# Application of the Cost Approach to Intellectual Property Valuation

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*Intellectual property includes several specific types of intangible personal property. These types of intellectual property are patents, trademarks, copyrights, and trade secrets. Valuation analysts may be asked to value an owner/operator's intellectual property for various transaction, taxation, accounting, planning, and controversy purposes. The cost approach is applicable to the valuation of intellectual property in many instances and for many purposes. Damages analysts may be asked to value an owner/operator's intellectual property as part of a cost to cure damages measurement method analysis. This method is sometimes applied with regard to the measurement of damages related to intellectual property breach of contract and tort claims. Transfer price analysts may be asked to conclude an arm's-length price ("ALP") related to the intercompany transfer of a multinational owner/operator's intellectual property. The application of the cost approach to conclude an ALP is an example of an "other method" of transfer pricing, as allowed by the Regulations related to Internal Revenue Code Section 482. This discussion summarizes the conceptual principles and the practical applications of the cost approach to estimate value, measure damages, or determine an ALP for intellectual property—and related intangible personal property.*

## Introduction

Intellectual property includes patents, trademarks, copyrights, and trade secrets. This discussion—and the other thought leadership discussions in this *Insights* issue—encompass those four categories of intellectual property. Most of the methods and procedures—and illustrative examples—included in this discussion—and the other discussions in this *Insights* issue—are also applicable to other categories of general intangible personal property.

In this discussion, valuation analysts, damages analysts, and transfer pricing analysts are collectively referred to as "analysts." Such analysts, respectively, are familiar with generally accepted intellectual property valuation, damages measurement, and intercompany transfer price approaches, methods, and procedures.

Typically, such analysts often have particular experience and expertise with regard to the generally accepted income-based and market-based methods and procedures. However, such analysts often have less experience and expertise with regard to the application of cost-based valuation, damages, and transfer price analyses.

This discussion focuses on the conceptual principles and the practical applications of the cost approach. In particular, this discussion focuses on the cost approach valuation of intellectual property. Much of this discussion also applies to the valuation of the other types of general intangible personal property.

In addition, much of this discussion also applies to the valuation aspects of intellectual property damages analysis and Intellectual property intercompany transfer price analysis.

Intellectual property is one category of intangible property. This discussion distinguishes between the terms intangible property and intangible assets.

Property is a legal term. Property is anything that an owner/operator can own under state law. That is, the owner/operator has legal rights to property.

Asset is an accounting term. An asset is anything that is reported in the asset section of a balance sheet. Not all types of property are recorded as an asset under U.S. generally accepted accounting principles ("GAAP"). Not all assets that are recorded on a balance sheet also qualify as property under the relevant state law.

Generally, the topic of this discussion is intellectual property—and related types of intangible property. When this discussion refers to items that are reported on a balance sheet (and particularly to the fair value measurement of such items), the discussion text will use the term intangible assets.

## Intellectual Property Valuation

There are various situations in which analysts develop and report intellectual property valuations—and other intangible personal property valuations. These situations include the following:

1. Sale (or other transfer) transaction pricing determination
2. Regulatory compliance; taxation planning and compliance and controversies
3. Fair value measurement ("FVM") for financial accounting purposes
4. Collateral value appraisal for asset-based financing
5. Appraising the intangible asset of a component of an asset-based approach business valuation analysis
6. Use or other commercial exploitation
7. License fee (royalty rate) negotiation
8. Forensic analysis and dispute resolution

This final category of situations—forensic analysis and dispute resolution—include the application of the cost to cure damages measurement method related to an intellectual property tort and breach of contract claims.

Intellectual property valuations are more typical in industries where intellectual property significantly contributes to either:

1. the owner/operator business value or
2. the owner/operator business operating income.

Such industries include technology, financial services, professional services, and many others.

In certain industries—such as health care—intellectual property valuations are often developed for purposes of compliance with statutory or regulatory requirements. For instance, a business sale and/or an intellectual property license transactions between a for-profit entity and a not-for-profit entity in the health care industry may require an intangible property valuation for regulatory and tax compliance.

One reason such an intangible property valuation may be required is to ensure that sale or license transactions are conducted fairly and within regulatory guidelines (for example, to ensure that a not-for-profit entity sells or licenses its intellectual property to a for-profit entity at a price that is less than a fair market value price).

As indicated in the American Institute of Certified Public Accountants ("AICPA") Statement on Standards for Valuation Services ("SSVS"), *Valuation of a Business, Business Ownership Interest, Security, or Intangible Asset* ("VS section 100"), there are three generally accepted intellectual property (and other intangible property) valuation approaches:

1. The income approach
2. The market approach
3. The cost approach

Most analysts are generally familiar with the application of the income approach and the market approach intellectual property valuation methods. These generally accepted valuation methods include the multiperiod excess earnings method, the capitalized excess earnings method, the relief from royalty method, and the sales comparison method.

