Intellectual Property Valuation—other than for Fair Value Accounting Purposes

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Discussion Outline

1. Defining the intellectual property valuation assignment
2. Types of assignments and types of opinions (e.g., valuation, damages, transfer price)
3. General purposes of intellectual property valuations
4. Specific reasons for intellectual property valuations
5. Summary of generally accepted approaches and methods
6. Analyst due diligence procedures
7. Intellectual property data sources—comparable sales, licenses, and companies
8. Reaching the valuation synthesis and conclusion
9. Reporting the value conclusion
10. Defending the value conclusion before a contrarian challenge
Types of Intellectual Property

• An intellectual property is a commercial intangible asset that enjoys special legal recognition and legal protection.

• The intellectual property special legal status comes from either federal or state statutes.

• There are four types of intellectual property:
  – patents
  – trademarks
  – copyrights
  – trade secrets

• There often are commercial intangible assets associated with the intellectual property.
Patents

• A patent grants an inventor the right to exclude others from making, using, or selling the patented invention for a specific time period.

• There are three types of patents:
  – utility patent – for an invention that has some type of usefulness or utility
  – design patent – “new, original, or ornamental design for an article of manufacture”
  – plant patent – “distinct and new variety of plant”

• Two patents may be issued for the same product; for example:
  – a design patent – for the product design
  – a utility patent – for the product useful characteristics

• A patent must be registered with the USPTO.
Trademarks

- A trademark is used to identify a product brand or a company
- A service mark is used to identify a service provider
- A trade name is a manufacturing business entity’s name
- A service name is a service business entity’s name
- Trade dress is the packaging for a product or décor for a service
- A trademark may be registered with the USPTO
  - registered trademark
  - unregistered trademark
Copyrights

- Copyright law protects “original works of authorship”
- The original work must display some creativity and be fixed in a tangible medium
- The copyright covers the specific expression of an idea – not the idea itself
- Original works may include:
  - literary works
  - musical works
  - dramatic works
  - choreographic works
  - pictorial, graphic, and structural works
  - motion pictures
  - sound recordings
  - architectural works
- May be registered with the USCO
Trade Secrets

- Any information that has economic value and is not generally known to the public
- Is protected by state (not federal) statute
- Typically examples include:
  - information about customers
  - information about employees, suppliers, distributors
  - information about product costs and prices
  - information about new business opportunities
  - information about business methods
  - some databases and know-how
- Cannot be registered with any government agency
General Reasons to Analyze Intellectual Property

1. Transaction pricing and structuring
2. Intercompany use and ownership transfers
3. Financial accounting and fair value reporting
4. State and local ad valorem property taxation planning and compliance
5. Financing collateralization and securitization
6. Litigation claims and dispute resolution
7. Management information and strategic planning
8. Corporate governance and regulatory/contractual compliance
9. Bankruptcy and reorganization analysis
10. License, joint venture, and other development/commercialization opportunities
Individual Reasons to Value Intellectual Property

1. Transaction pricing or structuring reasons
   a. pricing the sale of an individual intellectual property or a portfolio of two or more intellectual property assets
   b. pricing the license of an individual intellectual property or a portfolio of two or more intellectual property assets
   c. equity allocation in a business enterprise or joint venture formation when the different investors contribute different tangible assets, commercial intangible assets, and intellectual property to the start-up business
   d. asset allocation to the equity owners in a liquidation of a business enterprise or joint venture when different investors receive tangible assets, commercial intangible assets, or intellectual property in exchange for their equity interests
Individual Reasons to Value Intellectual Property (cont.)

2. Intercompany use and ownership transfers
   a. the transfers of intellectual property between the wholly-owned subsidiaries (or other business units) of a consolidated business enterprise
   b. the transfer of intellectual property between less than wholly-owned subsidiaries (with different minority shareholders) of a consolidated business enterprise
   c. Product inventory cost accounting for in-process goods transferred between business units with varying intellectual property ownerships in a consolidated business enterprise

3. Financial accounting and fair value reporting
   a. Business combination purchase price allocations among all acquired tangible assets and intangible assets
   b. goodwill and intellectual property annual impairment testing
   c. post-bankruptcy fresh start accounting for all business entity tangible assets and intangible assets
Individual Reasons to Value Intellectual Property (cont.)

