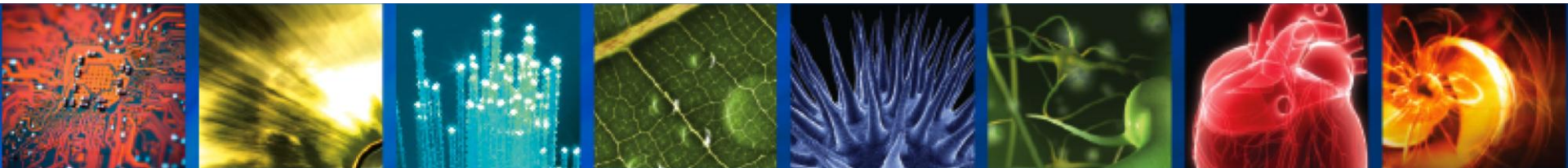


# *IP Strategies for Software Tech Companies*

*Amy Chun • Russell Jeide • Ted Cannon*

*September 11, 2014*



# Roadmap

- **Key IP Concerns for Software Tech Companies**
- **New Post-Grant Proceedings for Challenging Patents**
- **Impact of *Alice* on Software Patents and the Importance of Building a Strong Patent Portfolio**

# Key IP Concerns

- Key IP issue that comes up over and over again:

**IS THE COMPANY GOING TO BE SUED FOR PATENT INFRINGEMENT?**

- Risk Assessment
  - Risk of getting sued
  - Risk of paying out \$\$\$ or being shut down
- Threats of patent lawsuits come from:
  1. Competitors
  2. Non-Practicing Entities (NPEs)/Patent Trolls
    - Do not sell any products or services
    - Acquire patent rights to assert against operating companies

# Competitors v. NPEs – What do they want?

## Competitors

- **Business-Driven Goals**
  - An injunction
  - Lure away/threaten existing and potential customers
  - Slow down business growth
  - Money
- **Willing to sue early stage companies**

## NPEs

- **Monetary Goals**
  - Sue big companies with significant revenue
  - Sue lots of smaller companies for nuisance value
- **Typically target established companies**

# Three Main Lawsuit Risks

## 1. Injunction will shut down business

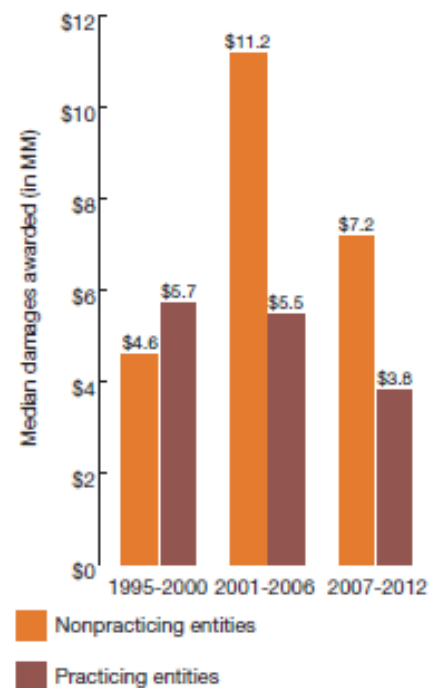
- But...these are rare

8	UNITED STATES DISTRICT COURT	
9	NORTHERN DISTRICT OF CALIFORNIA	
10	SAN JOSE DIVISION	
11	APPLE, INC., a California corporation,	) Case No.: 11-CV-01846-LHK
12	Plaintiff,	
13	v.	) ORDER DENYING APPLE'S RENEWED MOTION FOR PERMANENT INJUNCTION
14	SAMSUNG ELECTRONICS CO., LTD., A	
15	Korean corporation; SAMSUNG	) [REDACTED]
16	ELECTRONICS AMERICA, INC., a New York	
17	corporation; SAMSUNG	
18	TELECOMMUNICATIONS AMERICA, LLC,	
	a Delaware limited liability company,	
	Defendants.	

# Three Main Lawsuit Risks

2. Will have to pay \$\$\$ for damages or settlement

Chart 2b. Patent holder median damages awarded: nonpracticing entities vs. practicing entities



Median damages are adjusted for inflation and represented in 2012 US dollars.

[http://www.pwc.com/en\\_us/us/forensic-services/publications/assets/2013-patent-litigation-study.pdf](http://www.pwc.com/en_us/us/forensic-services/publications/assets/2013-patent-litigation-study.pdf)

