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THE MANAGEMENT AND EXPLOITATION OF INTELLECTUAL PROPERTY RIGHTS
BY SMALL AND MEDIUM-SIZED INDUSTRIES

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1. Introduction

During my experience in the intellectual property field I have often heard from small and medium-sized enterprises that they have considerable difficulties in gaining a complete view of the measures and actions to be taken in that field; in short, which behaviour would be appropriate to convey the best possible benefit from intellectual property protection? This uncertainty was quite pronounced also in highly developed countries.

I will try to give you a number of recommendations. The optimal approach to intellectual property matters depends, of course, on the business of the enterprise concerned. In my view, the most important criterion is the degree of research and development carried out by the enterprise, because their R&D produces inventions, and inventions are to be transformed into innovations meaning new products or methods successfully introduced into the market, prohibiting imitation and avoiding patents of competitors. To achieve this goal, a percentage of the R&D budget seems adequate for the support of its intellectual property policy.

The size of the enterprise, whether small, medium or large, has only an indirect relationship to the intellectual property activity as the degree of R&D is, in the majority of cases, a function of the size of the enterprise.

To structure the variety of enterprises, please have a look at the graphic diagram where three typical groups of enterprises are shown. The diagram is not meant to cover all kinds of enterprises, but the majority of them is entirely or partly included.

Let me first explain the three groups and their relationship to intellectual property matters. I make the basic assumption that

the enterprises no longer need to be convinced that intellectual property is an essential support for their business activity. They are prepared and willing to be active in the intellectual property field, and all they want to know is what could be the optimal activity, organisation and expenditure.

2.1 Enterprise working with state-of-the-art technology

You will be aware of the fact that quite a number of enterprises, all over the world, manufacture and sell products which represent nothing else than the state of the art. Just as an example, take a company which produces pots and pans for the kitchen. While new inventions of pots and pans are, of course, continually made, you can stay with old models and still find a lot of customers.

While in such an enterprise inventions are rare, maybe an employee has now and then an idea for an improvement, one or more trade marks for the products can substantially support the business. It might also be suitable to register one or more designs for the products to avoid an imitation of the outward appearance by a competitor.

As far as patent information is concerned, the enterprise should make sure that its technology is really state of the art, meaning that it does not infringe patents of third parties which might have been filed many years ago. Since patents can be in effect for a long time - for instance 20 years - it is possible that technology considered as old is still patented. The enterprise will have to search for such patents to carry out what is known as product clearance. Once this has been successfully done, a further study of patent literature might be less important as long as the enterprise does not materially change the product.

If the patent clearance reveals a patent which has to be used, the enterprise might either choose another type of product, or

apply for a licence under the patent. In fact, many enterprises working on state of the art technology do this under a licence acquired from a company which has formally developed such technology and often also transfers know-how to the licensee. For the various aspects of the negotiation and preparation of such licence agreements, the enterprise may refer to the Licensing Guide for Developing Countries, issued by WIPO, publication No. 620, in 1992.

2.2 Enterprise with product development

As a rule, an enterprise has a better standing in the market and can increase its market share if the products and methods offered by it are regularly developed further and new innovations are included in its programme. Take as an example the manufacture and sale of electric sockets and plugs, where new and better items will find more customers.

In contrast to the enterprise working on state of the art technology, a certain number of inventions will be made each year by its employees, leading to a corresponding number of patent applications. Trade marks and designs will also be of interest, and a considerable know-how will be accrued during the transformation of invention into innovation.

Since the product development goes on continuously, it is necessary to study the patents which are issued to third parties, and to continue the product clearance. A regular study of patent literature will also serve to further other purposes: to show the development engineers which ideas have already been found by others, and to show them ways of development which from the beginning avoid an infringement of the patents of competitors.

Also an enterprise with product development might find it necessary to conclude licence agreements with partners to acquire user rights and/or know-how. Here, however, the enterprise might have its own patent rights to offer and a

cross-licence agreement might be obtainable which can considerably lower the fees and royalties the enterprise has to pay, in exceptional cases even to zero.

The patent the enterprise has secured for its own development results can have an important role in the contractual relationship with a large company, it provides a balance of the economic power of both partners for the particular product concerned.

2.3 Enterprise with R&D activity

Whoever wants to stay in the foremost line of progress in the high technology area has to conduct not only development but also research. Take as an example a company producing alloys or compounds of specific properties.

