

Best Practices

Valuation of the Debtor Company Intellectual Property

Robert P. Schweihs and Patrick B. Schweihs, Esq.

There are many reasons why a valuation analyst may be asked to value debtor company intellectual property within a bankruptcy context. Before the valuation analyst is retained, the party-in-interest (and, typically, the legal counsel) should carefully define the intellectual property valuation assignment. After being retained, the valuation analyst will consider all of the generally accepted intellectual property valuation approaches, methods, and procedures. This discussion explains and illustrates those generally accepted valuation approaches and methods. And, this discussion describes the intellectual property valuation synthesis and conclusion process. Most bankruptcy-related valuations are subject to a rigorous contrarian review. Therefore, this discussion concludes with suggestions related to (1) the attributes of an effective (i.e., persuasive) intellectual property valuation report and (2) what type of professional should prepare the bankruptcy-related intellectual property valuation.

INTRODUCTION

Discussing the objectives and requirements at the outset of any valuation assignment forces those responsible for the valuation to think carefully through all of the elements of the valuation assignment. It also helps to prevent misdirecting the valuation process and helps the various parties involved to avoid misunderstandings that might otherwise arise.

Whenever intellectual property is the subject of the valuation assignment, it is particularly important to consider the elements of the valuation assignment. When users need to know the value of intellectual property for bankruptcy purposes, carefully defining the elements of the intellectual property valuation assignment is never more important.

The special legal protections given to intellectual property are generally designed to prohibit the use and sale of protected works without the authorization of the intellectual property owner. Markets have developed over time to allow owners of intellectual property to license or sell their property to better situated market participants in order to adapt and exploit the properties.

The vitality of those markets helps encourage investment in intellectual property, and intellectual property law generally supports those transactions. Among many other things, intellectual property valuation analysts typically consider the actions of buyers and sellers in these markets during any valuation assignment.

Bankruptcy law seeks to preserve the on-going value and maximize the economic stake of creditors of failing enterprises. In the bankruptcy environment (subject to various exceptions, limitations and defenses), contracts and licenses can be assumed, rejected, or assigned. This complicates the valuation assignment when the bankrupt debtor is either the licensor or the licensee of intellectual property, and it raises a variety of dilemmas for the valuation analyst.

For example, if a debtor's license is assignable by the bankruptcy estate to a competitor of the licensor, should the analysis of the intellectual property value be based on the expectation that the licensor is required to continue to support (e.g., make improvements to¹) the intellectual property (even if it is in the hands of a competitor)?

Defining the valuation assignment is the logical beginning of the valuation process, providing focus for all the valuation considerations and efforts to be undertaken. Often, defining the valuation assignment includes the most important decisions to be made on the project. Time spent at the outset in being explicit in defining the purpose and the objective of the valuation assignment is time well spent.

The assignment given to the valuation analyst by the client should describe the objective of any intellectual property valuation assignment by focusing on these elements:

1. definition of the intellectual property
2. ownership characteristics subject to analysis
3. bundle of legal rights
4. standard of value
5. premise of value
6. valuation date

However, before these elements are defined, the purpose of the intellectual property valuation assignment should be determined. This is because each of these elements of the assignment's objective may be influenced by the valuation assignment's purpose.

THE PURPOSE OF VALUING INTELLECTUAL PROPERTY IN A BANKRUPTCY ENVIRONMENT

There are many reasons why a valuation analyst may be asked to value the debtor company intellectual property within a bankruptcy environment.

The intellectual property could serve as collateral for either the debtor company pre-bankruptcy financing or the debtor-in-possession (DIP) financing. A sale or license of intellectual property could serve to generate cash flow for the DIP. The analyst could be asked to opine on the fairness of the sale or license consideration to the creditors or other parties in interest.

The value of the debtor intellectual property often affects the debtor corporation solvency (or insolvency) at various dates prior to the bankruptcy filing. These debtor solvency issues become relevant in allegations related to fraudulent conveyance or preference payments.

The debtor intellectual property commercialization potential (or the associated spinoff value) could affect the reasonableness of a proposed plan of reorganization. And, the intellectual property value

should be recognized in the fresh start accounting for the debtor emerging from bankruptcy.

Legal counsel is often involved in the bankruptcy-related intellectual property valuation. This is because the legal counsel is involved in assisting their bankruptcy party-in-interest clients in structuring transactions, complying with taxation and accounting requirements, negotiating and arranging financings, litigating claims, and defending and commercializing the intellectual property.

Therefore, the bankruptcy counsel is often involved in the process of:

1. identifying the debtor company intellectual property,
2. performing the related due diligence,
3. interviewing and selecting the appropriate valuation analyst,
4. defining the valuation analyst's assignment,
5. helping to assemble valuation-related data and documents,
6. providing legal instructions to the valuation analyst,
7. reviewing and questioning the valuation work product,
8. interpreting and relying on the valuation report, and
9. defending the valuation during any administrative, regulatory, or judicial challenge.

Valuation analysts often value general commercial intangible assets for bankruptcy-related purposes without the legal advice from, or the assistance of, bankruptcy counsel. However, due to the special nature of patents, copyrights, trademarks, and trade secrets, the valuation analyst and the legal counsel often work together in several phases of the bankruptcy-related intellectual property valuation assignment.

The following list summarizes many of the bankruptcy-related reasons why a valuation analyst may be asked to value intellectual property. Such valuation assignments may come directly from a party-in-interest to the bankruptcy. More commonly, such valuation assignments come from the legal counsel to one of the parties.

1. transaction pricing and structuring
 - pricing the sale of the DIP individual property or a portfolio of two or more intellectual property assets
 - pricing the license of the DIP individual intellectual property or a portfolio of two or more intellectual property assets

- valuing the equity allocations in a DIP joint venture when one or more parties contribute intellectual property assets
 - valuing the asset distributions in a debtor's liquidation when one or more parties receive intellectual property assets
 - transferring intellectual property between parent corporation subsidiaries (when one subsidiary is in bankruptcy and the other subsidiary is not in bankruptcy)
2. financings collateralization and securitization
 - use of intellectual property as collateral for cash-flow-based or asset-based pre-bankruptcy debt financings
 - sale/licenseback financing (pre-bankruptcy) of the debtor intellectual property
 3. taxation planning and compliance
 - effect of the intellectual property value on the Internal Revenue Code Section 382 limitations on the debtor corporation use of net operating losses
 - effect of the intellectual property value on the Section 108 discharge of indebtedness income exclusion related to taxpayer corporation insolvency
 4. adequate consideration for DIP transactions
 - use of intellectual property as collateral for secured creditor position
 - use of intellectual property as collateral for DIP secured debt
 - fairness of the sale or license of intellectual property as a DIP cash generation spinoff opportunity
 - use of intellectual property in the assessment of debtor corporation solvency or insolvency with respect to fraudulent transfers and preference actions
 - impact of the debtor intellectual property on the proposed plan the reorganization
 5. financial reporting and fair value accounting
 - goodwill and intellectual property asset impairment testing
 - post-bankruptcy fresh start accounting for emerging entity tangible assets and intangible assets
 6. debtor strategic planning and management information
 - formation of DIP intellectual property joint venture, joint development, or joint commercialization agreements
 - negotiation of DIP inbound or outbound intellectual property use, development, commercialization, or exploitation agreements
 - identification and negotiation of DIP intellectual property license, spin-off, joint venture, and other commercialization opportunities

Defining the purpose of the valuation assignment will also help determine the form of the work product. The valuation report can be oral, written, or a combination. The valuation opinion report should be prepared for the specified purpose and with the expected audience in mind.

The valuation analysis should include the valuation methodologies that are relevant for that audience and the report should include references expected by that audience.

The purpose of the valuation considers the following elements:

1. How will the intellectual property valuation be used?
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?

In addition to understanding the reason for the intellectual property valuation, it is important for the valuation analyst to understand exactly what the objective of the analysis is. The party-in-interest or the legal counsel should specifically define which one (or ones) of the following opinions the valuation analyst is being asked to render:

1. to estimate a value (as specifically defined) for the debtor intellectual property
2. to measure lost profits or some other measure of economic damages related to the intellectual property
3. to conclude an arm's-length price for the intercompany transfer of the intellectual property

4. to estimate a fair license agreement royalty rate between independent arm's-length parties
5. to opine on the fairness of an intellectual property, sale, license, or other transfer transaction from a financial perspective
6. to estimate the intellectual property remaining useful life (RUL)

THE OBJECTIVE OF VALUING INTELLECTUAL PROPERTY IN A BANKRUPTCY ENVIRONMENT

When defining the intellectual property valuation assignment's objective, the first element is a complete definition of the debtor intellectual property. That definition statement 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 that should be considered with the debtor intellectual property. For example, should the trademark analysis include advertising materials and trade dress? Should the patent analysis include product/process engineering drawings and currently available proprietary technology?

In some situations, there is uncertainty on the parts of—and controversy between—the parties in a bankruptcy matter as to what exactly is included in (or excluded from) the optimal assemblage of assets that are the object of the valuation assignment.

For example, combining (1) the right to use certain technology (e.g., a patent) with (2) the use of a trade name (which imposes some degree of quality control requirements) is potentially controversial. This is because the combination of these two intellectual properties in one assemblage of assets, even though that would otherwise maximize the value of the two intellectual properties, might also impose an unbargained-for duty on the trade name licensor: to create a new quality control management system.²

Similarly controversial may be whether to include in the value of certain intellectual property access in the future to assets (e.g., improvements, discoveries, new media) that are not in place as of the valuation date.

The second element of the valuation assignment is a description of the ownership characteristics of the intellectual property including any license or contract that is in effect.

The risk of bankruptcy can undermine the incentives for parties to (1) license intellectual property and (2) make optimal investments in exploiting those license transactions that have already been consummated.

When a bankruptcy petition is filed and a “stay” has been entered, the bankrupt intellectual property licensor or licensee cannot pursue a breach of contract action or an infringement action without authorization from the bankruptcy judge presiding over the estate.