4. Taxation planning and compliance
   a. purchase price allocations among all acquired tangible assets and intangible assets in a taxable business acquisition
   b. depreciation and amortization accounting for purchased tangible assets and intangible assets
   c. charitable contribution deductions of donated intellectual property
   d. intercompany transfer pricing of intellectual property owned by controlled foreign subsidiaries of a multinational corporation
   e. state and local ad valorem property tax compliance and appeals related to exempt (or taxable) intellectual property

5. Financing collateralization and securities
   a. use of intellectual property as collateral on cash flow-based or asset-based corporate debt financings
   b. sale/leaseback or sale/licenseback financing of corporate intellectual property
6. Bankruptcy and reorganization
   a. use of intellectual property as collateral on secured debt
   b. use of intellectual property as collateral or debtor in possession (DIP) secured debt
   c. intellectual property sale or license as a DIP cash generation spinoff opportunity
   d. use of corporate intellectual property in the assessment of a debtor corporation solvency or insolvency
   e. license or operating use of debtor intellectual property as part of plan of reorganization
Individual Reasons to Value Intellectual Property (cont.)

7. Litigation claims and dispute resolution
   a. intellectual property royalty rate analysis in infringement claims
   b. intellectual property breach of contract or noncompete/nondisclosure agreement economic damages claims
   c. intellectual property condemnation, expropriation, eminent domain, or dissipation of corporate assets claims
   d. intellectual property lost profits in interference with business opportunity or lender liability claims
Individual Reasons to Value Intellectual Property (cont.)

8. Management information and strategic planning
   a. formation of intellectual property joint venture, joint development, or joint commercialization agreements
   b. negotiation of inbound or outbound intellectual property use, development, commercialization, or exploitation agreements
   c. analysis of intellectual property-based capital formation alternatives
   d. analysis of intellectual property-based (license, sale, use, etc.) wealth creation alternatives

9. Corporate governance and regulatory compliance
   a. custodial inventory of all owned and licensed intellectual property
   b. assessment of insurance coverage needed on corporate intellectual property
   c. development of defense strategies against infringement, torts, breach of contract, and other wrongful acts
   d. development of defense against dissipation of corporate assets allegation
10. Commercialization and development opportunities
   a. identification of intellectual property license, spin-off, joint venture, and other commercialization opportunities
   b. negotiation of intellectual property license, spin-off, joint venture, and other commercialization opportunities
Objectives of the Intellectual Property Analysis

1. to estimate a defined value for a specific ownership interest in the intellectual property
2. to measure an appropriate royalty rate or license fee associated with the third party license of the intellectual property
3. to calculate the arm’s-length price (ALP) for the intercompany transfer of intellectual property between controlled foreign entities of a multinational taxpayer corporation
4. to quantify the expected remaining useful life (RUL) of the ownership or operating (or associated rate of change in the value) of the intellectual property
5. to determine the amount of lost profits or other economic damages associated with a damages event suffered by the intellectual property
6. to opine on the fairness (or solvency, adequate consideration, excess benefits, etc.) of an intellectual property sale or license transaction
Elements of the Assignment – Description

- The first element is a complete definition of the intellectual property.
- That definition should specify exactly what patent, copyright, trademark, or trade secret is the valuation subject.
- This definition should include the registration number and country for the patent or for the copyright and trademark (if registered).
- This definition should describe any commercial intangible assets to be considered with the intellectual property.
Elements of the Assignment –
Bundle of Rights

- The second element is a description of the bundle of legal rights.

