

Valuation of Intellectual Property in the Marital Estate: Part I of II

ROBERT F. REILLY, CPA

The first part of this article summarizes the various types of intellectual property assets that may be encountered in a marital estate. It considers the reasons why a valuation analyst may be asked to value marital estate intellectual property, and, it describes the analyst's due diligence procedures related to the marital estate intellectual property valuation.

The second part of this discussion (which will appear in the next issue of the *American Journal of Family Law*) describes and illustrates the generally accepted intellectual property valuation approaches and methods. That discussion also summarizes the analyst's valuation synthesis and conclusion procedures.

TYPES OF INTELLECTUAL PROPERTY

Whether the valuation analysis relates to a marital estate or not, there are only four categories of intellectual property:

- Patents
- Trademarks
- Copyrights
- Trade secrets

These four types of intellectual property are one subset of the general category of property called intangible assets. Patents, trademarks, and copyrights are created under and protected by federal statutes. Trade secrets are created under and protected by state statutes. However, most states have either completely

adopted—or adopted the essence of—the Uniform Trade Secret Act within their state statutes.

For purposes of this article, the marital estate may be either the intellectual property owner (and, particularly, the licensor) or the intellectual property nonowner operator (the licensee). Therefore, the marital estate is sometimes referred to as “the owner/operator.”

Most states have adopted the Uniform Trade Secrets Act.

The marital estate could either own or operate the intellectual property directly or indirectly. In the direct case, one of the marital parties directly owns or licenses the intellectual property. An example would be a spouse inventor who owns or licenses a patent or a spouse who owns or licenses a copyright. In the indirect case, one of the marital parties owns some type of closely held business, and that family-owned business owns and operates (and derives value from) the intellectual property.

Associated or Contributory Intellectual Property

For purposes of this article, the four intellectual property categories may be expanded to include associated or contributory intangible assets.

Robert F. Reilly is a managing director in the Chicago office of Willamette Management Associates, a valuation consulting, economic analysis, and financial advisory services firm.

The *patents* category may include patent applications, the technology and designs encompassed in the patent, and the engineering drawings and other technical documentation that accompany the patent or patent application.

The *trademarks* category may include trademarks (both registered and unregistered), trade names, service marks, service names, trade dress, product labeling that includes trademarks, institutional advertising (including signage), and promotional materials that include trademarks.

The *copyrights* category may include both registered and unregistered copyrights on publications, manuscripts, white papers, musical compositions, plays, manuals, films, computer source code, blueprints, technical drawings, and other forms of documentation.

The same product can have a patent and a trademark.

The *trade secrets* category may include any information or procedures that the owner/operator keeps secret and that provides some economic benefit to the owner/operator. Such trade secrets include computer software source code, employee manuals and procedures, computer system user manuals and procedures, station or employee operating manuals and procedures, chemical formula, food and beverage recipes, product designs, engineering drawings and technical documentation, plant or process schematics, financial statements, employee files and records, customer files and records, vendor files and records, and contracts and agreements.

It is not uncommon for the marital estate to include two or more related intellectual properties. For example, the same product can have a utility patent and a design patent. The same product can have a patent and a trademark. The same software can hold a copyright and be a trade secret. The same procedure manuals can hold a copyright and be a trade secret. The same drawings and schematics can be included within a patent, have a copyright, and be a trade secret.

GENERAL REASONS TO VALUE INTELLECTUAL PROPERTY

Outside of the family law context, an analyst may be asked to value commercial intellectual property for the following general reasons:

- *Financial accounting*: valuations for fair value acquisition accounting and intangible asset periodic impairment testing
- *Income tax accounting*: valuations for a contribution from an owner to a company or of a distribution from a company to an owner, a charitable contribution, abandonment deduction, taxpayer solvency or insolvency analysis, or the purchase price allocation in a taxable acquisition
- *Property tax accounting*: valuations of intangible assets that are either subject to property tax or exempt from property tax
- *Bankruptcy*: valuations for post-bankruptcy fresh start accounting, determining the value of debt collateral, the reasonably equivalent value of assets transferred into or out of the bankruptcy estate, fairness of the price of a bankruptcy estate asset sale, and debtor solvency or insolvency analysis
- *Fairness of transaction price*: analyses of intellectual property transactions between any two arm's-length parties, between a parent corporation and a less-than-wholly-owned subsidiary, and between a for-profit entity and a not-for-profit entity
- *Forensic analysis*: intellectual property valuations or damages analyses, including breach of a development or commercialization contract, eminent domain and expropriation, infringement, tortious interference with a business opportunity, and various other tort claims

This list presents many (but not all) of the common transactional, notational, and controversy reasons to value an intellectual property and demonstrates that there are numerous reasons (unrelated to the marital estate) to value intellectual property.

