# ACHIEVING COMPETITIVE ADVANTAGE BY PATENTING YOUR INVENTIONS

# **About Me**

- Currently Founder and CEO of SkyAccountant™
- Background in Engineering and Business
- Specialize in:
  - Product Innovation
  - Evaluating and identifying patentable technologies
  - Designing and implementing patent programs
- 15 patents/pending
- Dad, Musician, Marathoner

# **Executive Summary**

- Organizations depend on product managers to create a "Differential Advantage" for sustaining growth
  - Innovation is the most direct means to an advantage
- Protecting innovation is overlooked by many organizations:
  - Gap in actual vs. assessed value of innovation
  - Lack of IP know-how and expertise
- Organizations expose themselves to theft (by competitors) and litigation
  - 1. What you need to know about IP and Patents
  - 2. What are the key decisions you need to make
  - 3. What can you take back to your organization

# Types of Protection for Intellectual Property



Copyright



**Trademark** 



**Patent** 

# What is a Patent?



### **Exclusive Right**

to benefit from



An Invention

for



A Limited Term

in return for

granted by

A Sovereign Nation



to an inventor or assignee



### **Full Disclosure**

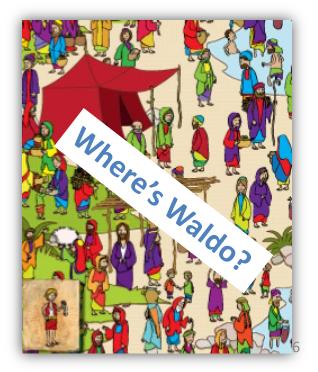
about the invention and its implementation

# What is an Invention?



New to the world (not in "Public Domain")

Not "obvious"



# Some Examples

- Light bulb
- Gramophone
- Telephone
- New Font
- High-yield Corn
- Cholesterol reducing compound
- Internal Combustion Engine

- One-click purchase
- Matrimonial matching
- Sales reporting
- Bank reconciliation
- Optimization





# Types of Patents



### **Utility**

- Useful process, machine, method, or composition of matter.
- New uses for previous inventions (in public domain)



### Design

- Ornamental design for a manufactured item
- Functionality not covered by patent



### **Plant**

- Discovery or invention of a new plant (mutants, hybrids, seedlings)
- Asexually reproduced (graft, cutting, or other; not from seed or tuber)

# Pop Quiz

### Patentable? Utility, Design, or Plant?

Airplane

Chewing gum

Peach

Statue of Liberty

Strategy for tax reduction

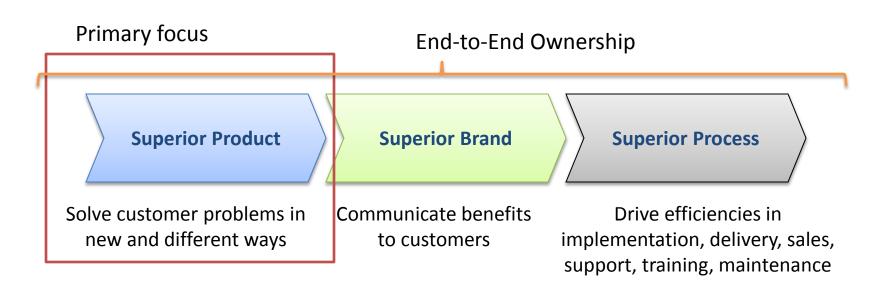
Fix round-off errors in financial statements

A molecule that can reduce inflammation

OCR check images into accounting software

# Role of Product Manager

# Product Manager's Role in creating "Differential Advantage"



The Product Manager Must Facilitate Innovation in All Functional Areas

# Innovation and Returns

### **Source of Functionality**

**Return on Investment** 

**Obvious** 

None, or negative return

**Public Domain** 

- Open source, academia, expired patents, "me too" solutions, consulting

Possible short-term returns

Innovative and truly new to the world

Potential for long-term returns but competitors sure to move in (or worse – claim your innovation as theirs)

"Prior Art" not in public domain but owned by another party

Potential lawsuit

# Patent or Trade-Secret?



Disclose and file for a patent?