If there is a license or agreement (contested or otherwise) associated with the debtor intellectual property, then the valuation analyst should be made aware of the following contract terms:

1. licensor/licensee responsibility contract terms
 - legal protection requirements
 - R&D expenditures
 - marketing expenditures
 - licenses, permits, or other regulatory approvals
2. 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

The third element of the valuation assignment is a description of the bundle of legal rights subject to analysis. The assignment should specify which of the following (or which other) bundles of rights the analyst should include in the debtor intellectual property 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

The fourth element in the valuation assignment is the standard (or definition) of value that the analyst is being asked to conclude. The standard of value typically relates to the question: Value to

whom? Different standards of value correspond to different reasons to conduct the intellectual property valuation.

Often, the standard of value is determined by a statutory, regulatory, or administrative requirement. Therefore, the party-in-interest (or, commonly, the legal counsel) will instruct the analyst as to the appropriate standard of value.

Some of the more common alternative standards of value include the following:

1. fair value
2. fair market value
3. use value
4. user value
5. owner value
6. investment value
7. acquisition value
8. collateral value

The fifth element in the valuation assignment is the premise of value that the analyst should assume. The premise of value considers the assumed set of circumstances under which the intellectual property transaction (sale or license) will take place.

Some of the more common alternative premises of value include the following:

1. value in continued use
2. value in place (but not in use)
3. value in exchange—orderly disposition basis
4. value in exchange—voluntary liquidation basis
5. value in exchange—involuntary liquidation basis

The selected premise of value is typically an assignment instruction from the party-in-interest (or from the legal counsel). If the client (or legal counsel) does not have an instruction as to the appropriate premise of value, then the analyst will typically select the premise of value that concludes the highest and best use (HABU) for the debtor intellectual property.

The tests for HABU of a particular asset are based on an analysis of what is physically possible, legally permissible, and financially feasible. For example, if the maximum value of an intellectual property is if it is “assembled” in combination with other assets as a group (as installed or configured), then the analyst will consider its value in continued use. If the maximum value of an intellectual property is on a stand-alone basis, then the analyst will consider its value in exchange.

In selecting the appropriate intellectual property HABU, the valuation analyst may consider the following alternatives:

1. current owner/operator HABU
2. new owner/operator (marketplace) HABU
3. licensor/licensee HABU

The sixth element of the valuation assignment is the valuation date. The client (or legal counsel) will have to instruct the analyst as to the appropriate “as of” date on which to conclude the defined value.

The date, or dates, at which the business is being valued is critically important because circumstances can cause values to vary materially from one date to another, and the valuation date directly influences data available for the valuation.

Many internal and external factors can cause changes in the value of an intellectual property. Obviously, a sudden change in earnings, especially if unanticipated, can have a substantial effect on value. Also, the value of an intellectual property varies with the cost of capital, a factor which can vary over time.

Major events, such as the signing or termination of a licensing agreement, can also have a dramatic, immediate impact on value.

In order to serve the information needs of the client, the valuation analyst should have a clear understanding of the intellectual property assignment. The legal counsel is often responsible for ensuring that the valuation analyst develops that understanding.

VALUATION DATA GATHERING AND DUE DILIGENCE

Before the analyst selects and applies the valuation approaches, methods, and procedures, the analyst will perform a due diligence with respect to the debtor intellectual property. The legal counsel may participate in this due diligence process, particularly if the intellectual property valuation relates to a transaction, financing, or litigation.

However, these due diligence procedures relate to identifying and obtaining information for the analyst’s valuation, economic damages, or royalty rate analysis. Therefore, this due diligence process is a supplement to—and not a substitute for—the lawyer’s legal due diligence process.

First, the valuation analyst will typically gather and analyze information related to the current intellectual property owner/operator (i.e., the debtor). The information will typically relate to

the historical development and current use of the intellectual property.

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. current and expected owner/operator 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 (e.g., the existence of an intellectual property license contract, decrease in the cost of capital components)

The analyst will consider the market potential of the intellectual property outside of the debtor.

For example, the analyst may consider the following factors from the perspective of an alternative (e.g., hypothetical willing buyer) owner/operator:

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 debtor can operate the intellectual property and also outbound license the intellectual property (in different products, different markets, different territories, etc.)

The analyst will also review and challenge any debtor-prepared financial projections and any debtor-prepared measures of intellectual property economic benefits. In particular, the analyst will test such financial projections and economic benefit measures against industry, guideline company, and other benchmark comparisons.

For example, the analyst may perform the following benchmark analyses:

1. compare prior debtor management projections to prior debtor actual results of operations
2. compare current debtor management projections to debtor current capacity constraints
3. compare current debtor management projections to the current total market size
4. consider published industry average comparable profit margin (CPM) data
5. consider selected guideline publicly traded company CPM data
6. consider the quality and quantity of available guideline or comparable intellectual property license data
7. perform an intellectual property RUL analysis, with consideration of:
 - legal/statutory life
 - contract/license life
 - technology obsolescence life
 - economic obsolescence life
 - lives (i.e., ages) of prior generations of the subject intellectual property
 - the position of the subject intellectual property in its life cycle

In addition to comparing the debtor historical and projected results to the selected guideline public companies (described below), the analyst may compare the debtor results to published industry data sources.

The following list presents some of the common published industry data sources that valuation analysts use for these benchmark comparative intellectual property analyses:

- 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

The above-listed data sources allow the valuation analyst to compare the debtor financial results to benchmark industry expense ratios, profit margins, returns on investments, and so forth.

GENERALLY ACCEPTED INTELLECTUAL PROPERTY VALUATION APPROACHES

There are three generally accepted intellectual property valuation approaches: the cost approach, the market approach, and the income approach.

Valuation analysts typically consider, and attempt to apply, all three approaches in each intellectual property valuation. However, practically, most intellectual property valuations are based principally on one approach.

For each intellectual property valuation, the analyst will select the approach (or approaches):

1. for which there is the greatest quantity and quality of available data,
2. for which the analyst can perform the most comprehensive due diligence procedures,
3. that best reflect the actual transactional negotiations of market participants in that industry,
4. that best fit the characteristics (e.g., use, age, etc.) of the debtor intellectual property, and
5. that are most consistent with the professional experience and informed judgment of the valuation analyst.

Within each approach, there are several valuation methods that the analyst can select and apply. And, within each method, there are numerous procedures that the analyst can perform. Therefore, valuation procedures are performed within a method to conclude a value indication. The analyst may perform two or three valuation methods within a single approach.

For example, the analyst may perform three different income approach methods and reconcile the three value indications to conclude a single income approach value indication.

Then, the analyst will reconcile the various valuation approach indications (if more than one approach is used). This synthesis of the various valuation approach indications will result in a final

value conclusion for the debtor intellectual property.

All of the cost approach methods are based on the economics principle of substitution. That is, the value of intellectual property alpha is influenced by the cost to create a new substitute intellectual property beta.

As will be discussed, all cost approach methods apply a comprehensive definition of intellectual property cost, including consideration of an opportunity cost during the intellectual property development stage.

In addition, the cost of the new substitute intellectual property should be reduced (or depreciated) in order to make the hypothetical new beta intellectual property comparable to the actual “old” alpha intellectual property.

Unlike most commercial intangible assets, intellectual property assets are not fungible. That is, the marketplace typically cannot replace the alpha intellectual property with a beta intellectual property.

This is because alpha is legally protected. Therefore, although the cost approach is used in intellectual property valuation, it does have certain application limitations.

All market approach methods are based on the economics principles of efficient markets and of supply and demand. That is, the value of the debtor intellectual property may be estimated by reference to prices paid in the marketplace for the arm’s-length sale or license of comparable (or guideline) intellectual property.

Comparable uncontrolled transaction (CUT) data related to sales or licenses are analyzed in order to extract pricing multiples or rates that can be applied to the debtor intellectual property.

All income approach methods are based on the economics principle of anticipation. That is, the value of any investment is the present value of the income that the owner expects to receive from owning that investment. All income approach methods involve a projection of some measure of owner/operator income over the intellectual property RUL.

This income measure may relate to:

1. the income earned from operating the intellectual property in the owner/operator business enterprise and/or
2. the income earned from licensing the intellectual property from the owner/licensor to an operator license that will pay a royalty (or some other fee) for the use of the intellectual property.

This intellectual property-related income projection is converted to a present value by the use of a risk-adjusted discount rate (or annuity capitalization rate).

Cost approach methods are particularly applicable to the valuation of recently developed intellectual property. In the case of relatively new intellectual property, the debtor development cost and effort data may be available (or may be more subject to accurate estimation).

In addition, cost approach methods are also applicable to the valuation of in-process intellectual property and to noncommercialized intellectual property (e.g., intellectual property held primarily for defensive use).

However, in all cases, the valuation analyst should realize that the debtor intellectual property value is not derived from the cost measure alone. Rather, the debtor intellectual property value is derived from the cost measure (however defined) less appropriate allowances for all forms of depreciation and obsolescence.

Market approach methods are particularly applicable when there is a sufficient quantity of comparable (almost identical) or guideline (similar from an investment risk and expected return perspective) intellectual property transaction data. These transactions may relate to either sale or license transactions. Such arm's-length, third-party transactions are often called CUT sales or licenses.

The valuation analyst will attempt to extract market-derived valuation pricing indications (e.g., multiples or rates) from these CUT data to apply to the corresponding metrics of the debtor intellectual property.

Income approach methods are particularly applicable in situations where the debtor intellectual property is used to generate a measurable amount of income. This income can either be:

1. operating income (when the intellectual property is used in the owner's business operations) or
2. owner income (when the intellectual property is licensed from the owner/licensor to an operator/licensee) to produce royalty income.

Income approach methods may also be used when the owner/operator has elected not to currently commercialize the intellectual property. An example would be when this forbearance of use is for the purpose of protecting the income that is produced by the owner/operator's other intellectual property.

COST APPROACH VALUATION METHODS

There are several intellectual property valuation methods within the cost approach. Each valuation method uses a particular definition of cost.

Two common cost definitions are:

1. reproduction cost new, and
2. replacement cost new.