Such an enterprise will face similar problems as previously mentioned, but will probably produce many more inventions per year.

Based on its R&D efforts, the enterprise might be in the position to grant licences to other companies. This might apply even if the enterprise has no manufacturing and sales organisation of its own, which is for instance the case with R&D centres either State owned or privately sponsored.

3. Management of intellectual property rights

3.1 An enterprise working on state of the art technology will have limited contact to intellectual property matters and therefore will be unfamiliar with the laws, regulations, requirements, and deadlines. It will, therefore, be in urgent need of a professional adviser who can explain to the management the important issues, assist in the decision making, and finally take care that the decided actions are reliably carried out.

The professional work for the enterprise will, therefore, be done by or under the responsibility of a patent attorney.

I take the term patent attorney here as including patent agents and lawyers with equivalent qualification, experience, and conduct in intellectual property matters.

A patent attorney in the narrow sense has completed a study of engineering or natural sciences, has trained for several years in intellectual property matters, including practising under the supervision of an experienced attorney, and in most cases has had to successfully pass a State examination. Among other requirements, the attorney has to comply with the ethical standards of his profession. For instance, he must not enter commitments dangerous to his professional independence, he is bound to secrecy with respect to all confidential information acquired during his practice, and he is not allowed to represent conflicting interests, to name just a few.

A patent attorney of such background, experience and professional conduct can be entrusted with all problems, difficulties and wishes an enterprise might have in the field of intellectual property protection. Despite his job title, a patent attorney handles prosecution, litigation, controversies, negotiation and conclusion of licence agreements, not only for patents but also for utility models, trade marks, designs, and other statutory rights, and is also familiar with aspects of unfair competition laws and copyrights.

Since the total scope of intellectual property work might not be on a large scale, the communication between the enterprise and the attorney will be channelled by a member of the management, for instance the head of the company and his secretary. It is important the attorney knows positively who in the enterprise is entitled to give him orders.

3.2 If the enterprise performs product development on a scale not exceeding about 15 inventions per year, it will also use

the patent attorney for the professional work to be done. The number 15 is, of course, not to be considered as a strict borderline. It is derived from the experience that an enterprise producing more than 15 inventions per year should seriously consider the establishment of an in-house patent team or patent department. I will explain the reason and advantages later.

With less than 15 inventions per year, economic reasons may decide against an in-house patent team. However, the patent work is nevertheless extensive enough so that a liaison office will be necessary. The workload might easily grow to a full-time job or even more.

The task of the liaison office is quite comprehensive. It will, for instance:

handle the exchange of letters between enterprise and attorney,

transmit the communications and official actions issued by the patent offices during the prosecution of the cases to the persons concerned in the enterprise, and give advice how to deal with them,

locate inventions made within the enterprise and care for the correct handling according to the law for later forwarding to the attorney,

monitoring the payment to be made to the attorney and controlling the debit note,

distribute, and sometimes also collect, the patent literature of interest for the developing engineer,

care for the compliance with laws or regulations regarding employee inventors' awards, and carry out many other activities which the intellectual property field brings about, last but not least the file keeping.

If the enterprise is interested in serving other markets than the home market, the foreign filing and maintaining policy to be established under the guidance of a patent attorney. Meetings for timely decision making, preferably performed by a patent committee consisting of representatives of manufacturing, sales and development, and probably also the patent attorney will be scheduled by the liaison person, who takes the minutes and refers the decisions to the attorney.

The liaison person should have a solid technical background and should be familiar with the fundamentals of intellectual property protection, for instance, the types of proceedings, the administrative rules, and the fees schedules of the patent offices approached by the enterprise. The liaison person should be committed to the tasks and derive professional satisfaction from them. To avoid misunderstandings, these tasks do not comprise the final draft of descriptions and claims nor the prosecution of cases before the patent offices or courts; this is still the area of responsibility of the patent attorney.

3.3. An enterprise producing more than 15 inventions per year, particularly if it also has a research department, can derive optimal benefits from activities in the field of intellectual property protection by establishing an in-house patent team with patent engineers doing the professional work which had previously been entrusted to a patent attorney.

Among the numerous advantages offered by an in-house patent team the most important are:

The patent engineer in charge, being an employee of the same company, has effective access to the R&D personnel. The patent engineer is supposed not to sit down waiting for inventions to be notified to him, but to approach the R&D people and ask them about their new ideas, informing them whether a patent could be applied for, and to take the results as basis for his work.

