

Intellectual Property Insights

THE IDENTIFICATION AND VALUATION OF INTELLECTUAL PROPERTY

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There are only four types of intellectual property: trademarks, patents, copyrights, and trade secrets. Each of these four types of intellectual property are legally created by and protected by a specific federal or state statute. Each of these intellectual property types also has a number of related general intangible assets. First, this discussion will focus on the procedures and factors that valuation analysts (and other financial economists) consider in the identification of intellectual property assets. Second, this discussion will focus on the generally accepted approaches and methods that valuation analysts (and other financial economists) use in the valuation of intellectual property assets.

INTRODUCTION

This discussion presents an overview of the special category of general intangible assets called intellectual property. Specifically, this discussion describes (1) which intangible assets qualify as intellectual property (IP) and (2) how the economic attributes of an intellectual property affect the value of the subject IP asset.

It is noteworthy that intellectual property is not an asset category that is separate from intangible assets. Rather, intellectual properties are a specially recognized subset of intangible assets. In other words, all intellectual properties are intangible assets, but not all intangible assets are intellectual properties.

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THE COMMERCIAL IMPORTANCE OF INTELLECTUAL PROPERTY

The IP category of intangible assets often constitutes a majority of a business entity's total intangible asset value (and a significant percentage of the entity's total business enterprise value). For this reason, IP deserves special consideration, separate from the consideration of general commercial intangible assets.

For example, let's consider the December 31, 2006, balance sheet of 3M Company ("3M"). 3M is a technology

products company with a global presence in several diverse industries. The 3M market value of invested capital (i.e., total business enterprise value) on December 31, 2006, was about \$60 billion.

As of that balance sheet date, the 3M total invested capital was comprised of:

1. net working capital (2.7 percent of total invested capital),
2. real estate and tangible personal property assets (9.7 percent of total invested capital),
3. other investment assets (1.9 percent of total invested capital), and
4. identified and unidentified intangible assets (85.7 percent of total invested capital).

Therefore, for 3M, a large majority of the company's total business enterprise value is made up of intangible assets. In the notes to the 3M annual report to shareholders, the asset category of intangible assets is described as patents, trade names, and other intangible assets acquired from an independent party.

As discussed below, patents and trade names are two common types of IP.¹ This example illustrates that intangible assets, including IP intangible assets, can comprise a significant component of a company's total business enterprise value.

An intellectual property manifests all of the identification-related and valuation-related economics attributes of other commercial intangible assets. That is, similar to the general commercial intangible assets discussed elsewhere in this *Insights* issue, there is a specific bundle of property rights associated with the existence of IP. However, unlike the general commercial intangible assets discussed elsewhere, IP assets enjoy special legal recognition and monopolistic protection.

IP is a legal creation designed to reward innovation with market exclusivity. In the United States, intellectual property is typically registered under, and is protected by, specific federal and state statutes. These statutes give the IP owner specific legal rights with regard to the commercial development and the economic exploitation of the subject IP. These statutes also give the intellectual property owner the right to prevent other parties from commercializing the subject IP.

The legal recognition and protection of IP that is found in the United States is also common among many other industrialized countries. According to the publication *Understanding Intellectual Property*, “Countries generally have laws to protect intellectual property for two main reasons. One is to give statutory expression to the moral and economic rights of creators in their creations and to the rights of the public in accessing those creations. The second is to promote creativity and the dissemination and application of its results, and to encourage fair trade, which would contribute to economic and social development.”²

Another important distinction between IP and general commercial intangible assets relates to the creation of the subject asset. General commercial intangible assets are typically created in the normal course of the subject business operations. These general intangible assets may include, for example, a supplier contract, a customer relationship, an assembled employee workforce, or a leasehold interest.

An intellectual property, on the other hand, is created by specific human intellectual capital activity. And, such creative activity can be attributed to the activity of specifically identified individuals. The allocation of a business entity’s total intangible value between IP assets and other general intangible assets depends on the specific attributes of the subject business enterprise.