Unlike real estate and tangible personal property appraisers, analysts often have less experience and less expertise in the application of the cost approach intellectual property valuation methods. Accordingly, this discussion focuses on the conceptual principles of—and the practical applications of—the cost approach intellectual property valuation methods.

As this discussion will explain, the cost approach is particularly applicable:

1. to certain types of intellectual property and related general intangible personal property,
2. in certain instances, and
3. for certain types of analyses purposes.

This discussion summarizes professional best practices related to the application of the cost approach to intellectual property valuation. This discussion describes a theoretical framework for the intellectual property cost approach valuation case studies.

This discussion is intended to achieve the following objectives:

- Present a review of the typical categories of intangible personal property (including examples of intellectual property).
- Describe the scope and the characteristics of several typical intangible personal property valuation assignments.
- Consider the suitability and the implementation of a cost approach valuation analysis for specific categories of intangible personal property, including intellectual property.

This discussion presents professional best practices and procedures related to the following:

1. Developing cost measurement metrics
2. Measuring appraisal depreciation and obsolescence
3. Concluding the cost approach value indication
4. Reconciling the cost approach value indication with value indications developed from other intangible property valuation approaches

Other discussions in this *Insights* issue provide a broad range of practical illustrations of the application of the cost approach to intellectual property valuation. These other discussions include considerations specific to FVM and financial accounting purposes as described in the Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC") topic 820, *Fair Value Measurements*.

These other *Insights* discussions also summarize the professional guidance provided by the *Mandatory Performance Framework* ("MPF") related to the Certified in Entity and Intangible Valuations™ ("CEIV") professional credential. Those discussions include consideration of how the MPF procedures are intended to ensure that intellectual property fair value measurements are appropriately supported.

The fair value standard related to U.S. GAAP is only one of the valuation standards (or definitions) of value considered in this discussion. The fair value standard of value is relevant with regard to the development of the FVM of acquired intangible assets for acquisition accounting purposes.

However, the primary focus of this *Insights* issue is not related to an FVM for financial accounting purposes. Rather, this *Insights* issue is intended to describe the application of the cost approach to intellectual property valuation for alternative valuation purposes and across alternative standards of value.

## Reasons to Value Intellectual Property

Exhibit 1 presents many of the reasons why an analyst may be engaged to value an intellectual property (or a related intangible property).

## Elements of the Intellectual Property Valuation Engagement

Before selecting the generally accepted valuation approach (or approaches) to apply to value the intellectual property, the analyst should develop a complete understanding of the valuation engagement.

Some of the typical elements of an intellectual property valuation assignment follow:

- Objective and purpose of the valuation
- Standard of value
- Premise of value
- Valuation date
- Description of the subject intellectual property
- Description of the subject bundle of legal rights
- Parties that may rely on the valuation
- Identification of any special reporting requirements

**Exhibit 1**
**Typical Reasons to Value Intellectual Property**

1. Transaction pricing and structuring
   - Pricing the arm's-length sale of an individual intellectual property or of a portfolio of two or more intellectual properties
   - Pricing the arm's-length inbound or outbound license of an individual intellectual property or of a portfolio of two or more intellectual property
   - Calculating an exchange ratio between two owners for the exchange of their two respective intellectual property portfolios
   - Measuring the equity allocations in a new business enterprise or joint venture when one or more parties contribute an intellectual property to the new entity
   - Measuring the asset distribution in a liquidating business enterprise or joint venture when one party (or more) receives an intellectual property in exchange for an equity interest or the payment of a liability
   - Pricing the intercompany transfer of the ownership of an intellectual property (or of the use of an intellectual property) between two wholly owned subsidiaries (or between two unequally owned subsidiaries) of a consolidated business enterprise

2. Owner/operator financing collateralization and securitization
   - Pledging an intellectual property as the collateral in either a cash-flow-based or an asset-based debt financing
   - Arranging the sale/license-back financing of a commercialized intellectual property

3. Taxation planning and compliance
   - Forming an intellectual property holding company and structuring the intercompany use license of the intellectual property to the subsidiary operating companies of a parent corporation
   - Performing an income tax basis allocation of a business acquisition purchase price (among the acquired tangible assets and intangible assets) in a taxable business acquisition transaction (such as in a transaction structured as an Internal Revenue Code Section 1060 asset acquisition)
   - Quantifying the amortization income tax deduction associated with a purchased intellectual property
   - Valuing owned intellectual property as part of a taxpayer corporation insolvency analysis in order to quantify the Section 108 exemption related to the recognition (or nonrecognition) of cancellation of debt income
   - Valuing a corporation's intellectual property related to the built-in-gain tax deferral on the corporate taxpayer's election to convert from C corporation to S corporation income tax status
   - Supporting the amount of a charitable contribution deduction related to a donated intellectual property
   - Estimating the arm's-length price for the cross-border transfer-and-use license for a multinational taxpayer corporation's intellectual property (for example, for Section 482 compliance)
   - Complying with state and local ad valorem property taxation requirements related to intellectual property that is either subject to—or exempt from—property taxation
   - Defending against any Service allegations of private inurement, excess benefits, or intermediate sanctions with regard to intellectual property transfers between a for-profit entity and a not-for-profit entity at less than (or more than) fair market value

