

Patent Valuation Standards In The United States Applying Existing Standards And Terminology To A Developing Field Of Practice

By Glenn Perdue

I. Introduction

Intellectual property continues to develop as an asset class worthy of ever increasing levels of investment. The last two years have seen some of the biggest patent-related transactions ever with Nortel's patent portfolio being purchased out of bankruptcy for \$4.5 billion; Microsoft's acquisition of 800 AOL patents for more than \$1 billion; and Google's acquisition of Motorola Mobility—and its expansive patent portfolio - for \$12.5 billion. Yet beyond these headline-grabbing deals, patents are being bought, sold, licensed, financed and infringed every day. Increasingly, we must reasonably estimate and account for the value of patents in business.

When it becomes necessary to estimate and account for the value of a certain type of asset on a recurring basis, standard approaches, terminology, and conceptual models tend to emerge. The use of such standards enables greater consistency of approach, comparability of results, and efficiency in practice.

In the 1920's the U.S. Government compensated distillers for losses when they were put out of business by prohibition. While some distillers earned profits that provided fair returns on fixed assets, others earned higher levels of profits. The government realized that it needed to compensate distillers for both tangible assets and the additional value that existed due to elevated levels of earnings enjoyed by some. The excess earnings method was used as a standard approach to address this need and was codified in an IRS appeals and review memorandum. The value derived for a distiller's "excess earnings" provided a collective value for intangible assets referred to as goodwill.¹ The development and use of the excess earnings method by the U.S. Government during prohibition provides an early example of intangible asset valuation standard at work.

Real estate may provide the richest and most accessible examples of valuation standards. Real estate appraisers use standard market, income, and cost-based approaches to value property in conjunction with

standard terminology and conceptual models in an attempt to provide greater consistency, comparability and reliability.

In considering standards relevant to patent valuation, we can look to existing standards, particularly within the business valuation domain. Some of these standards address intangibles directly. Given the rich body of existing work that extends back nearly one-hundred years, intellectual property professionals need not re-invent the valuation standards wheel.

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For purposes of this article, standards are viewed broadly to include certain legal, regulatory, and professional definitions and requirements. Furthermore, the idea of "accepted practice" may also be appropriate to consider in a discussion of standards. While certain explicit standards may be clearly codified in written form, accepted practice may be more implicit in nature yet may provide the basis for standards in some situations.

This paper focuses specifically upon patents. However, much of the discussion herein applies to trademarks, copyrights, trade secrets, and other types of intangible assets.

II. Valuation Provider Standards

One factor that may dictate applicable standards is the valuation credential(s) held by the valuator performing the valuation. The three most widely-recognized business and intangible asset credentialing providers in the U.S. are:²

AICPA: The American Institute of Certified Public Accountants (AICPA) confers the ABV (Accredited in Business Valuation) credential to CPAs that qualify.

2. While the CLP (Certified Licensing Professional) credential is widely recognized within the licensing profession, it is not a valuation credential per se. However, some holders of the CLP gained the credential due in some part to their IP valuation experience. In addition, we should note that at least one independent organization, The Business Development Academy, offers a patent valuation designation program but, at the time of this writing, did not present any information related to standards on its website.

1. David Laro and Shannon Pratt, *Business Valuation and Federal Taxes: Procedure, Law, and Perspective* (2nd edition, page 244, John Wiley & Sons, Inc. 2011).

AICPA members are governed by the AICPA's Statement on Standards for Valuation Services (SSVS) which begins as follows in the Introduction and Scope section:³

This statement establishes standards for AICPA members who are engaged to, or, as a part of another engagement, estimate the value of a business, business ownership interest, security, or intangible asset.

ASA: The American Society of Appraisers confers the AM (Accredited Member), ASA (Accredited Senior Appraiser), and FASA (Fellow of American Society of Appraisers) designations. The ASA is an umbrella organization that includes art appraisers, real estate appraisers, and other sub-specialists. ASA appraisers that focus on business valuations must follow the ASA's business valuation standards which state:⁴

These Standards... provide additional requirements specifically applicable to the valuation of businesses, business ownership interests, securities and intangible assets.