# Three Main Lawsuit Risks

3. Will have to spend \$\$\$ to defend a lawsuit

## AIPLA 2013 Report of the Economic Survey

### Patent Infringement (all varieties)

Amount in Controversy      End of Discovery      Through Trial

< \$1M	\$530K	\$970K
\$1M-\$10M	\$1.2M	\$2.1M
\$1M-\$25M	\$1.7M	\$2.8M
\$10M-\$25M	\$2.2M	\$3.6M
>\$25M	\$3.6M	\$5.9M

### Patent (defending against NPEs)

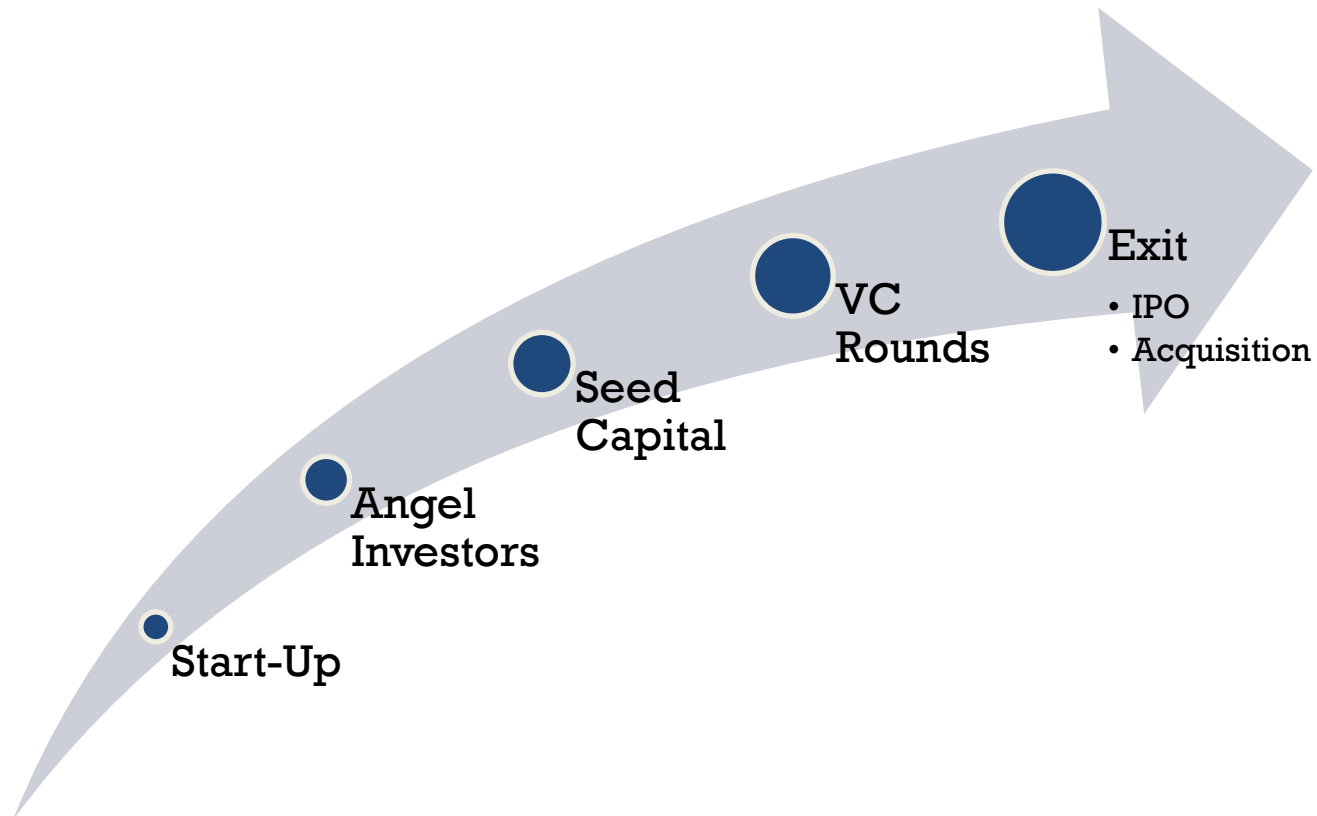
Amount in Controversy      End of Discovery      Through Trial

< \$1M	\$516K	\$820K
\$1M-\$10M	\$988K	\$1.6M
\$1M-\$25M	\$1.3M	\$2.0M
\$10M-\$25M	\$1.7M	\$2.7M
>\$25M	\$2.9M	\$4.4M

<http://www.patentinsurance.com/custdocs/2013aipla%20survey.pdf>

# When Is Risk Assessed?

- Key Decision/Funding Milestones = Risk Assessment Stages





# Assessing Patent Risk – The Tech Industry

- How do you know which patents might be infringed?



30



250,000

# Assessing Patent Risk – Competitors

- **Competitor Portfolio Assessment**
  - Research and monitor information patent portfolios
  - Analyze patent families for existing risk and potential future risk
    - Damages estimations
    - Patent term estimates
  - Track litigation behavior

# Assessing Patent Risk – Competitors

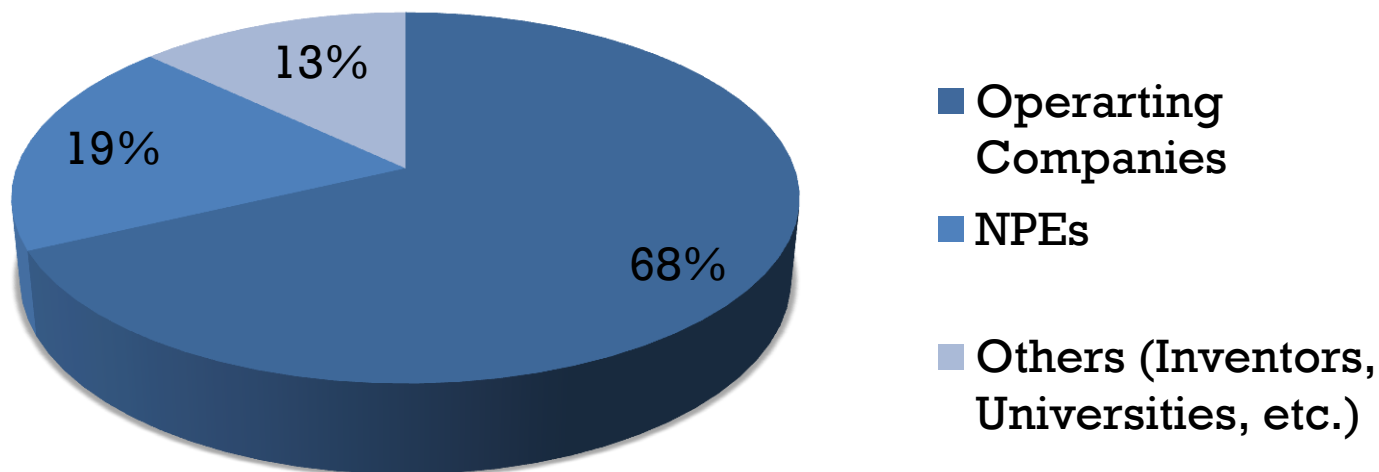
- Options for Reducing Risk
  - Indemnification from data and technology suppliers
    - But, not usually provided for open source code
  - Strategic alliances/partnerships
  - Escrow funds for acquisitions
  - Patent Infringement insurance
  - Establish Company positions for patents with high risk