- Which of the following bundles should be included in the valuation?
  1. fee simple interest
  2. term/reversion interest
  3. licensor/licensee interest
  4. territory (domestic/international) interest
  5. product line/industry interest
  6. sublicense rights
  7. development rights
  8. commercialization/exploitation rights
Elements of the Assignment – Contract Terms

• The third element describes any contract or license terms in effect
  - licensor/licensee responsibility contract terms
    • legal protection requirements
    • R&D expenditures
    • marketing expenditures
    • licenses, permits, or other regulatory approvals
  - other contract terms
    • minimum use, production, or sales
    • minimum marketing or commercialization expense
    • R&D technology development payments, completion payments
    • party responsible to obtain the required approvals
    • milestone license payments
Elements of the Assignment – Standard

- The fourth element is the standard (or definition) of value the analyst is asked to conclude:
  - fair value
  - fair market value
  - use value
  - user value
  - owner value
  - investment value
  - acquisition value
  - collateral value
Elements of the Assignment – Premise

• The fifth element is the premise of value that the analyst should assume:
  – value in continued use
  – value in place (but not in use)
  – value in exchange—orderly disposition basis
  – value in exchange—voluntary liquidation basis
  – value in exchange—involuntary liquidation basis
Purpose of the Valuation

• The purpose of the valuation considers the following questions:
  1. what will the intellectual property valuation be used for?
  2. who will rely on (or receive a copy of) the valuation?
  3. what form and format of intellectual property valuation report is required?
  4. are there any legal instructions (e.g., specific statutory definitions, judicial precedent, or reporting requirements) that the analyst should consider?
Data Gathering and Due Diligence

- The valuation analyst will typically gather and analyze information related to the intellectual property current owner/operator.

- Such information will typically include the following:
  1. owner/operator historical and prospective financial statements
  2. owner/operator historical and prospective development/maintenance costs
  3. owner/operator current and expected resource/capacity constraints
  4. description and estimate of the intellectual property economic benefits to the current owner/operator
     - associated revenue increase (e.g., related product unit price/volume, market size/position)
     - associated expense decrease (e.g., expense related to product returns, COGS, SGA, R&D)
     - associated investment decrease (e.g., inventory, capital expenditures)
     - associated risk decrease (existence of intellectual property contracts, decrease of cost of capital components)
Market Potential

- The analyst will consider the intellectual property market potential outside of the current owner/operator.

- The analyst may consider the following factors:
  1. change in the market definition or the market size for an alternative owner/user
  2. change in alternative/competitive uses to an alternative owner/user
  3. the intellectual property ability to create inbound/outbound license opportunities to an alternative owner/user
  4. whether the current owner can operate the intellectual property and also outbound license the intellectual property (in different products, different markets, different territories, etc.)
**Review of Financial Projections**

- The analyst will also review and challenge any owner/operator-prepared financial projections and any owner/operator-prepared measures of intellectual property economic benefits. The analyst may perform the following benchmark analyses:
  1. compare prior management projections to prior actual results of operations
  2. compare management projections to current capacity constraints
  3. compare management projections to the current total market size
  4. consider published industry average CPM data
  5. consider guideline publicly traded company CPM data
  6. consider the quality and quantity of available license data
  7. perform RUL analysis, with consideration of:
     - legal/statutory life
     - contract/license life
     - technology obsolescence life
     - economic obsolescence life
     - lives of prior generations
     - position of subject in its life cycle
Benchmark Published Industry Data Sources

- 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*
Common Data Sources for 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
Common License Transaction Databases

• **RoyaltySource**

www.royaltysource.com—The AUS Consultants database provides license transaction royalty rates. The database can be searched by industry, technology, and/or keyword. The information includes royalty rates, name of the licensee and the licensor, a description of property licensed (or sold), the transaction terms, and the original information sources.

• **RoyaltyStat, LLC**

www.royaltystat.com—RoyaltyStat is a subscription-based database of license royalty rates and license agreements, compiled from Securities and Exchange Commission documents. It is searchable by SIC code or by full text.
Common License Transaction Databases (cont.)

• **Royalty Connection**

  www.royaltyconnection.com—Royalty Connection™ provides online access to license royalty rate and other license information on all types of technology, patents, trade secrets, and know-how. Users can search by industry, product category, or keyword.

• **ktMINE**

  www.bvmarketdata.com—ktMINE is an interactive database that provides direct access to license royalty rates, actual license agreements, and detailed agreement summaries. License agreements are searchable by industry, keyword, and various other parameters.
Common License Transaction
Print Sources

• AUS Consultants publishes a monthly newsletter, *Licensing Economics Review*, which contains license royalty rates on recent transactions. The December issue contains an annual summary of license royalty rates by industry.

