

Valuing Intellectual Property

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Discussion Outline

- Types of intellectual properties
- Intellectual property property rights
- Intellectual property economic attributes
- Reasons to analyze intellectual properties
- Analytical methods
- Analytical issues
- Summary and conclusion

Types of Intellectual Property

1. Marketing-related
 - Trademarks and trade names
 - Service marks
 - Trade dress
2. Technology-related
 - Patents – process
 - Patents – product
 - Patent applications
3. Engineering-related
 - Engineering drawings
 - Industrial designs
 - Trade secrets

Types of Intellectual Property (cont.)

4. Data processing-related

- Computer software copyrights
- Chip masks and masters
- Proprietary databases

5. Artistic-related

- Musical composition copyrights
- Literary composition copyrights
- Film copyrights

Common Categories of Intellectual Property

1. Creative and artistic—literary works and copyrights, musical compositions, computer software copyrights, trademarks and trade names.
2. Innovative and engineering—product and process patents, industrial designs, trade secrets, blueprints, engineering drawings.

Intellectual Property Property Rights

1. Intellectual property general property rights
 - private ownership
 - transferable (sell, gift, etc.)
 - legal protection
 - use (or not use)
 - hypothecate
 - tangible manifestation

2. Intellectual property additional property rights
 - legal registration
 - additional legal protection
 - transfer partial rights (license)
 - commercialize (or prevent commercialization)

Economic Phenomena That Do Not Qualify as Intellectual Property

1. Economic phenomena that do not meet the specific attribute tests described previously do not qualify as intellectual property.
2. Some economic phenomena are descriptive or expository in nature. They may describe conditions that contribute to the existence of—and value of—intellectual property

Economic Phenomena That Do Not Qualify as Intellectual Property (cont.)

3. Such “descriptive” economic phenomena include:
 - a. market share
 - b. visibility
 - c. high profitability
 - d. lack of regulation (or a regulated environment)
 - e. monopoly position
 - f. market potential
 - g. etc.

4. While these “descriptive” conditions do not qualify as I/P, they indicate that actual I/P have economic value.

Intellectual Property Economic Attributes

- Use—generate operating income
 - increase revenues (price, volume, share)
 - decrease costs (operating, SG&A, interest)
 - decrease investments (working capital, capx)
- Not use—defensive use
 - prevent others from use

Intellectual Property Economic Attributes (cont.)

- License—generate license income
 - specified legal rights
 - industry and product
 - geography
 - license and use
 - maintain legal status
 - maintain commercial status
 - development and commercialization
- Life
 - legal
 - economic
 - contractual
 - functional/analytical

Reasons to Conduct Damages Analysis of Intellectual Properties

- Purchase price allocation
- SFAS 141 & 142
- In-process research and development
- Breach of contract
- Infringement
- Bankruptcy
- Fraud
- Lender liability
- Expropriation

Valuation Analytical Methods

1. Cost approach methods
 - replacement cost
 - reproduction cost

2. Income approach methods
 - direct capitalization
 - yield capitalization
 - income measures
 - income allocations

Valuation Analytical Methods (cont.)

3. Market approach methods

- sales comparison transactions
- license comparison transactions
- units of comparison
- royalty rates

Highest and Best Use Analysis

- Highest and best use criteria
- Alternative premises of value
 1. Value in continued use
 - Contributory value of income-producing tangible and intangible assets benefits I/P
 2. Value in place
 - Mass assemblage of assets (including I/P) fully functional but not generating income
 3. Value in exchange—orderly disposition
 - I/P sold piecemeal, with normal exposure to market, between a willing buyer and willing seller
 4. Value in exchange—forced liquidation
 - I/P sold piecemeal, to highest bidder, with seller under compulsion to transact

Alternative Premise of Value

Selection of the appropriate premise of value is based on:

- Purpose and objective of the analysis
- Specific statutory/judicial requirements
- Highest and best use of subject I/P

Economic Damages Analytical Methods

1. Comparative business valuation methods
 - “before and after” scenarios
 - “but for” scenarios
 - direct decrease in business value
2. Lost profits methods
 - decremental revenues
 - incremental costs
 - incremental investments
 - incremental costs of capital
 - sum of historical income
 - present value of prospective income

Economic Damages Analytical Methods (cont.)

3. Economic income methods

- effect on share
- effect on market
- effect on prices
- effect on production
- cost, volume, profit relationships

Analysis of I/P for Lost Profits and Economic Damages Purposes Analytical Issues

- Damages to aggrieved party
- Unjust enrichment to defendant
- Damage award is taxable to plaintiff
- Royalty for continued use
- Responsibility for mitigation
- Liability defense

Analysis of I/P for Lost Profits and Economic Damages Purposes Analytical Issues (cont.)

- Discount rate, capitalization rate
- Empirical sale transaction data
- Empirical license transaction data
- Obsolescence
- Remaining useful life

I/P Remaining Useful Life (RUL) Analysis

1. Legal/statutory life
2. Judicial life
3. Contractual life
4. Functional life
5. Technological life
6. Economic life
7. Analytical life

Various Determinants to Estimate RUL

1. Legal determinants
 - patents
 - copyrights
2. Contractual determinants
 - technology-sharing agreements
 - I/P development rights
3. Judicial determinants
 - computer software
4. Functional determinants
 - computer software
 - trade secrets

Various Determinants to Estimate RUL (cont.)

5. Technological determinants
 - proprietary technology
 - technical documentation

6. Economic determinants
 - product formulations
 - proprietary technology
 - computer software
 - designs

7. Analytical determinants
 - blueprints, diagrams, schematics
 - engineering drawings
 - all of the above

Data Requirements of Various Life Determinants

<u>Life Determinants</u>	<u>Type of Remaining Life Estimation</u>	<u>Information or Data Required</u>
1. Legal	Definite	Document
2. Contractual	Definite	Document
3. Judicial	Definite	Document
4. Functional	Subjective	Engineering
5. Technological	Subjective	Technical
6. Economic	Quantitative	Engineering, Economic
7. Analytical	Quantitative	Aged life/retirement data

Illustrative Analysis

- Damages (infringement) case study
- Transfer price (royalty rate) case study

Summary and Conclusion

1. Types of intellectual properties
2. Property rights and economic attributes
3. Economic damages analytical methods and issues
4. Illustrative analyses
5. Questions and discussion