TYPES OF INTELLECTUAL PROPERTY

There are four common types of intellectual property. These types, or categories, of IP are described as follows:

“The legal recognition and protection of IP that is found in the United States is also common among many other industrialized countries.”

“Similar valuation methods and economic analysis procedures typically apply to the IP in each of these four categories.”

1. **Trademarks and trade names.** A trademark is “any word, name, symbol, or device, or any combination thereof—(1) used by a person or (2) which a person has a bona fide intention to use in commerce and applies to register on the principal register established by this [Act], to identify and distinguish his or her goods, including a unique product, from those manufactured or sold by others and to indicate the source of the goods, even if that source is unknown.”³

This category of intellectual property also includes servicemarks, service names, and trade dress.

2. **Patents.** Patents may be obtained for “any new and useful process, new machine, manufacture or composition of matter, or any new or useful improvement thereof.” The claimed invention must also be new, useful, and nonobvious, in relation to the prior art.⁴

This category of intellectual property includes (1) the three kinds of patents, i.e., utility, design, and plant patents and (2) the associated patent applications.

3. **Copyrights.** Copyrights exist in “original works of authorship fixed in any tangible medium of expression, now known or later developed, from which they can be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device.” “Works of authorship” include literary works, musical works, dramatic works, pictorial works, and sound recordings.⁵

The intellectual property category of copyrighted material includes musical and literary compositions, other works of art, and copyrights in computer software and engineering drawings.

4. **Trade secrets or know-how.** A trade secret is “information, including a formula, pattern, compilation, program, device, method, technique, or process, that: (1) derives independent economic value, actual or potential, from not being generally known . . . and (2) is the subject of efforts that are reasonable under the circumstances to maintain its secrecy.”⁶

The intellectual property category of trade secrets includes recipes, formulas, processes, designs, diagrams, schematics, and memorandums.

The individual IP in each of these four categories is generally similar in nature, feature, method of creation, and legal protection. Similar valuation methods and economic analysis procedures typically apply to the IP in each of these four categories.

There are also legal distinctions between the various IP categories. For example, there are specific legal rights related to the ownership of patents and copyrights. In the United States, a patent gives the grantee the right to exclude others from practicing the invention for a period of about 20 years.

In the United States, a copyright gives the IP owner the exclusive right (1) to reproduce, distribute, and perform the copyrighted work and (2) to create derivative works for the life of the author plus 70 years following the author's death.

A description of the additional specific legal rights of each IP type is beyond the scope of this discussion. However, this distinction is important to make because it emphasizes the importance of distinguishing IP assets from the broader category of general commercial intangible assets.

There are also nonlegal reasons to categorize IP. As illustrated above, the IP assets in each category have specific attributes that distinguish them from the other categories of IP assets.

Corporate IP owners often describe their IP assets in their annual reports based on the categories presented above; the authoritative legal and economic literature and continuing education courses discuss IP assets by category; and, the generally accepted IP valuation methods are typically similar within each IP asset category.

REASONS TO PERFORM A VALUATION (OR OTHER ECONOMIC ANALYSIS) RELATED TO INTELLECTUAL PROPERTY

This section introduces the most common reasons why valuation analysts are routinely asked to prepare valuations (or other economic analyses) of IP.

As with other commercial intangible assets, there are numerous reasons why valuation analysts (and other financial economists) are asked to analyze the economics of IP. Generally, these various reasons may be aggregated into the following eight categories:

1. transaction pricing and structuring
2. intercompany use and ownership transfers
3. financial accounting and reporting
4. taxation planning and compliance
5. financing collateralization and securitization

6. bankruptcy and reorganization
7. litigation claims and dispute resolution
8. management information and strategic planning

The above list presents a sample of the reasons why valuation analysts are routinely called on to perform independent valuations of client IP. Within this general list, there are numerous other individual reasons to analyze IP.

