



# Monetizing Your Patent Assets: Turning Paper into Gold

Northern California Chapter - American Vacuum Society  
Plasma Applications Group

November 15, 2017

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# Patent Uses

## Tangible / Intangible Value to Company



Contract Negotiations



Financing



Competitive Assessment



IP Risk Assessment

## Sell / Enforce



Sell



License / Royalty



Litigation / Settlement



Defense

## Liquidate / Borrow



Mergers & Acquisitions




Bankruptcy Liquidation




Loan Collateralization

# How patent assets helps your company


- 
- Financing (start-ups, VC financing, debt financing)
  - 70-80% of a company's market cap is derived from intangible assets, e.g., patents, business knowledge and know-how ("How to Tell What Patents are Worth" Forbes 6/25/2013)
  - Bargaining position (cross-license, supply agreements)
  - Establish market power, differentiation
    - ▶ Ability to enjoin others
  - Competitive assessment
    - ▶ How you compare with your peers?
    - ▶ Strategic prosecution
  - Risk assessment
    - ▶ Are there holes in your portfolio?
    - ▶ Did you file foreign counterparts?
    - ▶ Have you analyzed third-party lawsuits

# US Patents by Type Issued in 2016



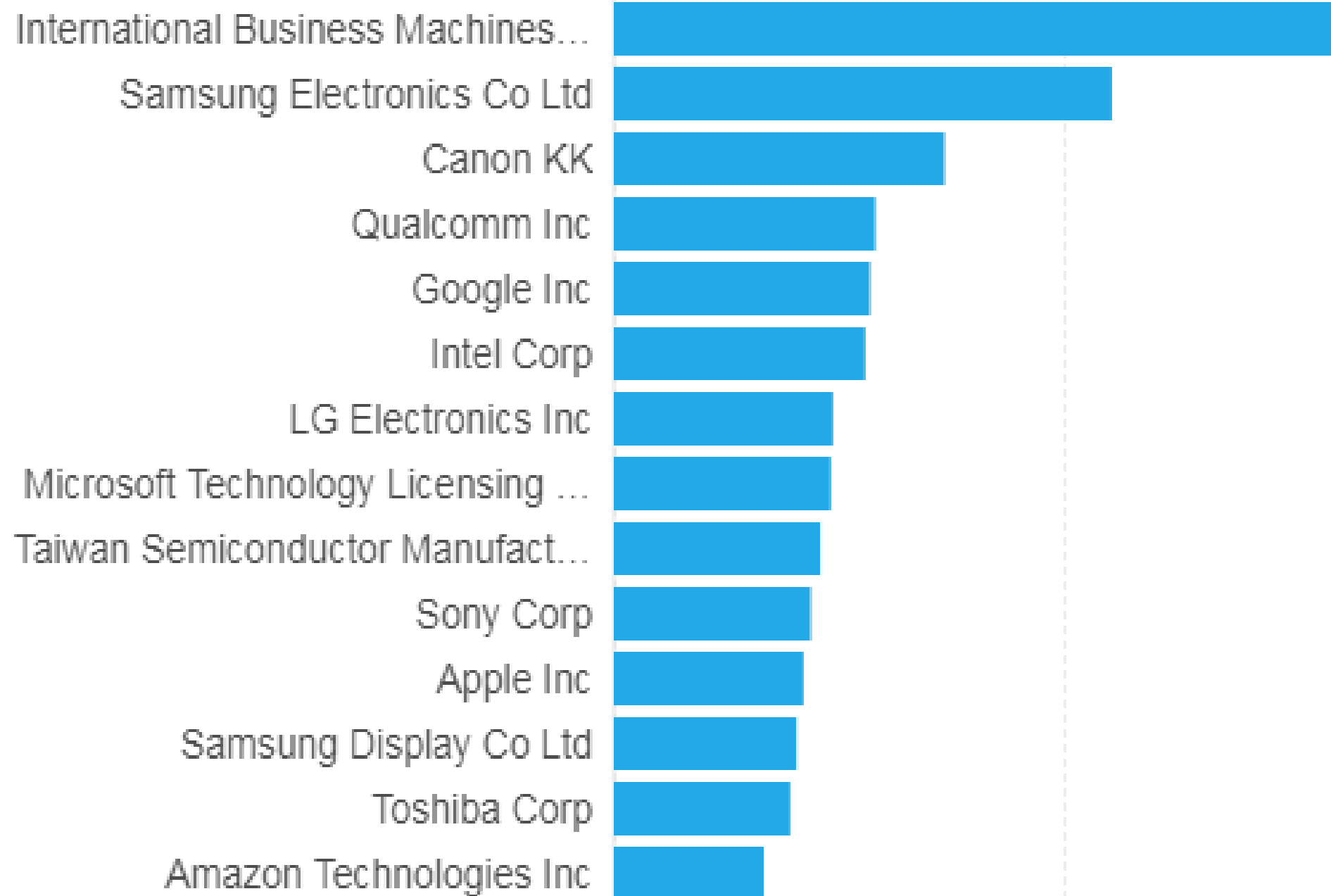
Type	2016	2015	% Change
Utility patents	303,051	298,446	1.5
Reissue patents	426	512	-16.8
Design patents	28,874	25,987	11.1
Plant patents	1,235	1,074	15.0
SIRs	0	0	0
Applications	381,792	380,450	0.35

