

Washington State Patent Law Association (WSPLA), May 2014

"Maximizing the Effectiveness of Patent Strategy,

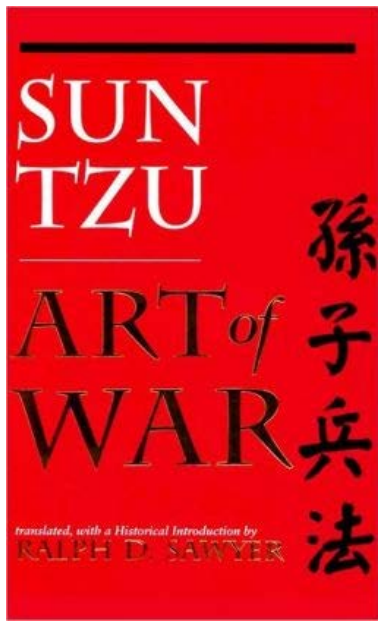
Inspired by Principles of Sun-Tzu:

Integrating Case Law, Best Practices, and The Art of War"

Presented by Peter Kim (Principal, Irvine Pointe Advisory)

Co-Authored with Steve Wong (Of Counsel, Amin, Turocy & Watson)

Source: Barnes & Noble



“What happens in wars ... when the weak side ... refuses to fight the way the bigger side wants to fight ... ?”

- **Malcolm Gladwell** (Author of “David and Goliath”)

“Settle matters quickly with your adversary who is taking you to court [...]”

- **Matthew 5:25**

“Better a patient man than a warrior, a man who controls his temper than one who takes a city.”

- **Proverbs 16:32**

4 Sun-Tzu Principles (Perspectives)

Sun-Tzu Principles	A	B	C	D	E
1. Be Proactive, Be First, Be Prepared.	X	X	X		
2. Learn Other Side's Purpose by Nurturing Relationship	X	X		X	
3. Never Put Adversary in a Nothing-to-Lose Situation		X		X	
4. Keep Adversarial Engagements as Brief as Possible					X

"A" = Patent Acquisitions "D" = Patent Prosecution
 "B" = Patent Licensing "E" = Patent Litigation
 "C" = Case Law

Who is Sun-Tzu?

- We're going to travel back in time to 2,500 years ago
 - Read his quotes about military strategy, summarize his principles
 - Travel forward to today, apply to Patent Strategy (maximizing value)
- Sun Tzu was a Chinese military general who lived around 500 B.C., adviser to King of Wu Helu (“Spring and Autumn Period”)
 - Mysterious person, dispute whether he actually existed
- “Art of War” first translated into English in 1910
- Sun-Tzu’s principles still relevant for military strategy today
 - In 1990s, General Norman Schwarzkopf Jr. successfully used Sun-Tzu principles during Gulf War
 - U.S. Army libraries and professional curriculum
 - U.S. Marine Corps Reading List

Sun-Tzu's Words Appeal to CEOs and Coaches (Leaders)

- "Larry Ellison [Oracle CEO] consistently executes 'The Art of War' better than any CEO," said Marc Benioff. (The Huffington Post, Mar. 24, 2014)
- Phil Jackson gave "Art of War" to Kobe Bryant to teach leadership. (Bloomberg, Mar 18, 2014)
- Sun-Tzu shapes the football coaching philosophy of Bill Belichick. (New York Times, Feb 3, 2005)

Sun-Tzu Shifts From Focus On Tactics to Focus on Understanding

If you know the adversary and know yourself, you need not fear the result of a hundred battles.

If you know yourself but not the adversary, for every victory gained you will also suffer a defeat.

