Intellectual property rights in purchasing and sourcing
- Overview of current best practices

Tobias Hedberg
Abstract

In purchasing and sourcing situations not all companies have a guideline or policy on the handling of intellectual property (IP) rights in these. This thesis covers a literature study on the area followed by interviews with high ranking positions in the industry and technology sector. The aim of the thesis is to create an overview of current best practices in said situations. By consulting relevant literature and conducting interviews it is clear that some key points are deemed more or less necessary for a healthy IP portfolio handling in these situations. These include: establishing a non-disclosure agreement, structuring the ownership of any upcoming IP developed under an agreement beforehand and having the IP department working in close junction with the purchasing and R&D department are some. Lastly, the thesis concludes that an essential factor determining IP success is a good understanding of the own portfolio and its implications.

Keywords: Intellectual property rights, purchasing, sourcing, portfolio analysis, strategy, lock-in.
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Yours sincerely,

Tobias Hedberg
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1 Introduction

This section is an introduction to the background of the thesis, knowledge economy and the aim of this thesis.

1.1 Background

Across the world, companies compete over market shares in their areas of operation. Ideas are turned into products or services and hopefully sold to as many customers as possible. Businesses want to keep their products unique from the competitors and if the ideas are unique enough they might try to make it (or parts of it) legally theirs and theirs only, thus preventing competitors from benefiting from their hard work. An invention should not be mistaken for a discovery, since the invention is something new and the discovery is something that already existed but has not yet been found, until such discovery. An invention can however be invented just for the sake of being able to discover something. However, companies often need other companies or divisions of their own company to e.g. produce, sell or distribute their products.

1.2 Knowledge Economy

Patents stimulate research and development of new ideas, in other words innovation, and by that comes financial growth. By making sure the investments are protected they consequently create an incentive to keep doing the hard work. [1]

The benefit with patents is that secrets involving new inventions must not be held tightly forever. Once a patent on the invention is granted they become public, however only to be used by the inventor or its company. Unless they license it to other parties in the granted countries for a royalty fee, free of charge or payed otherwise. Another benefit is that the costs for the research and development behind the patent have the possibility to be recovered by these royalties or from having the exclusivity to produce a particular type of product. Also, by revealing the invention, others may find this helpful in their research solving other issues, thus new knowledge is spread. Another positive effect of innovation is that it triggers competitiveness between companies and the nature of competition is that it sets the businesses up against each other in a race to always strive to deliver newer and better products to the market ever forward.

Over the years 2000-2015 patent applications (direct and PCT national phase entries) increased by 109.7% according to World Intellectual Property
Organization (WIPO), as seen in Figure 1, [2]. The countries with the most filings are China, Japan and the United States. The by far largest contributor to this increase is China with 51906 filings in 2000 and 1101864 in 2015, translating to a rise by 2022.8% in percent.

1.3 Aim

The overall goal of this thesis is to conduct a study on the current best practices in purchasing and sourcing negotiations when handling intellectual property (IP) rights in different IP-related challenges. IP rights is a growing factor in the business economy and its importance increases with the rapid technology development, making the best practices in purchasing highly beneficial to all parts of the process.

1.4 Konsert Strategy & IP

This thesis has been written in large parts at the main office of Konsert Strategy & IP, Gothenburg, Sweden. As they describe their business on their website, they are a boutique management consulting firm with an understanding of that business, technology and intellectual property must work in concert
to drive technology-based competitiveness. Back in 2006, they were a part of the Center for Intellectual Property (CIP) at Chalmers and University of Gothenburg, but have since grown organically and been profitable and are now fully privately owned. They are now a next-generation development and strategy consultancy for knowledge-intensive organisations and have a great track record. They have not one, but two positions on the world’s top 300 leading IP strategists in the IAM Magazine.


2 Terminology Introduction

This section is to serve as a guide into the field of intellectual property rights, its business areas and challenges, thus creating a further understanding of this thesis’ core purpose and aim.

2.1 Intellectual Property Rights

Intellectual property rights (IPR) are ideas of the intellectual mind that are by law claimed to certain owners of said idea. It is divided into two categories; industrial properties and copyrights. [1] Industrial properties consists of patents, utility models, industrial designs, trademarks, service marks, trade names, indications of source or appellations of origin [3]. An introduction to patents is included below, since it is of most relevance to this thesis’ main scope of field.

2.1.1 Patents

In order to test if one’s idea is patentable one must first review these three general conditions and make sure they are met, according to the European Patent Office. [4]

1. Novel (i.e. at least some aspect of it must be new)

2. (a) Non-obvious (in United States patent law)
   (b) Involve an inventive step (in European patent law)

3. (a) Useful (in U.S. patent law)
   (b) Be susceptible of industrial application (in European patent law)

A description of the true meanings of the above mentioned general conditions is necessary. The first condition, novelty, is that it must not be known to the public, in any way, shape or form before filing for having it patented. It can not be introduced at a conference, published in an article or in other ways be released to the public, however small. In case it would be public, it is deemed not new, and a patent for it will not be granted.

The second condition, non-obvious or involving an inventive step, means that it must not be an obvious solution to a problem for a professional skilled in the art of that technical area.

The third and last condition, being susceptible of industrial application, means that it must be able to be reproduced and useful in the industry, whereas the word industry is interpreted in its widest sense.
Once one has an idea that, in their belief, fulfils the requirements of a patent they can file to have it patented and the process can begin. The process of applying for a patent is of a highly complex nature. There are many ways to apply for one and numerous steps and choices to make on each path. This part will be excluded from this thesis, to keep the focus on the aim of the thesis.

However, patents are a national right, thus making the owner solely permitted to produce and distribute the product exclusively in said country for generally 20 years. Filing for a patent can be done in multiple countries and in many ways. The takeaway from this, in the long run, is to give a deep thought on which countries to enter. This should be based on a market research and the company’s strategy.

Lastly, in order to keep one's patent active an annual fee has to be paid.

2.1.2 Other Intellectual Properties

Apart from patents, IPR consists of the above-mentioned rights but they will not be a discussed in this thesis and therefore not further explained.

2.1.3 Licensing

Patents, or IPR for that matter, can be licensed to other parties for a fee or in an agreement of cross-licensing. The second way, cross-licensing means that both parties in an agreement gets to use intellectual properties from each other.

2.2 Purchasing

Purchasing is in general defined as a process to acquire goods or services to a company. This can be conducted in various ways and paid for in a variety of forms. In this thesis, purchasing will mainly focus on the purchasing of components to be included in a product where IP can play a big role in the process as well as being at risk. Purchasing of goods can generally be divided into two separate terms, general components and customised components.

2.2.1 General Components

General components, or off-the-shelf products, is common terms used to describe goods that are, more or less, available immediately or can be put into production upon request.
2.2.2 Customised Components

Customised components are as the name calls for parts that need customisation to satisfy the purchasing party. It can be general components that need some modifications in order to fit the demands or from drawings made by the ordering party.