# Assessing Patent Risk – NPEs

- More concern about NPEs
- “Reports” that NPE litigation is dramatically increasing
  - RPX estimates that the numbers are even higher claiming that 67% of all cases filed in 2013 were filed by NPEs
    - <http://www.rpxcorp.com/2014/05/06/no-major-surprises-in-2013-npe-litigation-report-cases-total-defendants-and-unique-defendants-all-up/>
- But, others say that the increase isn’t significant
  - “[T]he *raw* number of patent lawsuits filed by non-operating companies substantially increased from 2010 to 2012.” However, “[a]fter considering the total number of patent litigants, we found rather a modest increase between 2010 and 2012.”
    - Christopher A. Cotropia, Jay P. Kesan & David L. Schwartz, [\*Unpacking Patent Assertion Entities \(PAEs\)\*](#)

# Assessing Patent Risk – NPEs

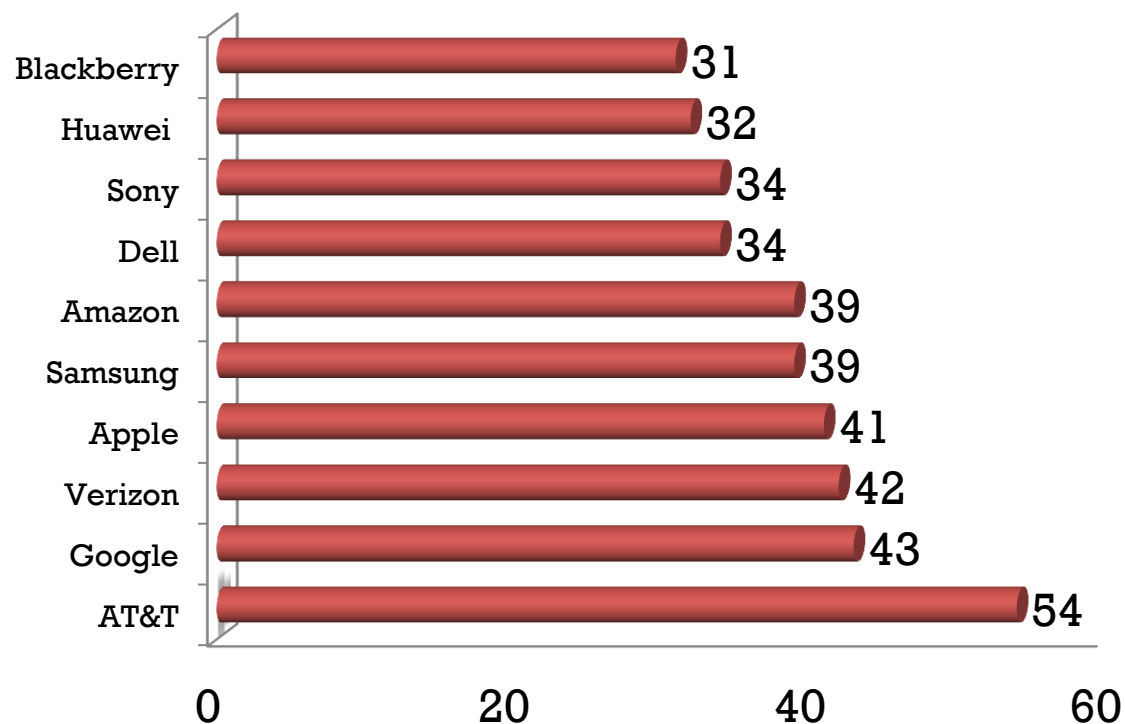
## Entities Filing Patent Suits (2007-2011)



<http://cpip.gmu.edu/2013/10/04/gao-report-confirms-no-patent-troll-litigation-problem/>

# Assessing Patent Risk – NPEs

- Top targets for 2013 NPE lawsuits



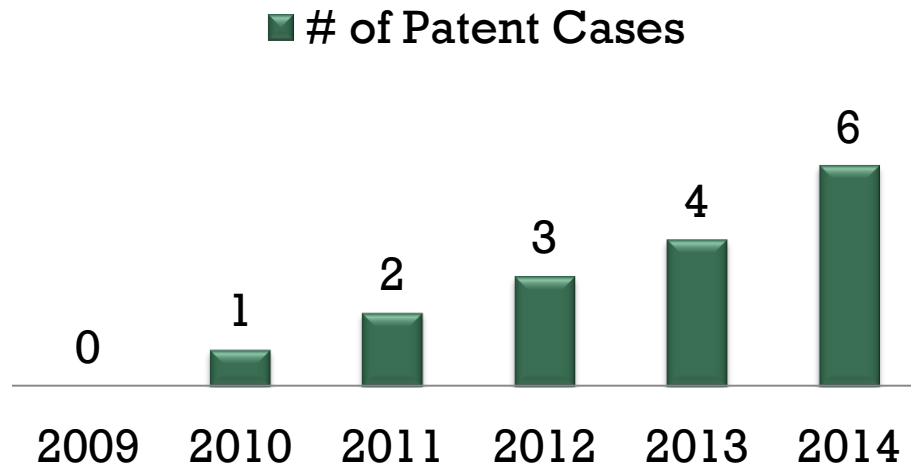
<http://fortune.com/2014/02/27/10-biggest-patent-troll-targets-in-business/>

# Assessing Patent Risk – NPEs

- Risk increases as the Company grows
- What can be done?
  - Defensive Patent Aggregators (e.g., RPX)
    - Group membership to buy a “license”
  - “Patent Pledges”
  - “License on Transfer” Licenses
  - Changes in the law
    - [Stalled] Legislation to address NPE litigation
    - Changes from the Supreme Court

# Assessing Patent Risk – NPEs

- In 2014, the Supreme Court decided **6** patent cases
  - All were **unanimous** decisions
  - 1 pending patent case that will be heard this fall
- This is a high number of patent cases compared to previous years





# Assessing Patent Risk – NPEs

## Supreme Court Cases in 2014

1. Deference to district court for claim construction
  - *Teva v. Sandoz* (cert granted)
2. Limiting protection for certain business method/software patents
  - *Alice v. CLS Bank*
3. Invalidating claims that don't have “reasonable certainty”
  - *Nautilus v. Biosig*
4. Limiting certain types of infringement to require a direct infringer
  - *Limelight v. Akamai*
5. Deference to district court for determining “exceptional” case/fee-shifting
  - *Highmark v. Allcare*
6. Expanding “exceptional” case/fee shifting analyses to include the “totality of the circumstances”
  - *Octane Fitness v. Icon Health & Fitness*
7. Patentee bears the burden of persuasion on infringement
  - *Medtronic v. Boston Scientific*