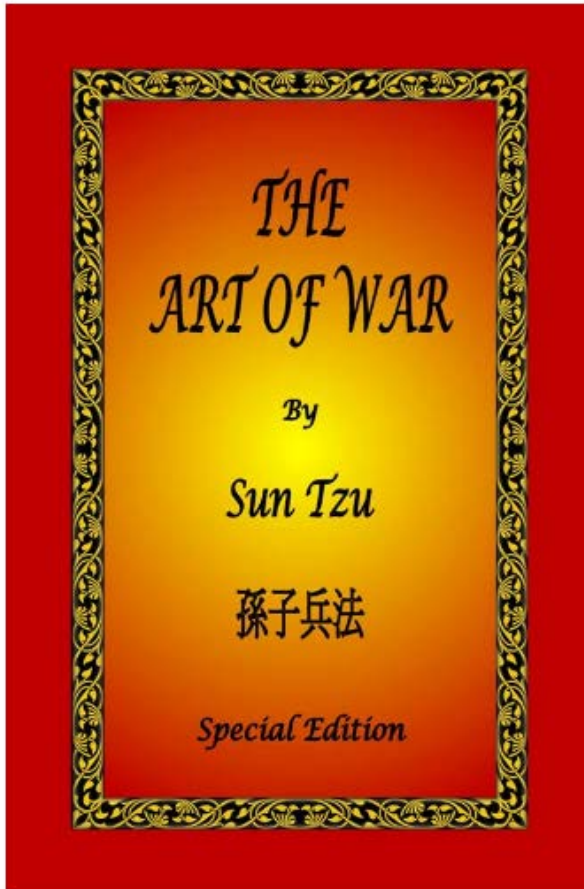
If you know neither the adversary nor yourself, you will succumb in every battle.

- Art of War (3.18)

Agenda for Today

- Co-Author (Steve Wong) is a Patent Attorney
 - Of Counsel, Amin, Turocy & Watson, LLP
 - Acacia Research
 - Pioneer Electronics and DiscoVision Associates
 - Licensing
 - Litigation Management
 - Patent Acquisition
 - Strategic Prosecution
 - “Art of War” Notation
- Summarize 4 Key Sun-Tzu Principles, integrate with:
 - Patent Acquisitions
 - Case Law
 - Prosecution
 - Licensing
 - Litigation
 - Negotiation
 - Practical Tool Applied to Litigation and Patent Acquisition Decisions

“Art of War” Notation



- Quotes use “Sun-Tzu Chapter.Verse” format
 - E.g. “Sun-Tzu 3.18” refers to Chapter 3, Verse 18
 - “Verses” not universally used
- Translation by Lionel Giles
 - Edited by James H. Ford and Shawn Connors
- Adapted the term "adversary" in lieu of "enemy" to better apply to commerce instead of military situations

Principle #1: Be Proactive, Be First, Be Prepared.

Whoever is first in the field and awaits the coming of the adversary, will be fresh for the fight; whoever is second in the field and has to hasten to battle will arrive exhausted.

- Art of War (6.1)

Principle #1: Be Proactive, Be First, Be Prepared.

- In patent acquisitions, certain advantages to being the first bidder in a competitive auction.
 - Requires proactive/prepared diligence team
 - Key is to create urgency in the seller's process (without letting other bidders “catch-up”).
 - “Break-up” provision keeps process moving (Fees can be lucrative, e.g. 37.5%).

Principle #1: Be Proactive, Be First, Be Prepared.

- Steve recounts licensing programs where early adopter licensees received favorable terms.
- Licensor motivated to show revenue, to “prove” patents to their own management and to recoup initial investment.
- After initial revenue, Licensor can hold out for market rate terms against subsequent licensees.

Principle #1: Be Proactive, Be First, Be Prepared.

The art of war teaches us to rely not on the likelihood of the adversary's not coming, but on our own readiness to receive him; not on the chance of his not attacking, but rather on the fact that we have made our position unassailable.

- Art of War (8.11)

Principle #1: Be Proactive, Be First, Be Prepared.

- Steve notes a 2013 case law example of this principle.
- CAFC Futurewei/Huawei vs. Acacia/Access/Smartphone (Dec. 3, 2013)
 - Access entered into Exclusive License with Acacia, which assigned rights to Smartphone.
 - Smartphone sued Futurewei for patent infringement in ED Texas.
 - The **next day** Futurewei filed a declaratory judgment against Acacia and Smartphone in CD California.
 - The Court dismissed the DJ case citing the first to file rule in Texas takes precedent over subsequently filed cases between the same parties when the actions sufficiently overlap.
 - The CAFC affirmed the dismissal of the DJ action holding that there were no exceptions to the first to file rule. Exceptions may be made if justified by “considerations of judicial economy, and the just and effective disposition of disputes.”
- Not effective for a defendant to file a DJ after being sued for patent infringement in another valid venue, absent the existence of any exceptions.

