## The Evolving IP Marketplace

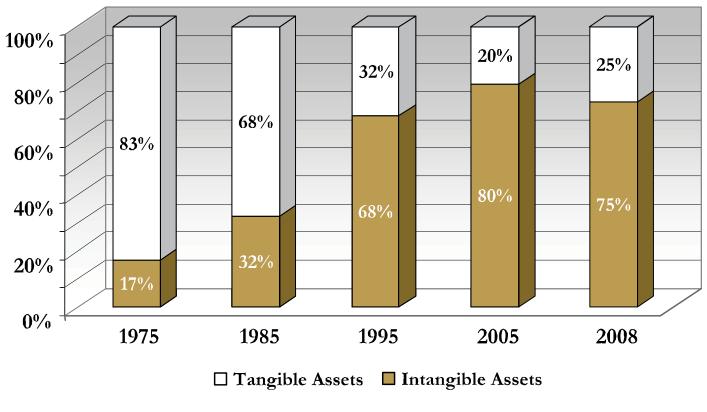
# FTC Hearings on Developing Business Models and a National IP Economic Infrastructure

James E. Malackowski

April 17, 2009

This paper represents the personal views of it author and not necessarily those of Ocean Tomo, LLC





### Components of S&P 500 Market Value

Source: Ocean Tomo

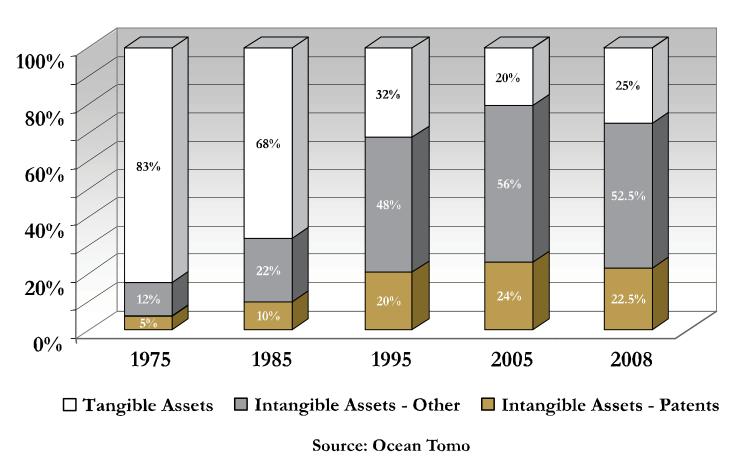


### **Economic Foundation**

- Quantitative evidence of transition to "knowledge economy"
- Antiquates current accounting and SEC reporting requirements
- Greater asset volatility without traditional risk management and risk transfer
- Suggests need for greater intangible asset process and control requirements
- Likely permanent change to US economy
- Likely to be repeated internationally
- Further complications comparing and valuing intangible assets across national borders
- Intangible assets to deliver investor returns



