Episode 05: Best Practices for Developing Reliable Freedom-to-Operate Landscapes and Advanced Techniques for Interactive, Reusable FTO Mapping

Patent Analytics Webinar Series
8–Episode Webinar Series

**Episode 01** - Techniques and Analytics for Identifying Valuable Patents and Patents to Abandon  
*Thursday, April 16, 2020 at 12:00 PM CT*

**Episode 02** - Using Patent Landscapes to Develop IP Rich Products and Valuable Patent Positions  
*Thursday, April 30, 2020 at 12:00 PM CT*

**Episode 03** - Using Prosecution Analytics to Improve Prosecution Efficiency and Identify Wasteful, Unproductive Prosecution Spending  
*Thursday, May 14, 2020 at 12:00 PM CT*

**Episode 04** - Using Examiner Analytics to Improve Prosecution Efficiency and Develop Well-informed, Data-Driven Prosecution Decisions and Strategy  
*Thursday, May 28, 2020 at 12:00 PM CT*

**Episode 05** - Best Practices for Developing Reliable Freedom-to-Operate Landscapes and Advanced Techniques for Interactive, Reusable FTO Mapping  
*Thursday, June 11, 2020 at 12:00 PM CT*

**Episode 06** - Using White Space Maps to Identify Open Spaces in the Patent Landscape  
*Thursday, June 25, 2020 at 12:00 PM CT*

*Thursday, July 9, 2020 at 12:00 PM CT*

**Episode 08** - Using Patent Prosecution History Reports to Increase Prosecution Efficiency and Avoid Unintended Estoppel  
*Thursday, July 23, 2020 at 12:00 PM CT*
Today’s Presenters...

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What exactly are FTOs and what are they used for?

An “FTO” is a Freedom To Operate analysis that determines which, if any, patents or patent applications present an infringement risk to a particular product or service.
What you will learn today

• Who uses FTO and to what purposes
• When they are most useful
• Strategic insights/Business Actions Available
• Making your FTO evergreen
• How FTO/Mappings are generated
• Overview of tools
Questions Answered:
• Will my new product infringe an issued patent?
• Will my new product possibly infringe a pending application when it issues?

Typical use cases:
• New Product Development
• New Feature on Existing Product
• Acquisition of a new company
• Investment into a startup
FTO Benefits

• Avoid unnecessary infringement suits and allegations
• Align development with ”open” IP space
• Enhance ability to develop patentable technology
• Identify opportunities
FTO Fundamentals

Is it feasible or even necessary to do an FTO
• How to handle incremental improvements?
• How to get a comfort level with products too complex to do complete clearance?

Scope of FTO Inquiry
• Do you clear every part of the proposed product?
• Or only the combination of parts you want to make?

Timing of FTO Process
• Do I design a product first and then clear it?
• Or do I first do the FTO, and then design product?

Defining Proposed Product for Clearance
• If I don’t have a final design, how do I do an FTO?
• How do I specify a design to clear if I don’t have one yet?
How Deep Do I Go?

FTO’s can be done at different depths of inquiry:

• US Competitors only vs. Competitors in Asia
• Aggressive competitors only
• FTE’s only
• All patents
• US/EP vs other international

Each level has pros and cons

• Competitors and FTEs most likely to notice an infringement, but can be done cheaper and faster
• All patents is more time consuming and expensive, but provides full picture and possibly opportunities to acquire a troublesome patent
• US and EP may both be important for med tech, but not always
Finding the Relevant Art

Using keyword/semantic search:
- Perform iterative keyword searches
- Zero in on most relevant search results

Using forward/backward citations
- Starting with set of relevant art, do forward/backward citation analysis
- Reiterate

Using time-based criteria
- Find inception point for the technology
- Search in that time period

Using competitors and or tech sectors
- Search competitors
- Search by CPC classification
Filtering the First Cut

• Filter out irrelevant results
• Identify the relevant results to analyze for FTO
• How to filter:
  • Review stacks of printed patents
  • Review folders full of PDF’s
  • Review in a DB
  • Review in a spreadsheet
Reviewing the "Pile" for FTO

Old fashion way

- Look at each patent one by one with design team
- Identify ways to avoid each patent
- Write up a report
- Start over if design changes from scratch

Better way:

- Review an interactive spreadsheet-based FTO map that keys off of key novelty of each patent
- Patent coverage stated in terms readily understood by engineers/scientists
- Note relevance or non-relevance of each patent
- Reiterate design ideas as many times as you want
- Update map as new patents issue
- Reiterate again
FTO pitfalls/tricks

Avoid

• Snapshot/One-N-Done
  • Consider Evergreen FTOs
• Single Source Searches
  • Patents/NPL/TM/Web
• Relying on FTO searches alone
• Only using legal team

Do

• Use your/competitor glossary
• Develop Core Concepts
• Develop Synonyms for Claims
• Partner with your Technologist
• Understand equivalents in claims
  • Review File Histories

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How Claim Abstraction Helps FTO

• **Claims largely define a patents value**

• **Claims between patents may be…**
  - Abstracted
  - Harmonized
  - Mapped

• **Thus claims may be assigned ontologies**
  - Similar to case law headnotes
Since Concepts Are Mapped To Claims, You're Almost Done!

Design Change Merely Changes Applicable Concepts

First concept of first claim

Concurrent

Concurrent

Concurrent

Map

Scope Concepts

Features

Design

Start Over

Yes

Design Change

No

Done

Abstracting: Case Law vs. Patent Claims

Headnotes

Scope Concepts

- What the claims say about the technology
  - Limitations
  - Varying Levels of Abstraction

Claimscape® Mapping

What is claimed is:
1. A method, comprising:
   delivering an electric stimulus from a lead situated within a body to a phrenic nerve at a controlled rate, wherein the electric stimulus is delivered to a region proximate a wall of a heart, whereas the electric stimulus is delivered from an electrode on the lead, the electrode being located on or within the heart.

(+ Attorney)
Output of FTO Claim Mapping

• **Interactive Excel Spreadsheet**
  - Usable by anyone
    - Outside Patent Counsel
    - Inside Patent Counsel
    - Engineers!!!
    - Best Practice = Outside Patent Counsel + Inside Patent Counsel + Engineers
  - Embeds “All Elements Rule” for infringement
    - If a scope concept in claim is absent from the design, can rule out that claim
    - If the scope concept appears in many claims, can eliminate many claims
    - Exclusionary tool: patent attorney reviews all claims that have not been ruled out
  - Easily updatable as new patents issue
    - “Chart once, use forever”
# FTO Report Claim Mapping Format

**Scope Concepts**
(minimal client time needed)

### Potential Relevance
("1," 2," or "3" – client provides input about present & future design)

### Individual Patents
(separated by violet and white columns)

### Claims Needing Further Review are Automatically Identified (in red)

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**Independent claims**

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**Key**
- Current Interest
- Future Interest
- Not of interest

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Key Take-Aways

• **FTOs involve Multi-sourced Highly Nuanced Data**
  • Detailed Human Analysis - Required
  • Resolve Data Inconsistencies by Hand
  • Claims are Key

• **Commercial FTO Mappings requires Review**
The Schwegman Analytics Advantage

SLW has been helping its clients find and improve high value patents for over 20 years and has invested heavily in its Analytics processes and tools for the last decade and is now expert at helping.

• More efficient work
• Shorter timelines
• Higher quality and key strategies
• IP Operations
• Fixed Fees/AFAs
• Tracking metrics
• Non-traditional providers
Thank You For Your Interest
Questions?
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