Principle #2: Learn Other Side's Purpose by Nurturing Relationship

Success in warfare is gained by carefully accommodating ourselves to the adversary's purpose.

- Art of War (11.60)

Principle #2: Learn Other Side's Purpose by Nurturing Relationship

- Historically, non-constructive patent licensing negotiations between NPEs and Fortune 500s.
 - Emotionally charged (“patent trolls are evil”)
- Settlement & resolution opportunities are plentiful.
 - NPE’s purpose: need constant replenishing of patent acquisitions to maintain/grow future revenue
 - Fortune 500’s purpose: abandons non-core patents
 - Sometimes, patents are more valuable currency than cash
 - Fortune 500s can negotiate NPE settlements with combination of cash and non-core patents.

Principle #2: Learn Other Side's Purpose by Nurturing Relationship

- Defending against patents targeting one business unit different than multiple units.
 - Some business units more “strategic” than others
 - In former, risk assessed by business unit counsel
 - In latter, broader enterprise risk assessed by Boards of Directors and General Counsel
- For Licensors with patents targeting a single product type, create synergy by combining other patents targeting other products.

Principle #2: Learn Other Side's Purpose by Nurturing Relationship

“Licensee”

CEO/BoD

GC

BU-1

BU-2

BU-3

“Licensor”

Patent A	X		
Patent B	X		
Patent C	X		

Principle #2: Learn Other Side's Purpose by Nurturing Relationship

“Licensee”

CEO/BoD

GC

BU-1

BU-2

BU-3

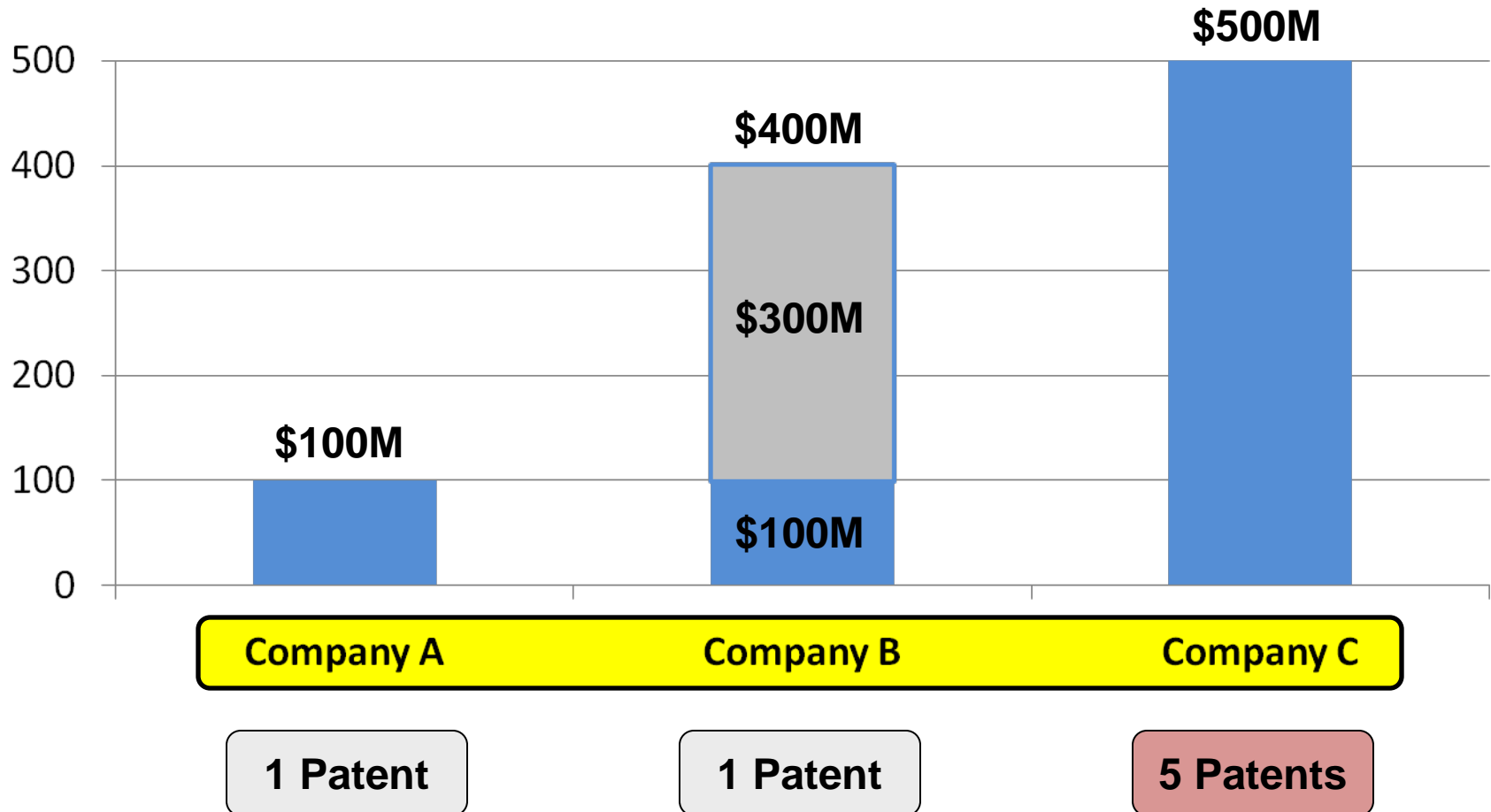
“Licensor”

