Aurora
Consulting

Prior Art: Searching Strategies and Techniques

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Format

- 10 Minutes: Ice Breaker
- 15-20 Minutes: Problem Solving
- 30-35 Minutes: New Material

Ice Breaker

Imagine you are a superhero. Your arch-nemesis' mission is to annoy and torment you. **How would they do that?**

Shared Problem Solving

- Fun Strategy Tidbits?
- Any problems you are encountering with the USPTO?
- Any practice issues arising?
- Any technical issues you are facing?

Overview

- Why inventors and companies should have a professional search conducted
- Types of searches and scope
- Tips for searching
- Conducting the search
- Reporting the search results

Why a Professional Search: First steps

- Ensure **novelty and/or non-obviousness** of your invention
  - Know what's in the public domain before investing time, resources, and money
  - An early opportunity to change design plan to overcome existing art
  - Reduce prosecution costs by filing properly scoped initial claims

Why a Professional Search: Offensive

- Patents are **business assets** that add value and give your business a competitive advantage
  - Can you freely produce and sell your idea
  - License or enforce your patent
  - Obtain investment funds or stimulate an acquisition
  - Capture the white-space
  - Track your competitors, inventors and technology area

* https://www.linkedin.com/pulse/flirting-danger-how-bumbles-ipo-driving-surge-ip-claims-towers/

Why a Professional Search: Defensive

- Protect yourself from others
  - Corporations:
    - Goal of having a large number of patents in their portfolio for cross-licensing and leverage (quantity vs. quality)
    - Enforce their patents
  - Startups:
    - Focus on the core invention (quality vs. quantity)
    - Ensure breadth of coverage
    - Search for any in-force claims you may potentially infringe

Search Types

- **Patentability**
  - The perfect search strategy to determine novelty and non-obviousness during the initial stages of product planning and development; completed prior to investing time and money
  - **Focus:** worldwide patents, published applications, NPL having any priority date
  - **Scope:** features, functionality, and breadth of the invention; the problem solved; keywords, synonyms, equivalents; classification / subclass

Search Types

- **Validity / Invalidity**
  - Conducted after the issuance of a patent to locate any prior art before the priority date that validates or invalidates the claims of that patent
  - **Focus:** worldwide patents, published applications, NPL having an earlier publication date or earlier priority date
  - **Scope:** understanding of the allowed claims; keywords, synonyms, equivalents; forward/backward search of examiner-cited references; file wrapper information; assignee/inventor; classification/subclass

Search Types

- **Infringement / Noninfringement**
  - Investigate whether claims of an enforceable, unexpired patent and published application cover or read-on your product or service; OR whether another product or service infringe your patent claims
  - **Focus:** exact or broader claims in unexpired patents and/or published applications (US or other countries depending on client); unexpired references only
  - **Scope:** understanding of the product/service; keywords, synonyms, equivalents; forward/backward search of examiner-cited references; assignee/inventor; classification/subclass

Search Types

- **Freedom-to-Operate or Clearance**
  - Can you freely produce, use, or sell your product/service in a particular country? Is your product/service already in the public domain?
  - **Focus:** worldwide patents, applications, NPL; claims of unexpired patents
  - **Scope:** Understanding of the product/service; keywords, synonyms, equivalents; forward/backward search of examiner-cited references; file wrapper information; assignee/inventor; classification/subclass

Search Types

- **State of the Art**
  - Gather trends, companies, and inventors in a particular technology field in order to assist R&D, marketing, acquisition value, joint ventures, business funding, licensing, etc.
  - **Focus:** worldwide patents, applications, NPL; may be date-limited to exclude older technology
  - **Scope:** understanding of the technology field; iterative process that may narrow and broaden depending on the client's focus

Search Types

- **Landscape**
  - Ensure sound business decisions and investment, supports determining commercial or licensing value of your patent; helps understand the benefits or risks in entering a new technology area; provides competitive intelligence; identifies white space in crowded fields
  - **Focus:** worldwide patents, applications
  - **Scope:** understanding of the technology field; generally an on-going and iterative process that narrows and broadens depending on the client's focus

Searching Strategies

Tips to find the needle in the haystack

- Forward/Backward search of examiner-cited references, including NPL
  - These are the closest-found references based on examiner searches
  - Each reference provides more references that can be reviewed
  - Provides keywords, synonyms and equivalents that may be unknown
  - Glean the classification / subclasses at that time

Searching Strategies

Tips to find the needle in the haystack

- Classification / Subclasses
  - Enter keywords at https://www.uspto.gov/web/patents/classification/, to select the classification and subclasses – importantly, the keywords need to focus on the inventive element(s)
  - Easier, quicker methods to determine the classification:
    - Use the examiner-cited references, if available
    - Perform a quick keyword search and note the classifications of the closest found references
  - A comprehensive search should include a review of all references in a core class / subclass for relevancy

Searching Strategies

Tips to find the needle in the haystack

1. Search the structure / function (What is it?)
2. Search the problem solved or end result (What does it do?)
3. Combine what it is and what it does
   - Start broad and narrow:
     - Search using main keywords, narrow by adding more keywords, iteratively narrow by grouping keywords with Boolean operators, rearranging the keywords and groupings, and using the class / subclass
   - Start narrow and broaden:
     - Combine what it is and what it does and work outward by removing keywords
     - Search within the class / subclass using keywords