# Assessing Patent Risk – NPEs

- What is the Supreme Court's trend?
  - Making requirements **more stringent for patent owners** who are asserting their patents
  - Making it **easier** for district courts **to find exceptional cases and award attorneys' fees**
- **Effect = More litigation risk for NPEs**

# Attacking Patents

- There are options for attacking bad and/or problematic patents
- Strategic considerations
  - May be starting a fight that wasn't ever going to occur
  - May prefer to let others handle
  - Timing
  - Cost: \$\$\$ + Company time
- Recent changes in the law have added new ways to attack patents
- Having your own arsenal of weapons is also important

# POST-GRANT PROCEEDINGS UNDER THE AMERICA INVENTS ACT

# Changes to Post-Grant Disputes

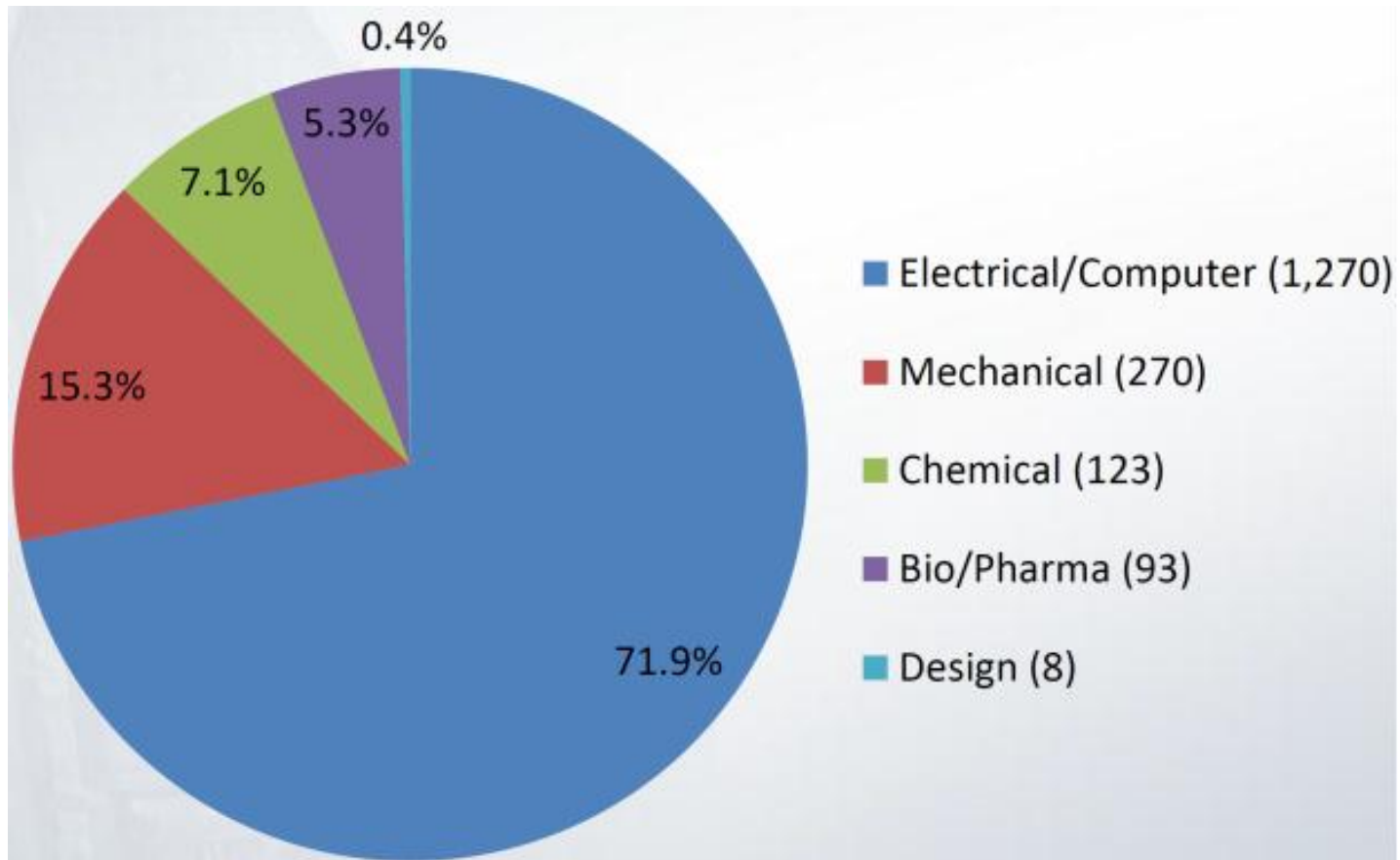
## Before

- *Ex Parte* Reexam
- *Inter Partes* Reexam

## After

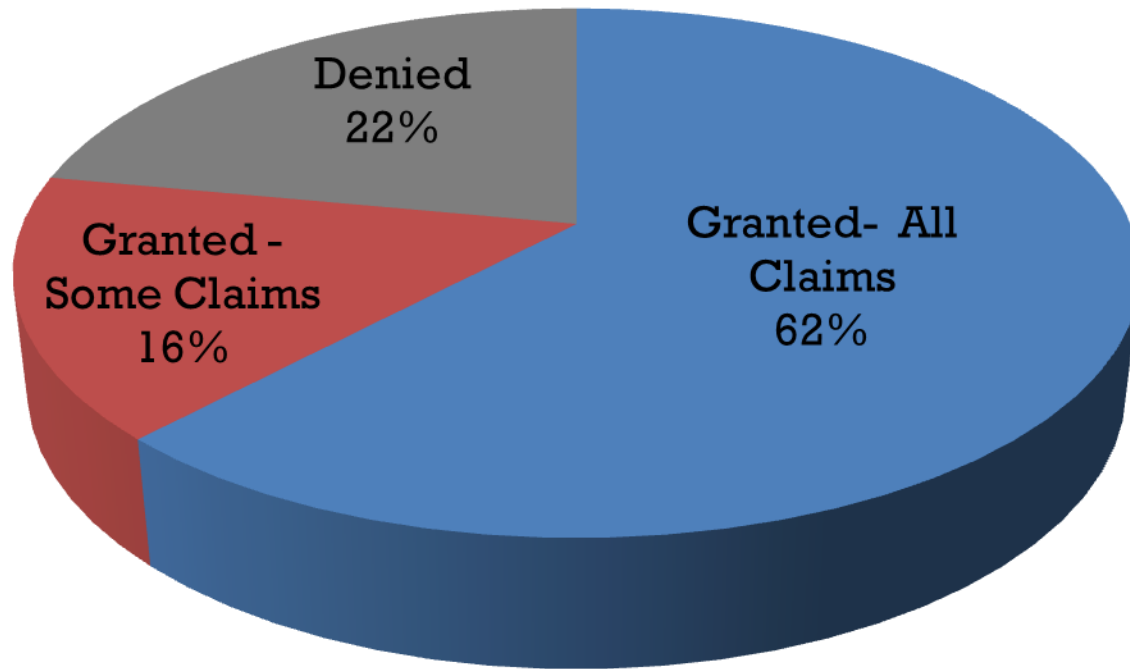
- *Ex Parte* Reexam
- *Inter Partes* **Review**
- Post-Grant Review
- Transitional Program for Covered Business Method Patents

# IPR and CBM Filings by Technology

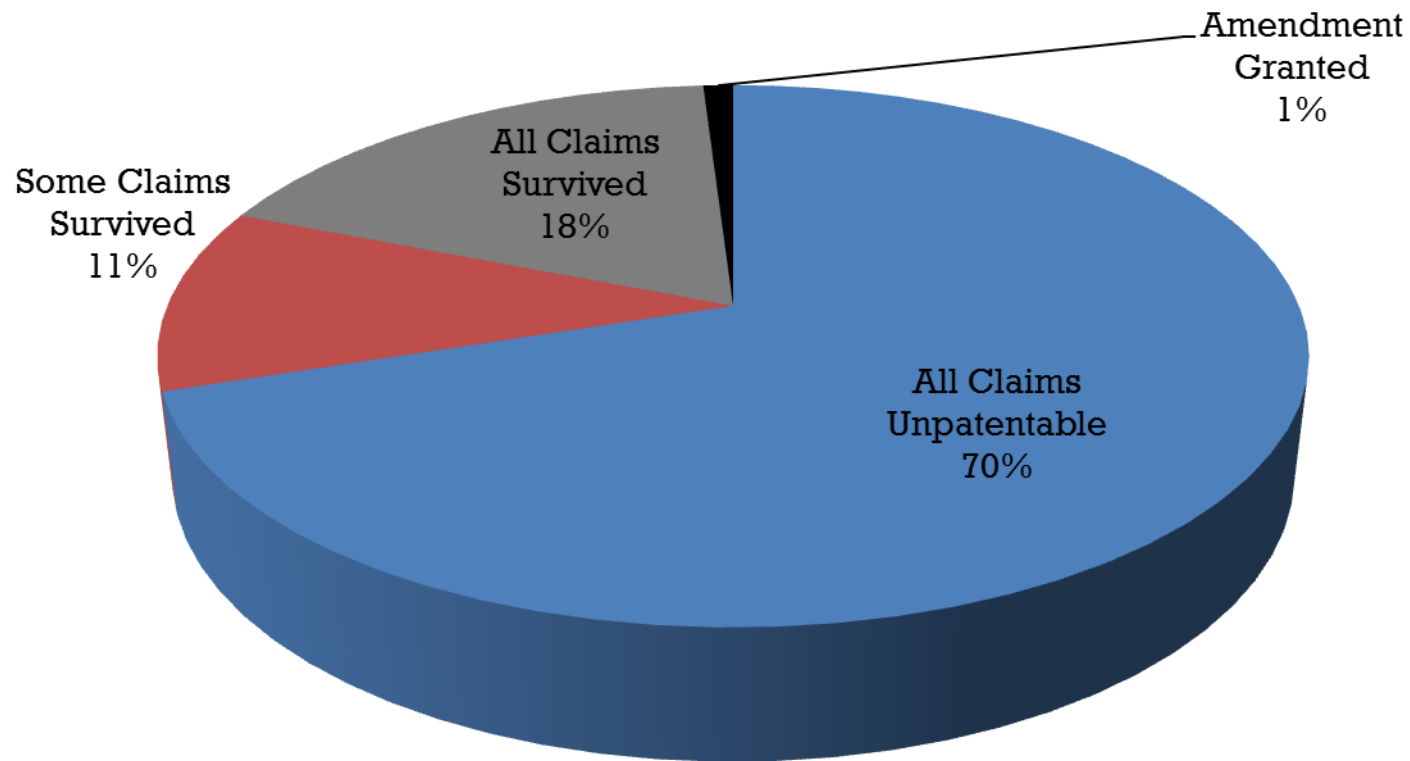


# Trials Instituted at High Rate

Source: [www.uscourts.gov](http://www.uscourts.gov)



# IPR Final Written Decisions





# *Ex Parte* Reexamination

- Patent challenger files a request for the USPTO to institute reexamination based upon prior patents and prior publications
- If reexamination is instituted, it is much like standard patent prosecution:
  - Patent Owner receives and responds to a series of Office Actions
  - Patent Owner can amend the claims or argue that existing claims are patentable
  - Challenger does not participate in process
  - No discovery is allowed

# *Inter Partes* Review

- Petitioner asks the USPTO to invalidate a patent based upon prior patents and prior publications
- If the petition is granted, the USPTO institutes a mini-***trial*** to determine whether the claims are valid
  - Both sides submit expert testimony
  - Limited depositions and other discovery is allowed
  - Trial ends in an oral hearing before panel of judges
- Challenger must file the petition within one year of being served with a patent infringement complaint
- If Petitioner loses, it cannot assert future invalidity defenses that it raised or could have raised in the IPR

