

Digital Transformation of the Legal Industry Webinar Series

SLW Digital Transformation Case Study:
Due Diligence, Freedom to Operate Studies,
Landscape Studies, Portfolio Curation,
Portfolio Analytics, Landscape Analytics,
Examiner and Attorney Analytics

8-Episode Webinar Series

Episode 01 – What is Digital Transformation for Law Practices? **Thursday, February 11**th, **2021**, at **12:00 PM CT**

Episode 02 – SLW Digital Transformation Case Study: Overview of SLW systems, tools, data lake, processes, teams and personnel. **Thursday, March 11**th, **2021,at 12:00 PM CT**

Episode 03 – SLW Digital Transformation Case Study: Application Preparation – Disclosure intake and docketing, application drafting tools, production management

Thursday, April 13th, 2021, at 12:00 PM CT

Episode 04 – SLW Digital Transformation Case Study: Prosecution I – Receiving & Reporting PTO Correspondence – docketing, data/document storage, work packets, drafting and filing papers and responses; reporting to clients

Thursday, May 13th, 2021, at 12:00 PM CT

Episode 05 – SLW Digital Transformation Case Study: Prosecution II – Claim tracking, reference analysis tools and reports, prosecution landscape tools and reports, IDS management **Thursday, June 10**th, **2021, at 12:00 PM CT**

Episode 06 – SLW Digital Transformation Case Study: Due Diligence, Freedom to Operate Studies, Landscape Studies, Portfolio Curation, Portfolio Analytics, Landscape Analytics, Examiner and Attorney Analytics

Thursday, July 8th, 2021, at 12:00 PM CT

Episode 07 -- SLW Digital Transformation Case Study: Billing, Invoicing, Client Budgeting and Cost Projection **Thursday, August 12**th, **2021**, at **12:00 PM CT**

Episode 08 -- SLW Digital Transformation Case Study: Recruiting, on-Boarding, Training, Firm Communications **Thursday, September 9**th, **2021**, at **12:00 PM CT**

Before We Get Started...



Recording

A link to the recording and slides will be emailed to all registrants.



Questions

Type in the question box and we will answer in real time or during the Q&A.



Social

Follow us on LinkedIn or go to SLW Institute on slwip.com to see upcoming and on demand webinars.

Today's Presenters...



Steve Lundberg
Principal & Chief
Innovation Officer
Schwegman
Lundberg &
Woessner



Suneel Arora Principal Schwegman Lundberg & Woessner



Milena Higgins
Chief of Data
Analytics
Schwegman Lundberg
& Woessner
Ph.D. Physics



Janal Kalis
Principal
Schwegman
Lundberg &
Woessner
FTO and Patent
Analytics Expert



Andre Marais
Principal
Schwegman
Lundberg &
Woessner



Thomas Marlow
President, Renewals
Former Chief Patent
Counsel of Fairchild
Semiconductor
Black Hills IP

Patent Due Diligence

Analyzing a Patent Portfolio to determine whether it supports your business objectives

Tasks in Patent Portfolio Due Diligence

- Identify all patents/patent applications in the portfolio;
- Check assignments of issued patents and patent applications;

Tasks in Patent Portfolio Due Diligence

Identify active patents, patent applications:

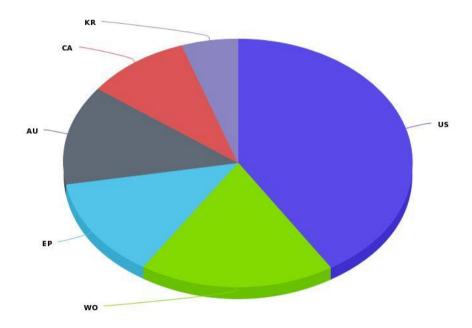
- Check payment of annuities, maintenance fees;
- Check patent expiration dates;
- Identify abandoned patent applications;
- Determine life left on issued patents that are not expired

Tasks in Patent Portfolio Due Diligence

- Identify Patent Families by Priority
 Across Countries and by Subject Matter;
- Align Patent Families with Products of Interest;
- Use Portfolio Owner's curation, tagging;
- Use Key Words in Abstract and Claims;
- Identify Patent Families of Interest;
- Review Backward/Forward Citations
- Review/Analyze Claims in Patent Families of Interest;
- Review Countries Covered; Remaining Term;
 Scope of Claims