# Top Companies for US Patent Activity in 2016

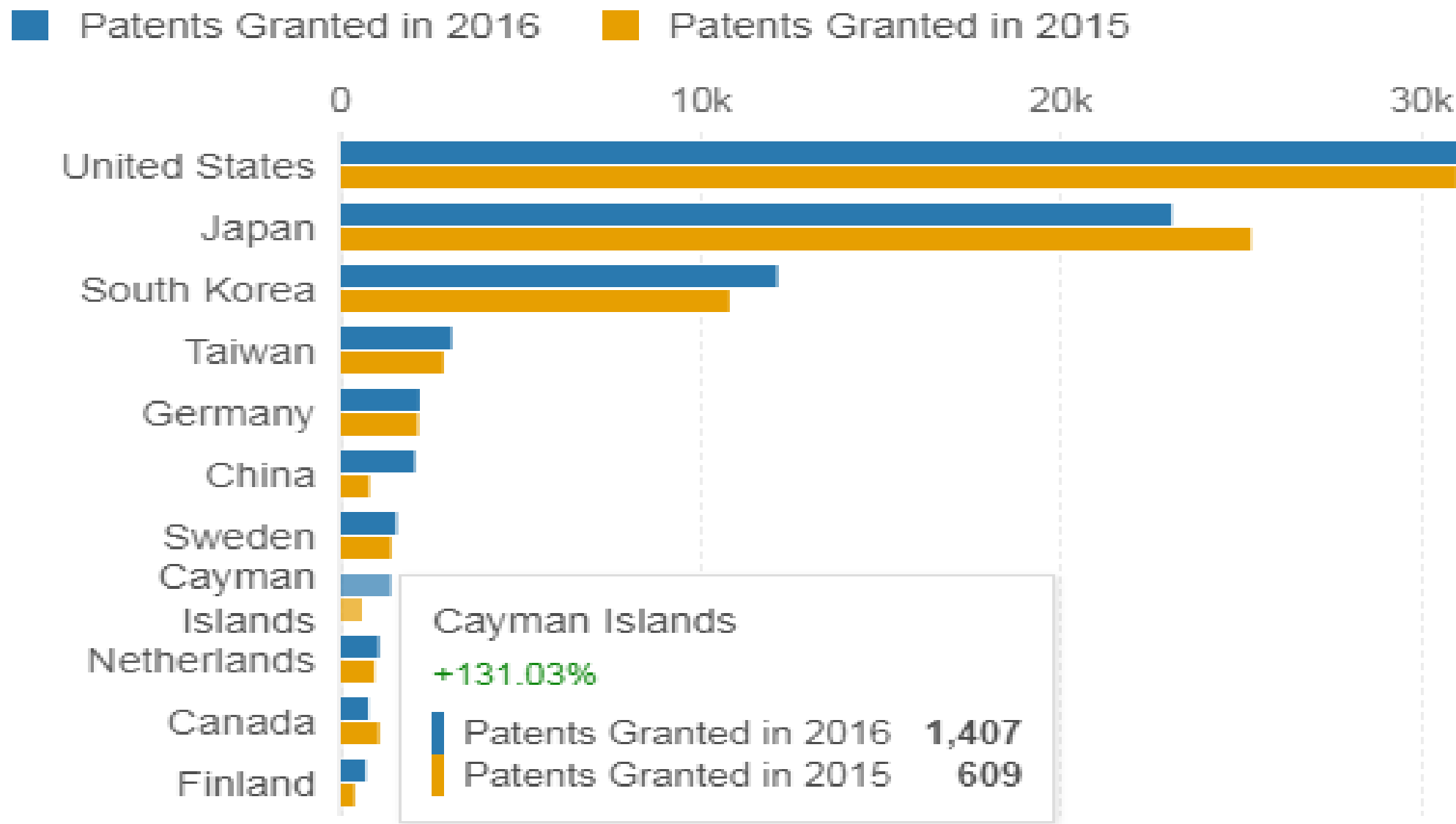


2016 Rank	Name	2016 Count	Country	2015 RANK
1	International Business Machines C	8088	US	1
2	Samsung Electronics Co Ltd	5518	KR	2
3	Canon KK	3665	JP	3
4	Qualcomm Inc	2897	US	4
5	Google Inc	2835	US	5
6	Intel Corp	2784	US	9
7	LG Electronics Inc	2428	KR	8
8	Microsoft Technology Licensing LL	2398	US	10
9	Taiwan Semiconductor Manufactu	2288	TW	13
10	Sony Corp	2181	JP	7
11	Apple Inc	2102	US	11
12	Samsung Display Co Ltd	2023	KR	12
13	Toshiba Corp	1954	JP	6
14	Amazon Technologies Inc	1662	US	26

# Top Companies for Patent Activity in 2016



# Headquarter Countries of Top 50 USPTO Patent Assignees



Source: IFI Claims Patent Services. [Show details](#)

# Patent Development Trends at Blue-Chip US Companies



- IBM saw a nearly 10% increase in US utility grants in 2016
- IBM saw 18% increase in Electrical Data Processing (Class G06F) and 25% Transmission of Digital Information (Class H04L)
- Samsung's grant count increased 9%, with large gains in G06F and Wireless Communications Networks (Class H04W)
- Apple's grant count increased 8%, Google's held steady
- Biggest mover was GlobalFoundries, increasing from 609 to 1,407 year over year (now #22)
- Intel, Microsoft, TSMC, Amazon, Huawei Technologies and Hyundai Motors all made substantial gains in ranking and granted patents