OR

Maintain as trade secret?



# Patent vs. Trade-Secret: Considerations





- Will technology last? Will business last?
- Which industries does this apply to?



- Will brand-strength carry the product?
  - Microsoft, Intuit, Twitter, Facebook did not file patents
  - When will brand-strength alone not help?

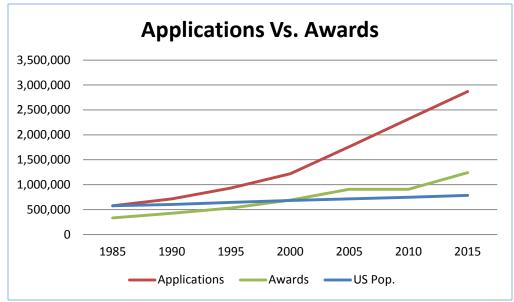


- Can competitors reverse-engineer product?
  - What type of products cannot be reverseengineered?



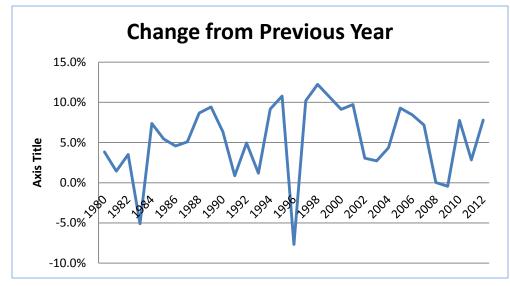
- Are there other benefits?
  - R&D Tax Credits, Intangible Asset Value
  - Risk mitigation

### **Patent Trends**



- 1. Continued rapid increase in applications and awards
- 2. No five-year period of static or negative growth
- 3. Innovation far exceeds US population growth
- 4. Rest of dev world: 10%
- 5. Developing countries: 1%

- Mostly positive YOY trends
- 2. Drops correspond to recessions
- 3. CAGR at 5%
- 4. Applies to all industries