2.3 Sourcing

Sourcing is in general the processes involved when a business is contracting suppliers to conduct labour for a business function in the business. This can be both in-house or externally at the suppliers facilities or together in a joint development. The development can either be delegated to a supplier or done in a collaboration with a supplier, a joint development.

2.3.1 Development

These types of agreements are for situations when a business is in need of a particular product or component to be used in a new product developed. This can be done both in-house or externally. The complexity lies in any upcoming intellectual assets during the development.

2.3.2 Joint Development

Different from development, this is done together with staff from both the supplier and the initiating business.

Example Scenario: During the duration of a joint development agreement between two parties, Company A and the supplier, new intellectual assets emerged. The two businesses both claim that the IP is solely theirs. Due to this, both parties are in a costly feud that could have been prevented by having a contract that beforehand established the rightful owner of any upcoming IP during the duration of the agreement.

2.4 Know-how, Foreground and Background

To be able to utilise the IP in agreements knowledge must often be traded, but knowledge can be explained in many ways and include different things. In the business world the following three terms are widely used, sometimes with different interpretations. Below, they are explained in general terms.
2.4.1 Know-how

Know-how is considered to be acquired knowledge in an area, collected from any practical and/or theoretical work from experiments and training. Without know-how, a licensee of e.g. a patent might not know how to use it. [5]

2.4.2 Foreground

Foreground is generally defined as the combined resource of materials, information and knowledge gathered during the time of a venture, regardless of the fact that they might not be protected. This means that both tangible and intangible (IP) assets are considered as foreground. Tangible assets can be anything from sketches and drawings to early prototypes. [6]

2.4.3 Background

Background is generally defined as the pre-existing knowledge prior to that of a venture. In other words, the things and knowledge necessary for the execution of the venture. Its components are similar to that included in foreground, but only those pre-existing count. [6]

2.5 Interviews

According to Cato R. P. Bjørndal, interviews can roughly be divided into four categories or methods, each of which having its pros and cons. Beginning with the first form of interview, the conversational interview, being the most unstructured form of interviews. This method has its origins in the everyday conversation, where both parties have control over the direction of the interview. Consequently, planning such an interview has its limitations and subsequently, the answers will be hard to compare. However, one advantage is that information can be continuously collected.

The next form is the template aided conversation, meaning that an overview of the theme and intended questions is used. There is a high degree of flexibility as the order of the questions can be changed based on how the interview develops. This method is suitable for group interviews.

A more structured form is the standardised interview with open questions and answers. This means that the interview form is based on a fixed number of questions to be answered in order, with most questions being open-ended. This makes it easier to compare the answers. With its predetermined questions, the source of error is reduced, where the interviewer may otherwise
subconsciously angle the interviewer and it will be easier to get a limited timeframe.

The most structured form is the standardised interview, with fixed options for the respondent to choose from. Comparing the obtained answers is done with ease and it is less time consuming for the interviewer. An important disadvantage is that the lack of nuances and depth in the answers.

It is preferable that all interviews are recorded and transcribed afterwards to not miss any valuable details. [7]
3 Research Methodology

The methodology used in this thesis has been a literature study to better understand the area in question. This was then followed up by a process of interviews with the defined questionnaire in section 3.5 with a number of business representatives. By then comparing the answers to the literature an attempt was made to create a set of best practice methods in purchasing and sourcing negotiations when handling IPR.

3.1 Literature Study

A literature study was made mainly focusing on academical publications such as articles and dissertations to gain further knowledge in this field. In line with the aim of the thesis, the focus has been on articles revolving the negotiating part of purchasing and sourcing situations. Notable sources of information are the European Union’s IPR Helpdesk and World Intellectual Property Organization’s (WIPO) reference literature and documents. Most academical articles and theses were collected in the libraries of Lund University’s and Chalmers University of Technology’s.

3.2 Interviews

The choice to on what type of interviews to conduct was made on the basis of the possible respondents availability to participate. It was deemed easier for them to find time for interviews over the phone than having a questionnaire with multiple-choice questions sent to them. The structure of the interviews were semi-structured interviews with structured questions throughout with open answers [8]. This method is constructed to provide deep details but still allowing the respondents room for explanations around the subject. The interviews were mainly held over the phone.

3.3 Interview Respondents

Before attempting to contact possible participants it had to be concluded which corporate positions that are of interest and thus are most probable to have knowledge in this area. The positions that were found most relevant to the subject are listed below.

- Head of IP/Patent Director
- Purchasing Manager/Head of Procurement
- Chief Legal Counsel within IPR
- CEO

Due to the fact that this business area contains highly confidential strategies, interviews can only be conducted under the insurance of the respondents full anonymity when answering questions. Their name, business and other possible connections that could lead the reader to the company, such as revealing titles are being anonymised by the company’s size and their main market. This to ensure that their business is not compromised. To give an example; if a patent director at one of the largest car manufacturers were to answer the questions it would be referred to as a patent director at an industry company. Not everyone is willing to share their corporate strategies, regardless of anonymity and contacts this far up on the ladder have compact schedules and might not have time to answer questionnaires. However, all asked to participate in this thesis were. In the below table, Table 1, the list of respondents in anonymised form are listed with their corresponding title, their businesses’ market and the size of the company.

<table>
<thead>
<tr>
<th>Interview</th>
<th>Title</th>
<th>Market</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>CIPO(^1)</td>
<td>Industry</td>
<td>Global</td>
</tr>
<tr>
<td>B</td>
<td>CLO(^2)</td>
<td>Technology</td>
<td>Multinational</td>
</tr>
<tr>
<td>C</td>
<td>Senior Corporate Legal Advisor</td>
<td>Industry</td>
<td>Global</td>
</tr>
<tr>
<td>D</td>
<td>CEO(^3)</td>
<td>Industry</td>
<td>International</td>
</tr>
<tr>
<td>E</td>
<td>CIPO(^1)</td>
<td>Technology</td>
<td>Global</td>
</tr>
<tr>
<td>F</td>
<td>VP, Head of IP</td>
<td>Technology</td>
<td>Global</td>
</tr>
<tr>
<td>G</td>
<td>CIPO(^1)</td>
<td>Technology</td>
<td>Global</td>
</tr>
<tr>
<td>H</td>
<td>Senior Legal Counsel</td>
<td>Technology</td>
<td>Global</td>
</tr>
</tbody>
</table>

\(^1\)Chief Intellectual Properties Officer (CIPO); \(^2\)Chief Legal Officer (CLO); \(^3\)Chief Executive Officer (CEO);

Table 1: Respondents to the questionnaire.

The size of companies can be defined in many ways. In Table 1 above, the size corresponds to their presence on the market. Global is in this thesis defined as if they have a global presence. By that, they have operations in many countries, headquarters in one country and a global marketing approach. Multinational companies have some operations in other countries.
International companies have their operations in one country and exports and imports.

Using Nasdaq’s "Nordic Model" definition of small, mid and large cap, short for capitalisation, the majority of the respondents represent large cap companies, [9]. Capitalisation is in this case defined as stock price multiplied by number of shares.

Small cap: < 150 million Euros

Mid cap: 150 - 1 billion Euros

Large cap: > 1 billion Euros

By all these different types of measurements, most of the companies the interviewees represent are to be considered large.