# Valuation Factors

- Historically—at least until dotcom boom—patent assets were not given much value or attention by company
  - ▶ Largely off-balance (not in companies' accounting)
  - ▶ Under traditional accounting methods (GAAP), look only at historical cost basis
  - ▶ R&D efforts expensed, not capitalized
  - ▶ Most investors and boards did not realize the hidden value of company's assets
- More recently, patents are considered major assets, but valuation remains uncertain
  - ▶ Strategic goals
  - ▶ Comparables
  - ▶ R&D
  - ▶ Technology category

# Valuation Factors (cont.)

- 
- Strategic goal
    - ▶ To be used offensively, defensively, or both
  - Comparables
    - ▶ Market rates
    - ▶ Other similar licenses
  - R&D
    - ▶ Materials, labor, management
    - ▶ Opportunity costs, delay in market entrance
    - ▶ Investment opportunities
  - Size of Portfolio
    - ▶ Portfolio price increase with number of patents

# Valuation Factors (cont.)

- 
- Industry categories
    - ▶ Software, wireless, pharmaceutical, other
  - NPE v. Non-NPE
    - ▶ Non-NPEs pay three times more than NPE Sellers or Buyers

# Valuation Methodologies

- Quantitative Analysis of Patent Portfolio
  - ▶ Cost-based
    - R&D, Size, replacement costs
  - ▶ Market-based
    - Estimation based on similar market transactions
    - Estimation based on royalty payments made pursuant to litigation
    - Comparables\*\*