NACVA: The National Association of Certified Valuation Analysts (NACVA) is a membership organization comprised of accounting and finance professionals. NACVA confers the CVA (Certified Valuation Analyst) designation to qualified members. NACVA's Professional Standards state the following:⁵

These Standards are applicable when valuing a business, business ownership interest, security, or intangible asset.

Each organization noted above specifically identifies intangible assets as a part of their professional standards. These three organizations, in conjunction with the Canadian Institute of Chartered Business Valuation Analysts and The Institute of Business Appraisers,⁶ jointly agreed upon definitions for over 100 valuation terms as published in the *International Glossary of Business Valuation Terms*.⁷

Valuation standards promulgated through the

3. American Institute of Certified Public Accounts, *Statement on Standards for Valuation Services* (Introduction and Scope Section page 7, copyright 2007).

4. American Society of Appraisers, *ASA Business Valuation Standards* (General Preamble page 4, copyright 2009).

5. National Association of Certified Valuation Analysts, Professional Standards (Scope of Services Section page 5, applicable as of 6/1/2011). As of April 1, 2013 the previously existing Accredited Valuation Analyst (AVA) designation was merged with the CVA designation.

6. In July 2012 the Institute of Business Appraisers merged into NACVA.

7. http://www.nacva.com/association/a_bv_terms.asp —accessed January 15, 2013.

AICPA (SSVS), ASA, and NACVA generally consider:

- Ethical requirements for members providing valuations;
- Requirements for defining the scope of an engagement;
- Development standards that identify information and analysis to be considered;
- Reporting standards that identify information to be included in a report.

These three organizations identify differing types of opinions that may be expressed in various forms which can be summarized as follows:

Conclusion of Value: This represents the highest level opinion by a valuation analyst in terms of considerations and analytical rigor. A conclusion of value is typically expressed through a written report which may be provided in detail or summary form.

Calculation of Value: Calculated values are based upon a limited scope engagement in which limited data and calculation methods are considered. Calculated values are typically presented in summary form through a report, presentation, or letter, but may also be expressed orally.

Litigation Engagements: The AICPA, ASA, and NACVA all provide litigation engagement exceptions. These exceptions recognize the unique nature of dispute-related engagements in which the retaining attorney may require case-specific analysis. These exceptions also recognize the fact that various jurisdictional rules may dictate reporting requirements. For instance, in federal courts, experts must adhere to reporting requirements of Rule 26(a)(2)(b) of the Federal Rules of Civil Procedure.

The issue of credentials and related standards becomes most relevant when an external valuation is provided and may be less relevant in cases of analysis generated for internal use. But of course, the use of broadly-accepted approaches, terminology, and conceptual models can be beneficial in any setting.

III. Valuation Purpose And Standards

Like other assets, patents may be valued for various reasons. The purpose of the valuation may dictate applicable standards beyond any provider-specific standards that may apply. The following summarizes some relevant standard-setting organizations and the types of valuations to which their standards may apply:

The Appraisal Foundation (AF): Born out of the Savings and Loan crisis of the early 1980s where unreliable real estate appraisals were considered part

of the problem, the AF was formed in 1987. While the genesis of the AF was related to real estate, the AF is responsible for the development of the Uniform Standards of Professional Appraisal Practice (USPAP) and other forms of guidance which apply to various appraisal disciplines beyond real estate, including the valuation of businesses and intangibles.⁸

Financial Accounting: The Financial Accounting Standards Board (FASB) is the primary purveyor of accounting standards in the United States. Previously, standards were referred to as a Financial Accounting Standard (FAS) but are now referred to as an Accounting Standard Codification (ASC).⁹ Standards relevant to accounting for patents can be found in ASC 350 (*Intangibles—Goodwill and Other*), ASC 805 (*Business Combinations*), and ASC 820 (*Fair Value Measurements and Disclosures*).¹⁰

ASC 350 provides guidance on the manner in which purchased intangibles are to be recorded at the time of acquisition (initial measurement) and later dates (subsequent measurement). The subsequent measurement of an intangible may result in an impairment adjustment where value is written-down or written-off completely. ASC 350 also provides guidance on determining the useful life of intangibles with finite lives, such as patents, for amortization purposes.