Reproduction cost new is the total cost, at current prices, to develop an exact duplicate of the intellectual property. Replacement cost new is the total cost, at current prices, to develop an asset having the same functionality or utility as the intellectual property.

Functionality is an engineering concept that means the ability of the intellectual property to perform the task for which it was designed. Utility is an economics concept that means the ability of the intellectual property to provide an equivalent amount of satisfaction.

There are also other cost definitions that may be applicable to a cost approach valuation. Some valuation analysts consider a measure of cost avoidance as a cost approach method. This method quantifies either historical or prospective costs that are avoided because the debtor owns the intellectual property.

Some valuation analysts consider trended historical costs as a cost measure. In this method, historical intellectual property development costs are identified and trended to the valuation date by an inflation-based index factor. Regardless of the specific cost definition used, all cost approach methods include a comprehensive definition of cost.

The cost measurement (whether replacement cost new, reproduction cost new, or some other cost measure) typically includes four cost components:

1. direct costs (e.g., materials)
2. indirect costs (e.g., engineering and design labor)
3. the intellectual property developer's profit (on the direct cost and indirect cost investment)
4. an opportunity cost/entrepreneurial incentive (to motivate the development process)

The intellectual property development material, labor, and overhead costs are unusually easy to identify and quantify. The developer's profit can be estimated using several procedures. It is often estimated as a percentage rate of return on the

developer's investment in the material, labor, and overhead costs.

The entrepreneurial incentive is often measured as the lost profits during the replacement intellectual property development period.

For example, let's assume it will take two years to develop a replacement patent. If the buyer buys the seller's actual patent, then the buyer can start earning income (either operating or license income) immediately.

If the buyer "builds" its own hypothetical replacement patent, then the buyer will not earn any income (operating or license) during the two-year development period. The two years of lost profits during the hypothetical patent development period represent the opportunity cost of developing a new replacement patent—compared to buying the actual debtor patent.

All four cost components—that is, direct costs, indirect costs, developer's profit, and opportunity cost—should be considered in the intellectual property cost approach valuation. So, while the cost approach is a different set of analyses from the income approach, there are economic analyses included in the cost approach.

These economic analyses provide indications of both:

1. the appropriate levels of opportunity cost (if any) and
2. the appropriate amount of economic obsolescence (if any).

The intellectual property cost new (however measured) should be adjusted for losses in value due to:

1. physical deterioration,
2. functional obsolescence, and
3. economic obsolescence.

Physical deterioration is the reduction in value due to physical wear and tear. It is unlikely that a debtor intellectual property will experience physical deterioration.

Functional obsolescence is the reduction in value due to the intellectual property's inability to perform the function (or yield the periodic utility) for which it was originally designed.

The technological component of functional obsolescence is a decrease in value due to improvements in technology that make the debtor intellectual property less than the ideal replacement for itself.

Economic obsolescence is a reduction in value due to the effects, events, or conditions that are

external to—and not controlled by—the intellectual property current use or condition. The impact of economic obsolescence is typically beyond the control of the debtor.

In any cost approach analysis, the valuation analyst will estimate the amounts (if any) of intellectual property physical deterioration, functional obsolescence, and economic obsolescence. In this estimation, the valuation analyst will consider the intellectual property actual age—and its expected RUL.

A common cost approach formula for quantifying intellectual property replacement cost new is: reproduction cost new – curable functional obsolescence = replacement cost new.

To estimate the intellectual property value, the following cost approach formula is commonly used: replacement cost new – physical deterioration – economic obsolescence – incurable functional obsolescence = intellectual property value.

Exhibits 1 and 2 present a simplified illustrative example of a cost approach intellectual property valuation. In this example, the valuation analyst is asked to estimate the fair market value of the copyrights and trade secrets related to the Alpha Debtor Company computer software. All of the computer software is subject to copyright protection. And, the software source code and the systems documentation and user manuals are treated as company trade secrets. The appropriate valuation date is January 1, 2011.

The valuation analyst decided to use the cost approach and the replacement cost new less depreciation method. Exhibit 1 includes the analysis of all four cost components of the cost approach. Exhibit 1 also illustrates the valuation analyst's functional obsolescence considerations.

Exhibit 2 presents the detail of one cost component of the cost approach: the developer's profit calculation.

Based on the cost approach analysis summarized in Exhibit 1, the fair market value of the Alpha Debtor Company computer software copyrights and trade secrets, as of January 1, 2011, is \$200 million.

MARKET APPROACH VALUATION METHODS

Valuation analysts typically attempt to apply market approach methods first in the debtor intellectual property valuation. This is because the market—that is, the economic environment where arm's-length transactions between unrelated parties occur—is often the best indicator of value.

Exhibit 1
Alpha Debtor Company
Computer Software
Copyrights and Trade Secrets
Cost Approach
Replacement Cost New Less Depreciation Method
Valuation Summary as of January 1, 2011

Software System	Estimated Software Replacement Development Effort in Person Months [a]	Time to Develop Replacement Software (in calendar Months) [b]	Indicated RCNLD Component [c] \$000
AS/400	4,531	29	66,100
Point of Sale	575	25	8,400
Tandem	3,304	16	48,200
Unisys	1,229	5	17,900
Pioneer	1,807	41	26,400
Voyager	325	12	4,700
Host to Host	85	9	1,200
Total Direct and Indirect Costs	11,856	24	172,900
Plus Developer's Profit [d]			10,500
Plus Entrepreneurial Incentive [e]			31,200
Total Replacement Cost New			214,600
Less Depreciation and Obsolescence [f]			13,300.0
Replacement Cost New Less Depreciation			201,300
Indicated Fair Market Value of Computer Software Copyrights and Trade Secrets (rounded)			200,000

Footnotes:

[a] The estimated development effort for each software category is equal to the average of the replacement development effort indication using (1) the COCOMO software cost engineering model and (2) the KnowledgePLAN software cost engineering model, rounded.

[b] The estimated time to develop replacement software in calendar months for each software category is equal to the average of the time to develop the replacement software in calendar months using (1) the COCOMO software engineering model and (2) the KnowledgePLAN software engineering model, rounded. The final figure in this column represents a weighted average time to develop the replacement software in calendar months (weighted by effort in person months), which is used to calculate the entrepreneurial incentive.

[c] Equal to the estimated development effort in person months times \$14,585 per person month, rounded. Cost per person month was calculated by multiplying the blended hourly rate of \$82.87 provided by the Alpha Debtor Company vice president of data processing, by 176 (8 hours per day times 22 days per month).

[d] Calculated as (1) total direct replacement cost new times (2) a computer software developer's profit margin of 11 percent times 55 percent. This adjustment is made because 45 percent of software development workforce represents outside contractors, the cost of which already includes a market-based developer's profit.

[e] Calculated as (1) the Alpha Debtor Company present value discount rate of 17 percent times (2) the sum of the total direct and indirect replacement cost new and the developer's profit, divided by 2 times (3) the weighted average total development time of 2 years (based on the weighted average time to develop in person months of 24 months as described in footnote [b]).

[f] According to Alpha Debtor Company data processing management, the Point of Sale system is scheduled to be replaced and upgraded in approximately five years. The Pioneer system is also scheduled to be replaced and upgraded in approximately five years. And, the Voyager system is scheduled to be substantially upgraded next year. Therefore, the valuation analyst estimated functional obsolescence as follows:

System Scheduled for Replacement	Replacement Cost New*	Percent Obsolete	Obsolescence Allowance
Point of Sale	\$10,400,000	20%	\$2,100,000
Pioneer	\$32,700,000	20%	\$6,500,000
Voyager	\$5,800,000	80%	\$4,700,000
Total			<u>\$13,300,000</u>

*includes the developer's profit and entrepreneurial incentive cost components.

Exhibit 2
Alpha Debtor Company
Computer Software
Copyrights and Trade Secrets
Cost Approach
Replacement Cost New Less Depreciation Method
Estimate of Computer Software Developer's Profit

Profit Margin Comparison

		Operating Profit Margins		
		4/1/09	4/1/08	4/1/07
		3/31/10	3/31/09	3/31/08
SIC Code 7371 - Custom Computer Programming Services - All Companies	[a]	4.2%	4.2%	4.8%
SIC Code 7371 - Custom Computer Programming Services - Sales of \$25 Million and Over	[a]	7.4%	3.8%	2.2%
SIC Code 7373 - Computer Systems Design Services - All Companies	[b]	4.3%	3.1%	2.1%
SIC Code 7373 - Computer Systems Design Services - Sales of \$25 Million and Over	[b]	4.7%	4.3%	1.1%

Adjusted Operating Profit Margins

Selected Guideline Companies	Ticker	2010/2009	2009/2008	2008/2007	Average	
Accenture plc	ACN	[c]	11.6%	11.4%	11.6%	11.5%
Analysts International Corp.	ANLY	[c]	-0.5%	0.5%	0.8%	0.3%
Bearing Point Ind.	BGPT	[c]	4.8%	6.7%	8.7%	6.7%
Cap Gemini Ernst & Young Group	CGEY	[c]	-0.1%	4.7%	9.8%	4.8%
Cognizant Technology Solutions Corp.	CTSH	[c]	19.7%	20.0%	19.1%	19.6%
Computer Sciences Corporation	CSC	[c]	6.6%	5.6%	6.2%	6.1%
Electronic Data Systems Corp.	EDS	[c]	8.7%	10.3%	9.5%	9.5%
Infosys Technologies Ltd.	INFY	[c]	29.0%	32.7%	33.2%	31.7%
Perot Systems Corp.	PER	[c]	10.2%	6.1%	6.7%	7.6%
Unisys Corporation	UIS	[c]	7.5%	4.5%	6.2%	6.1%
Wipro Ltd.	WIT	[c]	21.1%	23.8%	22.8%	22.6%

Selected Guideline Companies

High Profit Margins	29.0%	32.7%	33.2%
Low Profit Margins	-0.5%	0.5%	0.8%
Median Profit Margins	8.7%	6.7%	9.5%
Average Profit Margins	10.8%	11.5%	12.2%

Selected Computer Software Developer's Profit

11%

Footnotes:

[a] The Risk Management Association (RMA) 2010-2009, 2009-2008, and 2008-2007 *Annual Statement Studies* - Custom Computer Programming Services.