The analyst who values marital estate intellectual property should be familiar with these various other reasons because parties to the family law dispute (and their legal counsel) may claim that the intellectual property valuation is some type of artificial litigation ploy. The fact is that intellectual property valuation is not the invention of one or more parties who are trying to gain some sort of an advantage in a family law conflict.

GENERALLY ACCEPTED VALUATION APPROACHES AND METHODS

All of the generally accepted intangible asset valuation approaches are applicable to intellectual property within a marital estate. This section introduces the cost approach, market approach, and income approach. A more complete discussion of intellectual property valuation approaches and methods is presented below.

Cost approach methods are particularly applicable to the contributory (or backroom) types of intellectual property. Market approach methods are particularly applicable to intellectual property that is or could be licensed. Income approach methods are particularly applicable to intellectual property that produces a measurable amount of operating income for the marital estate.

HABU issues arise when the marital estate has a patent or copyright of limited commercial use.

The *cost approach* is often applicable to the valuation of trade secret proprietary information and of copyrights on internal use software. For example, the cost approach may be used to value procedure manuals, training manuals, technical documentation and drawings, internal use training films, confidential books and records, confidential customer or supplier files, or the source code for internal use computer software. For these types of intellectual property assets, it may be difficult for the analyst to assemble comparable uncontrolled transaction (CUT) sale or license data or to identify asset-specific income measures.

The *market approach* is often applicable to the valuation of patents, trademarks, and certain copyrights. For such intellectual property, it is common for the marital estate to license the use of the intellectual property to a third-party asset operator. The various forms of royalty payments from the licensee to the licensor (*e.g.*, royalty as a percent of revenue, as a percent of income, or on a per-unit basis) may be used to estimate the intellectual property value.

The *income approach* is often applicable to the valuation of patented or unpatented (trade secret) processes or technologies. The income approach is also applicable to the valuation of certain trademarks and copyrights. For example, it may be applicable if the patented product or process (or

the trade secret product formulation in process) allows the owner to generate increased revenue or experience decreased costs. This income measure may occur when the owner/operator experiences increased unit sales or increased unit selling prices due to the proprietary feature. Alternatively, it may occur if the owner/operator experiences decreased operating expenses or decreased other expenses due to a property process. The income approach is often used in the valuation of copyrights related to books, plays, musical compositions, or films and film libraries because the analyst can often identify a measurable stream of income associated with the commercialization of the copyrighted work.

VALUATION OF THE INTELLECTUAL PROPERTY IN A MARITAL ESTATE

The following discussion summarizes several reasons why an analyst may be asked to value intellectual property in the marital estate.

Reason 1: Intellectual Property as a Nonmarital Asset

Some jurisdictions consider property that one spouse brings into a marriage to be nonmarital property. In such an instance, the analyst may be asked to value the intellectual property that was owned by one spouse as of the marriage date. The analyst may also be asked to value that separate (nonmarital) intellectual property as of a current (say, separation or dissolution) date. Some jurisdictions consider the appreciation in the value of such an intellectual property to be a nonmarital asset.

Reason 2: Intellectual Property as a Marital Asset

When the intellectual property was developed or purchased during the marriage, it is usually a marital asset. The analyst may be asked to value an intellectual property (or a portfolio of intellectual property assets) as of a current (*e.g.*, separation or dissolution) date. The appropriate standard of value would be jurisdiction-specific. The value of such a marital estate intellectual property would be subject to distribution upon divorce. Although the statutory standard of value may vary by jurisdiction, many jurisdictions consider a market-derived standard of value to be appropriate.

Reason 3: Intellectual Property Owned or Operated in a Family Business

Intellectual property assets are often an important value driver in the closely held business that is owned by the marital estate. In such an instance, the business ownership interest is the marital asset. The analyst often applies the income approach or market approach business valuation methods to value the business ownership interest. However, the asset-based approach is also a generally accepted business valuation approach. In particular, the asset accumulation method (of the asset-based approach) may be used to identify and value any underutilized intellectual property that is owned or operated by the family-owned business.

Reason 4: Highest and Best Use Intellectual Property Issues

All assets of the marital estate are typically valued at their highest and best use (HABU). This statement is true of marital estate intellectual property—whether the intellectual property is owned directly by the marital estate or indirectly through a business ownership interest. HABU issues may arise with regard to underutilized (or undercommercialized) intellectual property or when the marital estate owns a patent or copyright that is in limited commercial use. For example, the intellectual property may be used by one company (*i.e.*, the family business), in one product and in one geographic territory. However, the intellectual property HABU may be for numerous licenses to several operator/licensees for use in multiple products across multiple geographic territories.