Patent D	X		
Patent E		X	
Patent F			X

Principle #2: Learn Other Side's Purpose by Nurturing Relationship

- The best way to monetize a patent is to sell it to a company involved a patent lawsuit with the infringer.
 - Especially if buyer is a patent defendant with large revenues and no/few patents
- See chart on next slide for illustration on the economics of a patent cross license.
 - “A” vs. “B”: “B” patent liability on \$300M revenue
 - “B” is a great patent buyer, will pay top dollar
 - “A” vs. “C”: even, zero money cross-license
 - “C” illustrates “patent/revenue multiplier” principle

Economics of Patent Cross-License ("A" vs. "B", "A" vs. "C")



Principle #2: Learn Other Side's Purpose by Nurturing Relationship

- Steve recounts in patent prosecution, helpful to understand the examiner's perspective (e.g. internal performance metrics/quotas).
 - Quota system for annual Examiner evaluations, retention, and bonuses
- Current Examiner count system gives more credit to First Action on the Merits and diminishes credit for RCEs.
 - (a) Identifies patentable subject matter earlier in the process, and
 - (b) More compact prosecution and less pendency time for applications

Principle #3: Never Put Adversary in a Nothing-to-Lose Situation

When you surround an army, leave an outlet
free. Do not press a desperate foe too hard.

- Art of War (7.36)

Principle #3: Never Put Adversary in a Nothing-to-Lose Situation

- Steve philosophy in license negotiations, allow the other side to claim some sort of perceived victory
- Peter was trained by IBM licensing veteran to give the other side something to claim victory to his own boss (or they will keep fighting).
- Even when in a strong position, there are many significant risks to forcing adversary into nothing-to-lose situation

Principle #3: Never Put Adversary in a Nothing-to-Lose Situation

- Steve recounts in patent prosecution, helpful to knowing what types of limitations would be acceptable to the examiner, but still preserve invention's value

Principle #3: Never Put Adversary in a Nothing-to-Lose Situation

- Alternate interpretation of this Sun-Tzu quote.
- Contrary to the common misinterpretation of “leave an outlet free”, Sun Tzu does not advise you leave an opening for the enemy to escape
 - The purpose of this stratagem, as explained by the brilliant Chinese poet [Du Mu](#), is:
 - “To make him believe that there is a road to safety, and thus prevent his fighting with the courage of despair. After that, you may crush him.”
- Wonder if Du Mu is overstating this point, see Sun-Tzu (3.2)

Principle #4: Keep Adversarial Engagements as Brief as Possible

When you engage in actual fighting, if victory is long in coming, then men's weapons will grow dull and their ardor will be damped. If you lay siege to a town, you will exhaust your strength.

