

VALUATION OF INTELLECTUAL PROPERTY: WHAT, WHY AND HOW

What is the Value of Intellectual Property?

Business Week's 2003 annual rankings of top brands finds Coca-Cola at the top once again - valued at US\$70.45 billion. The second- and third-placed brands are Microsoft at US\$65.17 billion and IBM at US\$51.71 billion. The Apple brand name, at number 50, is valued at US\$5.55 billion. These sums are not only huge on their own, but they often represent as much as 70 to 99 percent of the total market capitalization of the company as well.

In the last ten years, smart companies have effectively used the intellectual property (IP) system to create, extract or leverage the value of most of their intangible assets by developing and executing IP asset management strategies. However, the number of such companies worldwide is rather small. A study conducted in 1997 concluded that the majority of firms in the United Kingdom do not undertake a formal valuation of their IP assets.² Another study showed that even in the USA, 76 percent of the 226 Fortune 500 companies surveyed did not assign value to their intangible assets in their annual reports.³ Conventional wisdom tells us that small and medium-sized enterprises (SMEs) could only be worse off in this respect.

Why Undertake Valuation of IP Assets?

The valuation of any type of asset, including an IP asset, helps its owner to decide as to the most cost-effective way in which that asset may be used, protected, insured, sold, leveraged or exchanged in the market place. Most activities relating to planning, negotiating or managing business relationships or transactions require information on the value of the IP assets of a company. These activities include:

Licensing - Before a company makes an agreement to license IP (see WIPO Magazine May-June 2003), it must know as accurately as possible the true value of the IP assets involved in the arrangement. Without knowing the value of the IP assets being licensed, neither party can know if it has really entered into a 'win-win' deal in financial terms. A good IP valuation helps a prospective licensee to compare the financial terms of a proposed licensing deal offered by a particular technology supplier with those of alternative suppliers.

Mergers and Acquisitions - The increasing contribution of intangible assets, in particular IP assets, to the overall market value of enterprises has sharpened the focus on IP issues in merger and acquisition (M & A) transactions. In-depth knowledge of the relative importance of the IP assets of the enterprises

involved will contribute to the success or failure of the M&A. Therefore, each party submits to the other(s), after signing mutual confidentiality or non-disclosure agreement(s), an **IP due diligence report**, which essentially provides a detailed picture of IP assets of the party.

Cost Saving - Recognizing the importance of IP assets, many companies have embarked upon systematic identification and documentation of their IP assets. This process leads to follow-up measures, such as legally protecting these IP assets. Like any other asset, maintaining IP assets has costs and benefits. Maintenance of some types of IP assets could be prohibitively expensive, especially if those assets are not providing, and are not expected to provide, more benefit than the cost incurred on maintaining them for the remaining period of their legal or business life. IP valuation helps firms identify IP assets in their portfolio whose inherent value has diminished below a benchmark value. For IP assets used in the non-core business activities of an enterprise, or those whose strategic importance has decreased, IP valuation may provide enough information to do a cost-benefit analysis to decide whether to continue maintaining the asset, license it, or allow it to lapse.



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² Bosworth, Derek. L. March 2003, *The Importance of Trade Marks to Capital Raising and Financial Performance- Lessons for SMEs*

³ *ibid*

Donation of IP Assets - Some countries have tax benefits linked to donations to nonprofit institutions, such as universities, which allow enterprises to leverage their IP assets. While such donations would focus on IP assets that do not provide economic benefit to the enterprise, they are not valueless. In some cases, they may need further development to become commercially viable, while in other cases the donating enterprise may have reasons to believe that the non-

profit institution can make more effective use of the assets. A valuation of the donated IP asset would be needed to enable tax authorities to calculate the amount of tax reduction the donating enterprise should receive.

Sale or Purchase of IP Asset - As the IP assets of a company may be identified, segregated, and sometimes completely uncoupled from other assets, such IP assets can be sold/purchased independently of the business to which they are related. It would, therefore, be useful to objectively estimate a fair value of the IP asset to be sold/bought. IP valuation provides a good working estimate for the parties involved to make informed decisions.

Joint Venture or Strategic Alliance - IP valuation is equally important when two or more companies come together to establish joint ventures or enter into a strategic alliance. The valuation of IP assets enables the parties entering into these types of arrangements to know and appreciate the value of the other party/parties. IP valuation would also assist the parties to fairly determine the respective share of ownership of a new company if the alliance or joint venture leads to the formation of a new entity.

Litigation Support - The business world is witnessing an increase in IP infringement cases. Among other things, such cases seek to analyze the damage caused and estimate the value that the owner of the IP right should be paid. Knowledge of the value of an IP right that has been infringed may be crucial in influencing the IP owner's decision on the course of action to be taken. Valuation of IP assets may also be required to support litigation in other situations such

as bankruptcy, breach of contract, death of principal, divorce, and minority stockholder rights.

Collateralization and Securitization - Banks in some countries have started accepting IP assets as collateral for granting loans. IP ownership also plays a positive role in influencing the decision of a venture capitalist for investing in a start-up company. In such cases, a sound calculation of the value of IP assets is a prerequisite.