# Post-Grant Review

- Bases for challenging patent are ***not*** limited to patents and prior publications:
  - Public uses and commercial sales
  - Patent ineligibility under 35 U.S.C. § 101
  - Written description and enablement
- Available only for patents filed after March 15, 2013
- Must be filed within nine months of patent issuance
- Limited discovery allowed
- Estoppel applies

# Covered Business Method Post-Grant Review

- A form of Post-Grant Review
- Limited to business method patents for financial products or services (Interpreted Broadly)
- Similar to Post Grant Review Except:
  - Immediately available
  - No nine-month time limit
  - Petitioner must be charged with infringement
- Limited discovery allowed
- Limited estoppel applies

# IPR and CBM Review – The Petition

- Petitioner in IPR or CBM bears the burden to show that the claims are invalid
- The initial petition must include the evidence relied upon to invalidate the claims:
  - Detailed claim chart for each challenged claim
  - All bases for invalidity
  - Supporting expert declaration in most cases

# IPR and CBM Review – The Trial

- After a petition is granted, the term “trial” refers to the entire IPR or CBM review proceeding
- Unlike reexamination, the trial is not a series of Office Actions
- During the trial, the Board:
  - Considers the parties’ written evidence and arguments
  - Rules on motions of the parties
  - Conducts an oral hearing
- At the end of the trial, the Board issues a single written decision

***ALICE!***

# Alice – What Is The Real Issue?

- The Big Question:

**Are “software and business method” patents still eligible for patent protection?**

- Eligibility is determined under 35 USC Section 101
- But, it is not the only requirement
  - Invention must be novel (Section 102)
  - Invention cannot be just obvious over what is already known (Section 103)



# Alice – “Abstract” Ideas Are Not Eligible

- Unanimous decision that the claims were not eligible subject matter
  - “[T]he asserted claims were drawn to the abstract idea of **intermediated settlement**”
    - “a **fundamental economic practice long prevalent** in our system of commerce”
  - “[M]erely requiring **generic computer implementation** fails to transform that abstract idea into a patent-eligible invention.”

# Alice – Not All Ideas Are Abstract

- “At the same time, we **tread carefully** in construing this exclusionary principle lest it swallow all of patent law.” (Mayo)
- “Thus, an **invention is not rendered ineligible** for patent simply because it involves an abstract concept. **Application** of such concepts **to a new and useful end** remain eligible for patent protection.” (Diehr)

# *Alice* – The Two-Step *Mayo* Process

- **Step 1**
  - Is the invention an “abstract idea”?
- **Step 2**
  - If so, is there something more that transforms the claims into something patentable?

# Alice – Takeaways

- Not a surprising decision
  - Consensus that the patents should not have been approved
  - *Alice* was another “easy” case
- Did not find that all software patents are abstract
- Did not give a test for determining whether something was abstract, just a “preemption” metric

# USPTO Interim Guidelines

- Limitations referenced in *Alice Corp.* that are not enough to qualify as "significantly more" **when recited in a claim with an abstract idea:**
  - Adding the words "apply it" (or an equivalent) with an abstract idea, or **mere instructions to implement an abstract idea on a computer**
  - Requiring no more than a generic computer to perform **generic computer functions that are well-understood, routine and conventional activities previously known to the industry**

# USPTO Interim Guidelines

- Limitations referenced in *Alice Corp.* that may be enough to qualify as "significantly more" **when recited in a claim with an abstract idea:**
  - Improvements to another technology or technical field
  - Improvements to the functioning of the computer itself
  - Meaningful limitations beyond generally linking the use of an abstract idea to a particular technological environment

# “A simple hypothetical...”

## Tuxis Tech v. Amazon – decided 9/8/14

**A man enters a clothing store to purchase a new pair of dress slacks**

**“a user initiated primary transaction for the purchase of a good or service”.**

**The sales representative assists the man in finding a pair of pants, and in the process learns that the man is a banker**

**“a second data element relating to the [identity of the customer]”.**

**Knowing that suspenders are fashionable in the banking profession, the sales representative offers the banker a pair of suspenders that match his pants**

**“utilizing at least in part the primary transaction data including the identity of the good or service of the primary transaction and the second data element [related to the customer] and determining at least one item for a prospective upsell”.**

**The customer agrees with the sales representative and purchases the suspenders**

**“receiving an acceptance of the offer ... in real time”.**

# What about the other elements?

1. A method for providing offers in real time of an item constituting a good or a service in the form of offers for purchase of the item to prospective customers as users of the system, utilizing an electronic communications device, comprising the steps of:
  - establishing a communication via the electronic communications device between the user and the system for purpose of **a user initiated primary transaction for purchase of a specific good or service**,
  - obtaining primary transaction data with respect to the primary transaction, including the identity of the prospective customer and of the good or service for purchase in the primary transaction,
  - generating an upsell offer as a result of the user initiated primary transaction by: utilizing the identity of the prospective customer to obtain at least **a second data element relating to the user**,
  - **utilizing at least in part the primary transaction data including the identity of the good or service of the primary transaction and the second data element and determining at least one item for a prospective upsell** transaction with the prospective customer, and
  - offering the item to the prospective customer and **receiving an acceptance of the offer from at least one user in real time** during the course of the user initiated communication.