The same HABU issue holds for the intellectual property owned by the family business. The marital estate trademark, technology, or software may be used exclusively by that family business; however, the HABU of such intellectual property assets may be to use them in the family business *and* to license them for noncompetitive uses to various licensees. Whether the intellectual property is owned directly or indirectly by the marital estate, the analyst should consider the HABU of all intellectual property.

Reason 5: Intellectual Property in the Family Business Property as a Nonmarital Asset

An analyst often has to value a family business interest as part of the marital estate, and the analyst often has to consider the entity's intellectual

property in the valuation of that family business. The analyst may encounter the situation in which the family business is started after the marriage and is, therefore, a marital asset. However, the intellectual property used in the business was created before the marriage and may be a nonmarital asset.

In this case, the intellectual property was contributed to the family business after the marriage. For example, let's assume that an inventor spouse creates a proprietary product formula or computer software before the marriage. The married couple then starts a family business. The inventor spouse contributes his or her intellectual property to the start-up company. The start-up company flourishes during the term of the marriage. The analyst may be asked to value that portion of the family business value that is a non-marital asset—*i.e.*, that is related to the value contribution of the non-marital intellectual property.

Reason 6: Intellectual Property and Supernormal Business Appreciation

Some jurisdictions treat any supernormal (above the normal expected) appreciation in the value of the family business to be a nonmarital asset. This situation may occur when the subject business interest was owned by one spouse before the marriage. The normal level of business appreciation during the marriage term is usually considered to be a marital asset. In some jurisdictions, any supernormal amount of business value appreciation during the marriage term may be considered a non-marital asset. This situation may occur if the supernormal business value appreciation is due to the extraordinary efforts or talents of the spouse who owned the business interest prior to the marriage.

This nonmarital asset issue may also occur when one spouse owned an intellectual property prior to the marriage. If the extraordinary business value appreciation is due to the entity's use of the non-marital intellectual property, then the extraordinary (above normal) amount of business value appreciation may be considered a non-marital asset.

Reason 7: Intellectual Property as an Income-Producing Asset

The analyst may be asked to analyze the income-producing capacity of the marital estate intellectual property. This income capacity analysis may include both

- (1) the operating and license income currently generated by the marital estate intellectual property, and
- (2) any additional operating and license income that the marital estate intellectual property could generate at its HABU.

The purpose of this type of income capacity analysis is to prove (or disprove) that the working spouse will have sufficient cash (from the expected intellectual property income) to pay for alimony, child support, or other payments to the nonworking spouse.

Reason 8: Intellectual Property Contract Rights in the Family Law Settlement

It is often difficult to distribute the marital estate ownership interest in the family business, particularly when there is one working spouse and one nonworking spouse. In such an instance, the working spouse may not want the nonworking spouse to own (and control) 50 percent of the equity in the family business. Nonetheless, as part of the marital assets distribution, the nonworking spouse may be entitled to 50 percent of the value of the family business. In addition, the nonworking spouse may not trust the working spouse to manage the value (or distribute the income) of the family business.

In order to avoid distributing the actual equity shares of the family business, a settlement agreement may be drafted to so that the nonworking spouse receives contractual income interests in the business entity's intellectual property. Effectively, the marital dissolution settlement agreement becomes an intellectual property license. The present value of the expected license income should equal the value of the family business equity interest due to the nonworking spouse. With such an agreement, the working spouse retains control of the family business, and the nonworking spouse receives a valuable intangible asset and a fairly predictable license income stream.

The analyst may be asked to value the intellectual property and to structure the license agreement terms (including the intellectual property license royalty rate).

TYPICAL DUE DILIGENCE CONSIDERATIONS

Whether the intellectual property is owned by a marital estate or not, the analyst should understand

the intellectual property attributes. The analyst may consider the intellectual property attributes through the following due diligence questions:

- What are the property rights related to the intellectual property? What are the functional attributes of the intellectual property?
- What are the operational or economic benefits of the intellectual property to its current owner/operator? Will those operational or economic benefits be any different if the intellectual property is in the hands of a third-party owner/operator?
- What is the current utility of the intellectual property? How will this utility change in response to changes in the relevant market conditions? How will this utility change over time? What industry, competitive, economic, or technological factor will cause the intellectual property utility to change over time?
- Is the intellectual property typically owned or operated as a stand-alone asset? Or is the intellectual property typically owned or operated as (1) part of a bundle with other tangible assets or intangible assets or (2) part of a going-concern business entity?
- Does the intellectual property utility (however measured) depend on the operation of tangible assets or other intangible assets or the operation of a business entity?
- What is the intellectual property HABU?
- How does the intellectual property affect the income of the owner/operator? This inquiry may include consideration of all aspects of the owner/operator's revenue, expense, and investments.
- How does the intellectual property affect the risk (both operational risk and financial risk) of the owner/operator?
- How does the intellectual property affect the competitive strengths, weaknesses, opportunities, and threats of the owner/operator?