# Valuation Methodologies (cont.) - Metrics Favored by NPEs

	Total Price	Number of Patents and Applications	Price Per Patent
Microsoft buys AOL patents (2012)	\$1.056B	925	\$1.1M
Facebook buys Microsoft's AOL patents (2012)	\$550M	650	\$846K
Apple, Microsoft, RIM buy Nortel patents (Rockstar) (2011)	\$4.5B	6,000	\$750K
Apple, Microsoft buy Novell patents (2010)	\$450M	882	\$510K
Google buys Motorola patents (2011)	\$12.5B	24,500	\$510K
RPX and IV buy Kodak patents (2012)	\$525M	1,100	\$477K
RPX buys Rockstar patents (2014)	\$900M	4,000	\$225K
Intel buys Interdigital patents (2012)	\$375M	1,700	\$221K

# Valuation Methodologies (cont.)



## ► Income-based

- Expected revenue generated from patent licensing or enforcement
- Assess the targeted companies
- Reverse view: Relief from royalty - valuation based on the royalty payments from which the company is relieved due to its ownership of the asset

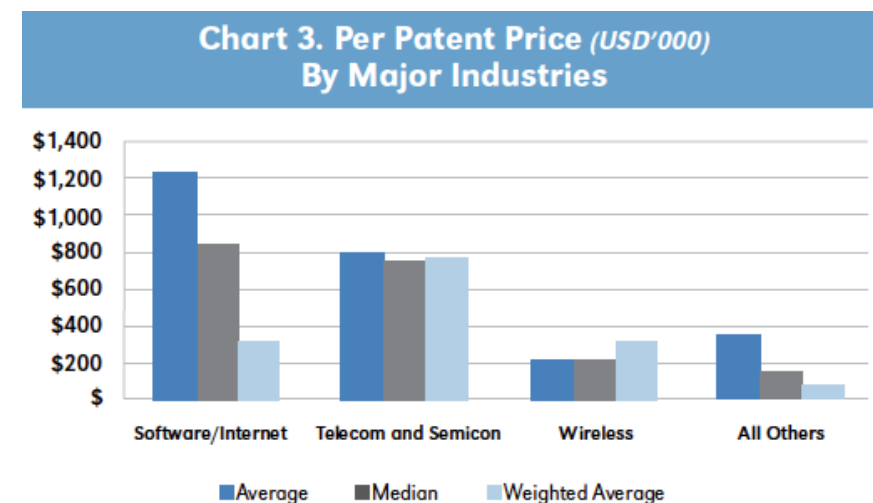
## ► Combination of the above

- This is not an exact science

# Valuation Methodologies (cont.)

- Quantitative Analysis - Other factors that have been used to increase / decrease valuation


- Technology category
  - Software, Internet\*
    - Study was done pre-Alice
  - Telecom
  - Wireless
  - Others
- Stock market valuation (less traditional)
  - Market cap of company / patent portfolio
  - Somewhat random



*Decompose And Adjust Patent Sales Prices For Patent Portfolio Valuation article by Jailing Lu*

Stock Market Valuation based market cap and patents	
InterDigital	\$75K
Mosaid/Conversant Technologies	\$90K
WiLAN	\$170K
Tessera	\$190K
Rambus	\$240K

# Specific Patent Assessment

- 
- Ranking patents based on quantitative factors
    - ▶ Computer-based or automated rankings, e.g., A, B, C
      - Based on quantitative factors, e.g., priority date, type of claims, length of claims, number of elements / limitations, foreign counterparts, expiration date
      - Use as first level of review to cull down large volumes of patents



# Specific Patent Assessment (cont.)

- Qualitative ranking of patents
  - ▶ Category
  - ▶ Quality of claims and specifications
  - ▶ Relevant prior art
  - ▶ Detectability of technology
  - ▶ Importance of intellectual property to industry
  - ▶ Core patent and technology
  - ▶ Life cycle of this patent and technology
  - ▶ Geographic coverage
  - ▶ Given experience, how do you view this patent?