ASC 805 (previously known as FAS 141/141R) provides guidance on developing a purchase price allocation and the manner in which intangibles are to be identified and accounted for in mergers, acquisitions, and other transactions that result in a change of control.

ASC 820 (previously known as FAS 157) defines and provides guidance on “fair value.” This standard of value is used in accounting for business combinations and other purposes and is discussed further in the next section.

While this paper is focused on U.S. standards, it is relevant to mention international standards. The International Accounting Standards Boards (IASB) is the standard setting body responsible for the development and publication of the International Financial Reporting Standards (IFRS). IAS 38 relates to accounting for *Intangible Assets* and is comparable to ASC 350. IFRS 3/3R relates to Business Combinations and

is comparable to ASC 805. IFRS 13 relates to *Fair Value Measurements* and is comparable to ASC 820.¹¹

Taxation: It is generally accepted that valuations prepared for U.S. federal tax purposes and submitted to the Internal Revenue Service (IRS) should conform to USPAP standards. These valuations should provide a Conclusion of Value as expressed in a written report. Beyond the applicability of USPAP standards to valuations prepared for tax purposes, the IRS promulgates other standards. Within the valuation profession, the best-known IRS standard may be Revenue Ruling 59-60 which defines Fair Market Value.

Not surprisingly, accounting and tax-related valuation standards differ. For instance, unlike FASB distinctions regarding the indefinite or finite life of an intangible asset, patents are classified as Section 197 intangibles for tax purposes and thus have a 15-year life for amortization purposes if purchased from another party.

Another distinction between accounting and tax standards relevant to patents is the standard of value. While Fair Value is the predominant standard of value for accounting purposes, Fair Market Value is the standard for tax purposes. Both are discussed further in the Standards of Value section.

Beyond business combinations, there are other situations in which a tax-related patent valuation may be needed. For instance, if a patent is owned by an individual that dies, the patent would become an asset of the estate for which estate tax may be owed. In making this determination, it would be necessary to estimate the Fair Market Value of the patent and other assets of the estate. Similarly, if the owner of a patent assigned it to another party—for instance a family member—at no charge, the transaction might be deemed a taxable gift for which the Fair Market Value must be considered in assessing any possible gift tax liability.

U.S. companies with operations in multiple taxing jurisdictions must also be aware of IRS Section 482 requirements dealing with intercompany transfer pricing related to intangibles. Transfer prices are to meet the “Arm’s Length Standard” which should reflect the price (*i.e.*, amount or royalty rate) that would be paid if the parties were unrelated. This concept is explained as follows:¹²

8. www.appraisalfoundation.org—accessed January 16, 2013. The AF is recognized by the U.S. Congress as a source for appraisal standards.

9. This transition in FASB terminology occurred in July 2009.

10. www.fasb.org—Accessed January 16, 2013.

11. www.ifrs.org—Accessed January 16, 2013.

12. 26 CFR Section 1.482-1(b). Other countries have their own transfer pricing rules.

In determining the true taxable income of a controlled taxpayer, the standard to be applied in every case is that of a taxpayer dealing at arm's length with an uncontrolled taxpayer. A controlled transaction meets the arm's length standard if the results of the transaction are consistent with the results that would have been realized if uncontrolled taxpayers had engaged in the same transaction under the same circumstances.

Buying and Selling: This may be the most obvious reason to value a patent. In this setting a buyer and seller may perform valuation analysis to better define reasonable pricing levels and an acceptable range of negotiation. Provider-specific standards apply in this setting.

Investing and Financing: While the purpose of “buying and selling” identified above captures the idea of a transaction in which one party sells a patent to another party, Investing and Financing addresses the fact that patent transactions are often complex and may involve the aggregation of capital from multiple sources. Provider-specific standards apply in this setting.