### **Estimating Total Patent Value**



### Components of S&P 500 Market Value

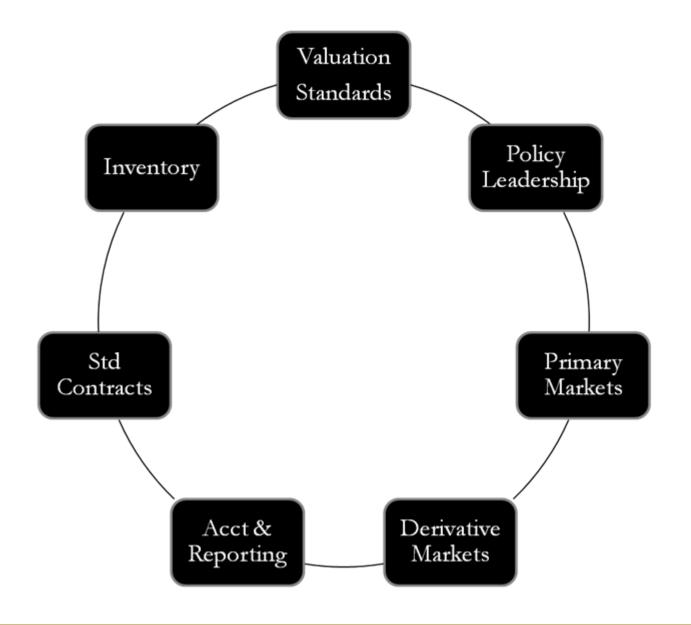


### **Estimating Total Patent Value**

- Fifteen year testing of Ocean Tomo 300<sup>®</sup> Patent Index suggests a 10% increase in Innovation Ratio (patent value / tangible asset value) leads to a 7% increase in stock price
- From 1996 through 2008 firms in the top half of the S&P 500, as ranked by normalized patent signal, show 30% increase in reported earnings and therefore higher valuation multiple
- Thirty percent of current intangible asset value (75% of market capitalization) suggests 22.5% of total market capitalization fairly attributable to patent value, all other factors constant



### **IP** Infrastructure





- Traditional appraisal standards
- Patent scoring reports



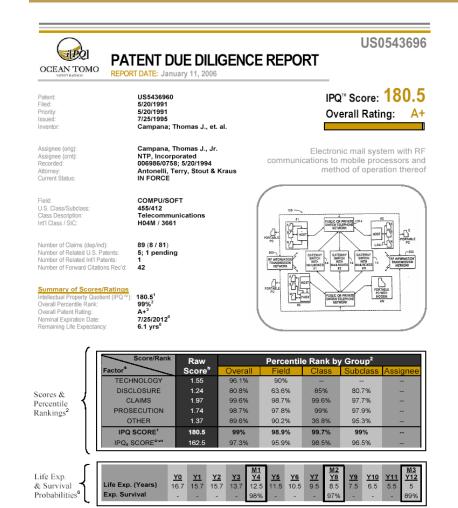


### **Traditional Valuation Standards**

- The Uniform Standards of Professional Appraisal Practice (USPAP) effective July 1, 2006 provide minimum requirements for appraisers and is applicable to IP (Standards 9 and 10)
- American Institute of Certified Public Accountants (AICPA) Valuation of a Business, Business Ownership Interest, Security or Intangible Asset Statement of Standards for Valuation Services effective January 1, 2008.
- Section 482: Allocation of Income and Deductions Among Taxpayers "Transfer Pricing Regulations"
- American Society of Appraisers, Business Valuation Standards, BVS-IX Intangible Asset Valuation (DRAFT) and SBVS-3 Standards on IP Valuation (DRAFT)
- Statement of Financial Accounting Standards No. 141 (Business Combinations), 142 (Goodwill and Other Intangible Assets Impairment) and 157 (Fair Value Measurement).



### **Patent Scoring Reports**



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For application notes on this page please refer to Appendix 1 attached hereto

#### PATENT DUE DILIGENCE REPORT

REPORT DATE: January 11, 2006

#### Related Technology Space

The '960 patent is currently classified by the USPTO in primary U.S. Class/Subclass 455/412 ("Telecommunications") and Int'l Class G06M 003/00. The closest corresponding SIC code is 3661 (Telephone And Telegraph Apparatus). Major patent holders in USPTO class 455 are listed below along with a patent-activity summary for the trailing 5-years.

			Patent Activity – Class 455
Patent Assignee	#Pats	IPQ	350 2.5
Xerox Corporation	19	96.3	
International Business Machines Corpora	18	83.5	300 2.0
Brother Kogyo Kabushiki Kaisha	18	128.6	250
Lexmark International, Inc.	17	91.6	ද <sub>200</sub>
Eastman Kodak Company	16	111.3	e
ZIH Corp.	16	100.6	kg 150 − 1.0 m
Fargo Electronics, Inc.	12	117.0	100 - A
Pitney Bowes Inc.	11	119.0	+ 0.5
Francotyp-Postalia AG & Co.	11	81.8	50 Pendency
Monarch Marking Systems, Inc.	10	130.7	0.0
			1999 2000 2001 2002 2003 2004 2005

Patenting activity in USPTO patent class 455 has been gradually increasing over the past 5 years, as shown in the above graph, with about 1897 new patents now issuing per year on average. Average pendency times (time from filing to issuance) have been increasing over the past 5 years to about 3.55 years currently, indicating a somewhat higher than normal backlog of pending cases awaiting examination.