Table 1
Attributes that Influence Marital Estate Intellectual Property Value

Item	Attribute	Influence on Value	
		Positive	Negative
1	Age—absolute	Newly created, state-of-the-art intellectual property	Long-established, dated intellectual property
2	Age—relative	Newer than the competing intellectual property	Older than the competing intellectual property
3	Use—consistency	Intellectual property that is proven or used consistently on products and services	Intellectual property that is unproven or used inconsistently on products and services
4	Use—specificity	Intellectual property that can be used on a broad range of products and services	Intellectual property that can be used only on a narrow range of products and services
5	Use—industry	Intellectual property that can be used in a wide range of industries	Intellectual property that can be used only in a narrow range of industries
6	Potential for expansion	Unrestricted ability to use the intellectual property on new or different products and services	Restricted ability to use the intellectual property on new or different products and services
7	Potential for exploitation	Unrestricted ability to license the intellectual property into new industries and uses	Restricted ability to license the intellectual property into new industries and uses
8	Proven use	Intellectual property has proven application	Intellectual property does not have proven application
9	Proven exploitation	Intellectual property has been commercially licensed	Intellectual property has not been commercially licensed
10	Profitability—absolute	Profit margins or investment returns on related products and services higher than the industry average	Profit margins or investment returns on related products and services lower than the industry average
11	Profitability—relative	Profit margins or investment returns on related products and services higher than the competing intellectual property	Profit margins or investment returns on related products and services lower than the competing intellectual property
12	Expense of continued development	Low cost to maintain the intellectual property as state-of-the-art	High cost to maintain the intellectual property as state-of-the-art
13	Expense of commercialization	Low cost of bringing the intellectual property to commercial exploitation	High cost of bringing the intellectual property to commercial exploitation
14	Means of commercialization	Numerous means available to commercialize the intellectual property	Few means available to commercialize the intellectual property
15	Market share—absolute	Products and services using the intellectual property have high market share	Products and services using the intellectual property have low market share
16	Market share—relative	Products and services using the intellectual property have higher market share than competing products and services	Products and services using the intellectual property have lower market share than competing products and services
17	Market potential—absolute	Products and services using the intellectual property are in an expanding market	Products and services using the intellectual property are in a contracting market
18	Market potential—relative	Market for products and services using the intellectual property are expanding faster than the competing intellectual property	Market for products and services using the intellectual property are expanding slower than the competing intellectual property
19	Competition	Little or no competition for the intellectual property	Considerable established competition for the intellectual property
20	Perceived demand	Perceived currently unfilled need for the intellectual property	Little or no perceived need for the intellectual property

- Where does the intellectual property fall within its own life cycle, the overall life cycle of the owner/operator, the life cycle of the owner/operator's industry, and the life cycle of both competing intellectual property and substitute intellectual property?

These inquiries are only a representative list of due diligence considerations. However, this due diligence provides a starting point to understand the use and function of the marital estate intellectual property and the attributes that create intellectual property value.

INTELLECTUAL PROPERTY VALUE ATTRIBUTES

Numerous factors may affect the intellectual property value. Industry, product, and service considerations provide a wide range of positive and negative influences on intellectual property value. To the extent possible, the analyst qualitatively and quantitatively considers each of these factors.

Table 1 presents some of the attributes that the analyst may consider; and indicates how these

attributes may influence the intellectual property value.

These intellectual property due diligence considerations can be either quantitative or qualitative. They may be either separately documented in the valuation work papers or performed as one component of the valuation. These considerations allow the analyst to assess the influence of these factors, either positive or negative, on the marital estate intellectual property value.

CONCLUSION

This article explained the types of intellectual property that may be included in the marital estate and the various reasons to value that intellectual property. It described the analyst's due diligence procedures before performing the quantitative valuation analysis, and it summarized the generally accepted intellectual property valuation approaches. The second half of this discussion (which will appear in the next issue of the *American Journal of Family Law*) will further describe—and illustrate—the generally accepted intellectual property valuation approaches and methods.