Top Patenting Countries

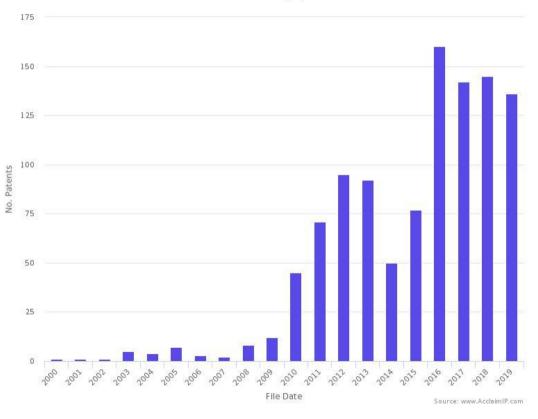
Top Patenting Countries



Date Charting

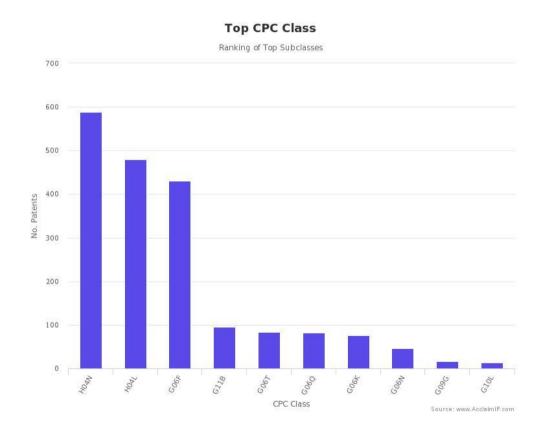
- Priority Date
- Filing Date
- Published/Grant Date





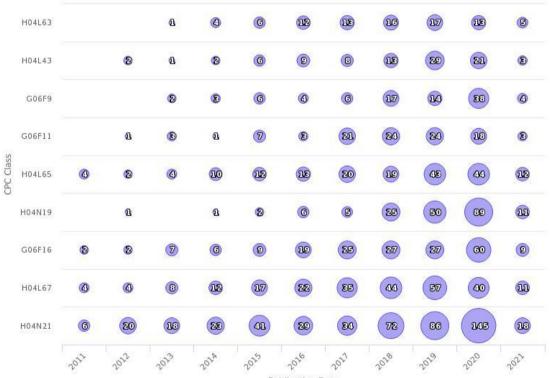
Top Classifications

- CPC / IPC
- Ranking at all class levels (Section to Complete class)
- First Only or All mentions of class available
- Class Titles Exportable