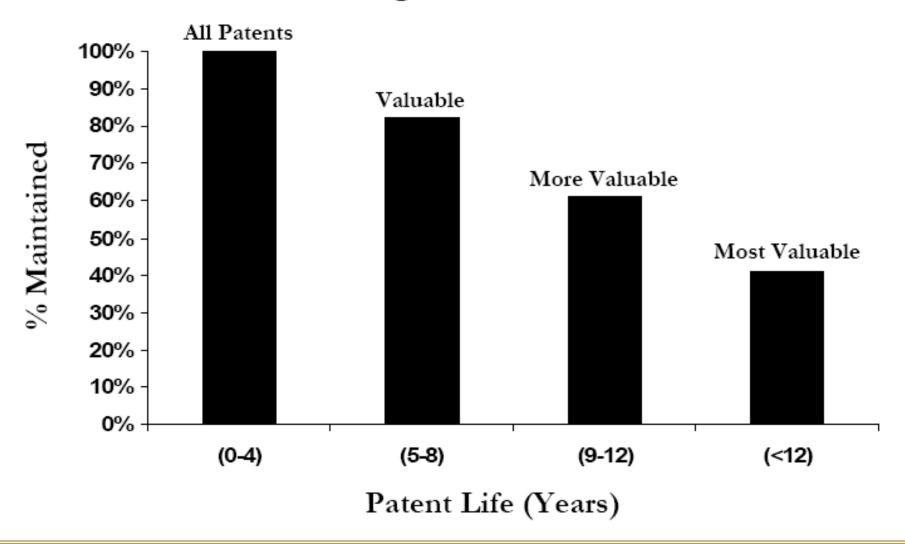
Of course, it should be noted that patent technology classification is an inexact science and relies largely on subjective review and analysis by human decision-makers. Because of this, some patents and patented technologies may be "misclassified" and/or put into existing classifications that do not exactly fit or aptly describe a particular technology. Thus, it may be beneficial to consider other possible patent classifications. Other relevant USPTO patent classifications in this case are indicated below along with estimated relevancy scores and growth trends for each

#### Relevant USPTO Classifications and Patenting Trends

Class#	Brief Description	Relevance	Trend	Rele	vance				
200	Circuit breakers	0.971	$\sim$						
345	Computer graphics processing	0.837	$\nearrow$						_
<b>1</b> 28	Surgery	0.777	$\sim$						
607	Surgery: light, thermal	0.766	$\sim$						
400	Typewriting machines	0.702	$\checkmark$						
600	Surgery	0.688	$\overline{}$						
341	Coded data generation	0.627	$\sim$						
273	Amusement devices: games	0.554	$\square$						
324	Electricity: measuring and testi	0.513							
601	Surgery: kinesitherapy	0.303	$\sim$						
_ 301	* Trend data represents patent issuance rates in a trailing 5-year period.	2	(	00.0	0.20	0.40	0.60	0.80	1.00