# Establish realistic expectations

- Microsoft, Facebook, and Apple deals were mega-portfolio deals that represent the upper limits of patent valuation and may not be reflective of true per-patent value
- *VirnetX, Inc. v. Cisco Systems, Inc.*, 720 F.3d 1361 (2014)
  - ▶ Apportioned value of patented feature separated from unpatented features in an accused product
  - ▶ Limited acceptable damages testimony
  - ▶ “Generally required that royalties be based not on the entire product, but instead on the smallest salable patent-practicing unit.”  
*LaserDynamics, Inc. v. Quanta Computer*, 694, F.3d 51, 67 (Fed. Cir. 2012)

# Establish realistic expectations (cont.)

- *Alice Corp. v. CLS Bank Int'l*, 134 S.Ct. 2347 (2014)
  - ▶ Software patent at issue was determined to be non-patentable subject matter
  - ▶ Two step test: (1) determine whether the claims at issue are directed towards an abstract idea, law of nature, or natural phenomenon, and (2) if so, determine whether the claim “contains an inventive concept sufficient to transform the claimed abstract idea into a patent-eligible application.”
- Apportionment of damages and limits on software patents and lower damages findings have put some caps on patent enforcement

# Monetization Options

- 
- Commercialize \$\$\$
    - ▶ Build and sell products
  - Sell \$
    - ▶ Establish realistic expectations
    - ▶ Part of large group of valuable patents or discrete technology
    - ▶ Cash up-front
  - License - indirect \$\$
    - ▶ Patents assigned to third party to manage licensing discussions
    - ▶ Company doesn't want to deal with the licensing / sale of these assets

# Monetization Options (cont.)


- License - direct \$\$
  - ▶ The company retains ownership of the patents and manages the licensing activities, or uses third parties to assist negotiations
  - ▶ lump-sum license
  - ▶ low on-going royalties
- Litigate \$\$\$\$ or 0
  - ▶ Settlement
  - ▶ Past damages
  - ▶ On-going royalties

# Monetization Considerations



- Sell
  - ▶ Low expectations depending on quantity and quality of portfolio
  - ▶ Difficult to sell handful of patents at time (e.g., 5-25)
  - ▶ Portfolio requires some very good / core patents
- License
  - ▶ Requires charting on competitor products
  - ▶ Potential declaratory judgment action
  - ▶ Requires time and effort
    - In house staff
    - High commission brokers / professional licensing agencies
    - Results may vary and not satisfying
    - Time intensive, 3-4 year campaign

# Monetization Options (cont.)

- 
- Litigate
    - ▶ Potentially higher return through settlement or trial verdict
    - ▶ Get past damages and obtain on-going revenue stream through royalty payments
    - ▶ Can be unpredictable and get nothing

# Getting Financial/Other Assistance (cont.)


- Selling and Licensing

- ▶ In-house

- Requires up-front investment and full time effort
    - Hire appropriate staff with business, market, technology expertise
    - 1-2 years for initial results, can be a 2-3 year or longer campaign
    - Requires charting on competitor products (evidence of use), claims analysis, reverse engineering, retaining experts, understanding of licensing transactions and market rates
    - However, sets up for potential declaratory judgment action
      - Seeking a license can create the “case or controversy” requirement for declaratory judgment jurisdiction. *Sandisk Corp. v. STMicroelectronics, Inc.*, 480 F.3d 1372 (Fed. Cir. 2007); *Medimmune, Inc. v. Genentech, Inc.*, 549 U.S. 118 (2007)



# Getting Financial/Other Assistance (cont.)

- 
- ▶ Broker and Professional Licensing Agencies
    - High commissions
    - Results may vary and not satisfying
    - Time intensive, 3-4 year campaign
    - Requires charting on competitor products, claims analysis, reverse engineering, retaining experts, understanding of licensing transactions and market rates
    - Sets up potential declaratory judgment action

# Getting Financial/Other Assistance

- Financing the litigation
  - ▶ Company or self (as plaintiff asserting patents)
    - Pays all fees and costs
  - ▶ Law firm
    - Full contingency fees ~ 40%
    - Partial contingency fees ~ 33% depending on how much of expenses were paid by company
    - Hybrid contingency - fees subsidized or reduced by law firm or funding source, repaid if successful with bonus fee (15-20%) based on outcome
  - ▶ Funding source can be litigation finance firms/hedge funds such as Burford Capital, Bentham IMF, Juridica Investments Ltd., Parabellum Capital, Rembrandt IP, Juris Capital, LexShares