Source: USPTO.GOV

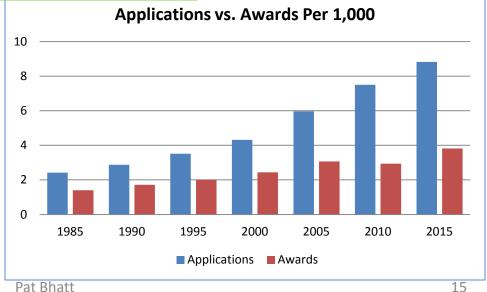
# Demographics

Total patents granted between 2000 and 2009

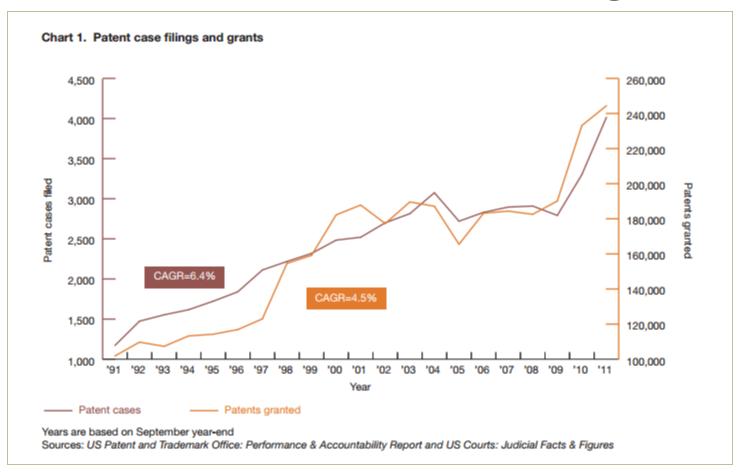


Silicon Valley has led innovation for 10+ years in

Patents per 1,000 people continues to grow



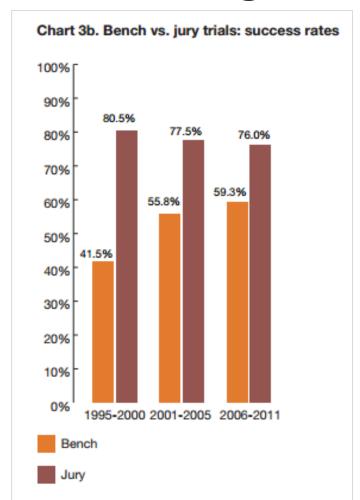
# Risks of Not Patenting

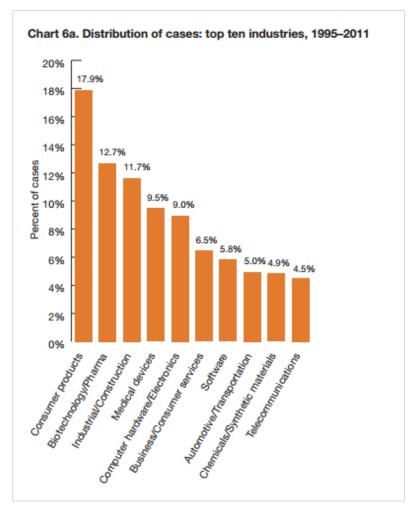


# Patent Litigation is on the Rise

http://www.pwc.com/en\_US/us/forensic-services/publications/assets/2012-patent-litigation-study.pdf

# Litigation Benchmarks





Chance of losing in litigation remains high. Average award = \$8M

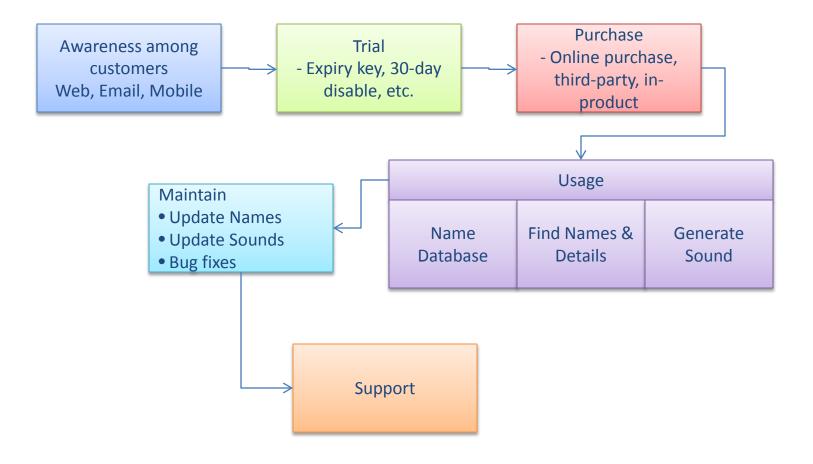
# Largest Awards/Settlements

Year	Plaintiff	Defendant	Technology	Award (in MM)
2009	Centocor Ortho Biotech Inc.	Abbott Laboratories	Arthritis drugs	\$1,848
2007	Lucent Technologies Inc.	Microsoft Corp.	MP3 technology	\$1,538
2010	Mirror Worlds LLC	Apple Inc.	Operating system	\$626
2011	Bruce N. Saffran M.D.	Jonhson & Johnson	Drug-eluting stents	\$593
2003	Eolas Technologies Inc.	Microsoft Corp.	Internet browser	\$521
2008	Bruce N. Saffran M.D.	Boston Scientific Corp.	Drug-eluting stents	\$432
2009	Uniloc USA Inc.	Microsoft Corp.	Software activation technology	\$388
2008	Lucent Technologies Inc.	Microsoft Corp.	Data entry technology	\$368
2006	Rambus Inc.	Hynix Semiconductor Inc.	Memory chips	\$307
2009	i4i Limited Partnership	Microsoft Corp.	Electronic document manipulation technology	\$277