An exhaustive list of the reasons why valuation analysts are asked to analyze IP is beyond the scope of this discussion. However, the above list illustrates that there are numerous categories of client reasons why analysts are retained to analyze the economics of IP.

In addition to the various reasons to analyze IP, the parties that rely on the independent IP valuations can also vary.

For example, the following types of parties routinely rely on intellectual property valuations: IP inventors, IP licensors and licensees, IP buyers and sellers, IP commercialization joint venture participants, IP development or exploitation contract participants, financial institutions and financial intermediaries, financial accountants and auditors, government and regulatory agencies, Federal and state taxing authorities, capital markets investors, and judges and other judicial finders of fact.

Earlier in this discussion, we noted that IP assets have a legal existence. There is also a substantial economic existence for IP assets. Of course, if the value of IP assets was inconsequential, then the marketplace would not require such frequent valuations and/or economic analyses of IP assets.

The next section further discusses the valuation of IP assets. A subsequent section discusses the generally accepted approaches and methods commonly used to value IP assets.

HOW INTELLECTUAL PROPERTY ATTRIBUTES AFFECT INTELLECTUAL PROPERTY VALUE

It is important to distinguish between IP and general commercial intangible assets. This is because the specific economic and other attributes of IP affect the value of the IP intangible assets. This discussion will describe how the specific economic attributes of IP affect the value of the subject IP asset.

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A subject IP asset will possess all of the economic attributes that are common to general commercial intangible assets. In addition, the subject IP asset will possess the additional economic attributes that are mentioned in this discussion.

The legal attributes of IP can affect the value of IP in numerous ways, depending on the purpose and objective of the particular valuation engagement. For purposes of this discussion, we will focus on six general factors related to IP that can affect the IP valuation.

These six general factors are:

1. the legal life of the IP asset,
2. the opportunity to commercialize the IP asset,
3. the amount and quantity of market data regarding IP asset transactions,
4. the generally greater royalty rates earned on IP assets compared to other commercial intangible assets,
5. the quantity of judicial precedent relating to IP assets, and
6. the passive value of the IP asset.

First, most intellectual properties have a specified legal life. This legal life measurement is an integral component of the subject IP economic analysis. This is because the legal life may influence the valuation analyst's estimation of the remaining useful life (RUL) of the subject IP.

The IP RUL estimation will influence (1) the particular valuation methods that the valuation analyst uses to analyze the subject IP and (2) the type and amount of data and information required for the IP valuation analysis.

Second, because of the special legal recognition and protection afforded to IP, IP owners have more commercialization opportunities available. This is particularly true compared to the owners of general commercial intangible assets.

For example, IP owners often enter into license, joint venture, or other exploitation and development agreements. These agreements allow the IP owners to enjoy the economic benefits of commercializing the subject IP separate and apart from their other business interests.

External commercialization opportunities can include licensing the use of and/or the development rights for the subject IP:

1. through geographic expansion—into new territories,
2. through industry expansion—into new industries, and/or

3. through product expansion—into new products.

In other words, the owner and the operator of an IP can be (and often are) two different parties.

These external commercialization opportunities are typically not available to the owners of general commercial intangible assets. For example, the owners of a favorable supplier contract, an ongoing customer relationship, or a trained and assembled workforce generally may derive the economic benefits from these intangible assets by commercializing them only within their own business operations.

In other words, the owner and the operator of a general commercial intangible asset are typically the same party.

Third, there are more transactional data available for valuation or other economic analysis with respect to intellectual properties (compared with other commercial intangible assets). That is, there are more data available with regard to the sale,

license, or other external commercialization of IP. This is because there are more reported IP sale/license transactions.

There are more reported sale or license transactions because IP owners are more confident about entering into external commercialization transactions. This is because parties to a transaction know that their legal and economic interests are more likely to be protected by the laws associated with their particular IP.