4. Regulatory compliance and corporate governance
   - Estimating the fair market value of an intellectual property related to the sale, license, or other transfer between a for-profit entity and a not-for-profit entity
   - Estimating the fair market value of a going-concern business enterprise related to the sale or other transfer between a for-profit entity and a not-for-profit entity based on the application of the asset-based business valuation approach
   - Documenting the custodial inventory and the management of an entity's owned or licensed intellectual property
   - Assessing the adequacy of property insurance coverage for an entity's owned or licensed intellectual property

**Exhibit 1 (cont.)**
**Typical Reasons to Value Intellectual Property**

- Defending against (or prosecuting) litigation claims of infringement, misappropriation, diversion of corporate assets, or of other tort claims—or of breach of contract claims—related to alleged wrongful acts involving intellectual property
- Defending against (or prosecuting) allegations of shareholder oppression and other claims related to the dissipation of corporate assets

5. Bankruptcy and reorganization
   - Valuing a debtor's intellectual property that is pledged as collateral for secured creditor financing
   - Pledging an intellectual property as collateral for debtor-in-possession ("DIP") secured financing
   - Opining on the fairness (to the creditors) of the sale or license of an intellectual property as a DIP cash-generation spin-off opportunity
   - Valuing the debtor's intellectual property in the performance of the debtor company solvency or insolvency tests (particularly the balance sheet test) with respect to fraudulent transfer claims and to preference actions
   - Measuring the impact of the debtor company owned or licensed intellectual property on the proposed plan of reorganization of the bankrupt owner/operator

6. Fair value measurement and financial accounting
   - Developing the acquisition accounting method for acquisition, transaction purchase price allocation among the acquired tangible assets and intangible assets—including intellectual property—in compliance with FASB ASC 805, *Business Combinations*
   - Testing for reporting entity goodwill impairment and for other intangible asset—including intellectual property—impairment in compliance with FASB ASC 350, *Intangibles — Goodwill and Other* and FASB ASC 360, *Property, Plant, and Equipment*
   - Preparing the postbankruptcy "fresh start" accounting for the emerging entity's tangible assets and intangible assets FASB ASC 852, *Reorganizations*
   - Valuing the intellectual property investments owned by (and reported on the balance sheet of) a portfolio company
   - Preparing valuations of all investments—including investments in intellectual property—for investment-company financial accounting FASB ASC 946, *Financial Services — Investment Companies*

7. Forensic analysis and dispute resolution
   - Measuring lost profits, reasonable royalty rate, or other economic-damage measurements related to intellectual property infringement or other intellectual property tort claims
   - Measuring lost profits or other economic damages measurements related to intellectual-property-related breach of contract, use or commercialization or development license, or noncompete/nondisclosure agreement damage claims
   - Estimating the owner/operator's intellectual property value in a condemnation, expropriation, eminent domain, or dissipation of corporate assets litigation claim

8. Owner/operator strategic planning and management information
   - Drafting and implementing an intellectual property joint venture agreement, joint development agreement, or joint-commercialization agreement
   - Negotiating an inbound or an outbound intellectual property use, development, commercialization, or exploitation license agreement
   - Identifying and negotiating intellectual property license, spin-off, joint venture, and other commercialization opportunities
   - Valuing intellectual property as one component of an asset-based approach business valuation of an early-stage company for private investment-planning purposes

The analyst should document an understanding of the engagement by defining its objective and purpose. Typically, the objective of an intellectual property valuation engagement is to estimate a defined value of a specified ownership interest in the intellectual property as of a specified date.

The standard of value and the premise of value should be identified. The subject ownership interest and the subject property itself should be understood. Intellectual property values are developed and reported as of a specific valuation date.

Finally, the purpose of the intellectual property valuation assignment should both:

1. explain the intended use of the valuation work product and
2. identify the intended users of the valuation work product.

Sometimes a valuation is not the type of analysis that the client actually needs. That is, some types of financial or economic analysis other than a valuation may better address the client's issue or informational needs.