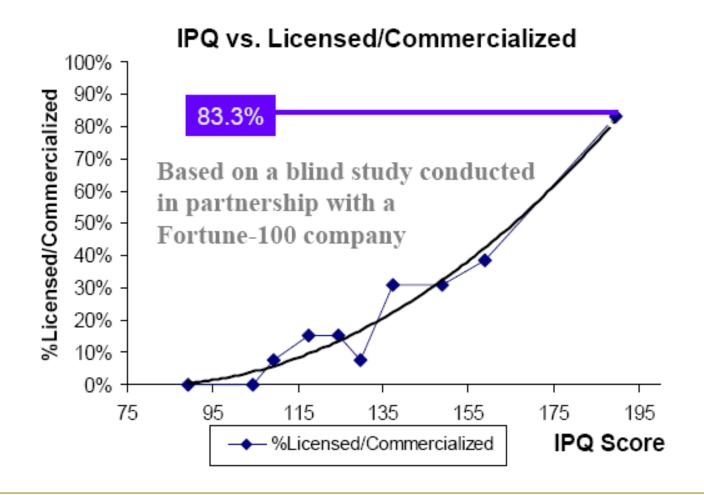






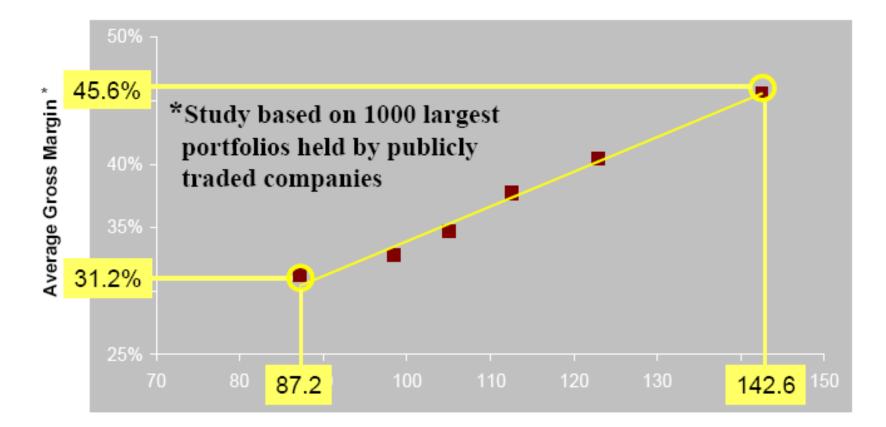


...higher patent quality correlates to a higher probability of being licensed / commercialized...





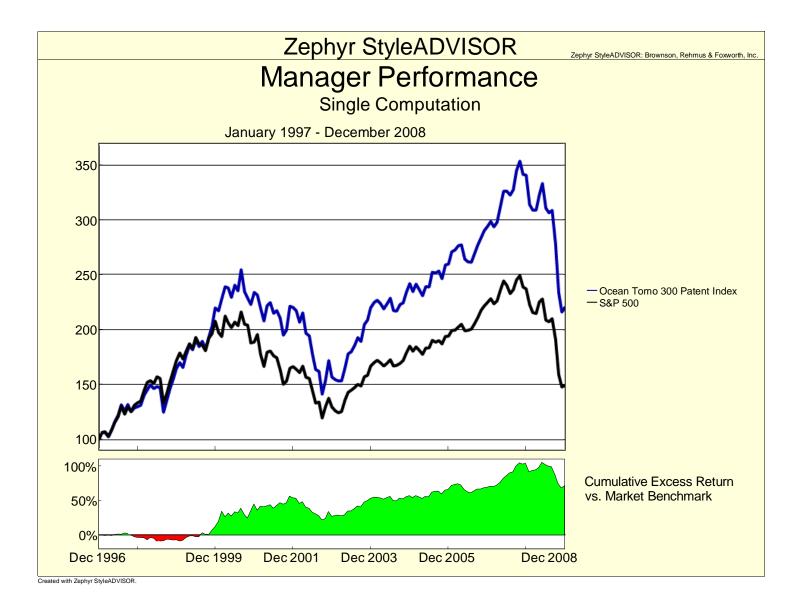
...higher patent quality correlates to higher gross profit margins...