# Getting Financial/Other Assistance (cont.)

- Financing the litigation (cont.)
  - ▶ Professional monetization firms (IP Navigation Group, Intellectual Ventures, Acacia, IP Edge)
    - Pro: full-service, possible full contingency, limit liability (no counterclaim)
    - Con: lose control of assets, may be required to assign to LLC controlled by third party firm, high commissions (50% of winning)

# Patent licensing / monetization entities

	Unified Patents	Allied Security Trust	Ocean Tomo	RPX	Epicenter	Acacia Research Group	Intellectual Ventures	General Patent Corp.	IP Nav	Plaintiffs Law Firm	General Practice Law Firm
	NPE defense fund. Targets specific technology and assets preemptively and challenge by IPR	Member based patent holding company. Gives companies opportunity to aggregate funds to buy patents.	Provides licensing, valuation, sales. Also provides various expert services - technical surveys.	Patent aggregators. License to Members. Helps resolve matters for multi-defendants cases.	Provides patent licensing and brokerage services. More focused asset monetization.	Publicly traded company with directive to monetize assets. Partner with patent owners.	Primary business is to license patents for profit. Purchase patents from individuals and businesses	Patent valuation and monetization agency. High commissions. No control.	Patent monetization Agency. High commissions. No control.	McKool Smith, Banys, Nix Patterson Ni Wang	Foley Lardner MoFo Fish DLA Piper Morgan Lewis Jones Day
Insurance /License	✓	✓	✓	✓	✓	✓	✓		✓		
Patent Aggregator			✓	✓	✓	✓	✓		✓		
Defensive Aggregation				✓	✓		✓		✓		
Brokerage (sales bias)		✓		✓			✓				
Defensive Assertions (IPR)	✓			✓							✓
Offensive assertions					✓	✓	✓	✓	✓	✓	✓
Financing							✓	✓ 50%	✓ 50%	Contingency 40\$ / partial contingency 33%	Partial or Hybrid contingency 10-20%
Debt Financing									✓		