[b] The Risk Management Association (RMA) 2010-2009, 2009-2008, and 2008-2007 *Annual Statement Studies* - Computer Systems Design Services.

[c] Capital IQ Database.

However, the market approach will only provide meaningful valuation evidence when the debtor intellectual property is sufficiently similar to the intellectual property that are transacting (by sale or license) in the marketplace.

In that case, the guideline intellectual property transaction (sale or license) prices may indicate the expected price for the debtor intellectual property.

There are two principal intellectual property market approach valuation methods:

1. the comparable uncontrolled transaction method and
2. the comparable profit margin method.

In the CUT method, the valuation analyst searches for arm's-length sales or licenses of benchmark intellectual property.

In the CPM method, the valuation analyst searches for companies that provide benchmarks to the debtor.

In the CUT method, the analyst will more likely rely on CUT license transactions. This is because, third-party licenses of intellectual property are more common than third-party sales of intellectual property. Nonetheless, for both sale and license transactions, the valuation analyst will follow a systematic process in the CUT method valuation.

First, the valuation analyst will research the appropriate exchange markets to obtain information about sale or license transactions, involving guideline (i.e., similar from an investment risk and expected return perspective) or comparable (i.e., almost identical) intellectual property that may be compared to the debtor intellectual property.

Some of the comparison attributes include characteristics such as intellectual property type, intellectual property use, industry in which the intellectual property operates, date of sale or license, and so on.

Second, the valuation analyst will verify the transactional information by confirming (1) that the transactional data are factually accurate and (2) that the sale or license exchange transactions reflect arm's-length market considerations. If the guideline sale or license transaction was not at arm's-length market conditions, then adjustments to the transactional data may be necessary.

This verification procedure may also elicit additional information about the current market conditions related to the sale or license of the debtor intellectual property.

Third, the valuation analyst will select relevant units of comparison (e.g., income pricing multiples or dollars per unit—such as “per drawing” or “per

line of code”). And, the analyst will develop a comparative analysis for each selected unit of comparison.

Fourth, the valuation analyst will compare the selected guideline or comparable intellectual property sale or license transactions with the debtor intellectual property, using the selected elements of comparison.

Then, the analyst will adjust the sale or license price of each guideline transaction for any differences between the guideline intellectual property and the debtor intellectual property. If such comparative adjustments cannot be measured, then the analyst may eliminate the sale or license transaction as a guideline for future valuation consideration.

Fifth, the valuation analyst will select pricing metrics for the debtor intellectual property from the range of pricing metrics indicated from the guideline or comparable transactions.

The analyst may select pricing multiples in the low end, midpoint, or high end of the range of pricing metrics indicated by the transactional sale or license data. The valuation analyst will select the subject-specific pricing metrics based on the analyst's comparison of the debtor intellectual property to the guideline intellectual property.

Sixth, the valuation analyst will apply the selected subject-specific pricing metrics to the debtor intellectual property financial or operational fundamentals (e.g., revenue, income, number of drawings, number of lines of code, etc.). This procedure will typically result in several market-derived value indications for the debtor intellectual property.

Seventh, the valuation analyst will reconcile the various value indications produced from the analysis of the guideline sale and/or license transactions into a single market approach value indication. In this final reconciliation procedure, the analyst will summarize and review (1) the transactional data and (2) the quantitative analyses (i.e., various pricing multiples) that resulted in each value indication.

Finally, the valuation analyst will resolve these value indications into a single market approach value indication.

Table 1 describes several of the databases that valuation analysts typically search to select intellectual property license CUTs. Table 2 describes several of the print sources that valuation analysts typically search to select intellectual property CUTs.

Of course, the valuation analyst will also confer with the debtor management to explore whether the debtor has entered into any intellectual property license agreements (either inbound or outbound). These debtor license agreements could relate to either the debtor intellectual property or to comparable intellectual property.

Table 1
Market Approach
Comparable Uncontrolled Transaction (CUT) Method
Common Intellectual Property License Transaction Databases

RoyaltySource

www.royaltysource.com—AUS Consultants produces a database that provides intellectual property license transaction royalty rates. The database can be searched by industry, technology, and/or keyword. The information provided includes the license royalty rates, name of the licensee and the licensor, a description of the intellectual property licensed (or sold, if applicable), the transaction terms, and the original sources of the information provided. Preliminary CUT results are available online and a final report is sent to the subscriber via e-mail.

RoyaltyStat, LLC

www.royaltystat.com—RoyaltyStat is a subscription-based database of intellectual property license royalty rates and license agreements, compiled from Securities and Exchange Commission documents. It is searchable by SIC code or by full text. The CUT results can be viewed online or archived. The intellectual property transaction database is updated daily. The full text of each intellectual property license agreement in the database is available.

Royalty Connection

www.royaltyconnection.com—Royalty Connection™ provides online access to intellectual property license royalty rate and other license information on all types of technology, patents, trade secrets, and know-how. The data are aggregated from information on all types of technology, patents, trade secrets, and know-how. The data are aggregated from arm's-length sale/license transactions, litigation settlements, and court-awarded royalty order from 1990 to the present. The intellectual property license database is frequently updated. Users can search by industry, product category, or keyword. The information provided includes the consideration paid for the intellectual property license and any restrictions (such as geographic or exclusivity).

ktMINE

www.bvmarketdata.com—ktMINE is an interactive intellectual property database that provides direct access to license royalty rates, actual license agreements, and detailed agreement summaries. The database contains over 7,800 intellectual property license agreements. The intellectual property license database is updated frequently. License agreements are searchable by industry, keyword, and various other parameters. The full text of each intellectual property license agreement is available.

The CPM method is also based on a comparative analysis. However, in this valuation method, the analyst is not relying on sales or licenses of comparable intellectual property. Rather, the analyst is searching for comparable or guideline companies.

The objective of the CPM method is to identify guideline companies that are comparative to the debtor in all ways except one. The debtor, of course, owns the subject intellectual property. Ideally, the selected guideline companies should provide a comparable benchmark to the debtor—except that they do not own a comparable intellectual property.

Ideally, the CPM method guideline companies operate in the same industry as the debtor. Ideally, the guideline companies have the same types of raw materials and the same types of sources of supply.

Ideally, the guideline companies have the same type of customers. Ideally, the guideline companies produce the same type of products or services. And,

ideally, the only difference should be that the debtor has an established trademark and the guideline companies have generic trademarks. Or, the debtor owns the subject patent and the guideline companies produce unpatented (and presumably inferior) products.

Because of the economic benefit that the debtor intellectual property provides, the debtor should earn a higher profit margin than the selected guideline companies. This profit margin comparison is usually made at the earnings before interest and taxes (or EBIT) level of income.

The incremental (or superior) profit margin earned by the debtor can then be converted into an intellectual-property-related royalty rate. Typically, all of the excess profit margin is assigned to the intellectual property (if the debtor intellectual property is the only reason for the debtor superior profit margin).

Table 2
Market Approach
Comparable Uncontrolled Transaction Method
Common Intellectual Property License Transaction Print Sources

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

Gregory J. Battersby and Charles W. Grimes annually author a book called *License Royalty Rates*, which is published annually by Aspen Publishers. This reference tool provides intellectual property license royalty rates for 1,500 products and services in 10 different licensed product categories: art, celebrity, character/entertainment, collegiate, corporate, designer event, music, nonprofit, and sports.

Intellectual Property Research Associates produces three books that contain information on license royalty rates for patents, trademarks, and copyrights. The books are *Royalty Rates for Trademarks & Copyrights*, *Royalty Rates for Technology*, and *Royalty Rates for Pharmaceuticals & Biotechnology*.

This royalty rate (derived from the excess profit margin) is then multiplied by the debtor revenue in order to estimate the amount of implied royalty income generated from the debtor intellectual property. This hypothetical royalty income is capitalized over the intellectual property expected RUL. The result of this capitalization procedure is an estimate of the intellectual property value, according to the CPM method.

Table 3 presents a nonexhaustive list of publicly traded company data sources that valuation analysts often use to:

1. select guideline companies for the CPM method analysis and

Table 3
Market Approach
Comparable Profit Margin Method
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

2. obtain guideline company profit margin information to use in the CPM method analysis.

In summary, there are several intellectual property market approach valuation methods. However, they are all based on comparative analyses of either comparable intellectual property sales, comparable intellectual property license royalty rates, or comparable companies (that own generic intellectual property).

Finally, Exhibit 3 presents an illustrative example of a market approach intellectual property valuation. In this example, the valuation analyst is asked to estimate the fair market value of the Beta Debtor Company (a telecommunications company) trademarks and trade names. The appropriate valuation date is as of January 1, 2011.

The valuation analyst decided to use the market approach and the relief from royalty (RFR) method in this trademark valuation. Exhibit 4 summarizes the analyst's search for, selection of, and analysis of comparable uncontrolled transaction (CUT) trademark license agreements. Like Beta Debtor Company, the hypothetical CUT trademark license data are all in the telecommunications industry.

Exhibit 5 summarizes the valuation analyst's calculation of the Beta Debtor Company present value discount rate. This discount rate is used to present value the royalty income projection over the trademark expected RUL.

Based on discussions with Beta Debtor Company management and on research regarding comparable telecommunications industry trademark life cycles, the analyst determined that the average RUL of the debtor company trademarks was 20 years.

Therefore, the trademark valuation is based on a 20-year trademark royalty income projection period.

Based on the market approach valuation analysis summarized in Exhibit 3, the valuation analyst concluded an \$840 million fair market value for the Beta Debtor Company trademarks and trade names, as of January 1, 2011.