- Art of War (2.2)

Principle #4: Keep Adversarial Engagements as Brief as Possible

- Rambus vs. Micron, settled 13-year litigation in December 2013. License terms publicly announced at payments totaling \$290M over 7-years, representing royalty rate of 0.6%.
 - Also settled SK Hynix in June 2013 for \$240M
 - CFO announced on conference call that total litigation expenses were over \$300M
- Appears to be positive financial outcome (including other licensing revenue) but complicated factors:
 - Employee morale/retention/recruitment, customer relationships, design wins, earlier settlement offers

Principle #4: Keep Adversarial Engagements as Brief as Possible

There is no instance of a country having benefited from prolonged warfare.

- Art of War (2.6)

Principle #4: Keep Adversarial Engagements as Brief as Possible

"I will spend my last dying breath if I need to, and I will spend every penny of Apple's \$40 billion in the bank, to right this wrong. I'm going to destroy Android, because it's a stolen product. I'm willing to go thermonuclear war on this."

- **Steve Jobs**, late CEO of Apple
(told Walter Isaacson, authorized biographer)

Note: as of December 2013, Apple spent \$60M in legal fees to Morrison Foerster related to Samsung litigation.

Principle #4: Keep Adversarial Engagements as Brief as Possible

In war, then, let your great object be victory, not lengthy campaigns.

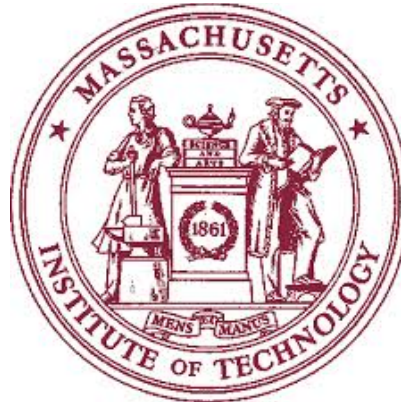
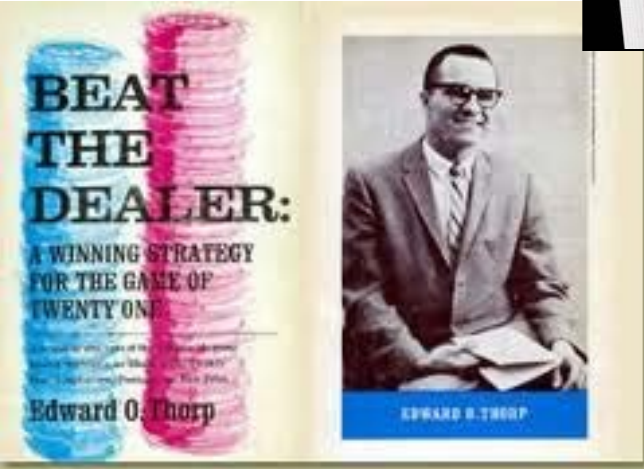
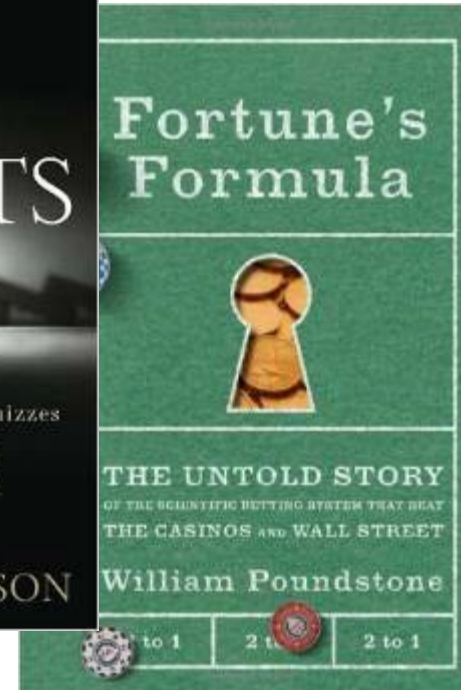
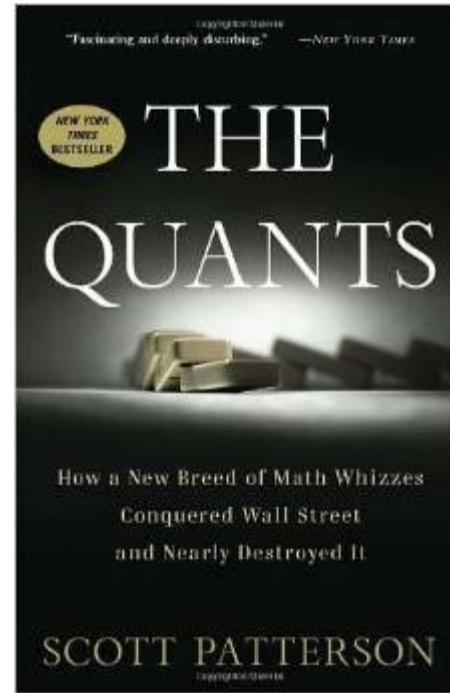
- Art of War (2.19)