Average IPQ Score

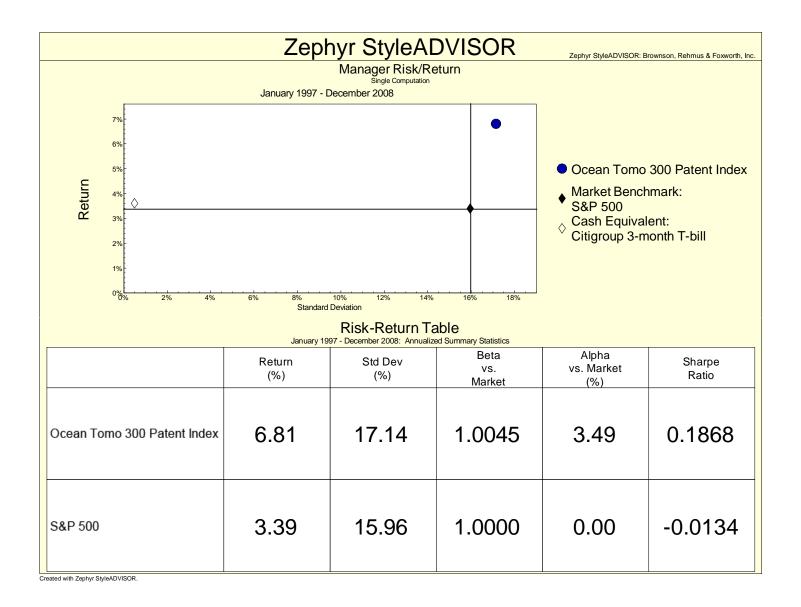


### **Empirical Proof - Public Equity Markets**





### **Empirical Proof - Public Equity Markets**







- Federal IP inventory and listing
- Private company inventory and marking





### **Federal Innovation Inventory**

- Billions of dollars invested annually
- Current technology solutions exist but are not commercialized because they are not widely known or effectively presented
- Little current coordination
- Includes greater access to new medical technologies for patients not responding to approved treatment or with dire expected outcome
- Strong example of what's possible in NASA sale at auction
- Consistent with Obama policy of open government



### APRIL 2, 2009 PROPOSED AMENDMENT TO 35 U.S.C. § 287(a):

Patentees, and persons making, offering for sale, or selling within the United States any patented article for or under them or importing any patented article into the United States, may give notice to the public that the same is patented, either by fixing thereon the word "patent" or the abbreviation "pat.", together with the number of the patent; or when, from the character of the article, this cannot be done, by fixing to it, or to the package wherein one or more of them is contained, a label containing a like notice or by fixing thereon the word 'patent' or the abbreviation 'pat.' together with an address of a posting on the Internet, accessible to the public without charge for accessing the address, that associates the patented article with the number of the patent.



## **Benefits of Revised Patent Marking**

- Potential for near-universal patent marking
- Improved access to patented technology after a patent expires
- Substantial savings in patent marking costs to responsible manufacturers
- An ability to provide constructive notice for products that cannot otherwise be marked
- An increased likelihood of "substantially consistent and continuous" marking
- Enhanced oversight of marking by patent licensees
- Standardized and simplified evidentiary requirements for patent litigation



## **Policy Leadership**

- US Patent & Trademark Office
- Whitehouse Office of Science & Technology Policy
- Infringement risk
- Labor policy
- Trade policy





### Entrepreneurialize the PTO

- Significant modernization of customer interface for both processing and searching (web platform) in coordination with new National CTO
- Need leadership which can rebuild culture into one that recognizes and is inspired by the key role the office plays in the economy broadly
- Expand resources for training, tools and examiner salary competitiveness



## **Office of Science & Technology Policy**

- Reverse the demotion of the head of the White House Office of Science and Technology Policy
- Structure such responsibility as a central role as an assistant to the President, a rank held in previous administrations, through creation of a new 'Innovation Secretary' position in the White House to oversee (not just coordinate) policies outlined here and key administrative positions affecting innovation including the PTO Undersecretary and current 'IP Czar':
- Allows building and harnessing an National innovation policy with a comprehensive view
- Effectively ties policy goals with execution
- Connects PTO more closely with White House
- Reconciliation of secrecy concerns and current process requirements



## Holistic Approach to Infringement Risk

- Already provided for in commonly used *Georgia-Pacific* analysis
- Simple change to damages law (Second 284) could compel consideration of NPE compensation considering all potential third party patent use
- Arguably 'form versus substance' issue though key point of patent reform debate



