

WIPO/IP/HAN/98/7(b)

ORIGINAL: English

DATE: May 1998



DEPARTMENT OF SCIENCE,
TECHNOLOGY AND ENVIRONMENT
OF THE PEOPLE'S COMMITTEE
OF HANOI CITY



NATIONAL OFFICE OF INDUSTRIAL
PROPERTY OF VIET NAM



WORLD INTELLECTUAL
PROPERTY ORGANIZATION



UNITED NATIONS
DEVELOPMENT PROGRAMME

WIPO NATIONAL SEMINAR FOR SMALL AND MEDIUM ENTERPRISES ON INTELLECTUAL PROPERTY AND THE TRIPS AGREEMENT

organized by
the World Intellectual Property Organization (WIPO)
in cooperation with
the National Office of Industrial Property of Viet Nam (NOIP),
the Department of Science, Technology and Environment (DOSTE),
of the People's Committee of Hanoi City,

and
with the assistance of
the United Nations Development Programme (UNDP)

Hanoi, May 15 and 16, 1998

**THEME III: STRENGTHENING THE PROTECTION OF INTELLECTUAL PROPERTY
RIGHTS (IPR) IN SMALL AND MEDIUM ENTERPRISES**

**TOPIC 7: FORMULATING AN INTELLECTUAL PROPERTY DEVELOPMENT
STRATEGY FOR ENTERPRISES**

*Document prepared by Mr. Peter Cordsen, Director,
The Danish Innovation Center, Taastrup, Denmark*

FORMULATING AN INTELLECTUAL PROPERTY DEVELOPMENT STRATEGY FOR ENTERPRISES

This paper will:

- Bring an introduction to the subject;
- Present some cost/benefit reflections;
- Illustrate the tangible benefits of patenting;
- Present a way of determining the costs;
- Exemplify different strategies;
- Finally bring a conclusion to the subject.

1. INTRODUCTION

This paper refers to the paper presented under topic 5: The Role of IPR in the Promotion of Competitiveness and Development of Enterprises and can be seen as a continuation of that paper. The below considerations are therefore related to the businessman's viewpoint – what is in it for my business.

2. SOME COST/BENEFIT REFLECTIONS

Whenever a businessman considers to invest his company's money he will make a cost/benefit analyses asking the following questions:

- What will be the benefits for my business on short, medium and long term?
- What will it cost on short, medium and long term?

The answers to these two questions will provide information on the profitability of the venture and on the expected cash flow situation. It will also indicate how the matter should be considered as an element in the company's long term strategy.

3. THE BENEFITS

In the paper presented under topic 5 it was demonstrated how SMEs can benefit from the patent system in at least these ways:

They can:

1. Use patent information as a tool in product development and in marketing;
2. Use patent protection thus obtaining
 - Market position improvement on a local market;
 - Market position improvement on the global market;
 - Improvement of the competence of the enterprise;
 - Opening the door for licensing and internationalisation.

Although all of these benefits are important there is hardly any doubt that the typical business manager will focus on

- Market position improvement on a local market
- Market position improvement on the global market

His very simplified consideration may lead him to conclude, that *a patent is a marketing tool!*.

If we agree to this somewhat simplified conclusion, at least we are now speaking a businessman's language. He knows what a marketing tool is, and he can evaluate it as such.

Marketing people – even in SMEs – are trained in predicting the sales potential, turn over and generated profit in various market scenarios, and they will be able to estimate the outcome of various “what-if” situations.

Considering the successful use of the patent system is the same as asking:

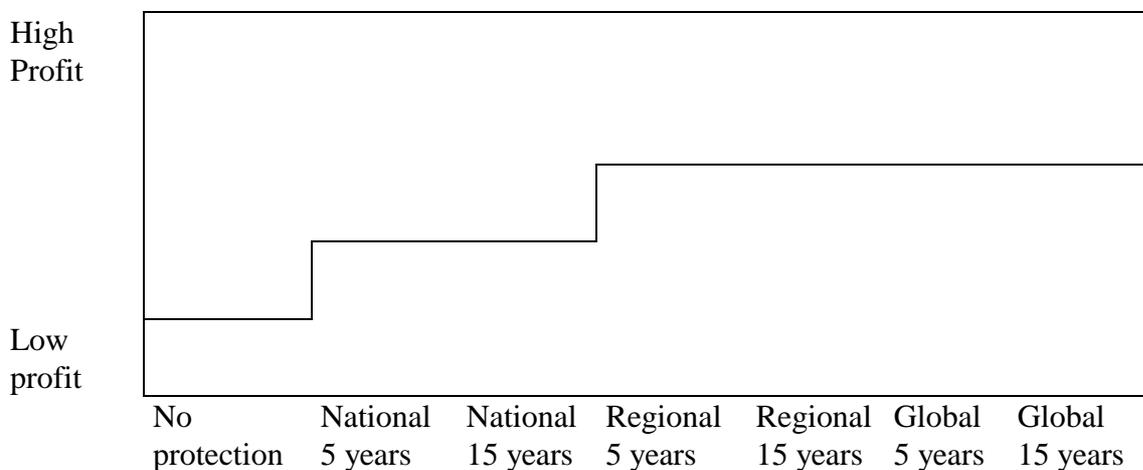
- What if we were the only ones on the market in this country for the next 5 years?
(anticipating that the technology under all circumstances has a short market life time)
- What if we were the only ones on the market in this country for the next 15 years?
(anticipating a strong national patent and a long market life time)
- What if we were the only ones on the market in our part of the world for the next 5 years?
- What if we were the only ones on the market in our part of the world for the next 15 years?
- What if we were the only ones on the world market for the next 5 years?
- What if we were the only ones on the world market for the next 15 years?