Investors might reasonably want to understand the value of patents owned by the business or fund in which they have (or are considering) an ownership interest. Similarly, those providing debt financing for patent-related assets may want to better understand patent value before providing a loan to become more comfortable with the underlying collateral. More fundamentally, individuals or institutions considering pursuit of a patent may perform early valuation analysis to make a go/no-go decision on moving forward with investments in the patenting process. This type of analysis occurs regularly within university technology transfer groups. Provider-specific standards apply in these settings.

Managerial Planning: Business owners and managers may desire patent valuations for internal use to better understand sources of business value that exist due to patents or for the purpose of valuing non-core patents being considered for licensing or sale. Provider-specific standards apply in this setting.

Bankruptcy and Reorganization: Valuations of patents and other IP may be required in the context of bankruptcy and reorganization. The Bankruptcy Code and related case law in the U.S. present standards that are unique to this setting. For instance, as related to appropriate Standards of Value, terminology specific to this setting such as *Reasonably Equivalent Value* and *Present Fair Salable Value* are used in addition to terms such as *Fair Value*.

IV. Standard Of Value

The standard of value answers the question “value to whom?” The often paraphrased quote of Plato that “*Beauty lies in the eye of the beholder*” is applicable to patents as value is driven by the context of the user and use. With any given patent, a specific user may see great value while others may see much less value or none at all.

Fair Market Value: This is probably the most highly recognized standard of value and is generally interpreted to consider value to a dispassionate financial investor that is simply seeking a market rate of return as compensation for the risk associated with an investment. The *International Glossary of Business Valuation Terms* provides the following definition:

Fair Market Value—The price, expressed in terms of cash equivalents, at which property would change hands between a hypothetical willing and able buyer and a hypothetical willing and able seller, acting at arm's length in an open and unrestricted market, when neither is under compulsion to buy or sell and when both have reasonable knowledge of the relevant facts.

Fair Value: For purposes of patent valuation and accounting standards related to ASC 820, the applicable definition of fair value is:

Fair Value—The price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

Unlike Fair Market Value which considers value to hypothetical buyers and sellers, Fair Value considers value to “market participants,” which is generally interpreted to mean buyers within a common industry. The fair value standard goes further by emphasizing a focus on the “exit price”—the price at which the owner could reasonably expect to sell the asset to a market participant—in an “orderly transaction” in the “principal” or “most advantageous” market. Fair Value also considers asset value in the context of its “highest and best use,” a concept observed in real estate appraisals.

It should be noted that two general, but dissimilar, uses of the term Fair Value are used within the valuation profession. In addition to the accounting-related use discussed above, there are also judicial uses of the term. Beyond its use in federal bankruptcy proceedings as cited in the previous section, the term Fair Value is used in a state law setting in cases of shareholder dissent and oppression and in cases of divorce. In the context of business valuation in these settings, the term Fair Value often deals with the

proper application or non-application of discounts in determining the value of an owner's equity interest.

Investment Value: *The International Glossary of Business Valuation Terms* provides the following definition:

Investment Value—the value to a particular investor based on individual investment requirements and expectations.

In the world of patents, values we see reported in the press often reflect investment values. In the case of examples cited at the beginning of this paper, it is clear that specific buyers saw specific sources of value in the IP purchased. Investment Value is also referred to as synergistic value in that the value may reflect expectations of synergies due to increased revenue, decreased costs, or some other form of buyer-specific value. Investment Value may also reflect certain premiums paid to obtain controlling interests in the acquired company that owns the IP.

Another term observed in valuation literature is “intrinsic value.” This term is used in securities analysis and litigation settings in a manner that can imply various standards of value. Some uses of the term suggest value to an existing owner(s) based on continued ownership. Another valuation term that addresses a similar notion is “value to holder” which considers value from the perspective of an asset owner, not a potential buyer. While these concepts may consider value from the perspective of a particular party, they can go further by considering value under a condition of continued ownership. By placing this condition on what may seem like a standard of value, it also implies a premise of value. Terms like “intrinsic value” and “value to holder” may blur the line between these two important concepts of value.