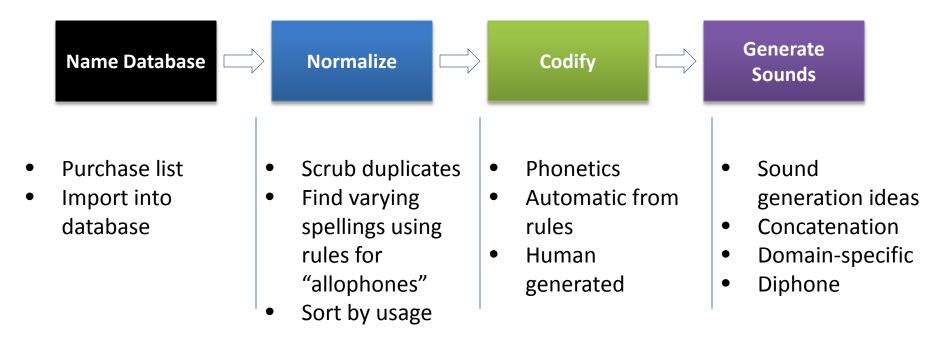
# Case Study: Namestasia™

- Problem: Text to speech unable to accurately recognize or speak international names
- Solution: Engine to recognize or generate sounds for names

# Start with E2E Flow



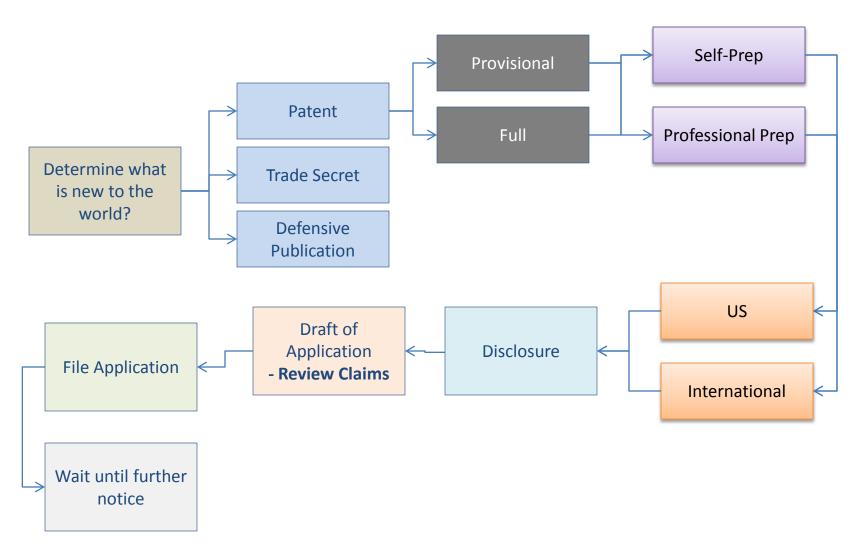
# Sample Product Implementation



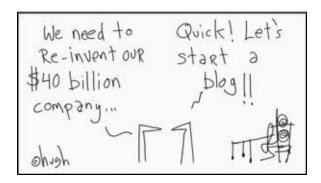
#### Exercise:

- 1. What is new to the world?
- 2. What is non-obvious?

# Filing the Patent



# Product Managers as Change Agents







#### 1. Create a culture of innovation

- Find a "senior exec" sponsor who is passionate about the benefits of establishing a patent portfolio
- Create buzz and excitement among employees and get their buy-in; give reasons to patent
- Offer incentive, however small
- Make sure every product release goes through a review for inventions

# 2. Establish an innovation pipeline within your organization

- Encourage employees (inventors) to submit patentable ideas
- Qualified team-members may review to determine if idea is new to the world and non-obvious
- Recruit attorneys to help inventors submit application to USPTO

### 3. Recognize and celebrate success

- Every inventor gets credit irrespective of accept/reject by reviewers
- Review successes and continually improve innovation processes

## What Did We Learn?

- IP and patent terminology, examples
- Implementing a patent strategy offers significant advantage
  - Not filing for patents poses serious risks
- Patent applications and grants are on the rise
  - So is litigation
- Organizational culture is key to innovation
- Product Managers hold pivotal role in delivering innovation and advantage

# Q&A