The answers to these questions will depend a lot on

- The strength of the company (a strong company can more easily market on distant markets);
- The accessibility of distant markets (Information Technology related markets are easier to access than, e.g., the market for concrete elements).

In most cases, however, SMEs will not be able to profit from distant markets, so the answers to the questions might be as illustrated below:

Total generated profit as a function of various protection scenarios



It appears that the company estimates that it will be able to generate a certain extra profit through a better market position up to a certain level. But the figure also shows that the company expects the profit to be the same whether they are alone on the market in their region or in the whole world. So a patent protection in distant countries will not change the situation (at least if a patent is considered a marketing tool only).

4. THE COSTS

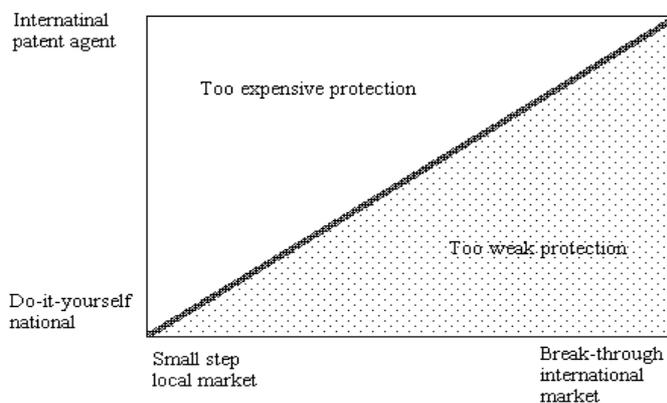
The costs of applying for and maintaining a patent is the most serious obstacle for an extensive use of the patent system. And the costs are both related to the necessary time involved in the process and to the expenses. The expenses are mainly seen as *the* obstacle.

The problem is that true information about the expenses is hard to get – in particular in the case of international patenting. But roughly, you get what you pay for. The challenge is to find out exactly what you need, and there is a huge spectrum of options.

In the one end of the spectrum you will find a patent application written by the inventor himself, possibly using free of charge assistance from the patent office or other assisting entity, filed in the national patent office only. This solution will initially only cost the filing

fee, which in most countries is very moderate. The “overall lifetime expenses” will be moderate, too, because they will be limited to national annual fees.

In the other end of the spectrum, however, you will find extensive international patenting based on patent applications formulated by international experts who easily charge 2-300 US\$ per hour. The basic patent application may be ½ cm. thick and count more than 70 patent claims – and with translation costs, filing fees and normally a huge correspondence with foreign patent offices in foreign languages, costs may be hair-raising. The below figure provides a rough and simplified illustration of the relevant patent activities (and hence the costs) as a function of the potential of the invention. A combination of the figure illustrating the overall profit potential with this figure which illustrates the overall costs will give an idea as to what sort of patent activities and costs can be justified.