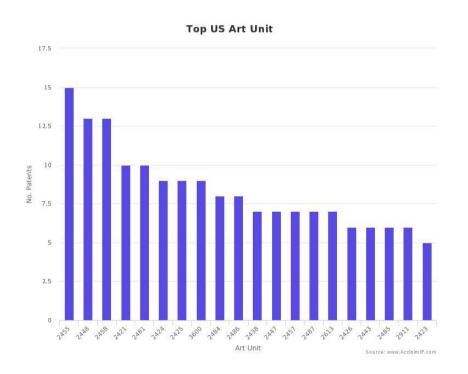
Portfolio Evolution by Class

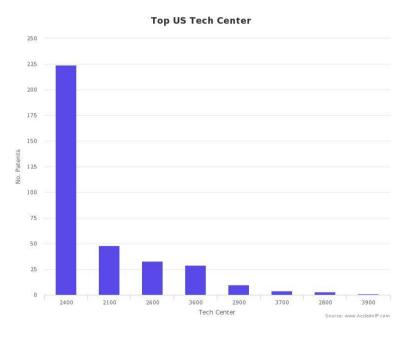
Patent Portfolio Evolution by CPC Class



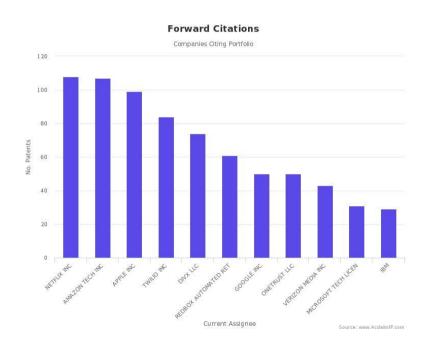
Publication Date

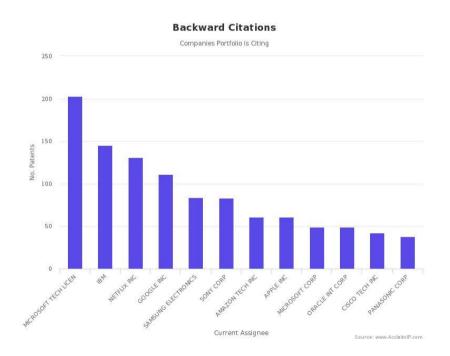
Top Art Unit / Tech Center





Citations



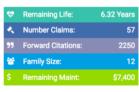


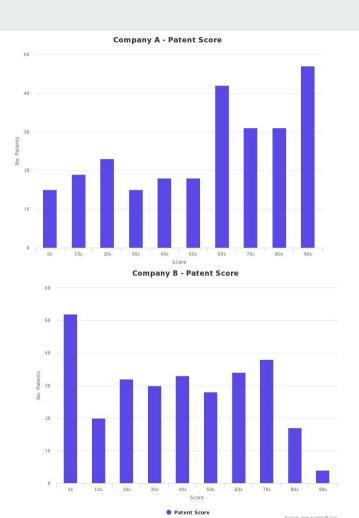
Patent Score

- Automated
- Citation Score
- Legal Score
- Technology Score

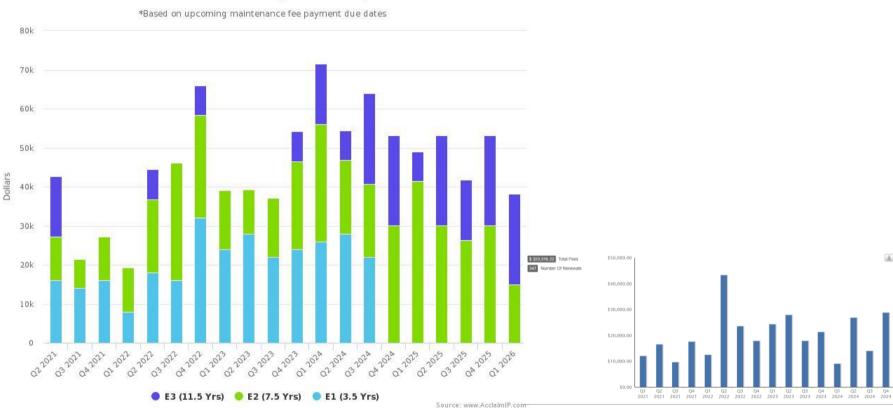


| 99 | 99 Citation Score |
|----------------|-------------------------------|
| | 47 Legal Score |
| O ₀ | 40 Technology Score |

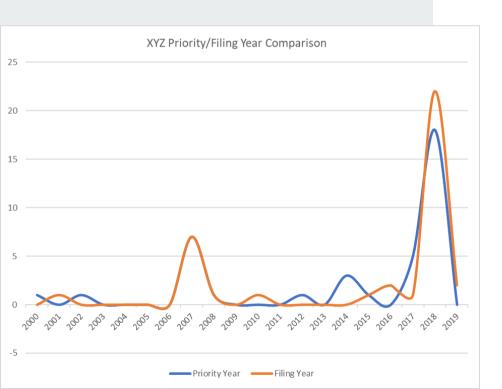




US Maintenance Fees by Calendar Quarter



Company-Level Analysis



Filing Trends

Key Technology Features

Portfolio Characteristics

- Expired vs. Active
- Pending Cases Trend
- Abandonment Rate
- Claim Scope

Notable Patents

Technology Filing Trends

SWOT Analysis

| STRENGTHS | WEAKNESSES |
|---|--|
| Large, strong portfolio in foundational A234 technology Considerably more active patents than other competitors | Significant percentage of portfolio is expired or will expire soon High rate of abandonment Claim scope appears to be narrower than competitors Weaker patent position for C119 technology |
| OPPORTUNITIES | THREATS |
| Reduce abandonment rate by implementing pre-filing screening Target prosecution of key applications (improve claim scope) Investigate partnership opportunities for C119 technology Investigate different applications for B665 technology | Competitor 1 has a strong portfolio in A and B technologies Competitor 2 has substantially increased filings in A234 technology in recent years Smaller players filing in C119 technology Emerging B665 technology may disrupt A234 technology market |

Software Tools Used:

Patent Searching / Analytics Reporting:

- AcclaimIP
- TotalPatent One®
- PatentBuddy™

Other Patent Software Used (Monitoring/Analysis)

- Patent Bots
- Patent 300[®] Dashboard

\equiv

Freedom-to-Operate Searching, Mapping and Analysis

Develop FTO Patent Maps for Broad Technology Development Initiatives or Specific Product Design Initiatives, Including Interactive, Reusable FTO Mapping