Principle #4: Keep Adversarial Engagements as Brief as Possible

Questions:

- Does that mean an inventor should never enforce his patents?
- How to advise management or clients on when (or when not) to litigate?
- Is there a scientific framework to use?

What is the Kelly Criterion?



Definition of Kelly Criterion

In probability theory and intertemporal portfolio choice, the Kelly criterion, Kelly strategy, Kelly formula, or Kelly bet, is a formula used to determine the optimal size of a series of bets. In most gambling scenarios, and some investing scenarios under some simplifying assumptions, the Kelly strategy will do better than any essentially different strategy in the long run (that is, over a span of time in which the observed fraction of bets that are successful equals the probability that any given bet will be successful). It was described by J. L. Kelly, Jr in 1956. (Source: Wikipedia)

Should I invest in this project?

If so, how much should I invest?

Kelly Criterion Variables

$$f^* = \frac{bp - q}{b} = \frac{p(b + 1) - 1}{b},$$

where:

- f^* is the fraction of the current bankroll to wager;
- b is the net odds received on the wager ("b to 1"); that is, you could win \$b (plus the \$1 wagered) for a \$1 bet
- p is the probability of winning;
- q is the probability of losing, which is $1 - p$.

(Source: Wikipedia)

Variables Below for Patent Litigation

“p” : what is probability of winning patent litigation?

“b” : what are odds received (i.e. payoff, excluding investment)

“f” : what % of my total capital to invest

Kelly Criterion: Example #1

Variables Below for Patent Litigation

“p” : what is probability of winning patent litigation?

“b” : what are odds received (i.e. payoff, excluding investment)

Solving For:

“f” : what % of my total capital to invest

“p” : 20% probability of winning patent lawsuit (post-appeal)

“b” : 5-to-1 odds received

* invest \$10M in patent litigation

* royalty potential of \$60M (60 - 10 = 50 profit)

Assuming:

“f” : Overall capital is \$100M cash, \$10M is 10% of portfolio

Kelly Criterion: Example #1

$$f = \frac{p(b+1) - 1}{b} = \frac{0.20(5+1) - 1}{5} = \frac{1.2 - 1}{5} = 0.04 = 4\%$$

“p” : 20% probability of winning patent lawsuit (post-appeal)

“b” : 5-to-1 odds received

- * invest \$10M in patent litigation

- * royalty potential of \$60M (60 - 10 = 50 profit)

Assuming:

“f” : Overall capital is \$100M cash, so \$10M is 10% of portfolio

Kelly Criterion: Example #2

Variables Below for Patent Litigation

“p” : what is probability of winning patent litigation?