Exhibit 3
Beta Debtor Company
Trademarks and Trade Names
Market Approach
Relief from Royalty Method
Valuation Summary
As of January 1, 2011

	Projected Calendar Years				
	2011	2012	2013	2014	2015
Present Value of Discrete Trademark Income:	\$000	\$000	\$000	\$000	\$000
Management-Provided Revenue Projection [a]	8,634,139	8,358,945	8,042,393	7,720,369	7,377,326
Arm's-Length Trademark License Royalty Rate [b]	2%	2%	2%	2%	2%
Projected Pretax Trademark Income	172,683	167,179	160,848	154,407	147,547
Less Projected Income Tax Rate [c]	<u>37%</u>	<u>37%</u>	<u>37%</u>	<u>37%</u>	<u>37%</u>
Projected After-Tax Trademark Income	108,790	105,323	101,334	97,277	92,954
Discounting Periods [d]	0.5000	1.5000	2.5000	3.5000	4.5000
Present Value Factor @ 11% [c]	<u>0.9492</u>	<u>0.8551</u>	<u>0.7704</u>	<u>0.6940</u>	<u>0.6252</u>
Present Value of Trademark Income	<u>103,264</u>	<u>90,061</u>	<u>78,068</u>	<u>67,510</u>	<u>58,115</u>
Sum of Present Values of Trademark Income	<u>397,018</u>				
Present Value of Terminal Period Trademark Income:					
Fiscal 2016 Normalized Trademark Income [f]	92,954				
Direct Capitalization Multiple [g]	<u>7.579</u>				
Terminal Value of Trademark Income	704,498				
Present Value Factor @ 11%	<u>0.6252</u>				
Present Value of Terminal Value	<u>440,452</u>				
Trademark Valuation Summary:					
Present Value of Discrete Trademark Income	397,018				
Present Value of Trademark Terminal Value	<u>440,452</u>				
Indicated Fair Market Value of the Trademarks and Trade Names (rounded)	<u>840,000</u>				

[a] Revenue projection provided by Beta Debtor Company management, consistent with the company's long-range financial plan.

[b] Based on an analysis of arm's-length license agreements between parties for similar property, as summarized in Exhibit 4.

[c] Based on the Beta Debtor Company expected effective income tax rate.

[d] Calculated as if cash flow is received at mid-year.

[e] Based on the Beta Debtor Company weighted average cost of capital, presented in Exhibit 5.

[f] Based on the 2015 projected after-tax trademark income and an expected long-term growth rate of zero percent.

[g] Based on a present value of an annuity factor for an 11 percent discount rate and a 15-year expected RUL.

Exhibit 4 Beta Debtor Company Trademarks and Trade Names Market Approach Relief from Royalty Method CUT Trademark License Transactions

Trademark Licensor	Trademark Licensee	Comparable Uncontrolled Transaction Trademark License Description	Royalty Rate Range		Uplift/Flat Fee	
			Low	High		
Southwestern Bell Telephone	Affiliate Group	The affiliate group imputed an affiliate compensation fee or "royalty" for the affiliates' right to the name, reputation and public image of the parent telephone company. The affiliates recognize the franchise-like benefits realized as a result of their relationship with the licensor.	2002	5.0%	5.0%	NA
Cable and Wireless PLC	Hong Kong Telecommunications Ltd.	In a related-party transaction, the Company entered into an agreement with a subsidiary, a Hong Kong telephone company, for the use of its trademarks (in particular, use of the telecommunication name and logo in connection with international business) on relevant products and services	2004	8.0%	8.0%	NA
AT&T Corp.	KIRI Inc.	The licensor grants to the licensee a nonexclusive, nontransferable, non-sub-licensed license to use the licensed marks (AT&T and globe design logo) solely in connection with the marketing, advertising, promotion and provision of the licensed services (such as telecommunication and internet services) in the licensed territory.	2009	2.50%	4.00%	\$2.5 million minimum guarantee
Nextel	Nextel Partners	A partnership or alliance between a U.S. parent company and a publicly owned spin-off company includes a licensing agreement for rights to use the Nextel brand name. The licensee owns its own spectrum and provides services as Nextel.	2004	0.50%	1.00%	0
France Telecom (Orange Brand Services Limited, UK)	PTK Centertel	PTK Centertel is rebranding its name from Idea to Orange. Idea, which now holds 32.2 percent of the market, will change its name and logo (trademark). PTK Centertel will pay the France Telecom a royalty for use of the Orange name.	2005	1.6%	1.6%	NA
Qwest Communications International, Inc. [s]	Unical Enterprises, Inc.	An exclusive, limited nontransferable, revocable right to use the following trademarks: Teehline, Easytouch, Favorite, Classic Favorite, Classic Favorite Plus, Photonouch, Choice, Competitor, Competitor Plus, Roommate, Pliza, Favorite Plus, Easyreach, Big Button, EZ Button, Cleartech, Favorite Messenger II, Digimate, Mountain Bell. Nonexclusive, limited, nontransferable revocable right to use the following trademarks: B Office, Bell Symbol, Bell mark, Northwestern Bell. All of the above in connection with corded telephones, cordless telephones, answering machines, integrated telephone/answering devices, and computers and monitors.	2005	2.1%	2.2%	NA
Virgin Enterprises Limited	NTL Inc.	The licensee entered into a trademark license agreement under which they are entitled to use certain Virgin trademarks within the United Kingdom and Ireland. The agreement was entered into on the same date and is an exclusive license covering a number of aspects of the company's consumer business, including the provision of communications services (such as internet, television, fixed line telephony, and upon the acquisition of Virgin Mobile, mobile telephony), the acquisition of branding sports, movie and other premium television content, and the branding and sale of certain communications equipment related to the licensee consumer businesses, such as set top boxes and cable modems.	2006	0.25%	0.25%	£8.5 million minimum annual royalty

Royalty Rate Range

High	8.0%	8.0%
Low	0.3%	0.3%
Mean	2.9%	3.2%
Median	2.1%	2.2%

NA = not applicable

Exhibit 5 Beta Debtor Company Weighted Average Cost of Capital As of January 1, 2011

Cost of Equity Capital:

Method #1: Modified Capital Asset Pricing Model (Ex Post Equity Risk Premium)				Source
Risk-Free Rate of Return		4.5%		20-year Treasury bond, <i>The Federal Reserve Statistical Release</i> , as of December 31, 2010.
General Equity Risk Premium		7.10%		<i>Ibbotson SBBI 2010 Yearbook</i> , Morningstar, Inc., 2010.
Multiplied by: Industry Beta		<u>1.05</u>		
Industry-Adjusted General Equity Risk Premium		7.4%		
Size Equity Risk Premium		0.7%		2nd decile, <i>Ibbotson SBBI</i> .
Company-Specific Equity Risk Premium		<u>2.0%</u>		Valuation analyst estimate.
Indicated Cost of Equity Capital		<u>14.6%</u>		
Method #2: Modified Capital Asset Pricing Model (Supply Side Equity Risk Premium)				Source
Risk-Free Rate of Return		4.5%		20-year Treasury bond.
General Equity Risk Premium		6.20%		<i>Ibbotson SBBI</i> .
Multiplied by: Industry Beta		<u>1.05</u>		
Industry-Adjusted General Equity Risk Premium		6.5%		
Size Equity Risk Premium		0.7%		2nd decile, <i>Ibbotson SBBI</i> .
Company-Specific Equity Risk Premium		<u>2.0%</u>		Valuation analyst estimate.
Indicated Cost of Equity Cap		<u>13.7%</u>		
Method #3: Duff & Phelps, LLC, Risk Premium Report Model				Source
Risk-Free Rate of Return		4.5%		20-year Treasury bond.
Equity Risk Premium Over Risk-Free Rate:				
	Bad Debtor	Regression Equation		Risk
	Fundamental	Variables		Premium Over
	\$MM	Constant	Coefficient	Risk-Free Rate [a]
Book Value of Equity	977	17.397%	-2.949%	8.6%
5-Year Average Net Income	1,169	14.216%	-2.715%	5.9%
Total Assets	15,397	18.036%	-2.725%	6.6%
5-Year Average EBITDA	4,957	15.583%	-2.709%	5.6%
Total Revenue	9,877	16.420%	-2.192%	7.7%
Number of Employees (not in Mil)	24,000	17.675%	-2.210%	8.0%
Median Equity Risk Premium Over Risk-Free Rate				7.1%
Company-Specific Risk Premium				<u>2.0%</u>
Indicated Cost of Equity Capital				<u>13.6%</u>
				Valuation analyst estimate.
				<i>Duff & Phelps, LLC, Risk Premium Report 2010.</i>
Method #4: Build-Up Model				Source
Risk-Free Rate of Return		4.5%		20-year Treasury bond.
General Equity Risk Premium		7.1%		<i>Ibbotson SBBI</i> .
Industry Equity Risk Premium		0.0%		Ibbotson SBBI, SIC 4813, average 2007-2010.
Size Equity Risk Premium		0.7%		2nd decile, <i>Ibbotson SBBI</i> .
Company-Specific Equity Risk Premium		<u>2.0%</u>		Valuation analyst estimate.
Indicated Cost of Equity Capital		<u>14.3%</u>		
Selected Cost of Equity Capital		<u>14.0%</u>		Median of Methods #1 - #4 Indicated Cost of Equity Capital

Cost of Debt Capital:

Before-Tax Cost of Debt Capital	7.6%	Beta Debtor Company cost of debt.
Income Tax Rate	<u>37%</u>	Beta Debtor Company effective income tax rate.
Selected Cost of Debt Capital	<u>4.8%</u>	

Weighted Average Cost of Capital Calculation:

Selected Cost of Equity Capital	14.0%	
Multiplied by Equity / Invested Capital	<u>70%</u>	Based on the median of the selected guideline companies.
Equals Weighted Cost of Equity Capital	9.8%	10% (rounded)
Selected Cost of Debt Capital	4.8%	
Multiplied by Debt / Invested Capital	<u>30%</u>	Based on the median of the selected guideline companies.
Equals Weighted Cost of Debt Capital	1.4%	1% (rounded)
Weighted Average Cost of Capital (rounded)	<u>11%</u>	

Footnote:

[a] Estimated as the constant plus the coefficient multiplied by the log of the financial fundamental.

