Common Errors Committed When Valuing Patents – Part 1

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Introduction

Over time, more organizations have recognized the importance of patents as contributors to shareholder value. The "patent wars" in the telecommunications industry's large patent-centric transactions such as Google's purchase of Motorola Mobility, and the increasing influence of non-practicing entities are all well-publicized patent issues covered by the mainstream media. As a result, patent-focused companies are spending more time and resources on creating and acquiring, managing and protecting, and extracting value from patents. As more companies focus on patents, they are finding many reasons to understand and determine the value of patents, including:

1. To support patent transactions such as buying, selling, auctions, licensing-in, licensing-out, and cross-licensing
2. To support and assess collaborations such as joint ventures, co-development agreements, supply agreements, etc. related to which patents are contributed or generated
3. To facilitate certain tax strategies, particularly those related to transfer pricing and intellectual property or patent holding companies
4. To make strategic decisions related to various management issues such as whether to "make or buy" technology as part of the research and development process, whether the investment in legal protections should be pursued, whether certain assets should be actively maintained or allowed to expire, etc.
5. In the context of litigation
6. To generate financing using patents as collateral or to attract capital from third-party investors such as private equity and venture capital firms
7. For financial reporting purposes
8. As part of bankruptcy proceedings
9. For certain regulatory purposes

A primary issue for many organizations that are attempting to value their patents is that they do not have personnel with the right skill sets, training, resources, tools, and expertise to do it well. However, it is neither practical nor financially feasible to hire third-party valuation experts for all of a company's patent valuation needs. Consequently, this article is meant to assist those who are attempting to value patents without the assistance of a third-party expert by identifying some of the more common errors that are made when valuing patents. Being aware of common errors is likely to assist valuators in increasing the quality of their valuations and to improve the reliability of their results.

Common Error: Due Diligence is Incomplete

The strength of any patent valuation is dependent upon the amount and quality of due diligence that is performed when gathering information to inform the valuation. Due diligence for patent valuations can be organized into three different categories: legal, technical, and business/financial due diligence. Illustrative questions that typically are helpful, or necessary, prior to performing a patent valuation include, but are not necessarily limited to:

Legal

- What is the scope and coverage of the patent claims?
- How did the claims change from the original patent application to the ultimate granted patent?
- What is the anticipated patent grant date for current, relevant applications?
- Are there any limitations or freedom-to-operate issues associated with the technology due to government regulations, other license agreements, etc.?
- Do any "chain of title" issues exist?
- Have maintenance fees been paid?
- What is the remaining legal useful life of the patent protections?
- Is the patented technology known or suspected to be infringed?

Technical

- What are the basic problems/challenges addressed by the patented technology?
- What technologies are considered prior art or non-infringing alternatives to the patented technology?
- Does the patented technology require access to "other" patented technology and who owns that "other" technology?
- How is the patented technology an improvement over prior art and other non-infringing alternatives?
- What additional work has to be done to make the invention "market ready" and how likely is ultimate technical success?
- What is the ease or difficulty of potential design-arounds to the patent claims and how much do such design-around options cost to develop and implement?
- How fast is the rate of innovation in the relevant technology area (i.e., what is the expected useful economic life of the patented technology?)

Business/Financial

- How is the patented technology used in products (the "Subject Products") by the patent owner today and how has it been used in the past, if at all?
- What are the other various potential applications of the technology (the "Subject Applications") and the competitive advantages/disadvantages of the technology in these applications?
- What is the size of each market or potential market related to the Subject Products and Subject Applications?
- What is the nature and what are the trends of the markets related to the Subject Products and Subject Applications?
- What are the estimated costs to implement the technology by the company, a potential purchaser, or licensee?
- What is the estimated profitability of Subject Products that may be manufactured and sold based upon the patented technology?
- Are there any potential health, safety, or regulatory issues associated with the Subject Product and Subject Applications?
- Has the patented technology or comparable technology been licensed or sold in the past and what are the details of these transactions?
- What are the costs associated with the continued development of the patented technology?