V. Premise Of Value

While the standard of value answers the question “value to whom,” the premise of value answers the question “value under what condition.” At its most fundamental level, an asset owner may derive value by either selling (value in exchange) or holding (value to holder) the asset. When valuing a business or business interest, we are often seeking a value in exchange under a “going concern” premise, indicating that the business is expected to continue operating, or under the premise a “liquidation” in which operations have, or are expected to, cease. When valuing a patent, the premise of value may be:¹³

Value in continued use, as part of a going concern business enterprise: Under this premise, patent value is considered within the context of how the patent contributes to the value of the overall enterprise on a going-concern basis. Asset values tend to have the greatest value in this setting.

Value in place, but not in current use in the production of income: Under this premise, patent value is considered within the context of a mass assemblage of assets that previously constituted, or could constitute, the assets of a going-concern business. Examples of this premise include businesses that have been shut down due to legal violations, bankruptcy, or the death of an owner. Troubled banks that are shut down, taken over, and later sold by the FDIC provide an example of this situation. In this setting, assets tend to have greater value as part of the overall assemblage than they would on a piece meal basis.

Value in exchange, as part of an orderly disposition: Under this premise, patent value is considered on an individual asset basis, not as part of an assemblage or going concern. This premise further assumes that the patent is made available in an appropriate market for a reasonable period of time to allow for adequate exposure. An example of this premise might be a company that has identified certain non-core patents for sale that waits to allow for a reasonable period of market exposure to enable broad market awareness and allow time for initial due diligence among potential buyers. Under this premise, the owner is not in a hurry to sell and is willing to wait in an effort to get a good price.

Value in exchange, as part of a forced liquidation: Under this premise, patent value is again considered on an individual asset basis without an adequate period of time for exposure to enable an orderly disposition. Under this premise, the owner is in a hurry to sell and will likely realize a sub-optimal sales price as a result. This scenario is often referred to as a “distressed sale” or “fire sale.”

As a matter of practice, we know that many patents are often grouped together as part of a bundle for sale in recognition of their relatedness and improved value as a group. These bundles typically include patents that relate to similar scientific or technological areas and may originate from common inventors. Such groupings are small assemblages of assets. This type of grouping may exhibit hybrid premise characteristics.

VI. Royalty Determination

While a royalty rate is a key input in many income-based valuation exercises, it may also be the ultimate valuation answer being sought in the context of pat-

13. See Reilly and Schweighs, *Valuing Intangible Assets* (page 63, McGraw Hill 1999). This citation relates to the four items that follow.

ent licensing or transfer pricing. The determination of a royalty rate can include income, market, and cost-based analysis. Furthermore, the determination of a “reasonable royalty” is a key consideration in the determination of patent litigation damages. In the context of patents that are monetized through litigation or the threat of litigation, a reasonable royalty thus becomes a key component of patent value.

In *Georgia Pacific* the Court articulated 15 factors that provide a pervasive standard for the determination of a reasonable royalty in a litigation setting. However, given the underlying economic relevance of the factors, some are relevant to consider in a non-litigation setting. The Georgia Pacific factors provide a standard framework for determining a royalty rate where no pre-negotiated rate exists.¹⁴

In *Grain Processing* the Court articulated the economic logic associated with the consideration of non-infringing alternatives available to the infringer as a key consideration in determining a reasonable royalty.¹⁵ Between *Georgia Pacific*, *Grain Processing*, and their progeny, the Court has provided standard income, market, and cost-based factors to consider in determining a reasonable royalty for a patent as summarized below:

Income-Based Considerations include the revenues, cost savings, and related profits realized (or expected) from the patented product or service along with the portion thereof that can be reasonably attributed to the patent.

Market-Based Considerations include historical royalties paid to license the subject patent or similar patents held by the licensee and licensor. Beyond the subject patent and similar patents, royalty rates or profit splits generally observed within the relevant industry may also be considered. Due to challenges with comparability and availability, a valuator may also consider proxy rates from similar industries if rates for the subject industry are scarce.

