



Patent Due Diligence

By Charles Pigeon

Understanding the intellectual property ("IP") attached to an entity will help investors and buyers reap the most from their investment. Ideally, startups need to consider IP as an important tool in the justification of the company valuation and the requested investment at all stages of investment.

Not All Due Diligence Is Created Equal

Investors have different goals which will have a bearing on the scope of the due diligence as well the stage of the investment. Consequently, it is important that both the investor requesting the due diligence and the person or team performing it understand each other's expectations.

An early stage investor may be content to know that a patent application has been filed and nothing more, while a later stage investor may want to be reassured that the patent(s) or pending patent applications have been examined to assess their *prima facie* validity.

The following are some of the major factors which need to be considered when assessing the scope of the due diligence:

- Cost of and time required for the due diligence process;
- Type of transaction;
- Type and value of the IP;
- Post-transaction intended use of the IP;
- Degree of certainty provided by the due diligence;
- Risk tolerability of the investor; and
- Representations, warranties and indemnities provided by the company and its owners.

First Things First

Effective due diligence begins by establishing an inventory of the intellectual property belonging to the target company. The IP can include patents, trademarks, industrial designs and trade secrets; however, patents will be the sole focus of this article.

Once the inventory is completed, the inventorship for each patent/patent application must be assessed. This can be done by asking the person responsible for the project if there were any inventors from outside the company. If so, one must determine the extent of their involvement. It is also important to determine if the inventors working at the company were tasked to invent or if they had other assigned tasks. All of this goes to ownership. In addition, it is important to know whether any of the developmental work was done away from the company premises and if so, what the circumstances were of the offsite work. Offsite work may lead to inadvertent disclosure of the invention or pertinent input from individuals who may not get credit for inventorship. Offsite developmental work may make the issue of inventorship/ownership a little murky and proper due diligence can be very effective in pinpointing such potential problems.

If the inventorship checks out, one must then ensure that the proper assignment forms have been signed by each one of the inventors. Subsequently, for "older" patents, one must ensure that they are in good standing, that is to say, the maintenance fees have been paid in due course. At this point, the objectives of most due diligence will have been completed, i.e. the determination of the existence, ownership and good-standing of any relevant patents.

Deeper Dive Due Diligence

For the inventors intending on relying heavily on the patents, due diligence can be performed in greater detail to more accurately assess the value of the patent(s) and the company owning those patents.

Due Diligence Documents

Typical documents which must be obtained in performing thorough patent due diligence of a target include the following:

- prosecution file histories of each patent and application;
- publications (scientific publications and presentations at conferences);
- pamphlets;
- in-licensing agreements and out-licensing agreements involving the patents;

- confidentiality agreements relating to products commercialized by the target;
- material transfer agreements related to the products of interest for investors;
- internal memorandum of inventions;
- notebooks from inventors related to the technology;
- employee agreements; and
- all internal and external correspondence regarding the patent/patent applications including those related to prosecution, a litigation and enforcement as well as any available legal opinions on the validity of the granted patents. The value there is two-fold, the opinion has been done and searches have necessarily been conducted to prepare the opinion. This can have a significant impact on the cost of performing this step of the due diligence and may provide extremely valuable insight as to red flags or other alarming concerns which were not known otherwise.

A number of aspects related to patents need to be considered when the investment is significant including an independent assessment of the validity of the patent, the validity of the competing products' patent protection and the various types of available opinions such as freedom to operate and infringement opinions.

Searches for novelty and inventiveness of the patent(s) are frequently used to provide an independent assessment of the value of the patent.

What is novelty?

Novelty is one of the three cornerstones of patentability. An invention is novel if it has never been made or disclosed anywhere else in the world prior to the filing date of the patent. This is intended to prevent the re-patenting of old technology and hence granting unwarranted monopolies.

What is inventiveness?