INCOME APPROACH VALUATION METHODS

In this valuation approach, the intellectual property value is estimated as the present value of the future income from the ownership/operation of the intellectual property.

The present value calculation has three principal components:

1. an estimate of the duration of the intellectual property income projection period, typically measured as the intellectual property RUL
2. an estimate of the intellectual property-related income for each period in the projection, typically measured as either owner income (e.g., license royalty income), operator income (e.g., some portion of the total business enterprise income), or both
3. an estimate of the appropriate capitalization rate, typically measured as the required rate of return on an investment in the intellectual property

For purposes of the income approach, the RUL relates to the period of time over which the debtor company expects to receive any measure related to the intellectual property:

1. license,
2. use, or
3. forbearance of use.

In addition to the term of the RUL, the analyst is also interested in the shape of the RUL curve. That is, the analyst is interested in the annual rate of decay of the future intellectual property income.

For purposes of the income approach, many different intellectual property income measures may be relevant. If properly applied, these different income measures can be used in the income approach to derive a value indication.

Some of the different income measures include the following:

1. gross or net revenues
2. gross income (or gross profit)
3. net operating income
4. net income before tax
5. net income after tax
6. operating cash flow
7. net cash flow
8. incremental income

9. differential income
10. royalty income
11. excess earnings income
12. several others

Because there are different income measures that may be used in the income approach, it is important for the capitalization rate (either the discount rate or the direct capitalization rate) to be derived on a basis consistent with the income measure used.

Regardless of the measure of income considered in the income approach, there are several categories of valuation methods that are typically used to value intellectual property:

1. Valuation methods that quantify an incremental level of intellectual property income—that is, the debtor will expect a greater level of revenue (however measured) by owning/operating the intellectual property as compared to not owning/operating the intellectual property.

Alternatively, the debtor may expect a lower level of costs—such as capital costs, investment costs, or operating costs—by owning/operating the intellectual property as compared to not owning/operating the intellectual property.

2. Valuation methods that estimate a relief from a hypothetical license royalty payment—that is, these methods estimate the amount of hypothetical royalty payment that the debtor (as licensee) does not have to pay to a third-party licensor for the use of the intellectual property.

The debtor is “relieved” from having to pay this hypothetical license royalty payment. This is because the debtor, in fact, owns the subject intellectual property.

3. Valuation methods that estimate a residual measure of intellectual property income—that is, these methods typically start with the debtor overall business enterprise income. Next, the valuation analyst identifies all of the tangible assets and routine intangible assets (other than the intellectual property) that are used in the debtor overall business.

These assets are typically called contributory assets. The analyst then multiplies a fair rate of return times the value of each of the contributory assets. The product of this multiplication is the fair return on all of the contributory assets.

The analyst then subtracts the fair return on the contributory assets from the business enterprise total income. This residual (or excess) income is the income related to the intellectual property.

4. Valuation methods that rely on a profit split—that is, these methods typically also start with the debtor business enterprise total income. The valuation analyst then allocates or “splits” this total income between (a) the debtor tangible assets and routine intangible assets and (b) the intellectual property.

The profit split percent (e.g., 20%, 25%, etc.) to the intellectual property is typically based on the analyst’s functional analysis of the debtor business operations.³

This functional analysis identifies the relative importance of (a) the intellectual property and (b) the contributory assets to the production of the debtor business total income.

5. Valuation methods that quantify comparative income—that is, these methods compare the debtor income to a benchmark measure of income that, presumably, does not benefit from the use of the intellectual property.

Common benchmark income measures include: (a) the debtor income before the intellectual property development, (b) industry average income levels, or (c) selected guideline publicly traded company income levels. A common measure of income for these comparative analyses is the EBIT margin.

When publicly traded companies are used as the comparative income benchmark, the method is often called the comparable profit margin method.

All of these income approach valuation methods can be applied using either the direct capitalization procedure or the yield capitalization procedure.

In the direct capitalization procedure, the valuation analyst:

1. estimates a normalized income measure for one future period (typically, one year) and
2. divides that measure by an appropriate investment rate of return.

The appropriate investment rate of return is called the direct capitalization rate. The direct capitalization rate may be derived for:

1. a perpetuity time period or
2. a specified finite time period.

This decision will depend on the valuation analyst’s estimate of the intellectual property RUL.

Typically, the analyst will conclude that the intellectual property has a finite RUL. In that case, the analyst may use the yield capitalization procedure. Or, the analyst may use the direct capitalization procedure with a limited life direct capitalization rate.

Mathematically, the limited life capitalization rate is typically based on a present value of annuity factor (PVAF) for the intellectual property RUL.

In the yield capitalization procedure, the valuation analyst projects the appropriate income measure for several future time periods. The discrete time period is typically based on the intellectual property RUL.

This income projection is converted into a present value by the use of a present value discount rate. The present value discount rate is the investor’s required rate of return—or yield capitalization rate—over the expected term of the income projection.

The result of either the direct capitalization procedure or the yield capitalization procedure is the income approach value indication for the debtor intellectual property.

Finally, Exhibit 6 presents a simplified illustrative example of an income approach intellectual property valuation. In this example, the valuation analyst is asked to estimate the fair market value of a Gamma Debtor Company pharmaceutical product patent. The appropriate valuation date is January 1, 2011.

The valuation analyst decided to use the income approach and the excess earnings method. Because the patent product revenue is expected to change at a nonconstant rate over time, the analyst decided to use the yield capitalization procedure. Using this procedure, this valuation method is often called the multiperiod excess earnings method (or MEEM).

The Gamma Debtor Company patent is used to manufacture the Delta pharmaceutical product line. Based on the remaining legal life of the Delta patent and the product line revenue decay rate (considering the effect of a competitive drug product), the valuation analyst estimates a 10-year RUL for the Delta patent.

Gamma Debtor Company management provided the analyst with a financial projection for the overall Gamma product line in which the Delta product fits. The analyst performed a revenue decay rate analysis

related to the Delta product in order to conclude a Delta patent revenue growth rate (or, in this case, decay rate).

Exhibit 6 presents the projection of the Delta product revenue and profit over its expected 10-year RUL. The analyst estimated an appropriate capital charge on all of the Gamma Debtor Company contributory assets, including working capital assets, tangible assets, and routine (nonpatent) intangible assets. This contributory asset analysis is summarized on Exhibit 7.

In order to control the number of exhibits, let's assume that Gamma Debtor Company has the same 11 percent cost of capital as presented in the previous Beta Debtor Company example (see Exhibit 5). Therefore, the valuation analyst used 11 percent as the Gamma Debtor Company weighted average cost of capital—or present value discount rate.

Based on the income approach valuation analysis summarized in Exhibit 6, the analyst estimated that the fair market value of the Delta product patent was \$790 million, as of January 1, 2011.

VALUATION SYNTHESIS AND CONCLUSION

In the valuation synthesis and conclusion, the valuation analyst should consider the following question: Does the selected valuation approach(es) and method(s) accomplish the analyst's assignment?

That is, does the selected approach and method actually quantify the desired objective of the analysis, such as:

- a defined value,
- a transaction price,
- a third-party license rate,
- an arm's-length intercompany transfer price,
- an economic damages estimate,
- an intellectual property bundle exchange ratio, or
- an opinion on the intellectual property transaction fairness.

The valuation analyst should also consider if the selected valuation approach and method analyzes the appropriate intellectual property bundle of legal rights. The valuation analyst should consider if there were sufficient empirical data available to perform the selected valuation approach and method.

That is, the valuation synthesis should consider if there were sufficient data available to make the

analyst comfortable with the analysis conclusion. And, the analyst should consider if the selected approach and method will be understandable to the intended audience for the intellectual property valuation.

The analyst should also consider which approaches and methods deserve the greatest consideration with respect to the intellectual property RUL. The intellectual property RUL is an important consideration of each valuation approach.

In the income approach, the RUL will affect the projection period for the intellectual property income subject to either yield capitalization or direct capitalization.

In the cost approach, the RUL will affect the total amount of obsolescence, if any, from the estimated cost measure—that is, the intellectual property reproduction cost or replacement cost.

In the market approach, the RUL will affect the selection, rejection, and/or adjustment of the comparable or guideline sale or license transactional data.

The following factors directly influence the intellectual property expected RUL:

- legal factors
- contractual factors
- functional factors
- technological factors
- economic factors
- analytical factors

Each of these factors is normally considered in the valuation analyst's RUL estimation. Typically, the life factor that indicates the shortest RUL deserves primary consideration in the valuation synthesis and conclusion.

Ultimately, the experienced valuation analyst will use professional judgment to weigh the various valuation approach and method value indications to reach a final value conclusion, based on:

- the analyst's confidence in the quantity and quality of available data,
- the analyst's level of due diligence performed on that data,
- the relevance of the valuation method to the debtor intellectual property life cycle stage and degree of marketability, and
- the degree of variation in the range of value indications.