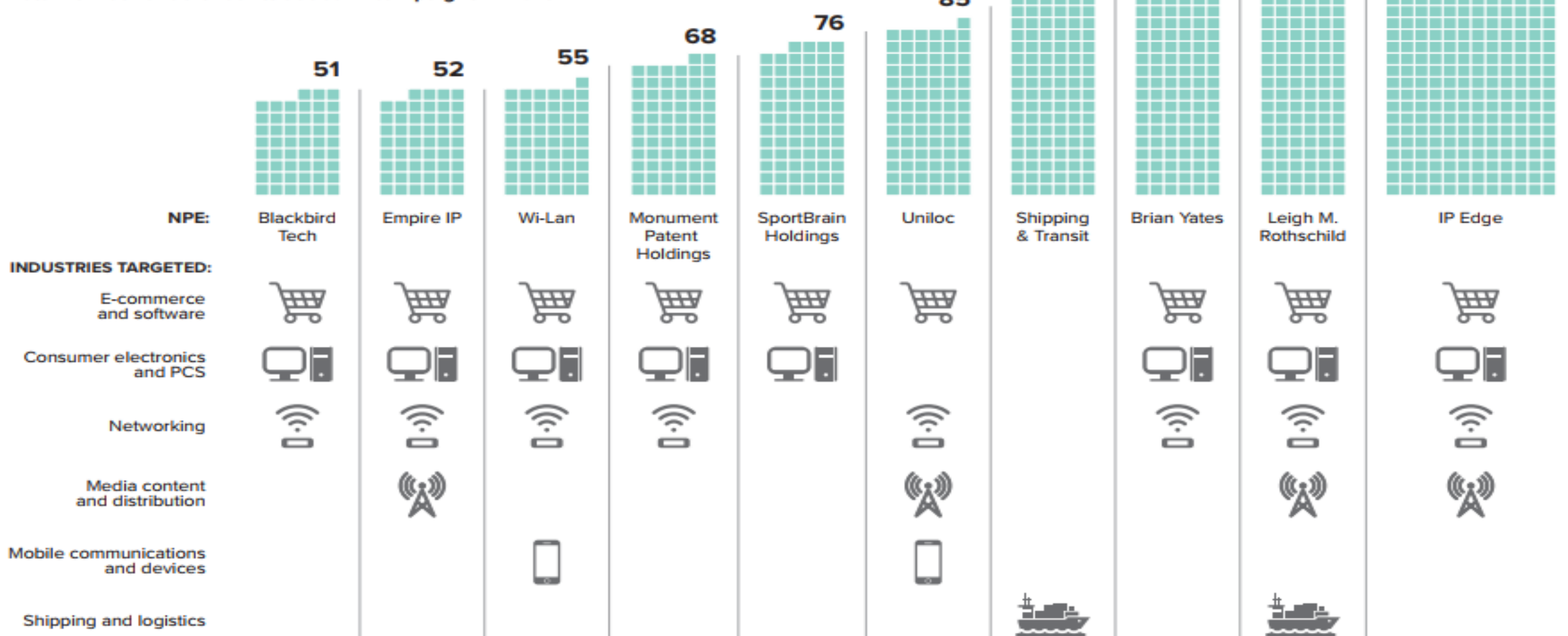
# Most Active “Patent Trolls” of 2016

## The Most Active ‘Patent Trolls’ of 2016

In 2016, IP Edge overtook Leigh M. Rothschild by a wide margin to become the year’s most active so-called patent troll. IP Edge and its many affiliates targeted more than 400 defendants in 33 patent litigation campaigns, accounting for 14 percent of all NPE litigation.

Non-practicing entities, such as IP Edge and Leigh M. Rothschild, routinely add hundreds of defendants to a campaign as part of their strategy to simultaneously claim patent infringement against multiple companies. An NPE is any patent holder that does not actively manufacture a product or provide services related to the patent. While not all NPEs are trolls, all “patent trolls” are NPEs — many firms follow NPE behavior as a proxy for estimating abusive patent activity. According to estimates from patent risk-management firm RPX, the following 10 NPEs accounted for 37 percent of all defendants targeted, but represent 2 percent of all active NPEs:

Total number of defendants added in campaigns in 2016



Note: This graphic was updated to reflect findings from *Iris Connex v. Dell*, which led RPX to add Brian Yates as one of 2016’s most active NPEs.


Source: RPX

By Janie Boschma and Todd Lindeman, POLITICO Pro DataPoint

# Other Third Party Resources for Patent Valuation / Monetization



# Steps for Patent Licensing - Pre-litigation

- 
- Investigation
    - ▶ Perform patent valuation and assessment
    - ▶ Identify targets
    - ▶ Prepare marketing materials
  - Notice
    - ▶ Submit marketing material to targets
    - ▶ Consider NDA
      - Pro: Prevent declaratory judgment actions
      - Con: No notice or willful infringement



# Steps for Patent Licensing - Pre-litigation (cont.)

- Notice (cont.)
  - ▶ Requires time and effort
    - In house staff
    - High commission brokers / professional licensing agencies
    - Results may vary and not satisfying
    - Time intensive, 2-4 year campaign
- Litigate
  - ▶ Potentially higher return through settlement or trial verdict
  - ▶ Get past damage and obtain on-going revenue stream through royalty payments
  - ▶ Can be unpredictable and get nothing



# Considerations Before Litigation

- Strength of patent / patent claims
  - ▶ Easy to comprehend claims (your audience is a jury)
  - ▶ Good expert support
- Strength of infringement allegations
  - ▶ Are there clear targets?
  - ▶ Are these your direct competitors?
  - ▶ Do they have good counterclaims? Their own portfolio?
- Likelihood of surviving IPR / invalidity challenge
  - ▶ You pretty much have to assume you will get an IPR / CBM challenge
  - ▶ Likelihood of a party succeeding in an IPR challenge was ~80%, now closer to 65%

# Considerations Before Litigation (cont.)



- Are these core patents / core technology?
  - ▶ Be careful if they are core patents!
  - ▶ You may inadvertently turn a monetization campaign into a bet-the-company case



# Thank You!

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