Cost-Based Considerations include the cost associated with obtaining available alternatives or the cost associated with working around the patent in a non-infringing manner as considerations in the determination of a reasonable royalty.

VII. Valuation Methods

While plenty has been written in this publication and others on the topic of patent valuation methods,

14. *Georgia-Pacific Corp. v. United States Plywood Corp.*, 318 F.Supp 1116 (SDNY 1970).

15. *Grain Processing Corp. v. American-Maize Products*, 185 F.3d 1341 (CAFC 1999).

a quick recap of methods is helpful in this discussion to underscore issues relevant to standards.

Income-Based Approaches produce values based upon the expectation of future cash flows through revenue (royalty income method) or cost avoidance (relief from royalty method). The discounted cash flow (DCF) method provides the basic tool used in this type of analysis. While the discount rate may be the most apparent means by which the risk of not realizing expected future cash flows is considered in DCF analysis, patent valuation techniques have been adapted to consider uncertainty through probability adjustments. For instance, the risk of FDA approval for a drug can be considered discretely, by phase, in risk-adjusted net present value analysis (rNPV). And when high levels of outcome uncertainty exist, the probability-weighted expected return method (PWERM) may be used to specifically consider the probability associated with various performance scenarios.

To isolate patent value using an income-based approach, an analyst may use a market-based royalty rate or may estimate the portion of profits attributable to the patent using the profit-split method. The widely known 25% Rule provides a general rule of thumb for profit splits. While use of the 25% Rule in assessing a reasonable royalty for patent litigation purposes was rejected for use in federal courts in *Uniloc v. Microsoft*,¹⁶ use of this rule of thumb continues for non-litigation purposes.

Market-Based Approaches rely upon evidence associated with historical market activity. The consideration of market-based evidence in patent valuations is particularly evident in the use of historical royalty data—found in license agreements or elsewhere—for the subject patent, similar patents, or patents considered to provide a relevant proxy. However, the use of direct patent sale evidence as a basis for developing an indication of value for a subject patent is rare due to the general scarcity of comparable patent sale data.

Cost-Based Approaches in patent valuation typically consider the cost associated with acquiring or developing an acceptable alternative. The historical cost to acquire the patent may also be considered in some settings if the patent owner wants to recoup these costs as part of a transaction. This consideration can be observed in a university technology transfer setting where the costs to obtain the patent may

16. *Uniloc USA, Inc. v. Microsoft Corp.*, No. 2010-1035 (Fed. Cir. Jan. 4, 2011).

be requested as an up-front payment in a licensing negotiation.

Valuation Methods Based on Patent Quality have been created using proprietary algorithms that develop patent values based upon patent characteristics which allow the system to assess relative patent quality. The patent quality measure may then be analyzed in conjunction with market value evidence to develop an indication of value for the subject patent. For instance, a tool developed by IPX, Inc. determines patent quality for the subject patent based upon a proprietary algorithm that considers citations and other quantifiable criteria to develop a patent quality score. This score is then considered along with valuation data for relevant public companies to provide a “market opportunity value” range for the subject patent(s).¹⁷ The value range developed using these methods may reflect various standards of value. Given the use of market-based value evidence, such methods most resemble a market-based approach.

Other Patent-Specific Methods have been devel-

oped to address unique aspects of patent value. For instance, non-practicing entities use specific methods to determine the assertion or enforcement value of patents that may consider the likelihood of prevailing at trial and may even consider discrete probabilities associated with findings of validity, enforceability, and infringement. Other methods have been developed to specifically consider blocking value and cross-licensing value.

VIII. Conclusion

Those performing patent valuations can benefit from past work in business valuation, accounting, tax, and law. In all of these areas, great thought has been given to issues now faced in valuing patents that can and should be capitalized upon. This prior work provides us with a rich base of standards to apply in valuing patents. Of course, valuation nuances always exist with unique assets. But such nuances can be handled as exceptions while existing rules are incorporated as standards by those valuing patents. ■

17. Per discussions with Ed Powell, CEO of IPX, Inc. Also see IPX website at www.ipxco.com.