Ultimately, the more information that is collected to inform a patent valuation, the more likely the valuation will yield accurate and reliable results. Of course, the amount of due diligence performed should reasonably be consistent with the importance and requirements for accuracy of the valuation. For example, a valuation that will be scrutinized by a taxing or regulatory authority may require more due diligence than a valuation that will help guide a decision or transaction that has a small financial or other impact.

Another important issue relates to the contributors to the due diligence process. We believe that an organization should take a team approach to valuing patents and performing related due diligence, when feasible. Importantly, in-house counsel, outside counsel, and/or others familiar with the patents and patent prosecution process should be engaged when performing legal due diligence, and inventors and other technical experts should be engaged when performing technical due diligence. Further, as part of performing business/financial due diligence, sales and marketing personnel may be able to provide insights into the drivers of the sales of Subject Products and certain competitive aspects in the marketplace, while engineering and manufacturing personnel can provide insight into the costs and time necessary to bring the Subject Products to market.

Common due diligence errors that we often see include:

- Many questions are not asked and many issues are not explored, causing important, relevant information to be overlooked and not incorporated into the valuation
- Due diligence is performed without input from legal and technical experts, and certain business people within the organization who can provide important insights relevant to value
- The valuation analysis makes assumptions that are inconsistent with the due diligence results actually obtained

Common Error: A Patent Valuation is Used for the Wrong Purpose

As listed earlier, there are at least nine different purposes for valuing patents, and likely many more. The purpose of the valuation is an important component to any patent valuation, as it may have a significant effect on the results of the valuation. Because the conclusion of value for a patent may differ depending upon the purpose of the valuation, the value determination of an asset for one purpose cannot necessarily be relied upon for other purposes. For example, the valuation of a patent for purposes of financial reporting may very well conclude a different value than if the same asset were valued for the purpose of selling the patent to a particular buyer.

A common error that organizations make relating to patent valuations is improperly using the value resulting from a patent valuation performed for one purpose for a wholly different purpose. Each valuation should have a stated purpose and use and generally should not be relied upon for different purposes or uses unless all of the assumptions, approaches, and calculations are carefully examined and determined to be suitable for the new or alternative use.

Common Error: Valuation Fundamentals are Not Adequately Addressed

A proper patent valuation should explicitly address a variety of fundamental valuation parameters that are extremely relevant to the ultimate determination of value. Such fundamentals include:

- The selection of an appropriate Standard of Value
- The selection of an appropriate Premise of Value
- The selection and implementation of valuation approaches to rely upon
- The date of the valuation

The common error made by many valuators relates to their failure to explicitly or adequately address each of these fundamental valuation parameters. Changing any of the four “previously mentioned fundamentals will likely cause the valuation result to vary for the same asset—often significantly. A discussion of each of these four fundamental parameters follows:

The Selection of an Appropriate Standard Value

The word “value” means different things to different individuals and can vary depending on the facts and circumstances of each particular valuation effort. Consequently, every valuation should have a specifically identified Standard of Value. The Standard of Value is the type of value being utilized for a valuation and is typically selected to match the purpose of the valuation. The use of different Standards of Value can result in different determined values for the same asset(s). The three primary Standards of Value and their definitions are as follows:

Fair Market Value/Arm’s Length Standard: Fair Market Value is a commonly used standard that characterizes a hypothetical transaction. It represents 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.[1] The Arm’s Length Standard is defined in the same way as Fair Market Value but the terminology is specific to valuation for transfer pricing-related issues. Although the appropriate Standard of Value to be used for any specific valuation is based on the facts and circumstances of the particular valuation, Fair Market Value is commonly used when valuing patents for purposes such as tax-related issues, debt financing through banks, auctions, the determination of “industry” royalty rates, and certain regulatory purposes.

Investment Value: Another standard of value frequently used in valuation analyses is Investment Value. Investment Value is defined as the value to a particular investor based on individual investment requirements and expectations.[2] An important consideration when determining Investment Value is the strategic or synergistic value realized by combining the assets being valued with complementary assets. Investment Value differs from Fair Market Value because it considers a specific buyer of the asset being valued, along with specific synergies that are relevant to that buyer, and not a hypothetical buyer as is the case with Fair Market Value. For this reason, it is very common for the Investment Value of a patent to be different than the Fair Market Value of the same asset. Investment Value is commonly used when valuing patents for purposes such as transactions where the specific licensor/licensee and/or buyer/seller are known, to support collaborations, and when making strategic decisions.