• Gregory J. Battersby and Charles W. Grimes annually author a book called *License Royalty Rates*, that is published by Aspen Publishers. This reference provides license royalty rates for 1,500 products and services in 10 different licensed product categories.

Intellectual Property Valuation Approaches and Methods

• Market approach methods
  – comparable uncontrolled transactions – sales
  – comparable uncontrolled transactions – license
  – comparable profit margin method

• Cost approach methods
  – reproduction cost new less depreciation method
  – replacement cost new less depreciation method
  – cost avoidance method

• Income approach methods
  – incremental income methods
  – relief from royalty methods
  – differential income methods
  – comparable profit margin methods
  – profit split methods
  – residual/excess profits methods
  – residual profit split methods
Market Approach Valuation Process

- Research the appropriate exchange market for sale or license transactions, involving either “guideline” or “comparable” intellectual property.

- Verify the information by confirming (1) the data are factual and (2) the transactions reflect arm’s-length market considerations.

- Select relevant units of comparison (income multipliers or dollars per unit—such as “per drawing,” “per customer,” “per line of code”) and develop a comparative analysis for each unit of comparison.

- Compare the guideline or comparable sale or license transactions with the subject using the selected elements of comparison; adjust the sale or license price of each transaction to the subject intellectual property.
Market Approach Valuation Process (cont.)

- Calculate the various pricing metrics (for each unit of comparison) from the guideline or comparable transactions. Quantify the mean, median, high, and low pricing metrics.

- Select the various pricing metrics (e.g., revenue multiples, income multiples, price per drawings, price per line of code, etc.) appropriate to the subject. The selected pricing metrics may be at the low, middle, or high end of the range. Select subject-specific pricing metrics.

- Apply subject-specific pricing metrics to the intellectual property financial or operational fundamentals (e.g., revenue, income, etc.) to conclude one or more value indications.

- Reconcile the various value indications produced from the analysis of the sale or license pricing metrics.
Cost Approach Valuation Process

- Reproduction cost new or replacement cost new

- Four cost components:
  - direct costs
  - indirect costs
  - developer’s profit
  - entrepreneurial incentive

- Physical deterioration

- Functional obsolescence
  - excess capital costs
  - excess operating costs

- Economic obsolescence
  - inability to earn a fair ROI
Income Approach Valuation Process

- Methods that quantify the incremental income level – the owner/operator earns greater revenue or incurs lower costs with the intellectual property

- Methods that estimate a relief from a hypothetical royalty payment – owner/operator actually owns the intellectual property. Therefore, the owner/operator does not have to inbound license the intellectual property from a hypothetical third party licensor

- Methods that measure a differential income level – compare the owner/operator income to some benchmark income measure.
Income Approach Valuation Process (cont.)

- Methods that consider comparable companies – compare the owner/operator to selected publicly traded companies; the selected companies don’t operate the intellectual property; assign excess profit margin (above the comparable companies margin) to the subject intellectual property.

- Methods that quantify a profit split – allocate the owner/operator profit margin between (1) the intellectual property and (2) all other contributory assets.

- Methods that quantify residual or excess profits – start with owner/operator total operating income; identify all contributory assets; assign a fair rate of return to each contributory asset; total income minus the contributory asset charge equals the residual or excess profits.

- Residual profit split methods – assign a capital charge to some contributory assets (e.g., NWC, RE, TPP); assign a profit split to the post-capital charge residual income.
Income Tax Amortization Adjustment

- When an intellectual property is purchased as part of the taxable acquisition of a going concern business, the price of that asset may be amortizable for federal income tax purposes.

- This amortization deduction is allowed under Internal Revenue Code Section 197.