For example, instead of developing an intellectual property valuation, the analyst may better serve the client by developing a different type of analysis, such as one of the following:

- An inbound or outbound license royalty rate analysis
- An arm's-length price analysis
- A damages measurement of lost profits or reasonable royalties due to an alleged infringement
- The fairness analysis of a proposed sale, license, or other transfer transaction
- An exchange ratio analysis when intellectual properties are being transferred
- The assessment of the intellectual property useful economic life

Whether the assignment calls for the valuation of an intellectual property or whether the assignment calls for another type of financial or economic analysis, the scope of the engagement should always be clearly defined and agreed on by the analyst and the client.

The intellectual property value developed for a particular purpose often may be different than the same intellectual property value developed for another purpose. Depending on the specific purpose of the valuation, the client (or the client's legal counsel) will instruct the analyst regarding the appropriate standard (or definition) of value. In simple terms, the analysis standard of value answers the question: Value to whom?

The following list presents some typical alternative standards of value that may apply to an intellectual property valuation analysis:

- Fair value
- Fair market value
- Use value
- User value
- Owner value
- Investment value
- Acquisition value
- Collateral value
- Strategic value
- Intrinsic value

The analysis premise of value answers the question: How will the assumed transaction (between the parties specified in the standard of value) take place? Often, the client (or the client's legal counsel) will instruct the analyst regarding the appropriate premise of value to apply in the analysis. When there is no such client instruction, the analyst may select the appropriate premise of value based on his or her conclusion of the highest and best use ("HABU") of the subject intellectual property.

The following list presents some of the alternative premises of value that may apply in an intellectual property valuation analysis:

- Value in continued use
- Value in place (but not in current use)
- Value in exchange—on an orderly disposition basis
- Value in exchange—on an voluntary liquidation basis
- Value in exchange—on an involuntary liquidation basis

Depending on the purpose and objective of the valuation assignment, the analyst may conclude the subject intellectual property HABU to be with:

1. the current owner/operator,
2. a new owner/operator, or
3. a willing licensor/willing licensee.

The valuation date is a fundamental element of every valuation assignment. The client (or the client's counsel) will instruct the analyst regarding the appropriate valuation date. As with any intellectual property economic analysis, the valuation date can be any of the following:

- Historical
- Current
- Prospective

The analyst should have a clear understanding of the particular intellectual property subject to the valuation. The description of the intellectual property should be clear and sufficient to avoid any confusion about which intellectual property types—and which intellectual property rights—are included in—or excluded from—the valuation analysis.

The intellectual property description may refer to license or contract dates, registration or other intellectual property numbers, physical locations, descriptive listings, or any other designation that would enable the analyst (and any party who may rely on the valuation report or value conclusion) to identify the intellectual property.

To the extent possible, the description should include all associated intangible property. For example, the subject intellectual property may include the copyrights and trade secrets related to all internally developed computer software owned and operated at a professional services company, including its source code and all associated code listings, system documentation, and operator or user manuals.

The next element of the valuation engagement is the identification of the particular bundle of intellectual property legal rights that should be included in the valuation analysis.

The following list presents some of the various bundles of rights that may be included in the intellectual property valuation:

- Fee simple
- Term/reversion interest
- Licensor/licensee interest
- Sublicensee's interest
- Domestic/international interest
- Product line/industry interest
- Life/residual interest
- Use rights
- Development rights
- Commercialization rights

The analyst should also have a complete understanding of what party or parties will rely on the intellectual property valuation report. Any limitations on the distribution of the valuation analysis and/or the valuation report (to the extent a written report is prepared and delivered to the client) are typically described in the client engagement letter.

These distribution limitations are described again in the resulting valuation report. An intellectual property valuation prepared for one use and for one user may not be applicable to a different use and a different user.

The analyst also should have a clear understanding regarding the client's (or the client's legal counsel) expectations regarding the valuation report. For example, the analyst needs to know whether the client requires a valuation report or a summary report.

Likewise, the analyst should know whether the valuation report should meet any statutory, judicial, or administrative reporting requirements. An example of such a valuation report would be an expert report prepared in accordance with the Federal Rules of Evidence Rule 26.

## Summary and Conclusion

Valuation analysts apply generally accepted approaches and methods to value intellectual property. Damages analysts apply generally accepted approaches and methods to measure intellectual property damages. And, transfer price analysts apply generally accepted approaches and methods to determine an intellectual property arm's-length price.

This discussion summarized the conceptual foundations and the practical applications of the cost approach in the development of intellectual property valuation, damages, and transfer price analyses.

Additional discussions in this *Insights* issue consider the reporting of—and the analyst's defense of—the cost approach valuation, damages, or transfer price analysis.

And, additional discussions in this *Insights* issue consider the application of the cost approach to intellectual property analyses developed for specific purposes—such as for fair value measurements and financial accounting purposes.

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