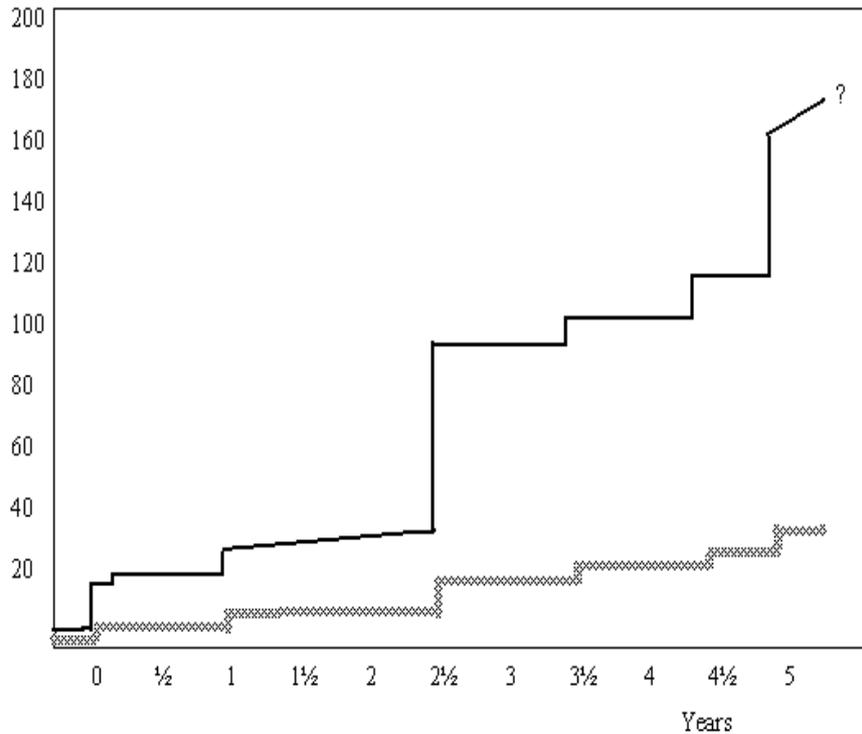
5. SOME CASH-FLOW CONSIDERATIONS

The above considerations only deal with the total profit generated and the total costs over the lifetime of the patent. But what if all the costs have to be paid at an early stage and the profit only will materialise after many years? That is a situation which will be feared by most managers, because that means that they have to take up loans, which in most cases are either very expensive or simply impossible.

Therefore it is very important to know at what time the different expenditure items have to be paid.

Taking the most serious case, an international patenting, the following diagram can illustrate two typical cases:

*1000 US\$



Patent costs over time

A relatively inexpensive case 
 A relatively expensive case 

It is worth noticing the very high step after 2½ years. It is caused by the costs of the patent entering the national phase in a number of countries. If the PCT system had not been used, then this expenditure had to be paid already after one year. The postponing of this expenditure has a dramatic effect for SMEs who have limited cash-flow reserves.

When the above figure of a specific case is studied and compared with the projected generated profit as a function of the protection, then the best patent strategy in that specific case can be chosen.

6. FORMULATING AN OVERALL PATENT STRATEGY

The above considerations are based on the conception of the patent as a marketing tool. But people tend to judge the patent system from various angles – leading to the most different overall strategies.

The table shown below illustrate some of these strategies

Overall strategy	Example of patentee	Remarks
Every patentable invention will be patented, both nationally and internationally	Contract research organisations 10 years ago. Some large Japanese companies	The reason for this strategy may either be lack of marketing competence – or dictated by the wish of pretending hi-tech competence, regardless of the price
Every patentable invention will be patented. Only those who show a potential for creating a substantial profit will be followed up internationally	Many technology based large and medium sized companies	Filing a patent application for every patentable invention can be seen as a sort of insurance. When serious costs occur, then a cost-benefit analyses will decide the future steps
Patent applications will be filed in selected cases, and only if there is a documentation for the profitability. If forecasts prove to be too optimistic, then the application will be withdrawn before it is made public (15 months)	Many technology based SMEs	Probably the most cost-efficient way of using the patent system. But there is a danger of loosing a patent right if predictions were too negative.
No patents are filed, but the patent literature is being carefully studied in order to prevent from infringing existing rights. Occasionally prophylactic publication takes place in order to prevent others from protecting.	Some companies, both large and small, often within electronics	The argument is often that in some branches technology develops so fast, that it is outdated before a patent is issued. It is a cheap but dangerous strategy
No patents are filed, and the patent literature is not being used	Many SMEs	A strategy based on ignorance. Many good possibilities remain unexplored, and the company is in danger of being put out of business by patent active competitors

Independent of the strategy there is one important decision which has to be made, and that relates to publication. It was earlier stated that a patent can be seen as a trade between an inventor (who receives the right to prevent others from profiting from his invention) and society (which becomes insight in the new invention).

Quite often a patented invention proves to be too early for the market and will be unable to create a profit before many years later. Therefore the patent process must be discontinued. This often takes place before the patent enters the PCT phase after 12 months. If it is decided not to go for international patenting, although there may be a potential for later international patenting, then it is *very important to withdraw the patent application before it is made public*. Otherwise the inventor will lose the opportunity of later filing a patent application and making use of patent protection.

Therefore, if it is decided to patent locally only, it is important that the market potential is local, too.

If an inventor only has a local protection of an invention which has a world wide market potential, then he has only gained very little – but the world society can without cost learn about his invention and make use of it. This is not a fair trade situation, and it should be avoided.

7. CONCLUSION

The patent strategy of an enterprise can be based on many philosophies, as illustrated above. In my view the most sound philosophy is closely related to the business manager's – perhaps simplified – view that a patent is a marketing tool.

It would be a good starting point for formulating an intellectual property development strategy if SME managers would appreciate patents as marketing instruments. The more delicate details may then follow during the later steps.

[End of document]