Common denominators of most of the respondents are that they either have a seat in the board of the company or in a position reporting directly to the board. The companies they represent count their employees by the tens of thousands and their revenue in billions of Euros/US Dollars, making their answers highly qualified for use as a basis in the attempt to establish a best practice in the field.

3.4 Design of Questionnaire

The design of the questionnaire was made after studying a selection of literature in the field and the following discussions with supervisors. The questions are formulated as an attempt to capture the different scenarios in a purchasing and sourcing situation and what companies do beforehand. Further on, how they structure the ownership of IP in theses situations and who are responsible for the process.
3.5 Questionnaire

Question 1: Pre-Analysis Before Purchasing and Development Agreements:

(a) Do you analyse the sellers’ respective portfolios before selecting and entering into purchasing agreements?

(b) Does your company have a strategy to prevent a ”lock-in” scenario when entering into development agreements (i.e. when your company selects a supplier who will own all IPR)?

(c) Do you estimate costs for IP in agreements, i.e. do you calculate on full ownership vs license?

(d) How does your company work with these areas?

Question 2: Foreground/Background:

(a) What is your company’s policy as to ownership of rights developed under the agreement?

(b) How is the ownership of IP rights normally divided between the parties?

Question 3: Use of Own Portfolio:

(a) Do you ever consider using your own portfolio as a leverage?

Question 4: Decision Making and Responsibility:

(a) Does your company have a strategy to handle IPR when sourcing and/or licensing?

(b) Who takes the final IP decisions when entering into purchasing and development agreements, i.e. are these decisions taken by e.g. head of procurement, head of IP or both?

(c) If yes on (b), who takes the decision if exceptions should be made to any IPR guideline?
4 Literature Study

This part of the thesis covers the literature study conducted. It is to make sure that the level of understanding in the field is adequate enough to fully interpret the answers given by the respondents of the questionnaire and to establish a theoretical perspective and background to the matter.

The different segments included below will be scratched on its surface and discussed on a higher level and not in its full complexity. However, the key takings from every section will be brought to light.

4.1 Decision Making and Responsibility

Structured management is of great importance for a business. As is leadership and the responsibility that comes with it. To have knowledge in the field of IP is of great importance, regardless of the size of one’s company.

To give an example, if a small start-up have a product, new to the market, and starts selling it without having any IP protection on it, perhaps except its name. A larger company can find this product fitting in their product portfolio and also begin to produce and sell it, likely with greater success. The smaller company, without the IP protection loses market shares rapidly and also its leverage. However, with IP protection they could, in general, either continue as intended and perhaps grow to become a large company, license their patent and thus receiving royalties from one or many other companies or lastly, sell their patent at a premium to the larger company.

The complex nature of IP demands that the responsible manager in charge has knowledge in the field. Empirical results from a study conducted by a researcher at the Technology Management and Economics department at Chalmers University of Technology, shows that patents propensity and its importance as to appropriating returns from R&D in small and medium-sized enterprises (SMEs) is low, [10].

4.1.1 The Need of an IPR Strategy

In an ever developing market, especially in the technology field with a continuous flow of new products and new technology combined with the competitiveness that naturally follows, the need of an IPR strategy increases. To keep, maintain and develop relevant IP in a lucrative manner is difficult, but following a strategically developed IP strategy makes it easier.

An IP strategy can take many shapes. There are numbers of consulting firms working on this matter, aiding and assisting corporations to establish or making current IPR strategies more efficient. It is a large segment by
itself with an opinionated view on how to best structure an IP strategy. However, the need of a strategy is inevitable, however developed it is. In some industries, the intellectual assets are larger than the tangible assets, [11].

As William A Barrett mentions in his article in the Nature Biotechnology journal, businesses of all sizes sometimes rush to file patents after patents. Patents both cost to apply as well as maintaining the exclusive rights through annual fees. It is both a costly process and it might accumulate unattainable figures if not properly managed. The process of which patents to file and in which direction to commence research should be done following an IP guideline, in other words, a strategy, [11].

Companies may also use the strategy to prevent or circumvent weak points in their portfolio. That might be to prevent competitors gaining stronger bargaining positions in negotiations due to interfering patents. Also, and very importantly, to redeem royalties for any of their own patents used by third parties with or without their consent. [12]

4.1.2 Management

Companies consists of many divisions or departments. Due to the complexity of IPR, it is common, at least in larger companies to have a separate IP department, focusing only on IP related matters. The manager in charge of such department usually have a title ranging from patent director to head of IP. They usually report either directly to the board or to the chief technology officer (CTO). It is essential that the manager in charge have deep knowledge in the business field of intellectual properties.

In an article in the MIT Sloan Management Review from the Massachusetts Institute of Technology it shows that by involving the executive positions in the company’s IP strategy is particularly valuable in obtaining greater returns on innovation and thus achieving a stronger performance of the IP portfolio in the business. [13]

4.2 Patent Portfolios

The combined selection of all patents in a business is called a patent portfolio. The following two sections will explain the concepts of portfolio analysis and how the portfolio can be used as leverage in business negotiations.
4.2.1 Portfolio Analysis

As the number of patents owned by a business grow, so does the complexity of the portfolio making it difficult to comprehend the situation or to get an overview of the portfolio. This is why performing a portfolio analysis on a regular basis is important. The importance of this management is shown in an article by Holger Ernst, that there is a close correlation between a companies profits and the management of its patents, [14].

This portfolio analysis is not merely important to larger corporations, but also to SMEs. In an article in the World Patent Information, Littmann-Hilmer and Kuckartz showcase and study a tool designed by the Innovation and Patent Centre (IPC) at the Hamburg Chamber of Commerce to better suit SMEs, which often do not have the resources of an entire IP department at hand, [15].

If made on one’s own company, a portfolio analysis is a part of a companies IPR strategy. To get a full understanding of the IP position on the market it is a necessity that this is done. The analysis is made to establish patents owned, which technology fields the firm is active in and which patents to keep. This process can be conducted in a large variety of ways, from different angles and comparing other metrics. In the process some pruning of the portfolio might be necessary, in other words, a selection of patents may be abandoned or sold. The pruning might be necessary both due to the fact that the patent is not utilised or that the costs for maintaining it are deemed too high to be sustainable.

As mentioned in the article in the World Patent Information journal, the data learnt from conducting a portfolio analysis can allow the company to establish the quality of the patent portfolio, patent activity and filing history. This can help a company either establish or refine their IP strategy. Furthermore, they also show different approaches to visualise the analysis based on different measurable parameters. [16]

An analysis can also be made on competitors’ portfolios or on a possible future or current supplier. Analysis on the later, can be used both as a defensive as well as an offensive move strategically.

4.2.2 Patent Portfolio as Leverage

A company’s patent portfolio can be very lucrative, if properly managed. It can also be used as leverage in negotiations with suppliers, [17]. The leverage can be that of having a stronger portfolio to use as bargaining chips in negotiations or having patents a possible supplier might deem fitting for their business.
**Example Scenario:** Company A produces cellular phones and another company, Company B, produces displays. Company A has a large number of patents on cellular phones functionality and some key features and wants to purchase screens for one of their new products. In an agreement with Company B, company A agrees to purchase screens from company B and gets a lower price on the deal than other companies, providing that Company B get the rights to use some specified patents under a free or at a discount, non-exclusive license.

