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EFFECTIVE MANAGEMENT AND USE OF INDUSTRIAL PROPERTY FOR ENTERPRISE DEVELOPMENT

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## EFFECTIVE MANAGEMENT AND USE OF INDUSTRIAL PROPERTY FOR ENTERPRISE DEVELOPMENT\*

#### INTRODUCTION

- As the world moves toward the post industrial age, the intellectual component of goods 1. and services will play an increasingly important role in their success in the market place. Small and medium size firms in the United States, Europe, and Japan and perhaps some of the larger firms in newly industrializing nations tend to be unaware of, and therefore fail to take advantage of, their industrial property. In my previous capacity with the U.S. Patent and Trademark Office, small and medium size firms would often complain that their products were being subjected to what they considered to be unfair competition by imported products manufactured abroad or by products manufactured domestically by large corporations. Typically, a product or machine of their creation and manufacture would be copied and sold in competition with them by a competitor. The aggrieved firm would have created the product, effectively marketed and created a demand for it, but, because it had not thought about protecting its creation through patents, industrial designs or trademarks, or by keeping production technology secret, they would be powerless to defend themselves against this competition from copiers who were legally taking advantage of their creativity and market development.
- 2. What tools are available to the small and medium size firm to protect its products from predatory competition? Among the tools in the arsenal to protect industrial property are patents, trademarks, industrial designs, and trade secrets. Each can contribute to the development and prosperity of the firm. While each of these forms of protection connotes an element of exclusivity, and a firm may choose to take full advantage of its exclusive rights in exploiting its technology, such exclusivity is frequently practiced only in the firm's home market. Some sharing of this exclusivity will often be a preferable means of exploiting a firm's industrial property in foreign markets. The enterprise may sell or license its rights, either totally or in specific territories, depending upon a host of commercial and practical considerations.

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- Yesterday, we heard how the Agreement on the Trade-Related Aspects of Intellectual Property Rights is going to strengthen systems for protecting industrial property rights. The subject matter qualifying for patent protection will be uniformly broad - the rights granted must extend to all products and processes, including products made by patented processes. The term of a patent must be at least 20 years from the filing date of the application, and the ability to enforce patented processes will be strengthened through the provision of a reversal of the burden of proof in appropriate cases. All countries must provide protection for trade secrets -that is, information which is secret, has commercial value, and has been subjected to reasonable steps to keep it secret. Any sign capable of distinguishing goods or services of one company from those of another company can constitute a trademark which, subject to the absence of a conflicting right, can be registered for a term of at least seven years. Countries must protect industrial designs that are new or original, provided they significantly differ from known designs, for a period of at least ten years. Thus, unlike in the past when systems for protecting inventions, industrial designs, trade secrets and trademarks varied considerably from nation to nation, there now exists a worldwide "floor" which companies can rely upon in protecting and promoting their industrial property.
- 4. A company needs to be aware of the industrial property which it possesses and how that property can be protected so as to maximize its contribution to the growth and development of the firm. Many small and medium size enterprises began and may still be concentrated around the production of a single product or the provision of narrowly-focused services to its customers. Such firms usually do not have research and development departments from which it might be expected that patentable inventions or protectable designs might flow. It is the creative aspect of its products, the know-how and trade secrets that may be utilized in its production, and the trademarks used in its marketing that constitute the property that is critical to the firm's well being. From machine tools to bicycles, from office equipment to plastic housewares, the product, its manufacture, and its commercialization can involve industrial property subject to protection.

#### **DISCOVERY**

5. Of course, we are too late to invent the first paper clip or the first staple for affixing a note to a document. For discussion purposes, however, let us go back in time 10 or 20 years. You own the ABC Office Supply Company which produces and markets an extensive array of paper products for offices, including stationery, folders, envelopes, shipping cartons, tape, and other office supplies. During a particularly hectic afternoon, one of ABC's employees hurriedly preparing the adhesive used to seal envelopes, mistakenly produces an adhesive which fails to harden. In fact, this adhesive possesses the property of remaining permanently sticky or tacky. When the adhesive is applied to seal the flap of an envelope, the flap can be opened and re-sealed without damage to the envelope. He discovers that paper coated with this adhesive can posted on a bulletin board, a door, or another piece of paper where it will remain until removed and that it leaves no residue upon its removal. Moreover, a sheet of paper with this adhesive can be removed and re-used many times. Yes, the employee has discovered those sticky little notepads which are all pervasive in today's business setting. You observe this and quickly appreciate that producing small packets of paper with adhesive along a portion of one side has tremendous market potential as a new office supply item.