Based on the valuation synthesis, the intellectual property final value conclusion can be a point

Exhibit 6 (page 1)
Gamma Debtor Company
Valuation of Pharmaceutical Product Patent
Income Approach
Yield Capitalization Procedure
As of January 1, 2011

Valuation of the Delta Product Patent	Notes	Pro Forma Years											
		12/31/11	12/30/12	12/30/13	12/30/14	12/31/15	12/30/16	12/30/17	12/30/18	12/31/19	12/30/20		
Gamma Debtor Company Product Line Revenue		4,643,232	4,450,217	4,184,750	3,880,112	3,548,858	3,548,858	3,548,858	3,548,858	3,548,858	3,548,858	3,548,858	3,548,858
Annual Growth Rate Percent		-1.2%	-4.2%	-6.0%	-7.3%	-8.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Estimated Delta Product Attrition Rate	23%												
Revenue Attributable to the Delta Product Patent	[a]	3,575,289	2,604,350	1,849,994	1,289,821	883,047	679,946	523,559	403,140	310,418	239,022	181,111	136,584
Annual Growth Rate Percent	[b]	NA	-27.2%	-29.0%	-30.3%	-31.5%	-23.0%	-23.0%	-23.0%	-23.0%	-23.0%	-23.0%	-23.0%
EBITDA	[c]	1,573,127	1,145,914	813,997	567,521	388,541	299,176	230,366	177,382	136,584	105,170	81,111	61,790
EBITDA Margin		44%	44%	44%	44%	44%	44%	44%	44%	44%	44%	44%	44%
Less: Depreciation/Amortization Expense	[d]	793,018	552,967	375,423	248,354	160,263	123,402	95,020	73,165	56,337	43,380	33,333	25,900
% of Revenue		22.2%	21.2%	20.3%	19.3%	18.1%	18.1%	18.1%	18.1%	18.1%	18.1%	18.1%	18.1%
EBIT		780,109	592,947	438,575	319,167	228,278	175,774	135,346	104,216	80,247	61,790	47,777	35,890
EBIT Margin		21.8%	22.8%	23.7%	24.7%	25.9%	25.9%	25.9%	25.9%	25.9%	25.9%	25.9%	25.9%
Less: Income Taxes @ 37 percent		288,640	219,390	162,273	118,092	84,463	65,036	50,078	38,560	29,691	22,862	17,777	13,580
Net Income		491,469	373,557	276,302	201,075	143,815	110,738	85,268	65,656	50,556	38,928	30,000	22,310
Net Margin		13.7%	14.3%	14.9%	15.6%	16.3%	16.3%	16.3%	16.3%	16.3%	16.3%	16.3%	16.3%
Plus: Depreciation/Amortization Expense		793,018	552,967	375,423	248,354	160,263	123,402	95,020	73,165	56,337	43,380	33,333	25,900
Less: Charges for the Use of Contributory Assets:													
Working Capital Capital Charge	[e]	27,530	20,053	14,245	9,932	6,799	5,236	4,031	3,104	2,390	1,840	1,411	1,080
Tangible Assets Capital Charge	[f]	(823,022)	(599,454)	(425,589)	(296,467)	(202,736)	(156,107)	(120,202)	(92,556)	(71,268)	(54,876)	(42,333)	(32,556)
Routine Intangible Assets Capital Charge	[g]	(164,756)	(123,965)	(91,524)	(66,472)	(47,625)	(36,671)	(28,237)	(21,742)	(16,742)	(12,891)	(10,000)	(7,777)
Equals: Patent Economic Income		324,239	223,159	148,856	96,422	60,516	46,598	35,880	27,627	21,273	16,381	12,333	9,333
Discounting Periods	[h]	0.5000	1.5000	2.5000	3.5000	4.5000	5.5000	6.5000	7.5000	8.5000	9.5000	10.5000	11.5000
Present Value Factor @ 11%		0.9492	0.8551	0.7704	0.6940	0.6252	0.5633	0.5075	0.4572	0.4119	0.3710	0.3333	0.2990
Present Value of Patent Economic Income		307,767	190,823	114,679	66,917	37,834	26,249	18,209	12,631	8,762	6,077	4,333	3,111
Present Value of Patent Economic Income (2011-2020)		789,949											
Indicated Fair Market Value of Delta Product Patent		790,000											

Exhibit 6 (page 2)
Gamma Debtor Company
Valuation of Pharmaceutical Product Patent
Income Approach
Yield Capitalization Procedure
Valuation Variables

[a] Considers the historical weighted decay rates for the Delta patented product revenue.

Delta product	2008	2009	2010	Average
Weighted Annual Revenue Decay Rate	23.4%	23.6%	23.3%	23.4%

[b] Represents 77 percent of Delta product revenue in 2011 based on the estimated attrition rate. Thereafter, Delta product revenue is decreased annually based on (1) the estimated attrition rate and (2) the negative annual growth rate.

[c] The projected 2015 EBITDA margin is maintained after 2015.

[d] The projected 2015 depreciation expense as a percent of revenue is maintained after 2015.

[e] Based on (1) working capital requirement for the Delta product line and (2) the return on working capital estimated based on the Gamma Debtor Company weighted average cost of capital (WACC).

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Working Capital - % of Consolidated Gamma Debtor Company Revenue	-7%	-7%	-7%	-7%	-7%	-7%	-7%	-7%	-7%	-7%
Working Capital Requirement (times Delta product revenue)	(250,270)	(182,305)	(129,500)	(90,287)	(61,813)	(47,596)	(36,649)	(28,220)	(21,729)	(16,732)
Return on Working Capital	(27,530)	(20,053)	(14,245)	(9,932)	(6,799)	(5,236)	(4,031)	(3,104)	(2,390)	(1,840)

[f] Equals the sum of projected capital expenditure allocated to the Delta product line based on (1) % of revenue and (2) the return on tangible assets requirement estimated (based on the WACC).

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Net Tangible Assets as % of Consolidated Revenue (see Exhibit 7)	113%	113%	113%	113%	113%	113%	113%	113%	113%	113%
Tangible Assets Requirement (times Delta product line revenue)	4,038,767	2,941,962	2,089,816	1,457,025	997,520	768,090	591,430	455,401	350,659	270,007
Return on Tangible Assets	444,264	323,616	229,880	160,273	109,727	84,490	65,057	50,094	38,572	29,701

[g] Routine intangible assets contributory asset charge as percent of consolidated revenue times revenue attributable to the Delta patented product line (see Exhibit 7).

[h] Calculated as if cash flow is received at mid-year.

Exhibit 7
Gamma Debtor Company
Valuation of Pharmaceutical Patent
Income Approach
Yield Capitalization Procedure
Contributory Asset Capital Charge Analysis

	FYE				
	12/31/11				
Tangible Assets Capital Charge:	\$000				
Beginning Tangible Assets [a]	12,034,000				
Capital Expenditures [a]	1,162,971				
Depreciation Expense [a]	<u>(2,249,209)</u>				
Net Tangible Assets	10,947,762				
Consolidated Gamma Debtor Company Revenue [b]	9,691,426				
Net Tangible Assets as % of Consolidated Revenue	113%				
	[c]	[d]			
	Fair	Estimated			
	Market	Required	Annual		
	Value	Rate of	Return		
Routine Intangible Assets Capital Charge:	\$000	Return	\$000		
Trademarks/Trade Names	970,000	11%	106,700		
Internally Developed Computer Software Systems	2,510,000	11%	276,100		
Trained and Assembled Workforce	580,000	11%	<u>63,800</u>		
Total Contributory Intangible Assets			446,600		
	12/31/11	12/31/12	12/13/13	12/31/14	12/31/15
	\$000	\$000	\$000	\$000	\$000
Consolidated Gamma Debtor Company Revenue [b]	9,691,426	9,382,534	9,027,219	8,665,762	8,280,712
Intangible Assets Capital Charge (from above)	446,600	446,600	446,600	446,600	446,600
Intangible Assets Capital Charge as % of Consolidated Revenue	4.6%	4.8%	4.9%	5.2%	5.4%

Footnotes:

[a] From Gamma Debtor Company business plan.

[b] Ibid.

[c] Ibid.

[d] Based on the Gamma Debtor Company WACC.

estimate (which is common for fair market valuations) or a value range (which is common for transaction negotiations or proposed license/sale transaction fairness opinions).

ATTRIBUTES OF AN EFFECTIVE INTELLECTUAL PROPERTY VALUATION REPORT

There are numerous objectives of the bankruptcy-related intellectual property valuation report.

First, the valuation analyst wants to persuade the report reader (whether the reader is a potential transaction participant, the debtor, a creditor, legal counsel for any party, a judge or other finder of fact, etc.). And, second, the analyst wants to defend the intellectual property value (or damages, royalty rate, etc.) conclusion.

In order to accomplish these objectives, the content and format of the valuation report should demonstrate that the analyst:

1. understood the specific intellectual property valuation assignment;
2. understood the debtor intellectual property and the subject bundle of legal rights;
3. collected sufficient debtor financial and operational data;
4. collected sufficient industry, market, and competitive data;
5. documented the specific intellectual property debtor economic benefits;
6. performed adequate due diligence procedures related to all available data;
7. selected and applied all applicable income approach, market approach, and cost approach valuation methods; and
8. reconciled all value (or damages, royalty rate, etc.) indications into a final intellectual property analysis conclusion.

The final (and arguably most important) procedure in the entire bankruptcy-related analysis is for the analyst to defend the value (or damages, royalty rate, etc.) conclusion in a replicable and well-documented valuation report.

Whether defending a value, price, royalty rate, economic damages calculation, exchange ratio, or fairness conclusion, the written report should:

- explain the intellectual property valuation (or damages, royalty rate, etc.) assignment,
- describe the debtor intellectual property and the subject bundle of legal rights,

- explain the selection or rejection of all generally accepted 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, and
- allow the report reader to be able to replicate all of the analyses performed.

In order to encourage the report reader's acceptance of the written intellectual property valuation report conclusion:

- the report should be clear, convincing, and cogent;
- the report should be well-organized, well-written, and well-presented; and
- the report should be free of grammatical, punctuation, spelling, and mathematical errors.

In summary, the effective (i.e., persuasive) intellectual property valuation report will tell a narrative story that:

1. defines the valuation analyst's assignment,
2. describes the analyst's data gathering and due diligence procedures,
3. justifies the analyst's selection of the generally accepted intellectual property valuation approaches, methods, and procedures,
4. explains how the analyst performed the valuation synthesis and reached the final value conclusion, and
5. defends the analyst's intellectual property value conclusion.

WHO SHOULD PERFORM THE INTELLECTUAL PROPERTY VALUATION?

An important consideration for the party-in-interest—and for the legal counsel—is: What type of

professional should perform the debtor intellectual property valuation?

There are many categories of professionals who perform intellectual property valuation (and damages, royalty rate, etc.) analyses.

These categories of professionals include the following:

- accountants
- economists
- licensing executives
- intellectual property consultants
- industry specialists
- valuation analysts

Typically, both the party-in-interest and the legal counsel will be involved in the decision regarding which category of professional to retain. And, typically, the party-in-interest and the lawyer need to decide on the appropriate category of professionals before they can interview and retain an individual professional.