# WHY CONTINUE FILING SOFTWARE APPLICATION?

# PTO Still Allowing Software Patents



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
 United States Patent and Trademark Office  
 Address: COMMISSIONER FOR PATENTS  
 P.O. Box 1450  
 Alexandria, Virginia 22313-1450  
 www.uspto.gov

## NOTICE OF ALLOWANCE AND FEE(S) DUE

20995 7590 07/11/2014  
 KNOBBE MARTENS OLSON & BEAR LLP  
 2040 MAIN STREET  
 FOURTEENTH FLOOR  
 IRVINE, CA 92614

EXAMINER

TRAN, HAI

ART UNIT	PAPER NUMBER
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3694

DATE MAILED: 07/11/2014

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/294,696	11/11/2011	]		9336

TITLE OF INVENTION: ROLE-BASED PERSONALIZATION

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	UNDISCOUNTED	\$960	\$0	\$0	\$960	10/14/2014

# “Business Methods” Patents

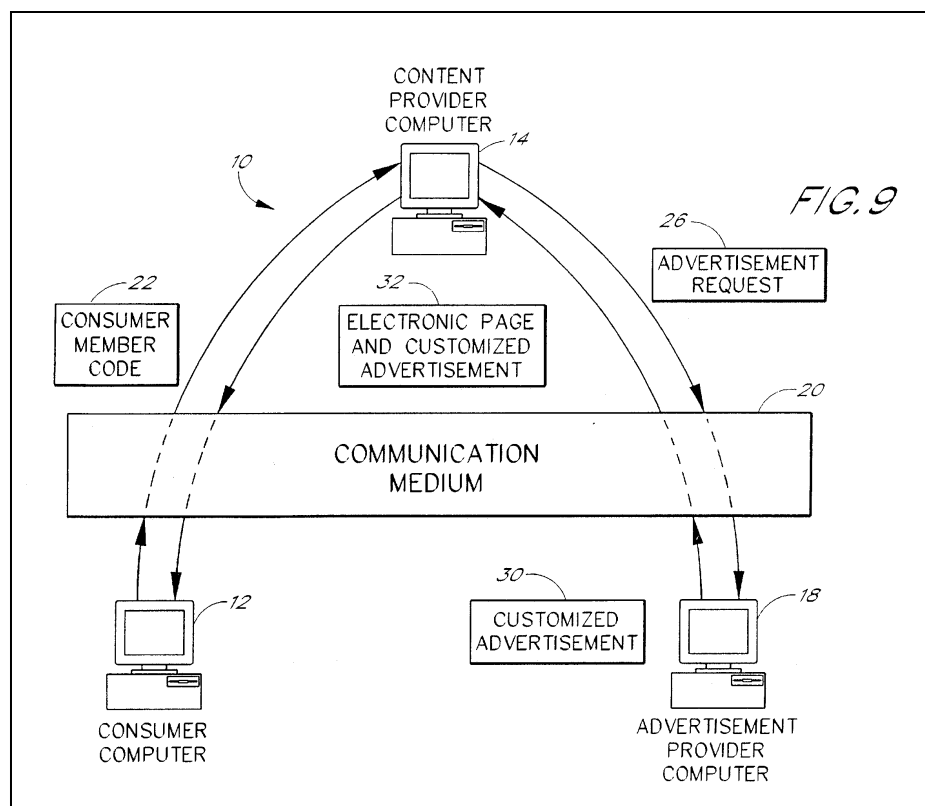
- In “class 705”, which appears to be the hardest hit technology area (relates to “Data Processing: Financial, Business Practice, Management, or Cost/Price Determination”)
  - 39 patents were issued September 9, 2014. Titles such as:
    - “Variable rate payment card”
    - “Generating a customer risk assessment using dynamic customer data”
    - “System and method for subscription-based delivery service”
    - “System and method for transacting purchases with a cash vendor using points and a virtual credit card”
  - This same week last year, 128 patents were issued in class 705

# Issued Software Patents are still valuable!


- Law is in Flux!
  - Expect Federal Circuit decisions soon that clarify subject matter eligibility standard
- Valuable in many ways that don't require testing 101 validity all the way through a trial ...
  - Marketing
  - Better licensing terms
  - Attract Capital
  - Licensing Revenue
  - Stop Competition
  - Protect Market Niche

# Example: Attracting Capital

- Internet Advertising - U.S. Patent No. 5,933,811



# Example: Licensing



US005602987A

**United States Patent** [19] [11] **Patent Number:** 5,602,987  
**Harari et al.** [45] **Date of Patent:** Feb. 11, 1997

[54] **FLASH EEPROM SYSTEM** 60178564 2/1986 Japan .  
 61-96558 5/1986 Japan .  
 62-283496 12/1987 Japan .  
 62-283497 12/1987 Japan .  
 63-183700 7/1988 Japan .  
 61034543 3/1989 Japan .  
 2136992 9/1984 United Kingdom .  
 W08400628 2/1984 WIPO .

[75] **Inventors:** Elyahou Harari, Los Gatos; Robert D. Norman, San Jose; Sanjay Mehrotra, Milpitas, all of Calif.

[73] **Assignee:** SanDisk Corporation, Sunnyvale, Calif.

[21] **Appl. No.:** 174,768  
 [22] **Filed:** Dec. 29, 1993

**Related U.S. Application Data**

[60] **Continuation of Ser. No. 963,838, Oct. 20, 1992, Pat. No. 5,297,148, which is a division of Ser. No. 337,566, Apr. 13, 1989, abandoned.**

[51] **Int. Cl.<sup>5</sup>** G06F 11/00  
 [52] **U.S. Cl.** 395/182.06; 365/200; 365/210; 395/427

[58] **Field of Search** 371/10.2, 10.3, 371/40.1; 365/200, 185.09, 201, 189.07; 395/375, 182.03, 182.04, 182.05, 182.06, 427, 430

[56] **References Cited**

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3,633,175	1/1972	Harper	395/435
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4,693,985	6/1978	Das	395/185.02

(List continued on next page.)

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557723	1/1987	Australia
0068886	8/1983	European Pat. Off.
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59-45695	3/1984	Japan
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60-212900	10/1985	Japan

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Miller, "Semidisk Disk Emulator," *Interface Age*, p. 102, Nov., 1982.  
 Clewit, "Bubble Memories as a Floppy Disk Replacement," *1978 Midcon Technical Papers*, vol. 2, pp. 1-7, Dec. 1978.  
 Hancock, "Architecting a CCD Replacement for the IBM 2305 Fixed Head Disk Drive," *Eighteenth IEEE Computer Society International Conference*, pp. 182-184, 1979.  
 Wilson, "1-Mbit flash memories seek their role in system design," *Computer Design*, vol. 28, No. 5, pp. 30-32, (Mar. 1989).