[1] Statement on Standards for Valuation Services No. 1, “Valuation of a Business, Business Ownership Interest, Security, or Intangible Asset,” American Institute of Certified Public Accountants (AICPA) Consulting Services Executive Committee, 2007 (“SSVS1”), Appendix B: International Glossary of Business Valuation Terms. Note that in addition to adoption by the AICPA, these definitions and others cited later in this article from Appendix B to the SSVS1 have also been adopted by the American Institute of Certified Public Accountants, American Society of Appraisers, Canadian Institute of Chartered Business Valuators, National Association of Certified Valuation Analysts, and The Institute of Business Appraisers.

[2] Ibid.

Fair Value: Fair Value is defined by the United States Financial Accounting Standards Board ("FASB") as 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 dates.[3] This is commonly referred to as an "exit value." Fair Value is most commonly used for the valuation of patents for financial reporting purposes in the United States. As a practical matter, Fair Value is often very similar to Fair Market Value as the market participants are not specifically identified; however, market participants are defined slightly differently for Fair Value versus Fair Market Value and there are some other differences as well.

It is our experience that the Standard of Value is often either not explicitly identified by a valuator or the selected Standard of Value does not match the purpose of the valuation or does not match the actual supporting calculations. Such an error can cause the concluded value to be materially incorrect for the stated purpose of the valuation. It is important for valuators to ask "the value to whom?" and "for what purpose?" in order to select and apply the appropriate Standard of Value.

The Selection of an Appropriate Premise of Value

An appropriate Premise of Value should be identified as part of every patent valuation consistent with the expected transactional circumstances. The two Premises of Value are Going Concern Value and Liquidation Value.[4]

Going Concern Value: A patent can be valued using a Going Concern Value assuming that the asset is expected to continue to be used in the future and that there is time in the valuation circumstances to sell the asset in a reasonable and orderly fashion.

Liquidation Value: Liquidation Value is appropriate when patents are being valued in the context of a bankruptcy. Liquidation Values may be based on either an "orderly" or "forced" liquidation. An example of an orderly Liquidation Value may relate to a business in a Chapter 11 bankruptcy reorganization, which is disposing of assets at a controlled pace with some flexibility regarding how the assets are disposed. Alternatively, when a business is in Chapter 7 bankruptcy, the bankruptcy court typically forces the sale of the business' assets in a defined, relatively short, time period.

Liquidation Value is typically lower than a Going Concern Value under the same Standard of Value assumption since the asset owner is typically time constrained for the disposal of the asset. Further, the asset owner's options for the use of the asset are limited to disposal, resulting in a weakened bargaining position. Similarly, a forced Liquidation Value is typically lower than an orderly Liquidation Value.

In some instances, it may be suitable to employ more than one Premise of Value in a valuation, such as in the context of bankruptcy or reorganization. For example, creditors may want to know the value of the assets under both Going Concern Value and Liquidation Value.

A common mistake that we typically see is that a Premise of Value is not clearly identified or considered, leading to potentially inaccurate results.

The Selection and Implementation of Valuation Approaches to Rely Upon

As part of valuation due diligence, the appraiser should attempt to collect relevant information related to all three traditional valuation approaches, which are defined as follows:[5]

- Cost Approach: a general way of determining a value indication of an asset by quantifying the amount of money required to replace the future service capability of that asset
- Market Approach: a general way of determining a value indication of a business, business ownership interest, security, or intangible asset by using one or more methods that compare the subject to similar businesses, business ownership interests, securities, or intangible assets that have been sold
- Income Approach: a general way of determining a value indication of a business, business ownership interest, security, or intangible asset using one or more methods that convert anticipated economic benefits into a present single amount

The implementation of various valuation approaches for which usable information is available should be considered and appropriate weight should be given to each implemented approach based on the facts and circumstances of each valuation effort and the reliability of the various results. In certain instances, although the implementation of a given approach may yield a dollar amount, this dollar amount won't necessarily be given any weight if the amount is not a reliable indication of the value of the subject asset. For instance, it may be possible to calculate a value based on a cost approach, but this cost approach amount may not be a reasonable proxy for the actual value of the subject asset.