4.3 Pre-Analysis and Supplier Selection

In order to get the best quality of goods or services at the lowest prices and with appropriate terms and conditions, some form of strategy on how to select a supplier is beneficial. This area is subject to a lot of research within the area of supply chain management. A supplier selection and evaluation model used in many sectors and to variable extent is the total cost of ownership approach as Ellram analyses in her article, [18]. It weighs different factors against each other and its complexity increases by the number of factors one includes. However, there are no universal praxis on how to use it and it may vary even within companies according to the article.

In an article by Ho, Xu and Dey, they show in a literature review that in traditional single criterion approach cost is not the most widely adopted criterion, [19], instead quality, delivery followed by flexibility is demonstrating the complexity of the supplier selection process and that a business wide decision on what to prioritise has to be made.

4.3.1 Lock-in Scenario

Once a supplier is selected, one thing companies should be careful of is to not be locked-in to a supplier. A lock-in scenario is defined as if a binding contract with a supplier prevents the purchasing business from changing supplier, hence the term locked-in. According to an article in the European Business Journal this is then translated into a power shift from the purchasing party to the supplier’s advantage, [20]. Furthermore, they conclude that purchasing managers should estimate the possible power balance issues between suppliers and their own firm, both in the selection and in negotiations.

Another article, in the Journal of Supply Chain Management, concludes that a negligence as to in depth examine what should be sourced and what should not. This may then shift the power from the firm to the supplier and eventually lead to a post-contractual lock-in or an unwanted dependency to the supplier. [21]
Example Scenario: A company sourced out the development of an important control system to be used in their finished products without consulting either the IP or the legal department. The supplier did not only develop the control system, they revolutionised it. However, the ownership of the IP or any upcoming IP during the agreement was not disclosed in any contract. This solution can now be implemented in all the competitor’s products, causing both loss in revenue as well as in the litigation process that followed.

4.3.2 Estimating costs for IP in agreements

Estimating costs can be done in various ways, and is a research subject in itself. In the process of procurement, licensing and sourcing, estimating the potential IP value or costs from the deal, if signed and compare it to no deal at all.

To estimate cost of full ownership versus licensing when purchasing goods from a supplier can be done in various ways. A method used in the industry is the net present value method to assess royalty rates. This can then be compared to the price of purchasing the product with its protecting IP rights included. Translate to desired sale price of product. What is the effect on the sale price or what is the scope for the component.

There are many ways to estimate licensing fees, either by using individual industry standard levels or by calculating it using different methods. One way of estimating the licensing fees is by royalty rate assessment demonstrated in an article by Hagelin, [22]. In the article he implements a method called the CAV (Competitive Advantage Valuation). It uses multiple (exchangeable) variables such as market share and expected profits based on statistical analysis as well as estimated market risks or if the patent is not granted yet, the possibility of not having it granted, to establish in his belief a suitable licensing fee.

Example Scenario: To produce a product, Company A needs components from a supplier, in this case Company B. The supplier demands both payment for the component as well as a license fee for using it in their products. This fee is a set percentage of the sales price for Company A’s complete product. The purchasing of these components is a recurrent scenario, but Company A wants to re-negotiate the percentage taken on its sales price. During these long negotiations the components start to ship in lower quantities. The vendors selling the final products are receiving fewer or no products, resulting in that the vendors are demanding fees for for having the promised shipments delayed. These fees can be seen as an example on costs that directly can be related to IP in purchasing agreements.
4.4 Contracts and Agreements

Intellectual property rights play a large role in business. It is a knowledge area combining innovation, engineering with applicable law. One cannot function without the other and thus a legal section is included in this thesis. The following four sections represents the key points usually included in an agreement, directly or indirectly related to IPR, when sourcing goods or services.

An important thing is to always have a non-disclosure agreement (NDA) in place before entering a negotiation. Another key factor is to specify what the deal shall entail. Both are explained in the two following sections.

4.4.1 Non-disclosure Agreement

The first thing a company shall have in place is a non-disclosure agreement (NDA) with the other party before disclosing business sensitive information. A two-sided NDA prohibits the parties from disclosing the other party’s confidential information; information that has been disclosed, orally or in writing, during the meetings. The NDA can be a so called corporate NDA where the parties once and for all agree that all information disclosed between the parties is of confidential nature, or you can have a product or project specific NDA. [23].

4.4.2 Specification

Specifying the purpose of the agreement is of vital importance since the aftermath otherwise can be very costly. Before entering into a purchase agreement it is of utmost importance to specify (in the specification) exactly what one wants to buy. The specification sets the ground for what one can expect from an agreement. From the specification one can check if one actually got what one has paid for. The party buying shall include what they want to purchase and if they want to buy a so called off-the-shelf product or if they want to buy a product specifically developed for them. Who in the end owns the specification plays an important role in the long run since one does not always want the seller to sell exactly the same to a competitor.

4.4.3 Non-Assertion Covenant

Non-assertion covenant, non-assert in short or covenant not to sue the other party. A non-assertion clause gives a party a security that the other party will not raise a claim for the party’s use of intellectual property. Often this serves a complement to a non-infringement clause where a party agrees to
hold the other party harmless from third party claims. A non-assertion clause takes this one step further.

"Company B shall not assert any intellectual property rights, other protected rights or applications thereof against Company A, Company A distributor, customer, manufacturer, user, seller or importer of any Company A products containing goods or combination of goods with other products. During the term of this agreement, Company B shall not seek a ban on the importation, free movement or use of Company A products."

The intended purpose of this clause is to preemptively settle any future infringement disputes.

**4.4.4 Indemnification**

If a party in a contract breaches the agreement, an indemnification clause is a way of resolving this beforehand. The party shall compensate the other party from e.g. claims and other costs and expenses; either after court proceedings or in settlements.
5 Results: Answers

In this section, the answers given by the respondents to the questionnaire are presented. Each section begins with a summarising explanation of the answers given. The answers and views are condensed to only include their main points and not fully transcribed answers.

5.1 Question 1: Pre-Analysis

5.1.1 Answers to question 1 (a)

Do you analyse the sellers’ respective portfolios before selecting and entering into purchasing agreements?

The answers the respondents gave are shown in Table 2. To this question half of the respondents answered that they do portfolio analysis on their suppliers, whereas the other half solves possible IP issues in either the agreements (interview B, D and in some part G) or as in the case with interview F. Instead of portfolio analysis they always put the indemnification responsibility on the supplier and prevent themselves beforehand by mapping possible risks involved.

Table 2: Answers to question 1 (a).