“b” : what are odds received (i.e. payoff, excluding investment)

Solving For:

“f” : what % of my total capital to invest

“p” : 20% probability of winning patent lawsuit (post-appeal)

“b” : 10-to-1 odds received

* invest \$10M in patent litigation

* royalty potential of \$110M (110 - 10 = 100 profit)

Assuming:

“f” : Overall capital is \$100M cash, \$10M is 10% of portfolio

Kelly Criterion: Example #2

$$f = \frac{p(b+1) - 1}{b} = \frac{0.20(10+1) - 1}{10} = \frac{2.2 - 1}{10} = 0.12 = 12\%$$

“p” : 20% probability of winning patent lawsuit (post-appeal)

 “b” : 10-to-1 odds received

* invest \$10M in patent litigation

* royalty potential of \$110M (110 - 10 = 100 profit)

Assuming:

“f” : Overall capital is \$100M cash, so \$10M is 10% of portfolio

Kelly Criterion Table => 20%

		Payout Multiple per \$1 of Investment													
		1	2	3	4	5	6	7	8	9	10	20	30	40	50
Probability of Success	10%	-80%	-35%	-20%	-13%	-8%	-5%	-3%	-1%	0%	1%	6%	7%	8%	8%
	20%	-60%	-20%	-7%	0%	4%	7%	9%	10%	11%	12%	16%	17%	18%	18%
	30%	-40%	-5%	7%	13%	16%	18%	20%	21%	22%	23%	27%	28%	28%	29%
	40%	-20%	10%	20%	25%	28%	30%	31%	33%	33%	34%	37%	38%	39%	39%
	50%	0%	25%	33%	38%	40%	42%	43%	44%	44%	45%	48%	48%	49%	49%
	60%	20%	40%	47%	50%	52%	53%	54%	55%	56%	56%	58%	59%	59%	59%
	70%	40%	55%	60%	63%	64%	65%	66%	66%	67%	67%	69%	69%	69%	69%
	80%	60%	70%	73%	75%	76%	77%	77%	78%	78%	78%	79%	79%	80%	80%
	90%	80%	85%	87%	88%	88%	88%	89%	89%	89%	89%	90%	90%	90%	90%
	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Kelly for Patent Acquisition

- Can essentially use the same analysis for patent acquisitions
- “Probability” (“p”) may be different if patent acquired for purpose other than litigation
- “Odds received” (“b”) may be different if financial benefit other than license royalty

4 Sun-Tzu Principles Revisited

- 1. Be Proactive, Be First, Be Prepared.**
- 2. Learn Other Side's Purpose by Nurturing Relationship**
- 3. Never Put Adversary in a Nothing-to-Lose Situation**
- 4. Keep Adversarial Engagements as Brief as Possible**

Closing Thought #1:

How to Double Your Winning Percentage

“How often do you think the bigger side wins? [...] When the political scientist Ivan Arreguin-Toft did the calculation a few years ago, what he came up with was 71.5 percent. Just under a third of the time [28.5%], the weaker country wins.

[...] When the weak side ... refuses to fight the way the bigger side wants to fight ... the weaker party's winning percentage climbs ... to 63.6 percent.”

- **Malcolm Gladwell**, “David and Goliath”

Closing Thought #2: Avoid Strategy that Works Only 2%

“A study of some 30 conflicts comprising more than 280 campaigns from ancient to modern history, the brilliant strategist and historian B. H. Liddell Hart came to a stunning conclusion: In only 6 of the 280 campaigns was the decisive victory a result of a direct attack on the enemy’s main army. Only six. That’s 2 percent.”

- **Ryan Holiday**, “The Obstacle is the Way”

Q&A

For additional questions, email me at:
peter@irvinepointe.com

Also request:

- Slides of this presentation
- Free copy of my article (co-authored with Tony Trippe):
“Welcoming the Innovator’s Dilemma to the Patent Committee”
(previously available only to subscribers to IAM Magazine)

Irvine Pointe's Hierarchy of Patent Troils

(inspired by Abraham Maslow)

Narrowest Definition
(minority opinion)