- The valuation analyst should realize that:
  - not all intellectual property qualifies as Section 197 intangible assets
  - a Section 197 intangible asset has to be purchased as part of a going concern business
  - the business acquisition has to be a taxable transaction
  - the owner/operator contemplated in the defined standard of value should be a taxpayer that is able to use the income tax deduction
Income Tax Amortization Adjustments

Principle

- Applicable only to the income approach value indication
- Start with the intellectual property unadjusted value, estimated at owner/operator effective income tax rate
- Divide the unadjusted value by 15 (i.e., for the 15 year amortization period) to estimate the annual deduction
- Multiply the annual amortization tax deduction by the owner/operator’s marginal tax rate
- Present value the annual income tax savings over the 15 year amortization period
Income Tax Amortization Adjustment Formula

- The adjustment formula is:

\[
value\ adjustment\ factor = \frac{1}{1 - (income\ tax\ rate) \times (present\ value\ annuity\ factor) / amortization\ period}
\]

- Assuming a 40% tax rate, the adjustment is calculated as follows:

\[
value\ adjustment\ factor = \frac{1}{1 - (40\%) (4.6755) / 15\ years}
\]

\[value\ adjustment\ factor = 14\%\]

- Assuming that the unadjusted income approach value indication is $1,000, the adjustment is $140 (i.e., $1,000 \times 14\%). The total income approach value indication is $1,140.
### Healthy Company, Inc. Trade Secret Cost Approach Simple Example

<table>
<thead>
<tr>
<th>IP Development Procedures</th>
<th>Total Person-Hours</th>
<th>Base Cost ($)</th>
<th>Benefits and Overhead Factor</th>
<th>Full Cost ($)</th>
<th>Reproduction Cost New ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compression Process Analysis</td>
<td>15,000</td>
<td>75</td>
<td>1.85</td>
<td>139</td>
<td>2,085,000</td>
</tr>
<tr>
<td>Food Ingredient Mixtures</td>
<td>8,000</td>
<td>75</td>
<td>1.85</td>
<td>139</td>
<td>1,112,000</td>
</tr>
<tr>
<td>Manufacturing Process Testing</td>
<td>10,000</td>
<td>85</td>
<td>1.85</td>
<td>157</td>
<td>1,570,000</td>
</tr>
<tr>
<td>Manufacturing Process Drawings and Documentation</td>
<td>8,500</td>
<td>90</td>
<td>1.85</td>
<td>167</td>
<td><strong>1,420,000</strong></td>
</tr>
</tbody>
</table>

Direct and indirect costs

- Developer's profit at 15%: 928,000
- Entrepreneurial incentive: 3,860,000
- RCN: 10,975,000
- Functional obsolescence (15% of RCN): 1,646,000
- Equals: RCNLĐ: 9,329,000
- Trade secret FMV (rounded): 9,300,000
## Income Approach Simple Example

### With Trade Secret Projection Variables ($ in 000s):

<table>
<thead>
<tr>
<th></th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>EBIT</td>
<td>22,037</td>
<td>24,240</td>
<td>26,665</td>
<td>29,331</td>
<td>32,264</td>
</tr>
<tr>
<td>Income tax</td>
<td>(7,933)</td>
<td>(8,727)</td>
<td>(9,599)</td>
<td>(10,559)</td>
<td>(11,615)</td>
</tr>
<tr>
<td>Op income</td>
<td>14,104</td>
<td>15,514</td>
<td>17,065</td>
<td>18,772</td>
<td>20,649</td>
</tr>
<tr>
<td>Depreciation expense</td>
<td>1,469</td>
<td>1,616</td>
<td>1,778</td>
<td>1,955</td>
<td>2,151</td>
</tr>
<tr>
<td>Capx</td>
<td>(1,469)</td>
<td>(1,616)</td>
<td>(1,778)</td>
<td>(1,955)</td>
<td>(2,151)</td>
</tr>
<tr>
<td>Capital charge</td>
<td>(2,200)</td>
<td>(2,200)</td>
<td>(2,200)</td>
<td>(2,200)</td>
<td>(2,200)</td>
</tr>
<tr>
<td>NWC</td>
<td>(696)</td>
<td>(735)</td>
<td>(808)</td>
<td>(889)</td>
<td>(978)</td>
</tr>
<tr>
<td>NCF</td>
<td>11,208</td>
<td>12,579</td>
<td>14,057</td>
<td>15,683</td>
<td>17,471</td>
</tr>
<tr>
<td>PV factor</td>
<td>0.9325</td>
<td>0.8109</td>
<td>0.7051</td>
<td>0.6131</td>
<td>0.5332</td>
</tr>
<tr>
<td>Discounted NCF</td>
<td>10,451</td>
<td>10,200</td>
<td>9,912</td>
<td>9,616</td>
<td>9,315</td>
</tr>
</tbody>
</table>