Fourth, an IP generally enjoys higher royalty rates and higher market value pricing multiples than do general commercial intangible assets. In other words, as a general observation, an IP will trade (i.e., be licensed or sold) at higher prices than other commercial intangible assets trade at. This is because IP buyers and

licensees are willing to pay more for an IP due to the protection afforded to them by IP laws.

Intellectual property laws reduce the risk associated with IP commercial transactions. As a result of this reduced risk, IP buyers and licensees generally are willing to pay more to enter into such transactions.

Fifth, there is substantially more judicial precedent regarding IP than there is regarding general commercial intangible assets. This judicial precedent factor itself has three implications:

1. There is greater judicially determined definition of certain IP than of general commercial intangible assets. For example, due to infringement and other litigation, courts have defined to some extent what a trade name is

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and what a trade secret is. Valuation analysts can generally rely upon these definitions in the identification and valuation of IP.

There is much less published precedent with regard to general commercial intangible assets such as an optimal distribution system or intangible value in the nature of goodwill. Therefore, there is somewhat less definition (at least, judicial definition) as to what constitutes these general commercial intangible assets.

2. With respect to certain IP, there have been more judicial decisions (a) with regard to appropriate (and inappropriate) valuation methodology, (b) with regard to reasonable ranges of royalty rates, and (c) with regard to economic damages analysis methods and amounts.

Again, judicial precedent may provide valuable guidance to the valuation analyst. This is not to suggest that valuation analysts should naively apply valuation pricing multiples or royalty rates in a specific analysis just because they are published in a judicial decision.

Obviously, such pricing multiples and royalty rates are only appropriate given the unique facts and circumstances of the specific court case. Nonetheless, a review of published precedent may provide the valuation analyst with an indication of a reasonable range of pricing multiples, royalty rates, damages-related lost profit margins, and so forth.

3. Commercial participants (that is, buyers, sellers, licensors, licensees) in the IP secondary market will be generally aware of the amount of judicial precedent. This judicial precedent will inform market participants that federal and state laws exist and that the courts recognize and protect various types of IP.

This level of judicial awareness and protection may motivate market participants to enter into more market transactions. This is because market participants may consider the IP market to be relatively safe and protected.

Sixth, it is noteworthy that these IP economic attributes can have a positive effect on both the active value and the passive value of the subject IP. Active value is generated when an IP asset is used proactively (that is, to increase the IP owner/operator price levels, market share, or profits). Passive value is generated when an IP asset is used defensively (that is, to protect the IP owner/operator price levels, market share, or profits).

In other words, both active value and passive value may be positively influenced by the legal attributes and the economic attributes of the subject IP.

The value of IP assets may be observed by examining how the marketplace treats the specific economic attributes of the subject IP asset. The six factors discussed above encompass some of the more important market-specific and asset-specific factors that affect the value of an IP asset.

“ . . . it is noteworthy that these IP economic attributes can have a positive effect on both the active value and the passive value of the subject IP.”

SUMMARY AND CONCLUSION

This discussion (1) described the specialized classification of intangible assets called IP, (2) summarized the specific legal and economic attributes that distinguish IP from general commercial intangible assets, and (3) described how these specific legal and economic attributes can affect the IP valuation.

As indicated in this discussion, IP assets possess several important economic attributes (many of which are legally protected) that make them distinct from general commercial intangible assets. This distinction exists from both (1) an intangible asset valuation/economic analysis perspective and (2) an intangible asset identification and classification perspective.

In addition, this discussion illustrated that IP assets can represent a significant portion of a business entity's total intangible asset value (and of a business entity's total business enterprise value).

Notes:

1. The specific allocation of intangible asset value between IP and other commercial intangible assets is not available for 3M.
2. *Understanding Industrial Property*, World Intellectual Property Organization, www.wipo.int.
3. Melvin Simensky and Lanning Bryer. *The New Role of Intellectual Property in Commercial Transactions*. (New York: John Wiley & Sons, 1994).
4. Ibid.
5. Ibid.
6. Ibid.

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