<table>
<thead>
<tr>
<th>Interview</th>
<th>Market</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Industry</td>
<td>Yes, for most of our suppliers we do a portfolio analysis beforehand. For critical components we might look at an acquisition instead.</td>
</tr>
<tr>
<td>B</td>
<td>Technology</td>
<td>Not when you take a common technology license as a subcomponent of a larger solution. Instead, you see protection in the agreement as to whether this solution would infringe on another’s intellectual property rights.</td>
</tr>
<tr>
<td>C</td>
<td>Industry</td>
<td>Yes, that is something that we very thoroughly do.</td>
</tr>
<tr>
<td>D</td>
<td>Industry</td>
<td>No, we usually solve the possible IP ownership issues in our frame agreements or the subsequent product or development agreements.</td>
</tr>
</tbody>
</table>

Continued on next page
<table>
<thead>
<tr>
<th>Interview</th>
<th>Market</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>E</td>
<td>Technology</td>
<td>Yes, but only for smaller suppliers that might not have sufficient funds to protect itself from possible indemnification.</td>
</tr>
<tr>
<td>F</td>
<td>Technology</td>
<td>No, not directly. We map the risks involved and always put the indemnification responsibility on the supplier. If it is a supplier that sues frequently, first then a deeper analysis is made.</td>
</tr>
<tr>
<td>G</td>
<td>Technology</td>
<td>No, as long as we secure access to those rights and/or ownership of those rights that come out it we don’t need to analyse their portfolios. That would take too much time, and we have to many suppliers.</td>
</tr>
<tr>
<td>H</td>
<td>Technology</td>
<td>Yes, in purchasing of important components we (almost) always analyse seller’s portfolio – and the company as such. We also describe what we want the seller to take into consideration when selling to us. Who should own what and why.</td>
</tr>
</tbody>
</table>
5.1.2 Answers to question 1 (b)

Does your company have a strategy to prevent a "lock-in" scenario when entering into development agreements (i.e. when your company selects a supplier who will own all IPR)?

The answers the respondents gave are shown in Table 3. To this question seven out of the eight respondents had a strategy to prevent them from a lock-in scenario with a supplier, but with somewhat different approaches. The company that did not have one specifically, explained that this has to do with the structure of their business and the present business plan.

Table 3: Answers to question 1 (b).

<table>
<thead>
<tr>
<th>Interview</th>
<th>Market</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Industry</td>
<td>Yes, we try to the extent possible solve IP ownership beforehand in the agreements. Avoiding too strict agreements and joint ownership, but perhaps granting the supplier free but limited licenses.</td>
</tr>
<tr>
<td>B</td>
<td>Technology</td>
<td>Yes, we try to avoid exclusive deals as far as possible. Not putting all eggs in one basket. We are mostly working with dual source scenarios.</td>
</tr>
<tr>
<td>C</td>
<td>Industry</td>
<td>Yes, we have an internal policy to avoid it to the extent possible. For most of our key components we have the availability of alternative suppliers. But in our industry section not all components have the benefit of having multiple suppliers.</td>
</tr>
<tr>
<td>D</td>
<td>Industry</td>
<td>Not directly, at this point in the business we are focusing more on process than on product, meaning that we are licensing in necessary IP, and simultaneously creating IP on our own.</td>
</tr>
<tr>
<td>E</td>
<td>Technology</td>
<td>Yes, we have. Our entire business model can be said to be based on avoiding lock-in.</td>
</tr>
</tbody>
</table>

Continued on next page
<table>
<thead>
<tr>
<th>Interview</th>
<th>Market</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>Technology</td>
<td>Yes, if we pay for development, we will also own all rights. We developed a joint development process to easier establish ownership of rights developed during joint development.</td>
</tr>
<tr>
<td>G</td>
<td>Technology</td>
<td>Yes, we do.</td>
</tr>
<tr>
<td>H</td>
<td>Technology</td>
<td>Yes, if you cannot own it, the strategy was to at least have a full license.</td>
</tr>
</tbody>
</table>
5.1.3 Answers to question 1 (c)

Do you estimate costs for IP in agreements, i.e. do you calculate on full ownership vs license?

The answers the respondents gave are shown in Table 4. The respondents answers differed from each others. Some deemed estimation of IP costs for full ownership often too complex, as in the case with interview E. Others calculated on the licensing fees. As for interview A and D, did calculations on levels to which they could agree on, and if the supplier wanted more they developed wanted goods on their own instead.

Table 4: Answers to question 1 (c).

<table>
<thead>
<tr>
<th>Interview</th>
<th>Market</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Industry</td>
<td>The IP department gives input to the purchasing department about normal levels for licensing fees. If the other party wants more, we may not be willing to enter into an agreement.</td>
</tr>
<tr>
<td>B</td>
<td>Technology</td>
<td>Yes, it has been done before the negotiations. Weighing the prices and necessary licensing fees to get a competitive product in the end.</td>
</tr>
<tr>
<td>C</td>
<td>Industry</td>
<td>Whenever we go into cooperation with a supplier we draft what we call a product development agreement, in which we try to the extent possible to secure the IP ownership of whatever new idea is coming up and. So, the IP costs are calculated beforehand.</td>
</tr>
<tr>
<td>D</td>
<td>Industry</td>
<td>Yes, always the case when entering into a license agreement. Alternatively we develop the IP instead of purchasing/licensing it.</td>
</tr>
<tr>
<td>E</td>
<td>Technology</td>
<td>We have a license-based business model. So it’s more about working strategically and creating a good future negotiating position. Estimating costs for full ownership are often too complex.</td>
</tr>
</tbody>
</table>

Continued on next page
<table>
<thead>
<tr>
<th>Interview</th>
<th>Market</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>Technology</td>
<td>No, we have not estimated them. We have not been able to do that, since it’s very hard to predict that kind of cost. We knew the other parties [suppliers] well.</td>
</tr>
<tr>
<td>G</td>
<td>Technology</td>
<td>Not in agreements. But we do estimate IP costs in products. What will the ultimate [IP] cost be for the product, that goes into the bill of materials for the product?</td>
</tr>
<tr>
<td>H</td>
<td>Technology</td>
<td>Yes. If it was core business the ideal situation is to own of course. There was always (almost always) a pre-calculation.</td>
</tr>
</tbody>
</table>
5.1.4 Answers to question 1 (d)

How does your company work with these areas?

The answers the respondents gave are shown in Table 5. Two respondents, G and H, said that the IP department worked closely together with the purchasing and/or R&D department. One respondent, E, answered that they are strategically building a as strong as possible patent portfolio to give them freedom to operate and that it gives them leverage in all agreements.

Table 5: Answers to question 1 (d).

