#### Intellectual Property Valuation Analysis For Sale, Transfer, Or License Purposes

Presentation to The Licensing Executive Society Portland, OR Tuesday, August 3, 2010

Presentation by: Robert F. Reilly, Managing Director Willamette Management Associates Chicago, IL

rfreilly@willamette.com



Willamette Management Associates

#### **Discussion** Outline

- 1. Defining the valuation analyst's assignment
- 2. Data gathering and due diligence procedures
- 3. Generally accepted IP valuation approaches, methods, and procedures
- 4. Performing the valuation synthesis and reaching the value conclusion
- 5. Defending the valuation analysis conclusion



# Defining the Valuation Analyst's Assignment

- 1. Alternative analysis purposes
  - estimating a sale price between a willing buyer/willing seller
  - estimating a royalty rate between a willing licensor/willing licensee
  - estimating a value to the current owner/operator
  - estimating a value to a specific buyer owner/operator
  - estimating an intercompany transfer price (royalty rate) between related parties
  - estimating economic damages related to an IP damages event
  - concluding the fairness of a sale price or a license royalty transaction
  - concluding a mutual exchange ratio for two IP bundles



# Defining the Valuation Analyst's Assignment (cont.)

- 2. Alternative analysis purposes
  - intended objective: value (to an owner/operator), transaction price, third-party license royalty rate, lost profits/economic damages, fairness
  - alternative standards of value (value to whom?)
    - fair value owner value
    - fair market value investment value
    - use value
- acquisition value
- user value
  collateral value
- alternative premises of value (how the transaction occurs)
  - value in continued use
  - value in place (not in use)
  - value in exchange—orderly disposition
  - value in exchange—voluntary liquidation
  - value in exchange—involuntary liquidation
- highest and use analysis
  - current owner/operator HABU
  - new owner/operator HABU
  - licensor/licensee HABU



# Defining the Subject Intellectual Property

- Develop a clear and complete definition of the analysis subject
  - intellectual property: trademarks, patents, copyrights, trade secrets
  - other related intangible assets, such as:
    - trademarks—advertising materials, trade dress
    - patents—product/process drawings, proprietary technology
    - copyrights—software, masks and masters
    - trade secrets—customer lists, product formulae
  - subject bundle of IP legal rights
    - fee simple
    - term/reversion interest
    - licensor/licensee interest
    - domestic/international interest
    - product line/industry interest



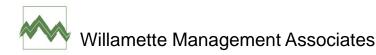
# Defining the Subject Intellectual Property (cont.)

- Develop a clear and complete definition of the analysis subject (cont.)
  - licensor/licensee responsibilities
    - legal protection
    - R&D expenditures
    - marketing expenditures
    - licenses, permits, regulatory approvals
  - other contract terms
    - minimum use, production, sales
    - minimum marketing, commercialization expense
    - R&D technology development, completion payments
    - obtain required approvals
    - milestone license payments



#### Data Gathering and Due Diligence Procedures

- 1. Analysis to the current owner/operator (use/user)
  - historical and prospective financial statements
  - historical and prospective development/maintenance costs
  - current and expected resource/capacity constraints
  - description and estimate of IP economic benefits
    - revenue (unit price/volume, market size/position)
    - expense (decrease product returns, COGS, SGA, R&D)
    - investment (inventory, capx)
    - risk (contracts, cost of capital)
- 2. Analysis to an alternative owner/operator (use/user)
  - change in market definition or size
  - change in alternative/competitive uses
  - IP creates inbound/outbound opportunities
  - owner operate and license IP (different products, territories)



## Data Gathering and Due Diligence Procedures (cont.)

3. Analyze projections and IP economic benefits against benchmark comparison

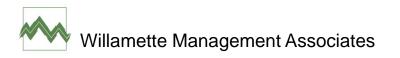
- prior projections vs. prior actual results
- current projections vs. capacity constraints
- current projections vs. market size
- consider industry average comparable profit margins (CPM)
- consider guideline public company comparable profit margins
- consider quality and quantity of guideline IP license data
- perform IP remaining useful life (RUL) analysis, based on:
  - legal/statutory life
  - contract/license life
  - technology obsolescence life
  - economic obsolescence life
  - prior generations of the subject IP
  - position of subject IP in its life cycle



#### Data Gathering and Due Diligence Procedures (cont.)

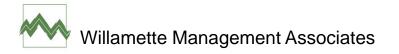
3. Analyze projections and IP economic benefits against benchmark comparison (cont.)

- data sources commonly used to identify industry average profit margins for IP owner/operators
  - Financial Research Associates—*Financial Studies of the Small Business*
  - The Risk Management Association—Annual Statement Studies: Financial Ratio Benchmarks
  - BizMiner (The Brandow Company)—Industry Financial Profiles
  - CCH, Inc.—Almanac of Business and Industrial Ratios
  - Fintel, LLC—Fintel Industry Metrics Reports
  - MicroBilt Corporation (formerly IntegraInfo)—Integra Financial Benchmarking Data
  - ValueSource—*IRS Corporate Ratios*
  - Schonfeld & Associates, Inc.—IRS Corporate Financial Ratios



# Valuation Approaches and Methods

- 1. Income approach methods
  - yield capitalization involves an annual uneven income projection over a finite projection period
  - direct capitalization involves an annual constant change rate income projection over either a finite period or a perpetuity period
  - typical IP income measures:
    - incremental income (with vs. without IP)
    - excess/residual income (business enterprise income less capital charge on all contributory assets)
    - profit split (percentage of business enterprise income assigned to IP, based on a "functional analysis")