Preliminary Considerations

- Client end goals and audience
- Is it FTO or Landscape?
- Timing of FTO before or after design is completed
- Understand client's budget
- Leverage domain expertise of client to use budget wisely (e.g., SLW identifies patents, client reviews)

Goals and Scope

Define Client Goals

- Freedom to operate
- Landscape analysis
- Part of transaction or investment due diligence

Scope of the Project

- Product or technology to be cleared
- Geographical coverage
- Identified competitors
- Exclusions
- •3rd party relationships to technology
- Exclusions

Search

Initial Search & Review

- Start simple
- Designing the search can be the most challenging part
- Review and select potentially relevant results
- Review together with client

Subsequent Search(es) Select relevant results from initial search and itera

- Consider client's own patents
- Classification, keyword, assignee searches
- Forward & backward citation searches
- Litigation activity

Analysis

- Understand the end goal
- Understand what you are clearing (there may be multiple components)

Iterate

- Understand budget
- Current assignees, legal status, expiration status of final result set

- Who will perform the search?
- Design the search strategy
- Consider nontraditional or nonpatent search sources and datasets outside typical IP search

Review

Initial Search & Review

- Start simple
- •Designing the search can be the most challenging part
- Review and select potentially relevant results
- Review together with client

Subsequent Search(es)

- •Select relevant results from initial search and iterate
- Consider client's own patents
- Classification, keyword, assignee searches
- Forward & backward citation searches
- Litigation activity



Analysis

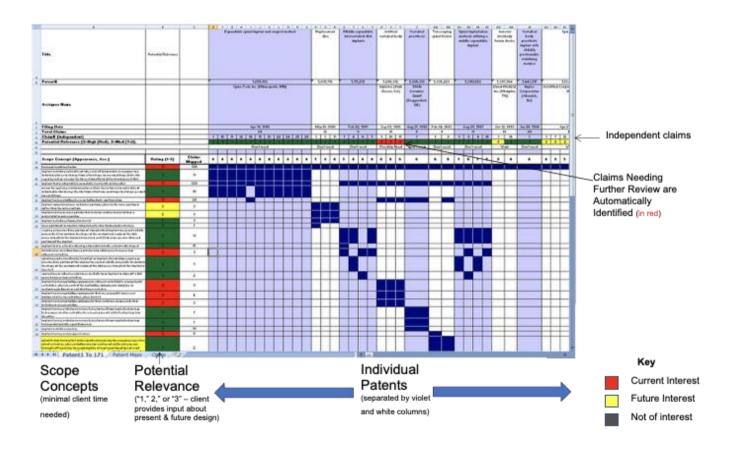
- Understand the end goal
- Understand what you are clearing (there may be multiple components)
- Understand budget
- Current assignees, legal status, expiration status of final result set

- SLW reviews search results (first pass)
- Pick out potentially relevant results
- Work with client to narrow those down to a manageable list
- Come up with key list of patents for further review
- What is the relevant output?

Deliverable Types

- FTO Memo
- ClaimBot
- Pitch Deck Slide Summary
- List of Constraints
- List of Questions for Target

Deliverable Interactive Claim Map



Examiner Analytics

Use Examiner Analytics to Develop Well-informed, Data-Driven Prosecution Decisions and Strategy

What is it?

 Examiner and Art Unit Analytics show key statistics for patent prosecution practices for PTO tech centers, art units, individual examiners.

Value Proposition

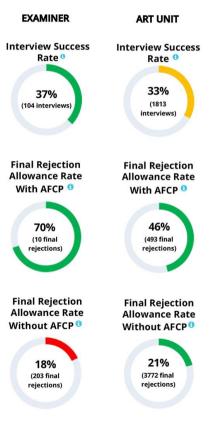
- Examiner/Art unit analytics provide a basis to tailor prosecution strategies to better advance applications through prosecution
- Examiner analytics provide valuable insight into Examiner behavior, in absolute terms and relative terms, enabling a practitioner to make more informed choices on such things as interviewing a case, filing an RCE, filing an appeal, etc.