## Labor Policy

- Provide leadership vis-a-vis IP role in collective bargaining
- Addresses directly underfunded pensions and access to health care
- Promotes domestic job creation
- Empowers blue color workers
- Related labor issues include addressing immigration matters vis-a-vis their effect on innovation



- More aggressively asserting US IP rights at the World Trade Organization including filing cases and collecting appropriate remedies
- Use Section 337 of the trade laws that allow US IP owners to exclude goods from the US market that infringe their IP using our market size/strength as a global tool also allowing the US Government to develop the capacity to selfinitiate cases defending US IP



### **Standard Contracts**

- Corporate patent license
- Federal patent licenses
- Patent sale





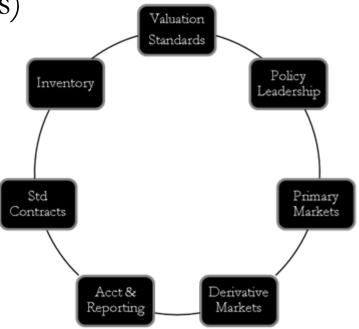
- Greater transaction speed and efficiency
- Facilitates secondary trading / sale
- Greater perception of fairness to small inventors
- Market moving to create (eg. Ocean Tomo Auctions and various on-line platforms)



- Disclosure of encumbrances due to confidentiality provisions
- Understanding full scope of existing licenses / cross-licenses
- Communication of believed use or infringement
- Developing standard of reasonable disclosure and diligence
- Protecting buyer identity
- Know-how transfer



- Sale (eg. Ocean Tomo Auctions; www.PatentBidAsk.com)
- Licensing (eg. yet2.com, etc.)
- Traded exchange (eg. IPXI ULR's)





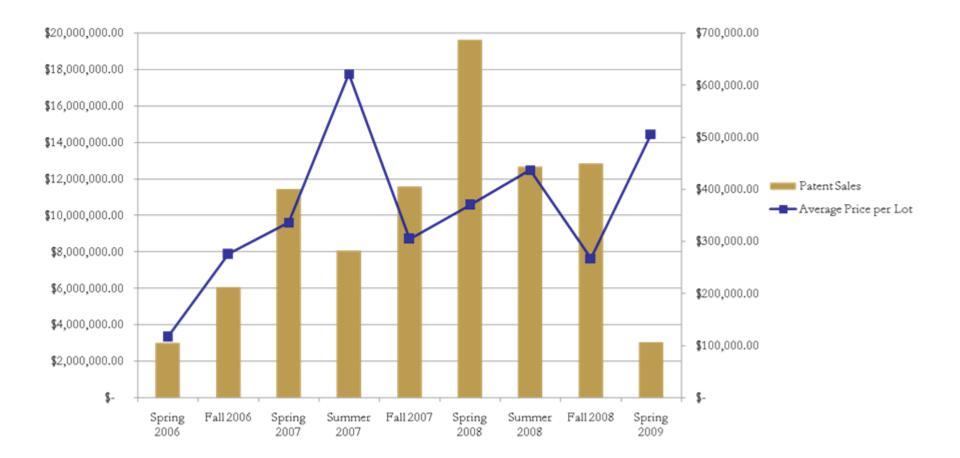
### **Ocean Tomo Auctions**



### \$100+ million in auction volume



### **Auction Results - Patents**



### **Ocean Tomo Auction Results**



### www.PatentBidAsk.com

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### CORE DESCRIPTION OF ILLUSTRATIVE ULR TRADE

ULR(s): U137A, B & C Valve Seat Insert PATENT: X,XXX,137 and continuations, continuations-in-part and foreign counterparts. LICENSED FIELD OF USE: All RESTRICTIONS: All secondary sales through IPX ISSUER RIGHT TO USE: Yes UNIT BASIS: One ULR covers one automotive or light truck engine TOTAL OFFERED QUANTITY: 5 million license units offered in 50 unit lots OFFERING TERM: 3 years TERM OF LICENSE: Until consumed