- 1. Income approach methods (cont.)
  - typical IP income levels:
    - net operating income
    - EBIT
    - pretax income
    - contribution income (for economic damages analysis)
  - discount/capitalization rate should agree with the selected income measure
  - discount/capitalization rate should agree with selected standard of value and the selected premise of value
  - projection period should agree with the IP RUL
  - income projection should consider the shape of IP life cycle
  - income projection should consider the IP maintenance costs



- 2. Market approach methods
  - comparable profit margin method:
    - compare guideline public companies without IP to the subject company with IP
    - difference in profit margins is due to the subject IP
    - profit margin delta is considered to equal a royalty rate
    - royalty income (i.e., rate x revenue) is capitalized over RUL to indicate value
  - note that, typically, guideline companies also have IP
  - so the CPM method compares the superior subject IP profit margin to an industry average IP profit margin
  - typically, EBIT is used as the CPM income measure



- 2. Market approach methods (cont.)
  - data sources commonly used to identify guideline companies and guideline company profit margins:
    - FactSet Research Systems, Inc.—FactSet
    - Hoover's, Inc.—Hoover's Company Records
    - Mergent, Inc.—MergentOnline
    - Morningstar, Inc.—Morningstar Equity Research
    - Standard & Poor's—CapitalIQ
    - Thomson Reuters—Thomson ONE Analytics



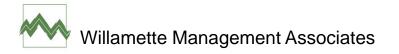
- 2. Market approach methods (cont.)
  - comparable uncontrolled transactions (CUT) method:
    - select guideline license agreement CUTs of comparable IP
    - adjusted CUT royalty rates for differences in guideline IP vs. subject IP
    - calculate mean/median/mode CUT license royalty rates
    - select royalty rate appropriate to the subject IP
    - royalty income (i.e., rate x revenue) is capitalized over RUL to indicate value
  - consider relative age of guideline IP vs. subject IP
  - consider relative market size of guideline IP vs. subject IP
  - consider relative growth rate of guideline IP vs. subject IP



- 2. Market approach methods (cont.)
  - data sources commonly used to identify IP CUT royalty rates:
    - AUS Corporation—RoyaltySource Royalty Rates
    - Financial Valuation Group—The Intellectual Property Transaction
      Database
    - ktMINE, LLC—ktMINE
    - RoyaltyStat, LLC—RoyaltyStat



- 3. Cost approach methods
  - particularly applicable for recently developed IP, for which development cost or effort data are available
  - also applicable for in-development or non-commercialized (e.g., defensive) IP
  - replacement cost new (RCN) includes:
    - direct costs (person-months x cost per month)
    - indirect costs (out-of-pocket costs)
    - developer's profit (return on investment)
    - entrepreneurial incentive (opportunity cost during development)

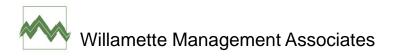


- 3. Cost approach methods (cont.)
  - less depreciation (LD) allowances for:
    - functional obsolescence (excess operating costs)
    - technological obsolescence (age/life before replacement)
    - economic obsolescence (inadequate ROI)
  - owners often don't track IP development costs
  - all conceptualization/commercialization costs should be included
  - consider subject IP RUL for obsolescence
  - remember, value is RCNLD, value is not RCN



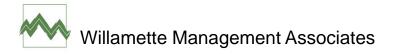
# Valuation Synthesis and Conclusion

- 1. How to select valuation approaches and methods to use
  - does selected method accomplish the analyst's assignment?
    - defined value
    - transaction price
    - third-party license rate
    - intercompany transfer price
    - economic damages
    - IP bundle exchange ratio
    - transaction fairness opinion
  - does selected method analyze the appropriate bundle of legal rights?
  - are there sufficient available data to perform the method?
  - will the method be understandable to the intended audience?



#### Valuation Synthesis and Conclusion (cont.)

- 2. How to weight the various approach/method value indications to conclude a final value
  - analyst's confidence in the quantity and quality of data
  - analyst's level of due diligence performed on data
  - relevance of the method to the subject IP life cycle stage and marketability
  - variation in the range of value indications range
  - final value can be point estimate or a value range (for transaction negotiations or fairness opinions)



#### Defending the Value Conclusion

- 1. Defending the value, price, royalty rate, economic damages, exchange ratio, fairness conclusion
  - explain the valuation (or price, royalty rate, etc.) assignment
  - describe the subject IP and the subject bundle of legal rights
  - explain the selection/rejection of all generally accepted valuation approaches and methods
  - explain the selection and application of all specific analysis procedures
  - describe the data gathering and due diligence procedures
  - list all documents and data considered
  - include copies of all documents specifically relied on



#### Defending the Value Conclusion (cont.)

- 1. Defending the value, price, royalty rate, economic damages, exchange ratio, fairness conclusion (cont.)
  - summarize all of the qualitative analyses performed
  - include schedules and exhibits of all quantitative analyses
  - avoid any unexplained or unsourced variables/assumptions
  - allow for the replicability of all analyses
  - encourage the reader's reliability of the written report
    - report should be clear, convincing, and cogent
    - report should be well-organized, well-written, and well-presented
    - report should be free of grammar, punctuation, spelling, and mathematical errors



#### Summary and Conclusion

- 1. Understand the analyst's assignment
- 2. Understand the subject IP and the subject legal rights
- 3. Collect sufficient owner/operator financial data
- 4. Collect sufficient industry, market, competitive data
- 5. Document the specific IP economic benefits
- 6. Perform due diligence procedures on all available data
- 7. Select and apply income, market, and cost approach valuation methods
- 8. Reconcile all value (price, royalty rate, etc.) indications into a final conclusion
- 9. Defend the analysis conclusion in a replicable and welldocumented report