PEDS (USPTO Patent Examination Data System)

| Refine by Cle | ear | Refined by: Examiner Name: SITTN | NER. MICHAEL J 🗙 | | | |
|---|-----|---|---|---|--|--|
| Top Filters More Filters | | | | | | |
| Application Number > | | 277 Results Match the selected criteria Expand All / Collapse All | | Expand All / Collapse All Request Download ▼ | | |
| Filing or 371(c) Date | > | Application/PCT # | Title of Invention | Status | | |
| Application Type | > | | FIFTH AND THE PROPERTY OF THE | About the filter To Book of To As | | |
| Examiner Name | ~ | > 09328672 | ELECTRONIC BOOK SELECTION AND DELIVERY SYSTEM WITH TARGETED ADVERTISING | Abandoned Failure To Respond To An Office Action | | |
| Q SITTNER, MICHAEL J | | | | | | |
| Top Values (Up to 25) SITTNER, MICHAEL J 277 | | > 09734044 | SYSTEM AND METHOD FOR INCENTIVIZING ONLINE SALES | Abandoned Failure To Respond To An Office Action | | |
| Group Art Unit | > | > 10401503 | METHOD AND APPARATUS FOR ELECTRONIC SUPPORT AND DELIVER OF MULTIPLE LOTTERY AND SWEEPSTAKE PROGRAMS, IN SUBSTANTIALLY OFF-LINE ENVIRONMENTS | ERY Abandoned Failure To Respond To An Office Action | | |
| Class / SubClass | > | | | | | |
| First Named Applicant | > | . 40.405200 | POINT-USED ELECTRONIC TRADING SYSTEM, POINT-USED ELECTRONIC TRADING METHOD, BROADCAST RECEPTION APPARATUS, AND BROADCAST RECEPTION METHOD | Abandoned Failure To Respond To An Office Action | | |
| Earliest Publication Number | > | > 10485398 | | | | |
| Patent Number | > | | | | | |

PatentPrufer





PatentBots

Grant Rate and Difficulty Ranking

| 3-Year Grant rate: | 2% over 110 cases |
|--------------------------|-------------------|
| Difficulty: 2 | Extremely Hard |
| Difficulty Percentile: @ | 98th |

With Examiner Sittner, you have a 2% chance of getting an issued patent by 3 years after the first office action. Examiner Sittner is an extremely hard examiner and in the 98th percentile across all examiners (with 100th percentile most difficult).

Grant Rate Timeline

Below is the grant rate timeline for Examiner Sittner, where the timeline is relative to the date of the first office action. The three-year grant rate is the percentage of applications granted at three years after the first office action.

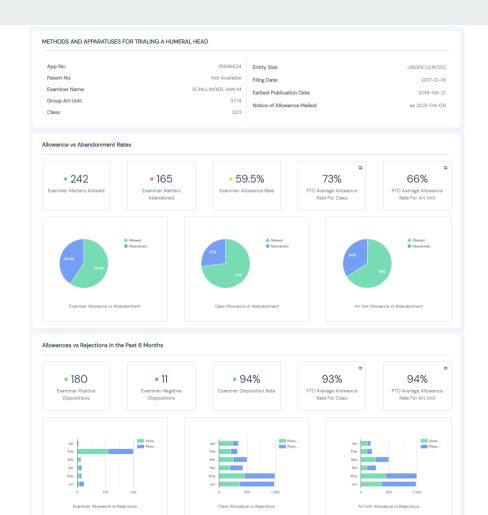


History of Appealed Cases

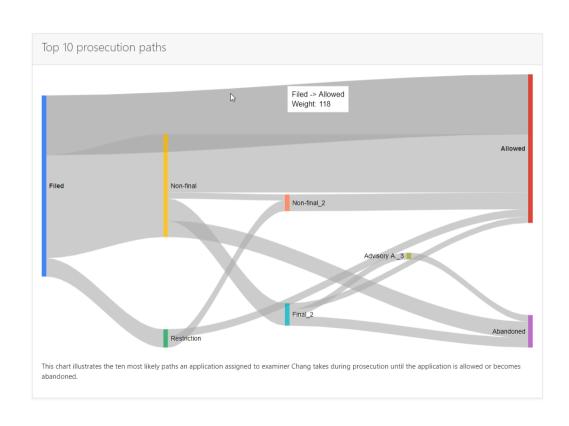
- Green: good outcomes (PTAB reversed, PTAB affirmed in part, examiner allowed claims, or pre-appeal conference withdrew rejections)
- Yellow: neutral outcomes (examiner reopened prosecution or pre-appeal conference reopened prosecution),
- · Red: bad outcomes (PTAB affirmance),
- Gray: uninformative outcomes (abandonment or filing of RCE), and
- . White: appeals are still pending.