It is generally preferred that a value conclusion rely on multiple approaches, if possible, over the reliance on a single approach. However, it is very common for a single approach to yield a result that can be relied upon to conclude a value.

In many instances, the purpose of a valuation may strongly affect which approaches are relied upon for concluding on a value. As an example, in certain circumstances, the Internal Revenue Service has formally stated that it prefers the use and reliance on a market approach for various tax-related valuations.

[3] FASB Accounting Standard Codification Topic 820, Fair Value Measurement, 820-10-20, Glossary.
[4] SSVS1, Appendix B: International Glossary of Business Valuation Terms.
[5] Ibid.

The purpose of the valuation also affects the way approaches may be implemented. For example, the implementation of a market approach for valuing a patent in patent litigation may yield a very different result compared to valuing the same patent for a licensing-out transaction. The development of a royalty rate for licensing-out may, in certain circumstances, partially rely on comparable royalty rate data that the courts might not accept in a litigation context.

Further, the use of an income approach to value a patent for the purpose of its contribution to a joint venture with a specific partner may yield a significantly different value result than a valuation of the same patent for a potential sale of the subject asset to a different potential buyer with different potential uses.

The common error made by many valuators is to not think about the purpose of the valuation when selecting the appropriate approaches. As a result, if the purpose of the valuation is not explicitly accounted for, the valuation conclusion may not be optimal. Further, without building the valuation for the relevant purpose, the analyst is likely to fail to identify and collect key relevant data that would likely affect the valuation.

The Date of Valuation

The valuation date is another of the key variables that will affect the value determination of a patent. The value of a patent at one date may be vastly different than the value of that same asset as of a different date due to changing facts and circumstances, available information, and estimates of future events related to the asset at the different dates. For example, the value of a patent that has not yet been commercialized will typically be very different than the value of the same asset at a later date after cash flows have begun to be generated and future sales levels, pricing, profit margins, and other financial and economic aspects of the Subject Products that use the patent are better understood and, therefore, less risky.

A patent valuation should properly incorporate all known and knowable facts regarding the asset being valued as of the selected valuation date. All patent valuations should include an "as of date" or "valuation date" clearly communicated to the readers of the valuation.

The purpose of the valuation will often directly affect the valuation date. For example, a valuation of a patent for a specific, potential future transaction (such as a license or sale/purchase) will likely cause the valuation date to be a date close to when the valuation is being performed. Alternatively, a valuation for tax, financial reporting, or litigation purposes could potentially require a date well before the time the valuation work is actually performed, causing the valuator to only consider certain facts and circumstances known or knowable as of that date.

Conclusion

This article, the first of a series, has listed just some of the common errors we see organizations and valuators making when valuing patents. Other common patent valuation errors that we expect to address in future articles may include the following issues:

- Non-Infringing Alternatives are Not Explicitly Considered and Incorporated into the Valuation
- Income Approach: Discount Rates Do Not Reflect the Risk of the Future Cash Flows
- Income Approach: Including Historical "Sunk Costs" in the Analysis
- Income Approach: Not All Expected Business Models are Incorporated into the Valuation
- Income Approach: Legal Life of the Assets is Modeled Instead of the Economic Life of the Asset
- Income Approach: The Value of the Subject Products is Not Properly Apportioned for the Contribution of the Subject Patent
- Market Approach: Potentially Comparable Agreements are Not Scrutinized Closely Enough
- Cost Approach: Historical Cost Data is Not Updated to Present Value
- Cost Approach: Applying the Cost Approach in Situations Where it is Not Relevant
- Reasonableness Tests are Not Performed

To the extent our readers have come across other common errors or are unsure if what they are doing is correct as it relates to valuing patent, please contact us via our email addresses provided below and so we may address some of the issues identified in a future article in this series.

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