### Sum of discounted NCF (rounded) | 49,500
## Healthy Company, Inc. Trade Secret
### Income Approach Simple Example

<table>
<thead>
<tr>
<th>Projection Variables ($ in 000s):</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>EBIT</td>
<td>19,172</td>
<td>21,089</td>
<td>23,198</td>
<td>25,518</td>
<td>28,070</td>
</tr>
<tr>
<td>Income tax</td>
<td>(6,902)</td>
<td>(7,592)</td>
<td>(8,351)</td>
<td>(9,186)</td>
<td>(10,105)</td>
</tr>
<tr>
<td>Op income</td>
<td>12,270</td>
<td>13,497</td>
<td>14,847</td>
<td>16,331</td>
<td>17,965</td>
</tr>
<tr>
<td>Depreciation</td>
<td>1,322</td>
<td>1,454</td>
<td>1,600</td>
<td>1,760</td>
<td>1,936</td>
</tr>
<tr>
<td>Capx</td>
<td>(1,322)</td>
<td>(1,454)</td>
<td>(1,600)</td>
<td>(1,760)</td>
<td>(1,936)</td>
</tr>
<tr>
<td>Capital charge</td>
<td>(2,200)</td>
<td>(2,200)</td>
<td>(2,200)</td>
<td>(2,200)</td>
<td>(2,200)</td>
</tr>
<tr>
<td>NWC</td>
<td>(876)</td>
<td>(926)</td>
<td>(1,018)</td>
<td>(1,120)</td>
<td>(1,232)</td>
</tr>
<tr>
<td>NCF</td>
<td>9,194</td>
<td>10,372</td>
<td>11,629</td>
<td>13,012</td>
<td>14,533</td>
</tr>
<tr>
<td>PV factor</td>
<td>0.9259</td>
<td>0.7982</td>
<td>0.6881</td>
<td>0.5932</td>
<td>0.5114</td>
</tr>
<tr>
<td>Discounted NCF</td>
<td>8,512</td>
<td>8,279</td>
<td>8,002</td>
<td>7,718</td>
<td>7,432</td>
</tr>
<tr>
<td>Sum of discounted NCF without trade secret</td>
<td>39,900</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sum of discounted NCF with trade secret</td>
<td>49,500</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>= Trade secret FMV</td>
<td><strong>9,600</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Healthy Company, Inc. Trade Secret Value Conclusion

<table>
<thead>
<tr>
<th>Valuation Approach:</th>
<th>Valuation Method:</th>
<th>Indicated Value ($ 000s)</th>
<th>Emphasis</th>
<th>Value Conclusion ($ 000s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost approach</td>
<td>RCNLD</td>
<td>9,300</td>
<td>50%</td>
<td>4,650</td>
</tr>
<tr>
<td>Income approach</td>
<td>Differential income capitalization</td>
<td>9,600</td>
<td>50%</td>
<td>4,800</td>
</tr>
<tr>
<td>Trade secret FMV</td>
<td></td>
<td></td>
<td></td>
<td>9,500</td>
</tr>
</tbody>
</table>
## Market Approach—Drug Patent Guideline License Agreements

<table>
<thead>
<tr>
<th>License</th>
<th>Licensee</th>
<th>Licensor</th>
<th>Start Date</th>
<th>License Term</th>
<th>Royalty %</th>
<th>Other Consideration</th>
<th>Type of Drug</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Pfizer, Inc.</td>
<td>Columbia U.</td>
<td>2009</td>
<td>15</td>
<td>6</td>
<td>$4m</td>
<td>ED</td>
</tr>
<tr>
<td>2</td>
<td>Glaxo Smith Kline</td>
<td>Autogen</td>
<td>2009</td>
<td>10</td>
<td>5</td>
<td>$10m</td>
<td>cardiovascular</td>
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<td>Nobel N.V.</td>
<td>2009</td>
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<td>2008</td>
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## Market Approach—Drug Patent Royalty Rate Adjustment Grid

