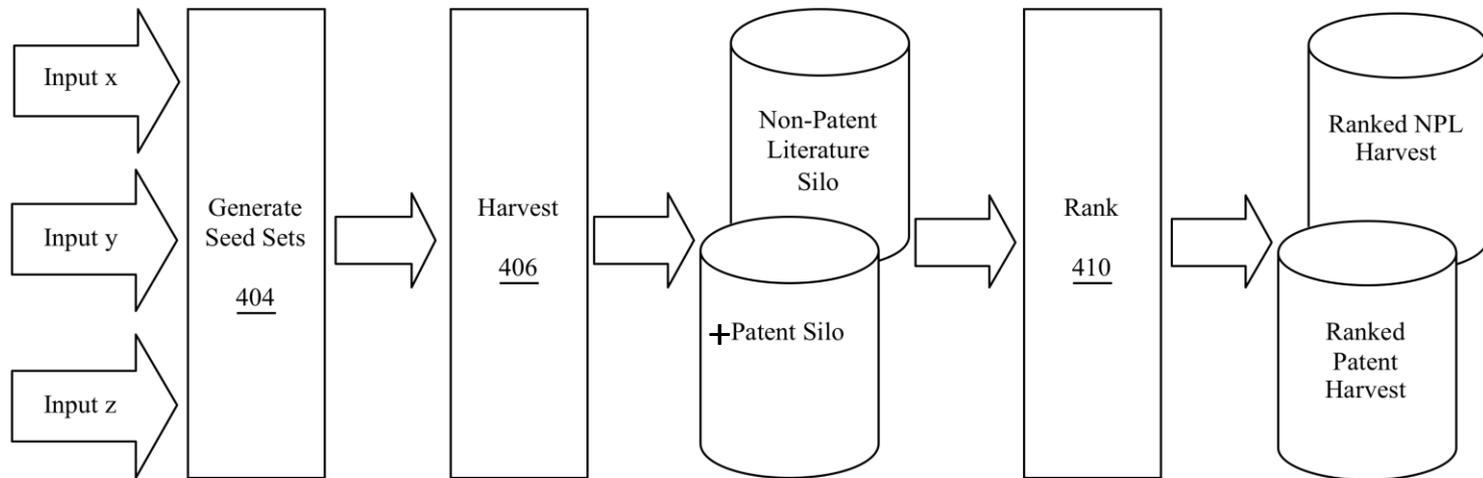


FIG. 5

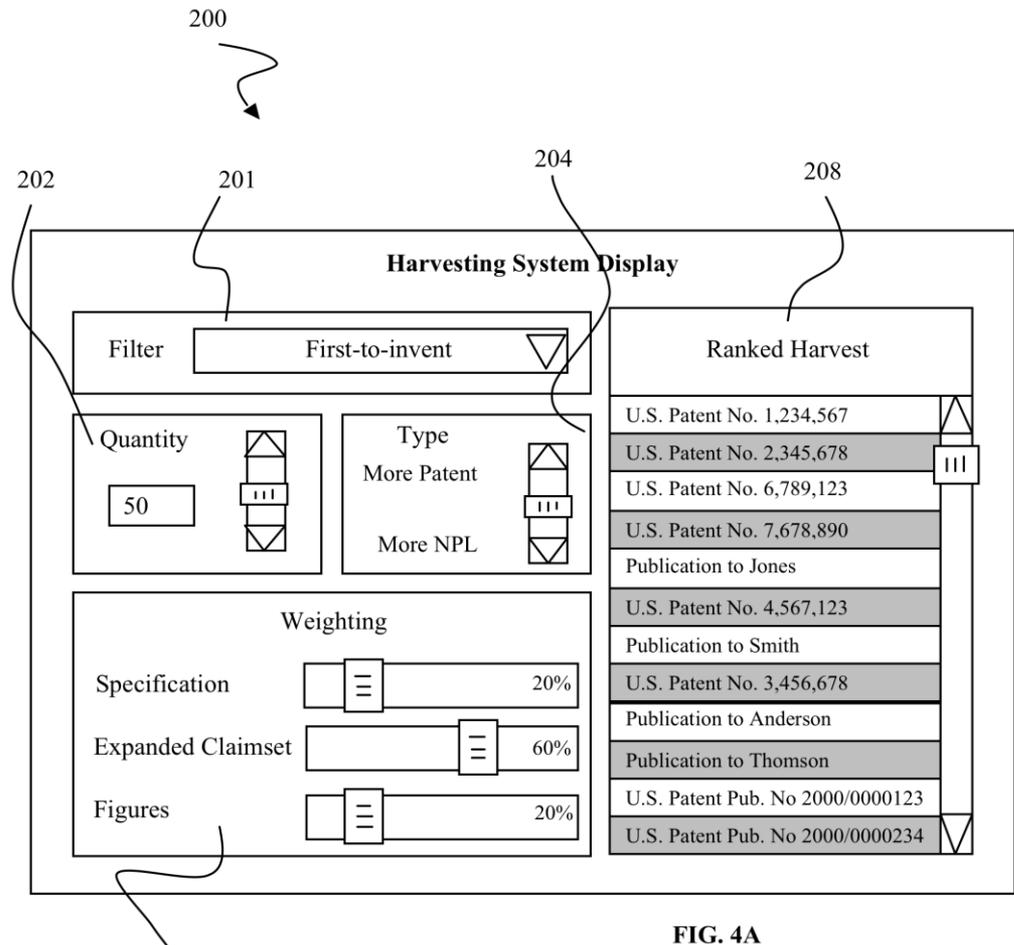
# The Snapshot Proposal

## Future Tools to Access Stored Silos

Vs.

- **Ranked Silo Searches**

- Uses different aspects of application to rank the relevance of a prior art silo
- Slider bars can adjust the ranking based on various parameters
- US Publ. Pat Appl. 2013/0282735 A1



# Thank You!



## About Brad Pedersen

Brad Pedersen is a patent attorney with more than 25 years of experience in patent law, engineering, business and entrepreneurship. He is a partner and the chair of the Patent Practice group at Patterson Thunte Pedersen, P.A., an intellectual property law firm in Minneapolis, Minnesota.

Brad is also a successful inventor and entrepreneur, with more than a dozen issued US patents and a recently launched RC gaming drone company – QFO Labs, Inc.

Brad is one of the more knowledgeable IP attorneys in the U.S. when it comes to the patent reform and the AIA. Since it was first introduced in 2005, he has actively followed the developments and debate surrounding patent reform at the agency, legislative and judicial levels. He educates clients and colleagues by writing and presenting on the imminent changes and strategies for dealing with the reforms.

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## About Patterson Thunte IP

Patterson Thunte Pedersen, P.A. helps creative and inventive clients worldwide protect, and profit from, their ideas. Practicing in the areas of patents, trademark, copyright, trade secrets, IP litigation, international IP protection, licensing and post-grant proceedings, the firm's attorneys excel at finding strategic solutions to complex intellectual property matters.

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