| Number | Status | History | Patent- Plex ② |
|----------|----------|--|-------------------|
| 15893354 | Pending | Notice of Appeal » Appeal Brief » Ex. Answer » Reply Brief » Ex. Reversed | View |
| 15053889 | Pending | Appeal Brief » Notice of Appeal » Ex. Answer » Reply Brief » Ex. Reversed | View |
| 15036348 | Patented | Appeal Brief » Notice of Appeal » Ex. Reasons for Allowance | View |
| 15192128 | Patented | Notice of Appeal » Appeal Brief » Appeal Brief » Ex. Reasons for Allowance | View |
| 14329796 | Patented | Notice of Appeal » Appeal Brief » Ex. Answer » Reply Brief » Ex. Reversed | View |
| 1//5/672 | Dotontod | Notice of Appeal & Appeal Prior & Ev. Anguer & Deply Prior & Ev. Deversed | Tyri |





SmartPat

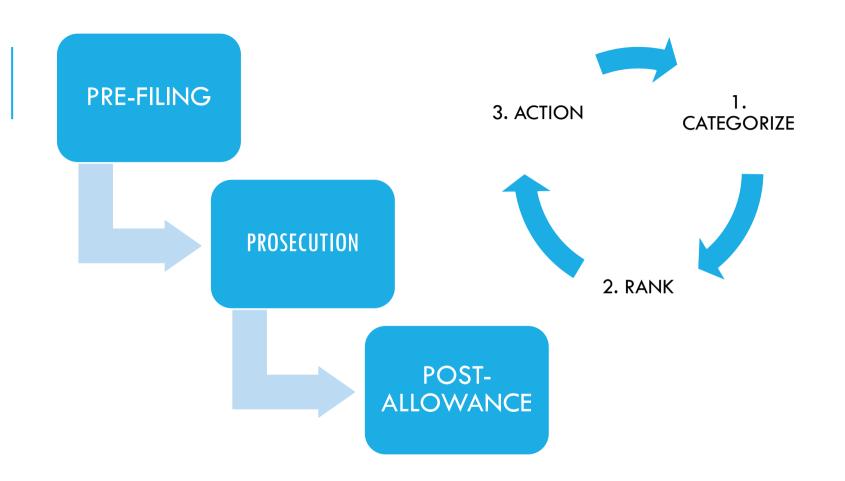


IP Asset Curation

cu·ra·tion

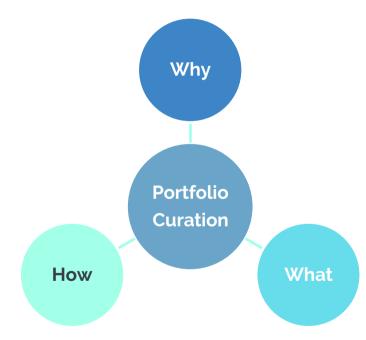
/kyəˈrāSHən/ Noun

1.the action or process of **selecting**, **organizing**, **and looking after the items** in a collection or exhibition



Patent Curation: Questions to Answer

Why are we building a patent portfolio? (What is the ROI?)



How do we build the patent portfolio to maximize ROI?

What assets do we need in the portfolio to achieve the "why"?

Patent Curation: Questions to Answer



Why are we building a patent portfolio?

Patent Curation: Start with the "Why"





Patent Curation: Questions to Answer



What assets do we need in the portfolio?

What



Inputs

Business Landscape



Patent Landscape

Resources



Outputs

Objectives

Goals



INPUT: BUSINESS LANDSCAPE

What



Khat

INPUT: PATENT LANDSCAPE

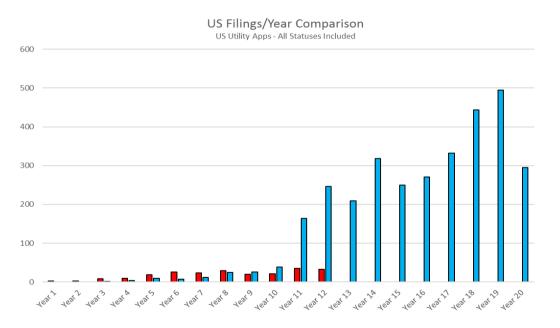


technology space.