As the importance of IP assets is growing, newer ways are being found to profit from ownership of IP assets. Securitization is one of them. It refers to the pooling of revenue-generating assets, and issuing securities backed by them. Through the securitization of IP assets it is now possible to raise, in a few countries, a bank loan without losing control over the securitized assets and with more reasonable terms, including repayment over a longer period of time, than is possible by traditional methods. Of the reported securitizations of IP the major ones have been in the United States and were based on the future music royalty streams of a portfolio of songs of recording artists. David Bowie was the first; others include James Brown, Ashford & Simpson, and the Isley Brothers.

Corporate Valuation for Shareholders - As shareholders become increasingly aware of the contribution of IP assets to the market value of companies, they are beginning to take more interest in news about IP assets owned or licensed by their companies. Therefore, corporate managers are expected to inform shareholders of the value of IP assets of their companies and how they are leveraging or monetizing such assets.

How is IP Valuation Done?

The valuation of IP assets is possible only if such assets can be specifically identified and clearly segregated from other assets used in the business. Even so, IP assets are and will always remain hard to appraise – that may be why many consider IP valuation to be as much art as science. IP valuation is a conscious process aimed at determining the monetary value of underlying IP asset(s) and is based on existing methods used in the valuation of tangible property.

The **Income Approach** focuses on the consideration of the income-producing capability of the underlying IP asset and is suitable for the valuation of patents, trademarks and copyrights. It estimates the present value of a stream of revenue that would result from the use of the underlying IP asset during its **economic life**, which may differ from the duration of its IP protection. It is the most popular IP valuation method. It has two main variations:

- ▶ **i) Relief from Royalty Method**
If a company owns an IP asset, say a trademark, using this method it has to determine the royalty rate if it were to buy or license the trademark from someone else. Having so determined the royalty rate, usually based on “market” experience or through the use of rules of thumb in the relevant industry, the company proceeds to calculate the amount of money, in present value, that it was “relieved” from paying if it had

to buy or license the IP asset. Though this is arguably the most convenient method for establishing the market value of IP assets, it has its shortcomings, which includes not providing the full value of the IP asset especially when such an IP asset is not to be licensed exclusively to one party (but non-exclusively to many parties).

- ▶ **ii) Incremental Income Method**
This variant of the income approach has two sub-variants, the first is the discounted future incremental income approach/method. This requires forecasting year-by-year future streams of incremental income, resulting from the use of underlying IP assets, and then discounting those into present value. For example, this would mean segregating the additional gross income from increased sales revenue or savings from expense reductions in operations, as in the case of a trademark that allows a company to obtain higher sales prices for certain products or a manufacturing patent that reduces material usage, respectively. The second sub-variant is the capitalization of incremental income approach/method. This variant focuses on actual income generated through the use of the IP asset and uses such information as an indicator of future potential annual growth. The resulting figure is then divided by a “capitalization rate”.

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INTELLECTUAL PROPERTY VALUATION

The **Market Approach** is based on comparing the value of sales of earlier similar/comparable IP assets in the market. To make such comparisons, there must be an active public market, an exchange of comparable properties, and easy access to price information. Unlike the income approach, this method is seldom used in the valuation of IP primarily because there is rarely an active market in which relevant information is readily available. The approach has a second variant that uses a 'standard' or 'established' range of royalty rates in that sector of industry or business, which may be more readily available in the market. Such royalty rates may be obtained spontaneously or compiled over a number of years. Though seldom used, this approach may be useful, when relevant information is available, to check the accuracy of other approaches.

The **Cost Approach** seeks to establish the value of an IP asset by calculating the cost that a company would incur if it were to develop a similar asset either internally or acquire it externally. The cost may be related to reproduction (reinstatement) or replacement of the IP asset. There are many practical challenges in determining what costs to include or exclude. The cost approach provides a useful indicator especially in the case of IP assets whose future economic

benefit are not yet evident. Even so, as a stand-alone method, it is the least used of the three methods as cost and value are usually not the same. In most cases this method is considered suitable only as a supplement to the income approach (if the valuation is not for bookkeeping purposes only). A good reason not to rely solely on this approach is that the valuation so obtained generally bears no relation to the true, fair or real valuation of the asset being valued; that is, the historical cost of developing a specific IP asset or its reproduction/ replacement cost has generally no direct correlation with the future revenue potential of the IP asset.

New Valuation Approaches

Apart from these three main approaches, there is an emerging trend of treating IP assets, in particular patents, as **options** are treated in the capital markets. An option can generally be defined as a right, but not an obligation, to purchase or sell an underlying asset whose price is subject to some form of random variation at or before a specified time. The main reason for this new trend is that patents have more or less similar characteristics as options and hence the numerous efforts to develop options-based valuation approaches for patents. The application of option-pricing methods to real options involving innova-

tion, and by implication patents, is thus by no means a straightforward task.

Most of the existing IP valuation option-based methods are derived from the **Black-Scholes options-pricing model**. Many IP valuation service providers have proprietary options-based IP valuation methods. This indicates that the use of option-based methods is still evolving.

There are a number of basic and practical problems in applying the options-based approach, so many other valuation approaches are being examined in academic circles, such as 'stock market-based methods' and 'patent renewal data-based methods'. Until more accurate valuation methods emerge, it seems the income-based approach, with its variants, is likely to remain the mainstay of the art and science of valuation of IP assets. However, whenever feasible, more than one type of valuation approach should be employed to obtain more reliable and fair IP asset valuations.

For more information on various practical aspects of the IP system of interest to business and industry, please visit the website of the SMEs Division at http://www.wipo.int/sme/en/case_studies/index.htm.

The next article in the IP and Business series will explore franchising.