### TRANCHES

U137A: 1 million ULR's at an initial offering price of \$0.50 per unit (eg unit 1)U137B: 1 million ULR's at an initial offering price of \$0.75 per unit (eg unit 1,000,001)U137C: 3 million ULR's at an initial offering price of \$1 per unit (eg unit 2,000,001)



### **Derivative Markets**

- Equity indexes
- Patent indexes





## **Equity Indexes**

#### THE WALL STREET JOURNAL

### PATENT SCORECARD

#### PatentRatings® System

Ocean Tomo's PatentRatings® system has identified 53 independent and object factors, which calculate the relative attractiveness of the more than 4 million patents issued by the U.S. Patent and Trademark Office since 1983. The PatentRatings® system is widely recognized by the intellectual property valuation industry.

#### Patent Based Indices

The transformation of the global economy to a knowledge economy has placed an unprecedented focus on the value of patents. Ocean Tomo has developed a suite of patent-based indexes which provide investors, asset managers and financial advisors with useful benchmarks.

#### Patent Index

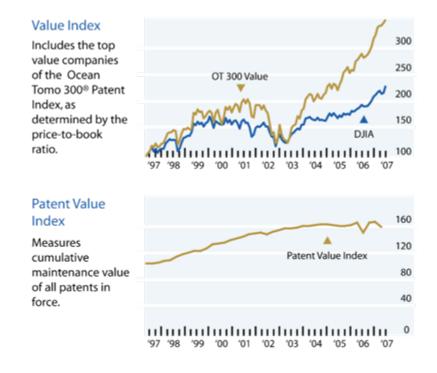
The Ocean Tomo 300<sup>®</sup> Patent Index represents a diversified portfolio of 300 companies that own valuable patents.



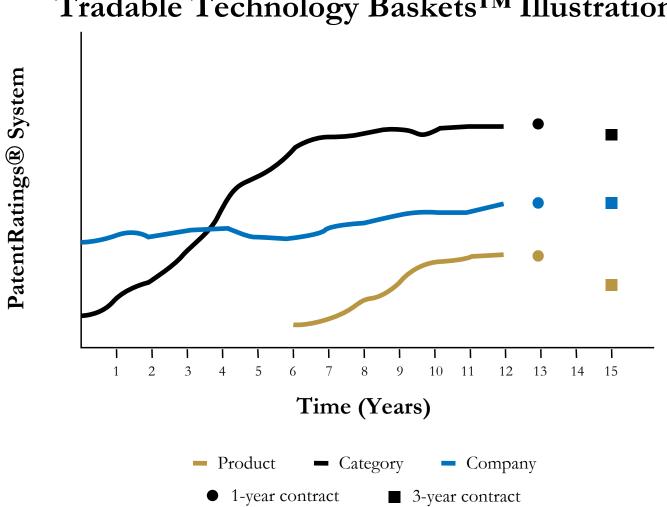
Includes the top growth companies of the Ocean Tomo 300<sup>®</sup> Patent Index, as determined by the price-to-book ratio.









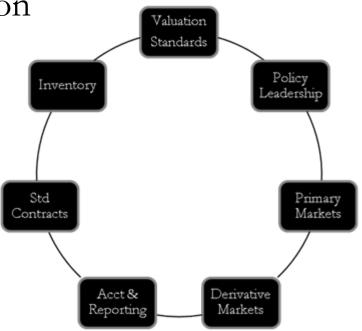


### Tradable Technology Baskets<sup>TM</sup> Illustration



## Accounting & Reporting

- Update current disclosures
- Evolving tax policy
- Potential public equity qualification
- Data transparency
- Need for global unification





## **Update Current Disclosures**

- Reinstate joint FASB and IASB research on expanded disclosure guidelines for intangibles
- Revise SEC definitions of asset-backed securities to include intangible asset classes
- Create safe harbor reporting of intangible assets in financial statements
- Clarify Sarbanes-Oxley requirements vis-a-vis intangibles