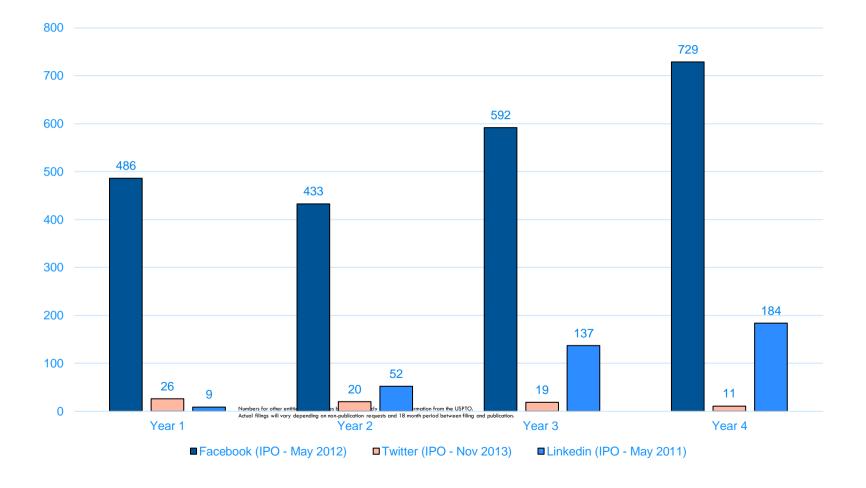
Value Proposition

Identify strengths and weaknesses of a Identify possible company's patent position in order to emerging threats in a technology optimize patent and product curation. space. Strengths **Threats** Weakness ΙP Value Creation Competitive Intel Opportunity Canoscape Analytic Identify opportunities to expand in a Gain strategic competitive insight into the technology space (e.g., potential relative strengths and weaknesses of the partnering, licensing, acquisition opportunities) patent positions of competitors in a

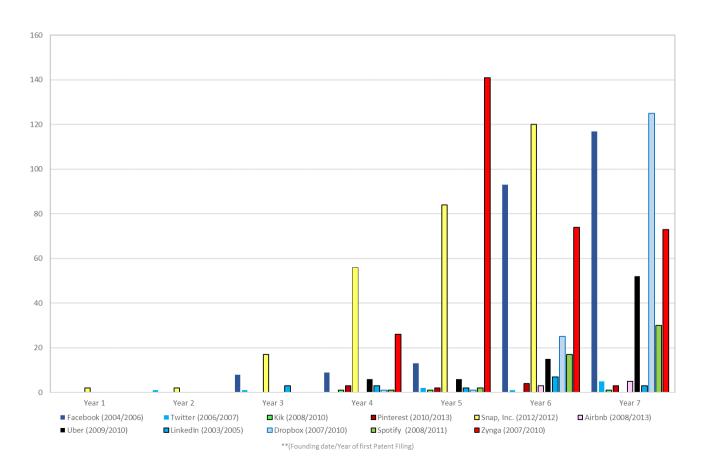
Benchmarking: Company Patent Growth Since Founded Comparison



| Company Filing Comparison | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 | Year 7 | Year 8 | Year 9 | Year 10 | Year 11 | Year 12 |
|---------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------|
| (Founded: 2008) | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
| | 3 | 3 | 8 | 9 | 19 | 26 | 23 | 29 | 20 | 21 | 35 | 33 |
| Founded: 1999) | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
| | 0 | 0 | 1 | 4 | 9 | 7 | 12 | 25 | 26 | 39 | 164 | 246 |