<table>
<thead>
<tr>
<th>License Royalty</th>
<th>Comparable to Subject</th>
<th>Size of Market</th>
<th>Market Growth Rate</th>
<th>Relative Market Share</th>
<th>Other Consideration</th>
<th>Adjusted Royalty %</th>
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<td>1</td>
<td>6</td>
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<tr>
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# Drug Compound Patent Market Approach Conclusion (in $ millions)

## Analysis:

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<tr>
<th>Analysis:</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
<th>Year 6</th>
<th>Year 7</th>
<th>Year 8</th>
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<td>10%</td>
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<td>0%</td>
<td>0%</td>
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<td>532</td>
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<td>6.5%</td>
<td>6.5%</td>
<td>6.5%</td>
<td>6.5%</td>
<td>6.5%</td>
<td>6.5%</td>
<td>6.5%</td>
<td>6.5%</td>
</tr>
<tr>
<td>Royalty expense</td>
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<tr>
<td>Net license expense</td>
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</tbody>
</table>
The Effective Valuation Report

• In order to encourage the reader’s acceptance of the report conclusion:
  – the report should be clear, convincing, and cogent
  – the report should be well-organized, well-written, and well-presented
  – the report should be free of grammar, punctuation, spelling, and mathematical errors

• The persuasive valuation report will tell a narrative story that:
  – defines the valuation analyst’s assignment,
  – describes the analyst’s data gathering and due diligence procedures,
  – justifies the analyst’s selection of the generally accepted valuation approaches, methods, and procedures,
  – explains how the analyst performed the valuation synthesis and reached the final value conclusion, and
  – defends the analyst’s value conclusion.
Attributes of an Effective Valuation Report

• The content and format of the valuation report should demonstrate that the analyst:
  1. understood the specific valuation assignment,
  2. understood the subject and the subject bundle of legal rights,
  3. collected sufficient financial and operational data,
  4. collected sufficient industry, market, and competitive data,
  5. documented the specific owner/operator economic benefits,
  6. performed adequate due diligence procedures related to all available data,
  7. selected and applied all applicable income, market, and cost approach valuation methods, and
  8. reconciled all value (or damages, price, royalty rate, etc.) indications into a final conclusion.
Defending the Conclusion

- In defending the value conclusion, the written report should:
  - explain the valuation assignment
  - describe the subject and the subject bundle of legal rights
  - explain the selection or rejection of all valuation approaches and methods
  - explain the selection and application of all specific analysis procedures
  - describe the analyst’s data gathering and due diligence procedures
  - list all documents and data considered by the analyst
  - include copies of all documents that were specifically relied on by the analyst
  - summarize all of the qualitative analyses performed
  - include schedules and exhibits documenting all of the quantitative analyses performed
  - avoid any unexplained or unsourced valuation variables or analysis assumptions
  - allow the report reader to be able to replicated all of the analyses performed
Summary

- The various intellectual property analysis objectives include:
  - estimate a sale price between a willing buyer and a willing seller
  - estimate a royalty rate between a willing licensor and a willing licensee
  - estimate a value to the current owner/operator
  - estimate a value to a specific buyer owner/operator
  - estimate an arm’s-length price (ALP) or other royalty rate for an intercompany transfer between related (or controlled) parties
  - estimate the lost profits or other economic damages related to a damages event
  - opine on the fairness of a sale price or a license royalty transaction
  - conclude a mutual exchange ratio for two intellectual property bundles
Conclusion

• The selected valuation approaches, methods, and procedures for the intellectual property are based on:
  – the particular characteristics of the intellectual property,
  – the bundle of legal rights subject to analysis,
  – the quantity and quality of available data,
  – the analyst’s ability to perform sufficient due diligence related to that data,
  – the purpose and objective of the specific valuation analysis, and
  – the relevant experience and professional judgment of the individual analyst.

• The final value conclusion is typically based on a synthesis of the value indications from each applicable valuation approach and method.