## **Evolving Tax Policy**

- Generally update the tax code to anticipate impact of innovation economy
- Examine valuation standards for off shore IP transfers
- R&D tax credit
- Consider lower tax rates for IP royalties
- Harness the tax revenue due from the sale of US technology to international buyers which is today hidden in royalty free licenses
- Recent State tax based initiatives (eg. Illinois)

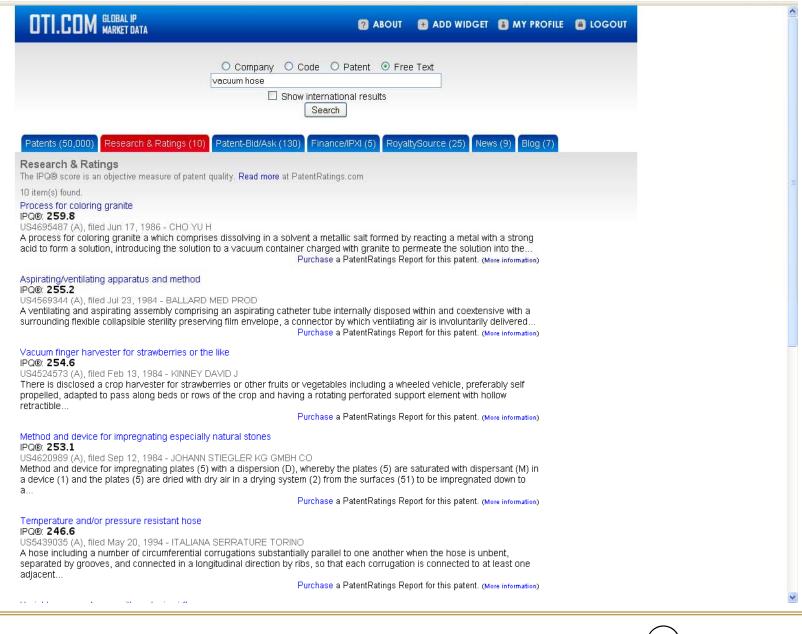


## **Potential Equity Qualification**

- Inclusion as a member within an IP-based index listed on IPXI (e.g. the Ocean Tomo 300<sup>®</sup> Patent Index or similar)
- Licensing revenue from intellectual property exceeds 15% of total revenues or 50% of reported earnings
- Innovation Ratio [intellectual property value / total book value], determined by an independent third-party appraiser, exceeds 25%
- Innovation Ratio, determined by an approved algorithm (e.g. Ocean Tomo PatentRatings®), exceeds that of the top quartile of a listed index based on such algorithm
- The value of intellectual property, determined by an independent third-party appraiser, exceeds \$1 billion.



### Data Transparency - OTI.com



40



### Data Transparency - IPXI Indexes



Finance data is provided by IPXI. To find out more information visit the IPXI website: http://www.ipxi.com/

The "Patent Value Index" (PVI) represents a normalization of patenting activity in a given sector. The relative level of the index gives a view into how valuable a technology or sector is believed to be by those practicing in that sector. One can use PVI to determine how interest in a sector has changed over time or relative to other sectors.

PVI relies on information from the US Patent and Trademark Office to determine patent issuance and maintenance events as well as classifications. This information is used to compile the indexes on a weekly basis.

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### **Global Unification**

### OTI.com

### IPXI

Equity Qualification / IP Indexes / TTB's / ULR's

### PatentRatings<sup>®</sup> Equivalency Engine

Portfolio Valuation / Patent Exchange Rates / Cross License Balancing Payments

#### **United States**

- Valuation expertise
- PatentRatings®
- Auction price discovery
- PBA US market
- OT 300® Indexes

#### **Europe**

- Valuation expertise
- PatentRatings®
- Auction price discovery
- PBA regional market
- Public equity indexes

#### <u>Asia</u>

- Valuation expertise
- PatentRatings®
- Auction price discovery
- PBA national markets
- Public equity indexes



### **Contact Information**



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