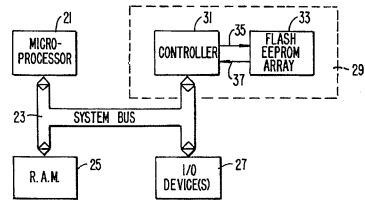
(List continued on next page.)

**Primary Examiner**—Robert W. Beausoliel, Jr.  
**Assistant Examiner**—Ly V. Hua  
**Attorney, Agent, or Firm**—Majestic, Parsons, Siebert & Hsue

[57] **ABSTRACT**

A system of Flash EEPROM memory chips with controlling circuits serves as non-volatile memory such as that provided by magnetic disk drives. Improvements include selective multiple sector erase, in which any combinations of Flash sectors may be erased together. Selective sectors among the selected combination may also be de-selected during the erase operation. Another improvement is the ability to remap and replace defective cells with substitute cells. The remapping is performed automatically as soon as a defective cell is detected. When the number of defects in a Flash sector becomes large, the whole sector is remapped. Yet another improvement is the use of a write cache to reduce the number of writes to the Flash EEPROM memory, thereby minimizing the stress to the device from undergoing too many write/erase cycling.

**50 Claims, 5 Drawing Sheets**



## SmartMedia Card

Store Images, Text And More On A SanDisk® Removable SmartMedia Card!



Available Capacities

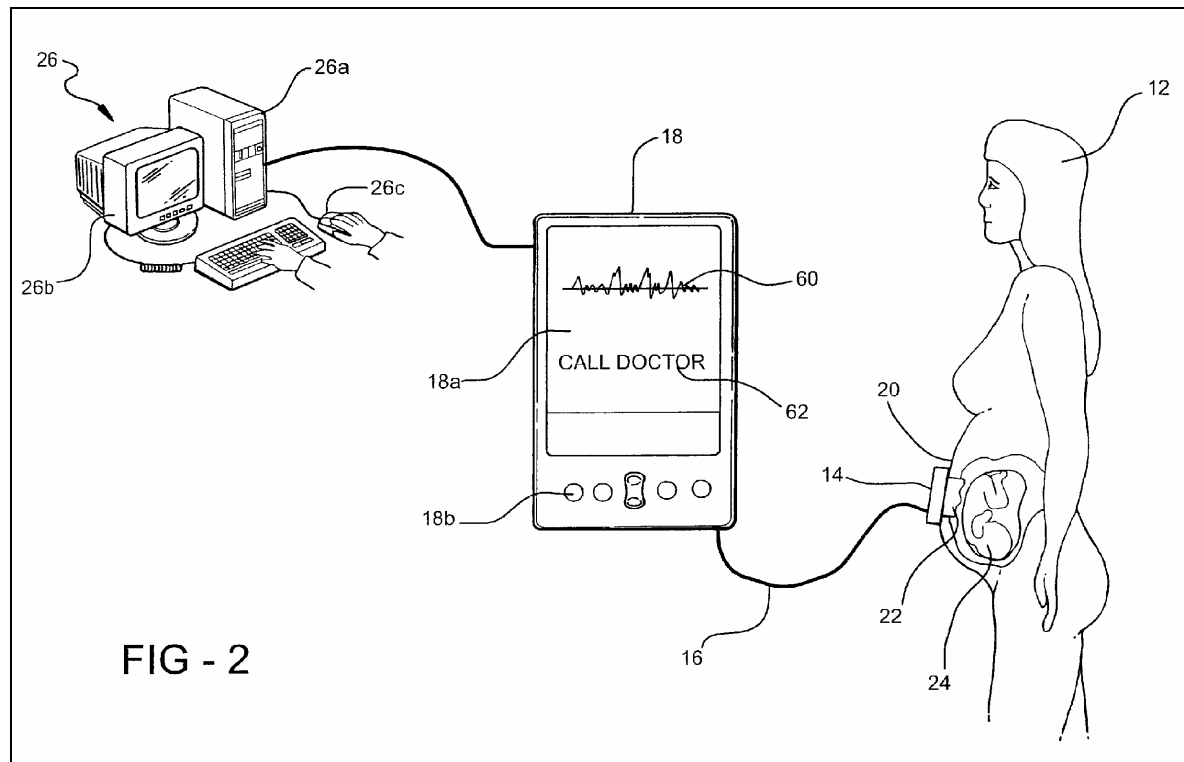


### What is a SanDisk® SmartMedia Card?

The SanDisk® SmartMedia card is a removable flash memory card that can be used in several different types of digital devices; including digital cameras, digital music players and digital voice recorders.

# Example: Stopping Competition

- Patient Monitoring System - U.S. Patent No. 5,558,638



# Example: Protecting Market Niche



Can be used as a single parameter, stand-alone monitor



Can be used as a battery operated, handheld oximeter



SatShare enables installed base of conventional monitor to easily upgrade to Masimo oximeters



## Amy Chun

[amy.chun@knobbe.com](mailto:amy.chun@knobbe.com)

949.721.7603

## Russell Jeide

[russell.jeide@knobbe.com](mailto:russell.jeide@knobbe.com)

949.721.5381

## Ted Cannon

[ted.cannon@knobbe.com](mailto:ted.cannon@knobbe.com)

949.721.2897



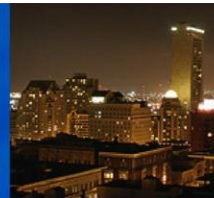
Orange County



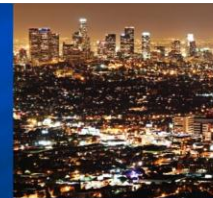
San Diego



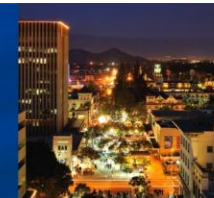
San Francisco



Silicon Valley



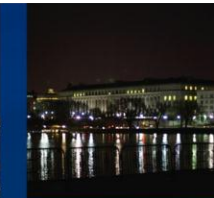
Los Angeles



Riverside



Seattle



Washington DC