<table>
<thead>
<tr>
<th>Interview</th>
<th>Market</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Industry</td>
<td>Protect core technologies within the business and on a sliding scale from core to commodities being more and more open to source these to selected suppliers.</td>
</tr>
<tr>
<td>B</td>
<td>Technology</td>
<td>Avoiding too exclusive agreements, that might prevent us from dealing with another supplier.</td>
</tr>
<tr>
<td>C</td>
<td>Industry</td>
<td>We use a lot of time and effort on ensuring our IP rights, taking our patents worldwide and also defending those patents. It is certainly an area where we spend a lot of time and energy.</td>
</tr>
<tr>
<td>D</td>
<td>Industry</td>
<td>We have very clearly defined within our company what is core and what is key IP. We also developed a coarse plan, partly on how to access certain IP and partly on how to ensure that we do not have any leaks.</td>
</tr>
<tr>
<td>E</td>
<td>Technology</td>
<td>Strategically, we are working to build as strong and relevant patent portfolio as possible. Because, it gives us freedom to operate and it’s applicable in all agreements.</td>
</tr>
<tr>
<td>F</td>
<td>Technology</td>
<td>Mainly by mapping out the risks involved and taking measures thereafter.</td>
</tr>
<tr>
<td>G</td>
<td>Technology</td>
<td>The IP department works closely together with the purchasing department.</td>
</tr>
</tbody>
</table>

Continued on next page
Table 5 – continued from previous page

<table>
<thead>
<tr>
<th>Interview</th>
<th>Market</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>H</td>
<td>Technology</td>
<td>Purchasing in close cooperation with R&amp;D and IPR organisation.</td>
</tr>
</tbody>
</table>
5.2 Question 2: Foreground/Background

5.2.1 Answers to question 2 (a)

What is your company’s policy as to ownership of rights developed under the agreement?

The answers the respondents gave are shown in Table 6. Half of the respondents said that they wanted the ownership of rights developed under the agreement. One quarter wanted the ownership if it had to do with their devices or their core business, for IP not related to their core business a free license was enough. One said that everything they paid for they also wanted ownership to. The last one wanted the ownership of IP to correspond with the parties input and effort.

Table 6: Answers to question 2 (a).

<table>
<thead>
<tr>
<th>Interview</th>
<th>Market</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Industry</td>
<td>If the IP generated is within our core business, then we want ownership. If it is outside, they can own it but we want a free license.</td>
</tr>
<tr>
<td>B</td>
<td>Technology</td>
<td>Our company wants to own all IP, that is the starting point.</td>
</tr>
<tr>
<td>C</td>
<td>Industry</td>
<td>As a starting point, we take ownership.</td>
</tr>
<tr>
<td>D</td>
<td>Industry</td>
<td>Ownership of IP corresponding to the parties input and effort.</td>
</tr>
<tr>
<td>E</td>
<td>Technology</td>
<td>Full control and ownership of our own foreground, as well as a license to theirs. As a starting point, we don’t give away any rights to our background.</td>
</tr>
<tr>
<td>F</td>
<td>Technology</td>
<td>Strict baseline; everything paid for should we have full ownership of, both IPR and results in all agreements.</td>
</tr>
</tbody>
</table>

Continued on next page
Table 6 – continued from previous page

<table>
<thead>
<tr>
<th>Interview</th>
<th>Market</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>G</td>
<td>Technology</td>
<td>Any IP generated by the supplier that relates to our devices. Then we want to have the ownership of that. If there is any IP, as we as customer generate, that is relevant to the components of the supplier. Then we can transfer ownership to the supplier but then we want to have a license for ourselves. Most often a free license. The license can be either exclusive or non-exclusive.</td>
</tr>
<tr>
<td>H</td>
<td>Technology</td>
<td>Full ownership of development result.</td>
</tr>
</tbody>
</table>
5.2.2 Answers to question 2 (b)

How is the ownership of IP rights normally divided between the parties?

The answers the respondents gave are shown in Table 7. The answers spanned from either owning all IP from a development to rather owning a subset completely than being a partner to many.

<table>
<thead>
<tr>
<th>Interview</th>
<th>Market</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Industry</td>
<td>A fair balance, as explained in (a).</td>
</tr>
<tr>
<td>B</td>
<td>Technology</td>
<td>The basic setting is that we own all IP, but sometimes we have joint ownership or the IP is divided by the parties business interests/areas and then cross-licensed.</td>
</tr>
<tr>
<td>C</td>
<td>Industry</td>
<td>Three options; either we own it [IP], the supplier owns it or it is a joint ownership. The last one, in a practical world, doesn’t really work that well.</td>
</tr>
<tr>
<td>D</td>
<td>Industry</td>
<td>It depends highly on the size of the other party [compared to us].</td>
</tr>
<tr>
<td>E</td>
<td>Technology</td>
<td>The basic goal is that we rather own a subset completely than being a partner to many. Joint ownership is problematic.</td>
</tr>
<tr>
<td>F</td>
<td>Technology</td>
<td>Normally we own it, but it is difficult to follow up on the rights.</td>
</tr>
<tr>
<td>G</td>
<td>Technology</td>
<td>Same as in question (a).</td>
</tr>
<tr>
<td>H</td>
<td>Technology</td>
<td>Each company owns their own background. We wanted to own the foreground and have a license to the background that made the foreground possible, in order to be able to further develop the foreground and the result of the development work.</td>
</tr>
</tbody>
</table>
5.3 Question 3: Use of own portfolio

5.3.1 Answers to question 3 (a)

Do you ever consider using your own portfolio as a leverage?

The answers the respondents gave are shown in Table 8. Seven out of eight said that they use their portfolio as leverage in negotiations, some even deemed it as their primary use of their portfolio and another called it their war chest. The one answering that they did not are currently building their portfolio but will use it as leverage, as soon it is possible and the portfolio is strong enough.

Table 8: Answers to question 3 (a).

<table>
<thead>
<tr>
<th>Interview</th>
<th>Market</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Industry</td>
<td>Yes, when entering a negotiation, may it be a supplier or in an acquisition, one can push the prices down using the IP portfolio. Usually easier to agree on than with pure money. It is more like a currency.</td>
</tr>
<tr>
<td>B</td>
<td>Technology</td>
<td>Yes, we use the portfolio as a war chest, both offensive and defensive, as well as leverage in a negotiation with a supplier in this case.</td>
</tr>
<tr>
<td>C</td>
<td>Industry</td>
<td>Yes, in negotiation we exchange a patent license to a supplier for a lower cost when purchasing goods or services. Sometimes, if they do not agree, we might instead develop it on our own.</td>
</tr>
<tr>
<td>D</td>
<td>Industry</td>
<td>No, we are currently building our portfolio, but will do that once possible.</td>
</tr>
<tr>
<td>E</td>
<td>Technology</td>
<td>Yes, even though it might not work all the time.</td>
</tr>
<tr>
<td>F</td>
<td>Technology</td>
<td>Yes, we do. It might be the primary use of our portfolio.</td>
</tr>
<tr>
<td>G</td>
<td>Technology</td>
<td>Yes, we do that both in general component suppliers as well as with customised components suppliers.</td>
</tr>
</tbody>
</table>

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Table 8 – continued from previous page

<table>
<thead>
<tr>
<th>Interview</th>
<th>Market</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>H</td>
<td>Technology</td>
<td>Yes, the IPR department was in charge of this and had good control over the different trading scenarios.</td>
</tr>
</tbody>
</table>
5.4 Question 4: Decision making and responsibility

5.4.1 Answers to question 4 (a)

Who takes the final IP decisions when entering into purchasing and development agreements, i.e. are these decisions taken by e.g. head of procurement, head of IP or both?