Inventiveness, also referred to as non-obviousness, is another cornerstone of patentability. It addresses the similarity, or rather, the lack thereof between the invention and the prior art (other publically available documents) related to the same type of invention. If the patent Examiner assesses the invention to be non-obvious, then it is a safe bet that the patent can withstand a validity challenge in court. However, patent challengers have recently become more and more bold in their approaches to attacking patents, so it is recommended that additional searches be conducted to supplement searches

done by Patent Offices. This may help to better establish the strength of the patent(s) of interest during the due diligence.

Freedom to Operate Searches

One common misconception about patents is that they give one the right to manufacture, sell and use the patented object. In fact, a patent is a negative right. It is the patent owner's right to exclude others from constructing, making, using or selling a similar invention in the country for which a patent has been obtained. In order to become patentable, an invention must fulfill three requirements, those of novelty, inventiveness and usefulness. Patent rights are limited to the country in which they have been granted.

Given the fact that a patent is not an affirmative right to use an invention, one must ensure that he can do so. A freedom to operate (FTO) search provides a level of confidence to the patentee or its licensee that he or she can commercialize the patented invention.

Generally speaking, when one starts the research and development into a new field, one must assess the patent landscape in this field. The patent landscape is understood to be the aggregate of all patents/patent applications related to a specific field of interest. For example, all the patents covering tools used in down-hole oil industry activities would form a prototypical landscape. The landscape includes expired patents, pending applications and patents which are still in force.

A startup company wishing to enter a specific technical field, is highly recommended to be familiar with the patent landscape so as to be able to direct its R&D activities and investments. A good appreciation of the prior art and any known publications made by potential competitors is valuable not only as a starting point in preparing a FTO opinion but also in directing the focus of the research.

Claims Analysis – Scope of the Patent

For any patents that are material to the business of the target, a claims analysis can be conducted. This type of analysis provides the investor an indication of the scope of the coverage of the patent. If the scope is narrow then it may be possible for a competitor to work around the patent. Consequently, the value of the patent is impacted by the ease with which one can work around it. A copy of the prosecution file wrapper should be obtained when performing this analysis.

Patent Validity Analysis

If the investment is highly dependent on the patent(s), a validity analysis can be carried out. Just because a patent has been granted does not mean its validity cannot be successfully challenged in court. For example, prior art may have existed prior to the filing date of the patent application that describes the invention but was not uncovered during its prosecution. This may be sufficient to mount a strong validity challenge against the patent.

As the validity of a patent can be challenged in many different ways, due diligence should not be expected to uncover all possible validity issues, but rather, it can provide an informed opinion of the likelihood of success of a challenge.

Infringement Analysis

An infringement analysis can be carried out as part of the FTO searches to determine if the current and/or proposed activities of the target infringe any third party patent rights. Infringing activities may relate to products, services or manufacturing processes. As it is not practical to review all of the activities of the target for this type of analysis, specific key activities and/or technologies should be identified. If it is determined that some aspect of the target's activities infringes a third party patent, the target may be required to stop those activities. This will no doubt impact the investment potential and/or the target's valuation.

Since patent applications are typically not open for public inspection (i.e. published) until 18 months after their filing (or priority date, whichever comes first), the contents of a competitor's patent application(s) will generally remain unknown until that time. This has the effect of casting some uncertainty around the field of technology and caution must be exercised when drawing any conclusions based on the results of the due diligence.

Factors which have an impact on the value of a target

Patent filings in the country of origin are usually expected, however patent filings in foreign jurisdictions can greatly enhance the valuation of a target. Another valuation factor is the expiration of competitors' patents on similar technology. This could drive down the prices of the entire industry as new players come in with the now off-patent technology, potentially forcing the target to cut costs to remain competitive. License agreements are almost ubiquitous in IP. Many companies develop and license their technology to others and the type of license is important to the target valuation. A non-exclusive license,

for example, may have a profound impact on the value of the investment as can restrictions in license agreements such as geographical and industry restrictions.

Concluding Thoughts

When performed carefully and diligently, with the goal of the investment and the intended exit strategy in mind, due diligence can be a powerful tool for an investor to secure value for his or her money. Having a basic understanding of the common due diligence objectives and limitations will undoubtedly provide a substantial advantage to the investor.