Any Patent Owner

No \$

Patents + Engineers + Products

Licensing

Patents + Engineers – Products

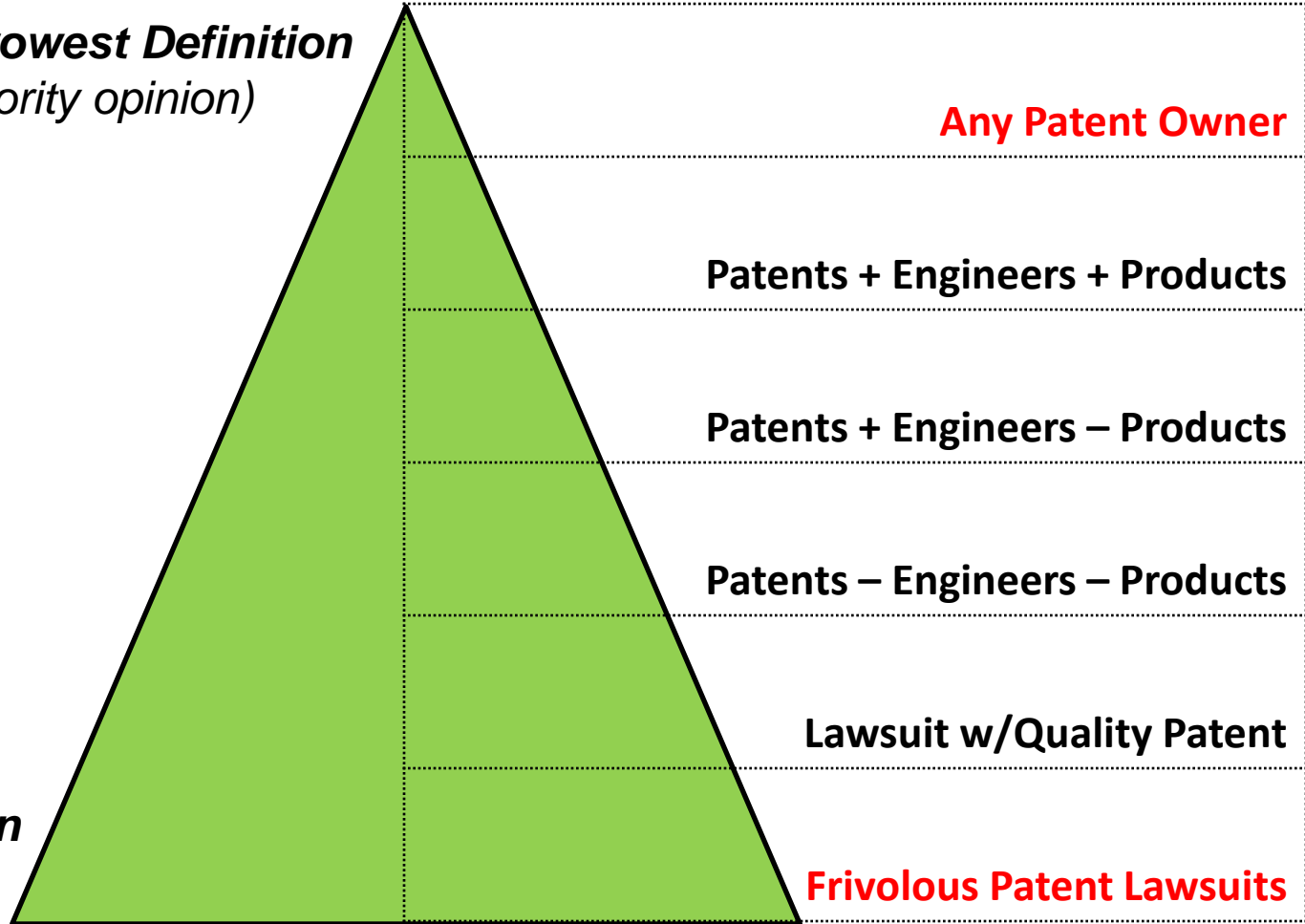
Patents – Engineers – Products

Lawsuit w/Quality Patent

Lawsuits

Frivolous Patent Lawsuits

Broadest Definition
(majority opinion)



Another Quote

Sun-Tzu (6.13)	Patent Strategy
By discovering the enemy's dispositions and remaining invisible ourselves, we can keep our forces concentrated, while the enemy's must be divided.	Steve looked at PACER to learn about when defendants settle