The answers the respondents gave are shown in Table 9. All except for one agreed on that the head of IP is a key player but the decisions were normally taken in joint consultation which either the purchasing department, head of procurement, legal, R&D or in some cases management.

Table 9: Answers to question 4 (a).

<table>
<thead>
<tr>
<th>Interview</th>
<th>Market</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Industry</td>
<td>A combination of Head of IP, legal and R&amp;D.</td>
</tr>
<tr>
<td>B</td>
<td>Technology</td>
<td>Head of IP, done in consultation with business and purchasing department.</td>
</tr>
<tr>
<td>C</td>
<td>Industry</td>
<td>Head of IP, in some cases head of legal.</td>
</tr>
<tr>
<td>D</td>
<td>Industry</td>
<td>CEO, at present time.</td>
</tr>
<tr>
<td>E</td>
<td>Technology</td>
<td>Head of IP.</td>
</tr>
<tr>
<td>F</td>
<td>Technology</td>
<td>Head of IP has some veto, but could be overturned by management.</td>
</tr>
<tr>
<td>G</td>
<td>Technology</td>
<td>Head of IP, done in consultation with business and purchasing department.</td>
</tr>
<tr>
<td>H</td>
<td>Technology</td>
<td>Both. If ordinary only head of procurement; if extraordinary a discussion between the two.</td>
</tr>
</tbody>
</table>
5.4.2 Answers to question 4 (b)

Does your company have a strategy to handle IPR when sourcing and/or licensing?

The answers the respondents gave are shown in Table 10. Everyone had a strategy but what it entailed differed in the answers, spanning from avoiding joint-ownership to the fullest extent possible to clear guidelines spelling out escalation routes. Other mentionable strategies were as in interview F; building strong portfolios to leverage against other companies, thus lowering their costs or as in interview H; main strategy was to think ahead and not be too greedy when it came to ownership.

Table 10: Answers to question 4 (b).

<table>
<thead>
<tr>
<th>Interview</th>
<th>Market</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Industry</td>
<td>Yes, one aspect is to avoid joint-ownership to the fullest extent possible.</td>
</tr>
<tr>
<td>B</td>
<td>Technology</td>
<td>Yes, to safeguard the crown jewels that is our IP.</td>
</tr>
<tr>
<td>C</td>
<td>Industry</td>
<td>Yes, in which we spell out a position we need or wish to take and also the approval process internally in terms of who can take decisions on what and which level do we need to ensure approval of how we deal with and address IP issues.</td>
</tr>
<tr>
<td>D</td>
<td>Industry</td>
<td>Yes, we do.</td>
</tr>
<tr>
<td>E</td>
<td>Technology</td>
<td>Yes, we have guidelines spelling out clear escalation routes.</td>
</tr>
<tr>
<td>F</td>
<td>Technology</td>
<td>Yes, mostly concerning licensing since that was our biggest business. Building portfolios to leverage against other companies, lowering our costs.</td>
</tr>
<tr>
<td>G</td>
<td>Technology</td>
<td>Yes, we do. We have standard agreements</td>
</tr>
</tbody>
</table>

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Table 10 – continued from previous page

<table>
<thead>
<tr>
<th>Interview</th>
<th>Market</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>H</td>
<td>Technology</td>
<td>Yes, the main strategy was to think ahead and not to be too greedy when it comes to ownership of IP. Sometimes it costs more than it gains.</td>
</tr>
</tbody>
</table>
5.4.3 Answers to question 4 (c)

If yes on (b), who takes the decision if exceptions should be made to any IPR guideline?

The answers the respondents gave are shown in Table 11. Most of them agreed it was the head of IP that should have the authority to take decisions if exceptions to the IPR guideline should be made. If not the head of IP should take the decisions the others answered the (head of) legal department or in the end the management team.

<table>
<thead>
<tr>
<th>Interview</th>
<th>Market</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Industry</td>
<td>Head of IP in conjunction with head of legal function - or in the end management.</td>
</tr>
<tr>
<td>B</td>
<td>Technology</td>
<td>Legal department</td>
</tr>
<tr>
<td>C</td>
<td>Industry</td>
<td>Depending on how sensitive it is, it could go all the way up to executive management.</td>
</tr>
<tr>
<td>D</td>
<td>Industry</td>
<td>Chief legal officer in conjunction with head of purchasing.</td>
</tr>
<tr>
<td>E</td>
<td>Technology</td>
<td>Head of IP</td>
</tr>
<tr>
<td>F</td>
<td>Technology</td>
<td>Head of IP</td>
</tr>
<tr>
<td>G</td>
<td>Technology</td>
<td>Head of IP</td>
</tr>
<tr>
<td>H</td>
<td>Technology</td>
<td>Head of IP in conjunction with head of legal - or in the end management.</td>
</tr>
</tbody>
</table>
6 Results: Analysis of the Answers in Comparison to the Literature

In this section an analysis on the basis of a comparison between the responses and the literature study is made. Any possible differences between the answers and literature will be commented.

6.1 Pre-Analysis Before Purchasing and Development Agreements

The pre-analysis section explains three important issues to address ahead of contacting suppliers in a purchasing or sourcing situation; portfolio analysis, IP strategies and estimating the costs of the IP.

6.1.1 Portfolio Analysis

Only half of the respondents to the questionnaire said that they did a portfolio analysis of the supplier before entering an agreement, despite that it is virtually not covered in the surveyed literature. This reveals a real need for further research within this area in order to better align the academic understanding with that of best practice.

During interview F, the respondent mentioned that it can also be a matter of time that prohibits them from doing this. Product cycles can be very short, and any task where time can be saved most probably will be left undone. But it can also be the case that not having an IP department skilled in the art of portfolio analysis that. Either due to funding, the size of the company or that the knowledge in the area is perhaps not sufficient to know that IP can be turned in to a profitable business, as shown in the article by Holgersson [10].

6.1.2 Strategies

Seven out of eight respondents said that the company they represent have a strategy to prevent lock-in scenarios. However, all eight agreed that they had an IP policy in the company, which of course differs from business to business. For a company, to have an IP strategy is of great importance according to the literature study. Both in terms of guiding the business in the right direction and also by preventing competitors from free riding of the hard work made by the business. This is in agreement with the literature, such as [20] and [21] who highlighted the need for an active lock-in strategy.
To strategically use one’s own patent portfolio as leverage in negotiations to lower prices is one way of using IP as a strategy. They also all answered that they had a strategy to handle IPR when sourcing and/or licensing.

6.1.3 Estimating Costs

Estimating costs of IP is both complex and difficult as explained by the respondents. Some of the respondents said that they estimated the costs, but did not specify in which way. However, the costs can be traced to the bill of materials in a product, as mentioned in interview G. Where the costs of purchasing the goods is included in the sales price, as well as possible licenses might be.

The intrinsic difficulty in performing such validation and many complicated factors surrounding it could explain why there is such a scarce literature about it.