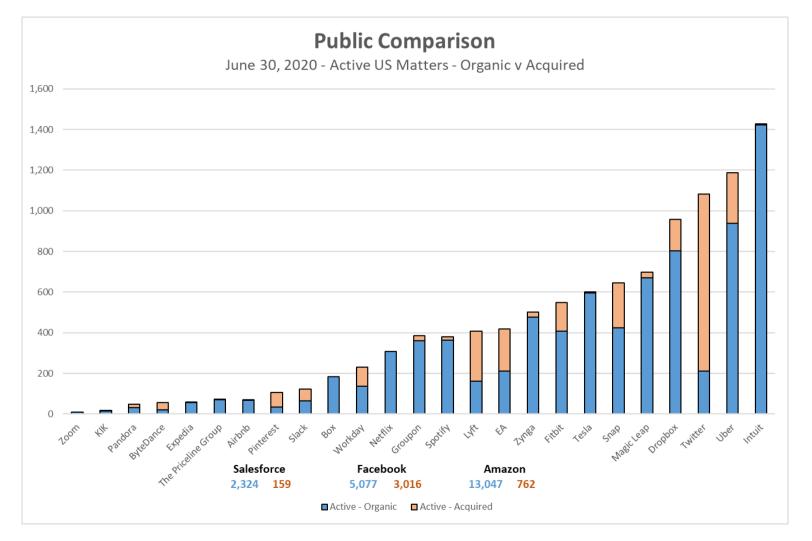


Benchmarking: Startup Patent Filing Comparison Chart - 1 of 2



Competitor Patent & Value Comparison

| Company Name | Active US Patent Matters (Issued & Pending) | Market Cap | Year Founded | # of Active Patents / Billion in Market Cap | Avg # of Patent Matters / Years Since Founding | |
|----------------------|--|------------|--------------|--|---|--|
| Microsoft | 40000+ | \$1.69T | 1975 | 0.02 | 889 | |
| Google | 30000+ | \$1.10 T | 1998 | 0.03 | 1364 | |
| Cisco | 15000+` | \$177 B | 1984 | 84.75 | 417 | |
| Amazon | 14000+ | \$1.70 T | 1994 | 0.01 | 538 | |
| Adobe | 5000+ | \$246.5 B | 1982 | 20.28 | 132 | |
| SalesForce | 3000+ | \$241 B | 1999 | 12.45 | 143 | |
| Avaya | 2500+ | \$1.30 B | 2000 | 1923.08 | 125 | |
| Uber (includes UATC) | 1100+ | \$58.9 B | 2009 | 18.68 | 100 | |
| Genesys Telecom | 650+ | \$1.80 B | 1990 | 361.11 | 22 | |
| Vonage/Nexmo | 235+ | \$2.76 B | 2001 | 87.04 | 12 | |
| Company X | 190+ | \$39.8 B | 2008 | 4.77 | 16 | |
| 8x8 | 180+ | \$1.77 B | 1987 | 100.00 | 5 | |
| Bandwidth.com | 50+ | \$3.77 B | 1999 | 13.16 | 2 | |
| Stripe | 34+ | \$35 B | 2010 | 0.97 | 3 | |
| MessageBird | 0 | \$~300 M | 2011 | n/a | n/a | |
| Plivo | 0 | ? | 2011 | n/a | n/a | |
| SendinBlue | 0 | ? | 2007 | n/a | n/a | |



OUTPUTS

What





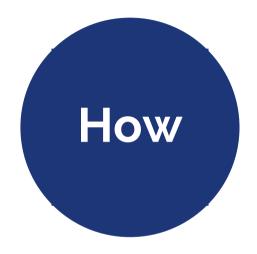
- Portfolio Level
- Case Level



Goals

- Quantity
- Quality
- Timing

Patent Curation: Questions to Answer



How do we build the patent portfolio to maximize ROI?

Patent Management Flow



OBTAIN: ORGANIC



Portfolio Curation

- Customized to the need of the client
- Organizes and classifies patents by product or technology
- Automated and hands-on categorization and ranking

| Title | | Patent Title | Patent Title | Patent Title | Patent Title |
|---|----------------|--------------|--------------|--------------|--------------|
| Patent# | | Patent No. | Patent No. | Patent No. | Patent No. |
| Current Assignee | | Patent Owner | Patent Owner | Patent Owner | Patent Owner |
| Filing Date | | Mar 21, 2019 | Nov 22, 2017 | Oct 29, 2018 | Aug 08, 2017 |
| Total Claims | | 20 | 25 | 20 | 20 |
| No. Of Claims (Independent) | | 3 | 4 | 3 | 3 |
| Technology Category (Sorted A-Z, Asc.) | Patents Mapped | 5 | 6 | 6 | 6 |
| 01. Tech Category 1 | 62 | | | | |
| 02. Tech Category 2 | 19 | | | | |
| 03. Tech Category 3 | 14 | | | | |
| 04. Tech Category 4 | 29 | | | | |
| 05. Tech Category 5 | 33 | | | | |
| Importance: High | 54 | | | | |
| Importance:Medium | 80 | | | | |
| Importance: Low | 89 | | | | |
| Primary Product: Product 1 | 7 | | | | |
| Primary Product: Product 2 | 116 | | | | |
| Primary Product: Product 3 | 38 | | | | |
| Secondary Product: Product A | 7 | | | | |
| Secondary Product: Product B | 11 | | | | |
| Secondary Product: Product C | 11 | | | | |
| Status: Allowed | 11 | | | | |
| Status: Granted | 39 | | | | |
| Status: Pending | 176 | | | | |
| Scope Concepts (Sorted A-Z, Asc.) | Patents Mapped | 2 | 1 | 1 | 1 |
| batch ingestion of data using remote device | 42 | | | | |
| hydration filter using charcoal or sand | 21 | | | | |
| Key Words (Sorted A-Z, Asc.) | Patents Mapped | 1 | 2 | 1 | 2 |
| batch ingestion | 17 | | | | |
| filter | 70 | | | | |
| hydration | 65 | | | | |

Thank you for your interest.

Questions?





These materials are for general informational purposes only. They are not intended to be legal advice, and should not be taken as legal advice. They do not establish an attorney-client relationship.