From this continuous co-operation, development engineer and patent engineer communicate on the basis of mutual trust and respect. This avoids misunderstanding and dissatisfaction among the R&D personnel.

As the patent engineer is readily available, he can be requested to explain the patent language found in patent documents and translate it into a technical language understood by engineers. This is particularly important in product clearance and opinions on infringement and validity.

The patent engineer can, as employee of the enterprise, collect all necessary data for calculating the inventors' awards if they are made dependent from the sales volume.

In co-operation with the R&D personnel, the patent engineer can define profiles of interest in the patent literature and compile the relevant publications for transmittal to the researchers and engineers.

While such - and other work - could also be carried out to some extent by a free patent attorney, the in-house patent team can do it faster and more effectively.

Patent engineers should have the same technical background and a similar training in intellectual property matters as mentioned with respect to patent attorneys. In fact, regarding prosecution and litigation they do generally the same as an attorney. The difference is that an employed patent engineer has his company as the sole client and continuously organises work according to the intellectual property policy which his company has decided to follow, be it the patent and trade mark filing activity at home and abroad, be it the attitude versus other companies in controversies about infringement or validity of protecting rights.

In most cases, the patent team will be equipped with sufficient personnel for handling the domestic applications and

prosecution; occasionally, an outside patent attorney might be employed for surges of workload. Foreign filing and prosecution, however, must always be done by patent attorneys admitted in their respective countries. A further task of the patent team is, therefore, to keep in close contact with these foreign attorneys.

4. Exploitation of intellectual property rights

Two kinds of exploitation have already been mentioned:

manufacture and sale under own patents, trade marks, and registered designs; and

licensing such intellectual property rights to others.

As a rule, the licence fee or royalty is less than the profit derivable from own manufacture and sale, and therefore licensing is preferably a means to reach a market which is otherwise unobtainable.

If an enterprise performs its own R&D and achieves results which might be of interest for competitors, it is confronted with a further task in the intellectual property field, watching the behaviour of the competitors and looking for possible infringements. Information can be collected from publications and periodicals, business leaflets, advertisements, and patents. Additionally, visits to trade fairs may reveal infringing acts. To maintain the strength of the patent portfolio, the enterprise should carefully evaluate and examine any suspicion aroused by such information. It is a management decision whether a presumptive infringer should be warned or even sued, or whether the enterprise, for any good reason, should abstain from such acts, but the matter should never be treated with negligence.

It goes without saying that in all matters of licensing and controversies, the advice and assistance offered by a patent attorney and/or a in-house patent team will be essential. An enterprise should not start any action in intellectual property

matters or write substantive letters without having consulted an intellectual property expert; otherwise it might encounter surprising and highly detrimental consequences.

If proceedings are to be instituted before a law court, the enterprise is required to be represented by a lawyer admitted to such courts. Also in such a case, a patent expert co-operating with the lawyer is highly recommended.

5. **Summary**

The more an enterprise invests in R&D, the more its business policy will be influenced by intellectual property matters. To deal with such matters economically, efficiently, and profitably, different solutions for the organisation of professional intellectual property work seem appropriate. Three examples of models of enterprises have been presented and proposals for the practical work have been given. For enterprises of other constitutions, the model solutions might offer suggestions.

A basic requirement in all cases is to employ experienced and knowledgeable persons who can be trusted to achieve the optimal results of the intellectual property work for the enterprise. In some countries, it might be difficult to make such persons available in a sufficient number. Some patent offices supply information in intellectual property matters and even arrange training courses for people wanting to learn about such matters.

Such courses could be extended under the aegis of WIPO, and organised into a permanent institution if no other source of intellectual property instruction is available, for instance university lessons. Very important, however, is experience in practical work over several years. Each country interested in a fruitful intellectual property system should build up a stock of experts, be it in free practice and/or in corporate employment, who can master the problems and difficulties of intellectual property protection.

Enterprise with	state-of-the-art technology	product development	research and development
average number of inventions/year	< 5	< 15	> 15
trade marks	occasionally	frequently	frequently
designs	occasionally	frequently	frequently
know-how	substantially unchanging	growing	strongly growing
patent information	when required	regularly	intensely
product clearance	before production	repeatedly	repeatedly
professional work done by	attorney	attorney and liaison office	in-house patent team (and attorney)