6.2 Portfolio as leverage

Seven out of the eight responding to the questionnaire said that they used their portfolio as leverage in negotiations. It might be used to establish a power position that might lower the prices in an agreement, supporting the article by Kalanje, [17]. It might not work every time, as mentioned in interview E, but it is always a part of the negotiations. And as in the licence intensive business as addressed in interview E, might be the primary use of their portfolio.

The leverage can also be in form of a cross-license, where the IP is used as currency, as mentioned in interview A, in the process of getting a better deal in the end.

6.3 Contracts and Agreements

Before contacting a supplier it is of utmost importance to have a NDA signed to prohibit the parties from disclosing any sensitive information that might be harmful for both parties, especially the buyer. Further to, in the specifications of the contract, establish what precisely it is that the buyer wants and what it should be used for. Having a non-assertion covenant in the contracts is common and useful to preemptively settle any future infringement disputes. One respondents mentioned that they always put the indemnification responsibility in all agreements on the supplier.

Most of these procedures are standardised and performed in a similar fashion over the entire field.
6.3.1 Ownership

Some of the respondents answered that they settled their IP ownership in the agreements beforehand. As stated in interview H, thinking ahead and not to be too greedy when it comes to ownership of IP might be a valuable lesson. Sometimes it costs more than it gains, which is also implied by Barret in his article, [11]. When it came to ownership of IP developed during the agreement, the companies included had different policies as who should own the IP and under which terms. Most companies starting point was that they take full ownership.

While others, as in the case with interviewees A and G, the ownership could be divided upon relevancy to the different parties. The purchasing party could transfer the ownership of IP that might be more relevant to the supplier, given that a free license to use it is granted and that they are not permitted to operate on the buyer’s market.

This shows that the portfolio management is a very non-trivial area of strategy with two extremes (greedy versus non greedy) and that active consideration of these issues are of great importance, as highlighted by Holger Ernst, [14].

6.4 Decision Making and Responsibility

Most of the respondents agreed that the head of IP plays a key role in purchasing and sourcing. They are also usually the ones taking the final decisions if any exceptions should be made from any IPR policy. In some cases (interviewees B and D) they leave that to the legal department or the CLO. It is clear from the interviews that the IP department is important in purchasing and sourcing. And by involving the executive positions in the company’s IP strategy is greatly beneficial for the company’s IP performance and the following possible returns revenue wise, as shown by Holgersson [13].

Not all companies have an IP department, especially not in SMEs. Those who do not simply have not got the resources to fund such a department. This suggests that by either establishing a department or sourcing the function could help SMEs to grow their revenue from their work within R&D.
7 Conclusions

After studying the handling of IP in purchasing and sourcing situations thoroughly, the conclusions that can be drawn is that there are no universal, definite best practices. Every business, situation and context is different from the other. However, there are some key steps to go through before entering into an agreement regarding the handling of IP rights in purchasing and sourcing. This is based on the answers given by the respondents to the questionnaire and the literature study conducted. Most of the respondents represents large corporations and has extensive experience in this field making their answers deemed likely to be considered close to business best practice.

Before commencing to an agreement with a supplier the company should do a portfolio analysis of their own portfolio, to get a full understanding of its contents and map possible areas of application into business. Only when that is completed, carrying on selecting suppliers following an internal IP strategy.

Firstly, either by doing a portfolio analysis of the different suppliers up for selection or by mapping out possible risks is of crucial importance when selecting, at least new, suppliers. The portfolio should also be used as leverage in an attempt to lower the cost of the agreement or as a currency in a possible trade of assets as part of the agreement.

Secondly, by establishing a non-disclosure agreement with the interesting party or parties to protect the information exchanged. Before committing to an agreement, a thorough discussion between the parties of what the agreement is and what the goods or services are going to be used for should be held. This to prevent any infringement issues later or possible attempts to sue the other part. The company interested in procuring goods or services needs to establish precisely what it is they are after in the specifications in the agreement. This could further be prevented by putting the indemnification responsibility on the supplier.

Thirdly, during the process of a development agreement it is necessary to beforehand determine the ownership of any invention or IP in any other shape or form. As stated by multiple respondents, joint ownership of IP rights is troublesome and also very difficult to manage and trace. The ownership structure should be in writing in a contract between the parties. It is key to not make the agreement too exclusive, to prevent the purchasing side from being locked-in to the supplier, to not put all eggs in one basket. Further, it is deemed important to protect one’s background and make sure to secure the foreground that came out of the collaboration. To include a non-assertion covenant in the agreement is beneficial.

To best work with these questions the company should have the executive
team involved in the IP strategy and the IP department should also work in close junction with the purchasing, R&D and legal departments. Having the purchasing or procurement department working tightly with the IP department providing insights on reasonable licensing levels, ownership structures and strategical paths of purchasing the right technique.

In the end, a decision not to perform a certain step is also a decision in itself.

The conclusions described above can be summarised in the figure below, Figure 2. This three-step method serves to show the three main topics to go through in order to have a successful handling of IP in purchasing and sourcing scenarios.

Figure 2: Simplified three-step method for successful handling of IP in purchasing and sourcing scenarios.
8 Reflections

A take back after conducting the interviews, is that interviews made with the semistructured method has its pros and cons. The upside is that more information can be given by the respondent through explanations and examples, however the downside is that condensing the answers to their key points is not an easy task, and in some cases possibly not getting a straight answer to the question is at risk.

Finding contacts having the time to participate is a process easier said than done, most of the ones that was reached out to agreed to take part in the interviews. But finding them without help from the supervisors and contacts would have been very difficult.

The subject studied is very large and more complex than perhaps first believed, and in hindsight should perhaps only been focusing on either purchasing or sourcing, not both simultaneously. The number of respondents to the questionnaire is eight, however their expertise and experience in this subject could weigh up the perhaps considered low number of participants.

8.1 Future works

This thesis was made on the premises of establishing an overview of the current best practices in purchasing and sourcing, specifically on how the IP rights are treated in these scenarios.

It would be interesting to put larger focus on development agreements alone. To know more on how to handle IPR with dual sources where the drawings of the wanted goods are handed over to more than one supplier. Furthermore, how the long term strategies are formulated and implemented for these types of situations. Another area of interest might be, to a larger scale, document the differences in IP knowledge in various markets and the subsequent ownership structures on different markets.

In estimating of the IP costs perhaps using the net present value of the suggested licensing fee for the future years is applicable and comparing that to the potential price point of purchasing the patent from a supplier instead.
References


Intellectual property rights in purchasing and sourcing - Overview of current best practices

Abstract
In purchasing and sourcing situations not all companies have a guideline or policy on the handling of intellectual property (IP) rights in these. This thesis covers a literature study on the area followed by interviews with high ranking positions in the industry and technology sector. The aim of the thesis is to create an overview of current best practices in said situations. By consulting relevant literature and conducting interviews it is clear that some key points are deemed more or less necessary for a healthy IP portfolio handling in these situations. These include; establishing a non-disclosure agreement, structuring the ownership of any upcoming IP developed under an agreement beforehand and having the IP department working in close junction with the purchasing and R&D department are some. Lastly, the thesis concludes that an essential factor determining IP success is a good understanding of the own portfolio and its implications.