INTELLECTUAL PROPERTY DUE DILIGENCE
ON EARLY STAGE TECHNOLOGY COMPANIES

Purpose

The purpose of an IP due diligence review for an early stage technology investment is to seek to identify, using appropriate methodology and at an appropriate cost, material issues relating to defects in the ownership, validity, scope or maintenance of an IP portfolio. A due diligence-type review will also be useful in providing confidence in a company’s intellectual property position for the purposes of licensing, collaborative research or other partnering transactions.

An abbreviated due diligence such as that outlined in this document will not identify every material issue that might subsequently be identified in a formal merger or acquisition or IPO due diligence, in which much more resources will be invested. More detailed due diligence investigations can be scoped and undertaken as appropriate if resources are available.

Reaching an appropriate level of comfort from an IP perspective is critical for any substantial investment in a technology venture, and the scope of the early due diligence should anticipate the type and intensity of due diligence to be expected at the time of exit from any investment, whether it be by trade sale, further investments by third parties or IPO.

Principal questions to be answered

At the broadest, there are four questions that are central to any intellectual property due diligence review. These are:

1. What technologies and intellectual property rights fall within the portfolio of intellectual assets that will be “sold” to the merger partner/acquirer/licensee etc on exit?
2. Does the company own those intellectual property rights – or if it does not own them, are the owners of those rights able to grant to the company sufficient rights to commercialise them?
3. How likely is it that those intellectual property rights will proceed to registration (in the case of pending applications) and are valid (in the case of granted rights)?
4. Does the company have reasonable freedom to exercise those intellectual property rights and to commercialise those technologies?

What intellectual property rights should be investigated?

This initial phase of the review is required both for the planning and scoping of the review, and for the reliable estimation of likely costs involved in the review. It involves interviewing key executives of the company to determine its own understanding as to its most important intellectual assets. It also involves review of publicly available IP registers, past information memoranda (if any), reports to shareholders, investor presentations, web site and other publications, any internal register of intellectual property, and ASIC filings by the company.

From this initial phase of the review those technologies that appear to be material to the operations and value of the company should be identified.
Some of the intellectual property rights relating to the technologies may have been licensed by the company from the owner(s) of the relevant intellectual property (for example, universities or research institutions), under one or more licence agreements that will define the intellectual property rights licensed to the company.

While the licence agreement(s) will set out the licensed IP, they will not answer the question of whether all relevant intellectual property rights generated within the licensor organisation(s), which are necessary to commercialise the licensed technologies, have been included within the licence(s). It may sometimes be prudent to assess the research output of the relevant research groups within the licensor(s) of licensed IP, to determine whether any other intellectual property developed by them should necessarily or desirably have been included with the licensed IP and made available to the company. This assessment would be based on the scientific publications and any patent filings of the relevant researchers and their institutions. A particular focus would be to identify additional technologies developed within the research institutions that could effectively compete with or enhance products based on the licensed IP.

**Does the company own or have sufficient rights to commercialise the technologies?**

Answering this question involves an examination of the registered ownership status of the relevant intellectual property applications and granted rights, but it necessarily goes further than this.

**Identifying the correct inventors**

Inventorship is important in the case of patents and patent applications. If a person made an inventive contribution to an invention but has not been named as an inventor in a patent application, any resulting patents will effectively be unenforceable, at least in the United States. Further, in most jurisdictions they will not be able to be validly commercialised through licensing without the consent of the unnamed inventor.

We recommend a review of each family of patent applications within the relevant technologies, with a view to determining whether the inventors have been correctly named. Such a review would ideally involve inspection of all original laboratory notes, but the cost of this inspection (at least where the relevant records are in the possession of licensors and not under the control of the company) may be prohibitive. A reasonable impression as to correct inventorship can be gained by interviewing the inventors and reviewing any published papers arising from the relevant research activities.

**Establishing chain of title**

Once the inventors of the relevant intellectual property have been identified, it is necessary to confirm the employment status of those inventors, as (speaking in general terms) inventions made by an employee in the course of their employment initially become the property of the employer. It is then necessary to identify any contracts relevant to intellectual property ownership that may have been entered into by the employer, such as contracts governing the funding of the research that gave rise to the relevant intellectual property.
Determining rights under licence agreements

Having identified any licensed technologies and licensed IP, it is then necessary to determine whether the relevant licence agreements grant to the company sufficient rights in the licensed IP for it to pursue its business plans and strategies, and to determine whether those rights are sufficiently broad and transferable such that the relevant agreements will not become a disincentive to any potential merger or acquisition partner. Any issues with title or licence agreements can then be brought to the attention of the relevant licensor(s) and an attempt can be made to renegotiate existing agreements or to put in place new agreements to address those issues.

Validity of the relevant intellectual property

Commonly most or all of the relevant intellectual property is not protected by granted patents, but remains in the form of pending patent applications which may or may not proceed to grant. It is clearly important for the company to come to a view about the likely prospects for protection of the relevant intellectual property through the grant of patent rights. Any valuation of the company will necessarily be heavily influenced by the likelihood of securing strong proprietary positions in its technologies.