Some parties may consider the relative costs of the valuation service in selecting the category of professionals to retain. However, the “cost” of being wrong in this decision process is typically much greater than the “cost” of the professional’s valuation fee.

Whether the party-in-interest and the legal counsel need the intellectual property valuation for bankruptcy-related transaction, financing, or litigation purposes, they should retain the most qualified professional they can.

When the effectiveness of the intellectual property valuation analysis and report will influence a buyer, seller, lender, licensor, licensee, judicial finder of fact, and so on, the party-in-interest and the legal counsel should not be concerned about finding a budget-priced valuation professional.

Each of the above-listed professionals has their strengths and weaknesses as an intellectual property valuation candidate. And, one category of analyst may be preferred for one type of assignment (say, negotiating a DIP intellectual property license agreement) over another type of assignment (say, testifying as an expert witness in a debtor corporation solvency dispute).

Accountants

Accountants (particularly CPAs) typically have a great deal of credibility with all parties to a bankruptcy filing. And, accountants (particularly CPAs) typically have the credentials to be qualified as expert witnesses. Accountants are typically familiar

with the financial accounting and taxation aspect of intellectual property valuation.

Many accountants perform intellectual property valuations according to rules-based methods. These rules-based methods are often promulgated by the Financial Accounting Standards Board or by the Internal Revenue Service. And, such methods are particularly applicable for fair value accounting disclosures or for Internal Revenue Code Section 482 compliance purposes.

However, some accountants are not particularly comfortable with judgment-based (compared to rules-based) valuation methods and procedures. And, intellectual property valuations are a relatively small part of the practice of many accountants.

Economists

Economists (particularly Ph.Ds.) also have a great deal of credibility with parties to a bankruptcy dispute. And, they typically have the credentials to be qualified as expert witnesses.

In fact, since valuation analysis is one particular type of economic analysis, many regulatory and taxation authorities (e.g., the Internal Revenue Service) often accept economists as intellectual property valuation analysts. This acceptance is particularly true for intercompany transfer price analysis and for other rules-based intellectual property valuations.

However, economists can sometimes perform very theoretical (and not empirically based) analyses. And, economists are not always familiar with the above-described generally accepted valuation approaches, methods, and procedures.

Accordingly, the economist’s valuation analyses are sometimes difficult for a layperson to understand. And, these analyses may not stand up to a contrarian challenge within a litigation environment.

Licensing Executives

Licensing executives typically have a great deal of practical experience in negotiating and structuring arm’s-length intellectual property license agreements. This experience may cross many types of intellectual property and many types of industries.

Therefore, licensing executives often have a great deal of personal and/or anecdotal evidence regarding intellectual property values, royalty rates, and so forth. However, because it is anecdotal, this evidence often cannot be independently confirmed.

While licensing executives often know how intellectual property valuations are performed, they may not know (or be able to explain) why intellectual

property valuations are performed that way. And, licensing executives often rely on so-called industry rules of thumb and not on the generally accepted valuation approaches, methods, and procedures.

Therefore, licensing executives are often more familiar with the licensing profession's practices and procedures than they are with the valuation profession's practices and standards.

Intellectual Property Consultants

Intellectual property consultants typically assist their employers and clients to develop strategic plans to maximize the value of intellectual property.

These plans often start with the process of identifying the debtor intellectual property. These plans often consider the competitive strengths, weaknesses, opportunities, and threats related to the intellectual property. The plans then analyze how the intellectual property is used by the debtor and how it can be commercialized outside of the debtor.

And, these consultants often assist their employers or clients to finance, license, or otherwise monetize the intellectual property. However, many intellectual property consultants prepare more qualitative than quantitative valuation analyses.

And, many of the intellectual property analyses are high level (i.e., conceptual) rather than empirical (i.e., practical). And, these consultants often rely more on "black box" types of analyses and less on the replicable generally accepted valuation approaches, methods, and procedures. Also, these consultants may not subscribe to any promulgated professional standards.

Industry Specialists

Industry specialists typically are not intellectual property specialists. Rather, they are electronics industry specialists, software industry specialists, telecommunications industry specialists, and so on.

Industry specialists are often retired industry executives or consultants who focus on consulting in one or two industries. They often provide industry clients with financial forecasting, strategic planning, competitive analysis, and other consulting services.

Often, industry specialists have been involved in business brokerage, business start-up, or bankruptcy transactions in their industry. And, they will perform intellectual property valuations as one of their industry services.

While these industry specialists know a great deal about their respective industry, they may not know a great deal about intellectual property or intellectual property valuation.

Accordingly, the justification for their valuation analysis and their value conclusion is typically "in my experience" as opposed to empirical data and recognized (and replicable) valuation profession practices and standards.

Valuation Analysts

Valuation analysts may have varying academic or professional backgrounds. Individuals are typically included in this category if they have completed professional training and received professional recognition by one or more of the professional valuation credentialing organizations.

These organizations typically promulgate intangible asset valuation professional standards, conduct both pre-credential training and post-credential continuing professional education courses, and offer comprehensive examination programs leading to a professional credential or accreditation.

Such organizations include the American Institute of Certified Public Accountants (which grants the ABV credential), the American Society of Appraisers (which grants the ASA credential), the Institute of Business Appraisers (which grants the CBA credential), and the National Association of Certified Valuation Analysts (which grants the CVA credential).

These professionals typically have the training and credentials to qualify as expert witnesses. And, these professionals typically apply the generally accepted valuation approaches, methods, and procedures. And, these professionals typically subscribe to—and comply with—the generally accepted valuation profession standards and practices.

Ultimately, the party-in-interest and the legal counsel have to decide which type of professional is best suited to conduct the debtor intellectual property valuation (or damages, transfer price, etc.) analysis.

There should be a match (of experience and expertise) between the selected analyst and the purpose and objective of the specific bankruptcy assignment. There should also be a match (of personalities and professional philosophies) between the selected analyst and the client.

In the final selection, the type of professional may be less important than the qualifications and the abilities of the individual analyst. Nonetheless, most bankruptcy-related intellectual property valuations are (at least potentially) subject to a contrarian review.

Therefore, the party-in-interest and the lawyer should select an intellectual property analyst who can deliver a valuation analysis and report (and expert testimony, if needed) that:

1. will convince the intended report (or testimony) audience and
2. will stand up to a rigorous contrarian challenge.

An analyst who has applied generally accepted valuation approaches, methods, and procedures and an analyst who has complied with generally accepted professional standards and practices may be best positioned to meet that challenge.

SUMMARY AND CONCLUSION

First, this discussion considered the various types of bankruptcy-related intellectual property analysis that a valuation analyst may be asked to perform.

For all debtor company intellectual property valuations (or related analyses), the analyst will consider the three generally accepted valuation approaches—the cost approach, the market approach, and the income approach.

Each of these valuation approaches has the same objective: to arrive at a defined value indication for the debtor intellectual property. Within each of the three approaches, there are several valuation methods and procedures that may be appropriate for the particular intellectual property valuation.

The analyst's selection of the specific valuation approaches, methods, and procedures for the debtor intellectual property is based on:

1. the particular characteristics of the debtor intellectual property,
2. the bundle of legal rights subject to analysis,
3. the quantity and quality of available data,
4. the analyst's ability to perform sufficient due diligence related to that data,
5. the purpose and objective of the specific valuation analysis, and
6. the relevant professional experience and informed judgment of the individual analyst.

The final intellectual property value conclusion is typically based on the analyst's synthesis of the value indications from each applicable valuation approach and method.

These generally accepted valuation approaches, methods, and procedures summarized in this discussion are generally relevant to bankruptcy-

related intellectual property analyses performed for transaction, financing, strategic planning, taxation, accounting, litigation, and other purposes.

Accordingly, both the bankruptcy party-in-interest and the legal counsel should be generally familiar with these generally accepted approaches for purposes of:

1. selecting the appropriate valuation analyst,
2. relying on the analyst's value (or damages, royalty rate, etc.) conclusion, and
3. defending the analyst's work product.

Notes:

1. See *Biosafe Int'l v. Controlled Shredders*, 1996 Bankr. LEXIS 888 (N.D. Ill. 1996), rev'd in part on other grounds, *Szombathy v. Controlled Shredders, Inc.*, 1997 U.S. Dist. LEXIS 5168 (N.D. Ill. 1997) (finding licensee's rights only to intellectual property in existence at the time of bankruptcy filing despite licensing agreement extending to later acquired intellectual property).
2. There is little case law on the assignability of exclusive patent licenses. In one case, the court barred the licensee from assigning its interest. *In re Hernandez*, 285 B.R. 435 (Bankr. D. Ariz. 2002).

Courts are split on the assignability of exclusive copyright licenses. In *Gardner v. Nike, Inc.*, 279 F.3d 774 (9th Cir. 2002), the court prohibited the assignability of an exclusive license without the licensor's consent. Other courts allow free assignability of exclusive copyright licenses. See *In re Golden Books Family Entm't, Inc.*, 269 B.R. 311 (Bankr. D. Del. 2001).

Trademarks sometimes receive special treatment in a bankruptcy context. In *In re: N.C.P. Marketing Group, Inc.*, 337 B.R. 230 (D.Nev. 2005), the court found that trademark licenses are personal and non-assignable. Therefore, it is unlikely that a trademark licensee will be able to assign their rights to third parties without the owner's consent.

3. Note that courts no longer automatically accept starting the reasonable royalty analysis at a 25% royalty rate for patent cases. This method does not satisfy the criteria set forth in *Daubert* or the Federal Rules of Evidence. See *Uniloc USA, Inc. v. Microsoft Corp.* 2010-1035 (CAFC 2011).

*Robert Schweih*s is a managing director of the firm. Bob can be reached at (773) 399-4320 or at rpschweih@willamette.com.

*Patrick B. Schweih*s, Esq., is a Chicago-based lawyer specializing in intellectual property. He can be reached at (312) 970-0003 or at schweih@gmail.com.