Ideally, any assessment of the prospects for the grant of any patent application and the validity of any resulting granted patent would involve professionally conducted searches in all important jurisdictions, to search for prior art that may result in a pending application not proceeding to grant, or in a finding of invalidity of a granted patent if it is challenged. However, the cost of such an exercise may not be regarded as justified in an early stage transaction. It may be preferable to limit the proposed review to an examination of the company’s own intellectual property files, and the files maintained by its patent attorneys, relating to the relevant patent applications and granted patents – the so-called “file wrappers”. These files may contain search results from official searches carried out by Patent Offices around the world, and may also contain the results of searches carried out previously by the company or its patent attorneys, either internally or using external contractors.

It is possible that in reviewing file wrappers relevant to an invention, search results which will be found that may impact on the company’s freedom to commercialise the invention, but it is important to recognise that searches carried out to determine whether a patent application should proceed to grant, or to determine the validity of a granted patent, are not directed at finding third party intellectual property rights that impact on the applicant's freedom to commercialise the invention. Accordingly, while a “clear” search result indicates that a patent application is likely to proceed to grant, it gives no indication as to whether the applicant will be free to commercialise the invention. Further, searches conducted by Patent Offices in different jurisdictions vary widely in quality, and the fact that a Patent Office was unable to locate prior art relevant to a patent application does not mean that that prior art cannot be used subsequently to attack the validity of a granted patent.

Freedom to Operate/Freedom to Commercialise

Being in possession of technologies protected by intellectual property rights is not of itself sufficient to guarantee that a company will be able to commercialise those technologies successfully. Obstacles to such commercialisation in the context of an intellectual property review may typically be divided into two types – constraints imposed by the intellectual property rights of third parties (typically referred to as “freedom to operate” issues), and constraints imposed by contracts entered
Lack of freedom to operate can of course have a devastating effect on the valuation and commercial viability of any technology company. Biotechnology companies are particularly vulnerable given the crowded nature of the intellectual property landscape in this field, and the enormous investments in intellectual property rights made by larger players such as multinational pharmaceutical companies, and established overseas biotechnology companies with relatively deep pockets and an aggressive tactical approach to securing intellectual property rights. Other fields of technology are increasingly affected by freedom to operate issues, as major players and new entrants alike seek to establish or defend proprietary positions. Early stage companies in areas where patent activity is increasing rapidly, such as ICT and financial services, are now as likely to be threatened by third party patent rights as biotechnology companies.

While the costs of having freedom to operate searches carried out in all important jurisdictions in respect of all the relevant technologies will be beyond the scope of early stage due diligence, it is recommended that the issue of freedom to operate should not be ignored. Relatively simple searches on the intellectual property rights of known competitors of the company, and on members of research teams in the relevant research fields identified by the company, can be carried out using free internet searching facilities. Such searches can be limited to the major jurisdictions of the USA and Europe and the Patent Cooperation Treaty application database. However, such general advice could not be relied upon as a “signoff” as to the company’s freedom to commercialise any particular product – rather, it would set the scene for an informed risk assessment.

**Constraints on commercialisation under contracts and funding conditions:**

Apart from constraints imposed directly on the company under its licence agreements and other contracts to which it is a party, there may also be indirect constraints arising from past conditional funding of the development of the relevant technologies. For example, the commercialisation of a technology developed with most forms of Commonwealth funding must be carried out “for the benefit of Australia”, and certain requirements for Commonwealth consent apply under many funding schemes.

**General review of IP management procedures**

Any party carrying out to diligence on a technology company will be likely to form a general impression about the company’s overall intellectual property management procedures. For more sophisticated merger or acquisition partners the quality of the company’s intellectual property management generally may be relevant to valuation, given that evidence of sound intellectual property management within the company will lead to a lower perception of risk.

In the course of a review, information about the company’s intellectual property management procedures generally should be gathered, and reported at the end of the review with suggestions for improvements.
Non-patent intellectual property rights

The analysis and recommendations above focus primarily on inventions protected by patents or patent applications – these are usually the most important intellectual property rights relevant to a technology company, especially if it has no products on the market. In the course of reviewing the relevant materials for issues relevant to patent rights it is also useful to advise on issues relevant to non-patent intellectual property rights such as trade marks, copyright and domain names, should apparently material issues arise.

It is recommended that the due diligence should at least involve trade mark searches to confirm the registration status of the company’s corporate trade marks in its major markets, and to identify potentially competing trade marks of third parties. As a first step a review of the file wrappers relating to any trade mark registrations applied for or obtained by the company should be undertaken.

Summary of possible due diligence steps

1. Initial scoping, identification of relevant technologies including licensed technologies, review of research output of research groups within licensor institutions to identify any additional technologies or intellectual property rights that necessarily or desirably should have been licensed to the company.

2. Interview inventors with a view to determining correct inventorship.

3. Review employment agreements and other agreements relevant to title such as collaboration agreements.

4. Review licence agreements to identify scope of grant and any unusual or onerous restrictions on the rights of the company.

5. Review patent application file wrappers for issues relevant to likelihood of grant, and patent validity.

6. Conduct abbreviated freedom to operate searches based on known competitors and research teams, using free internet searching facilities.

7. Review any funding agreements or other applicable agreements and advise on constraints on commercialisation rights.

8. Review trade mark file wrappers.

9. Conduct trade mark registration and availability searches.

10. General advice on intellectual property management procedures.

This paper is provided for general background and illustration purposes only. It should not be relied upon without further specific advice.