- 6. You instruct a machinist for ABC to develop a prototype of a machine to facilitate the production of these notepads. The prototype utilizes large rolls of paper, cuts them into smaller rolls of various sizes, coats the paper as it is unrolled with the sticky adhesive along a portion of one side, cuts the paper a second time into various widths, and finally presses the paper together in notepads of from 50 to 300 sheets.
- 7. Some difficulties arise, however. Even though the employee who accidentally mixed the adhesive is able to replicate it, the viscosity of the adhesive is simply too great for practical utilization by the machine. A consultant from a local university suggests the addition of a thinning agent which allows the adhesive to be applied rapidly, and then heating the adhesive at the point of application to at least 120 degrees Celsius to evaporate the thinning agent.
- 8. While the prototype establishes the feasibility of producing the notepads at a rapid pace, when commercial production is initiated, numerous adjustments and refinements are necessitated to ensure continuous, efficient operation. Considerable documentation and drawings are created to facilitate the construction of production models of the machines.
- 9. ABC anticipates correctly that these notepads will be immensely popular and offer the opportunity for significant sales. ABC also recognizes that it has a number of competitors which could certainly duplicate these notepads if they achieve the acceptability and market success which ABC anticipates.
- 10. As a manufacturer of office supplies and equipment, ABC is not familiar with the need to protect its creativity. Indeed, as is typical of many small and medium size companies, the improvements to products and processes that could result in patentable inventions essentially come from the employees and are often not appreciated as constituting patentable inventions. It is in the day-to-day work of the employees, producing the products which a company sells, that modifications are made to products to improve their functionality or to overcome a problem called to their attention by customers that patentable inventions arise.

#### **OWNERSHIP**

11. The question arises, to whom do such patentable innovations belong -- ABC, the employee who conceived them, or the university consultant? There is not a simple answer. In the United States, ownership of inventions made by employees is determined on the basis of equitable considerations which take into account the contributions of the employer and the employee. Where inventions are made by employees during normal working hours, utilizing information possessed by virtue of their employment, utilizing materials and other resources of the employer, and the invention relates to the business of the employer, the employer will generally be entitled to an assignment of the invention. Where the employee makes the invention in their spare time, not utilizing information or materials of their employer, there is generally no requirement that the employee assign the invention to the employer. Where the circumstances fall between these two ends of the continuum, a court might find that the employee owns the invention, but that the employer is entitled to a royalty- free license to use it.

12. This situation would be different if ABC was located in a country such as Germany or Sweden which has an extensive employee-inventor law specifying in great detail the exact rights and obligations of employees and employers with respect to inventions made by employees. While not every small company will face the situation of ABC, they nonetheless would be prudent to consider entering into employee invention agreements with all of their employees, since anyone can be creative. In the example of ABC, it would be entitled to an assignment of rights to the invention, since it was made by its employee during working hours utilizing materials of ABC.

#### PROTECTION: WHAT AND HOW?

- 13. Decisions should be made about protecting the invention and the means of its manufacture at an early stage. Are there inventions involved in the notepad or in the process for its production which might be patentable? If there is a process invention, is it better protected by a patent, or is the process one which is better protected as a trade secret? Finally, what steps should ABC take to market the product? In fact, resort to patent, trade secret and trademark protection can all contribute to the protection and marketing of this new product.
- 14. All too frequently, companies such as ABC fail to recognize that simplicity of an invention does not negate patentability. If the product is new, useful and non-obvious, it can be subject of a valid patent. While there have been numerous ways to attach papers to each other and to other substraits, no one has developed a packet of papers with a permanently tacky adhesive on one side as a mechanism for attaching papers to each other or to other substraits and which can be removed and re-used many times. The fact that it satisfies a demand that quickly develops for it in the marketplace is indicative of the fact that it was not obvious to anyone. And the notepad clearly has utility going far beyond the office setting.
- 15. The machine to manufacture the notepad may also qualify for patent protection. On the other hand, there may be numerous ways of producing the notepad so that a patent on the machine developed and utilized by ABC would have limited value.
- 16. The adhesive may constitute a patentable invention. There might even be joint inventors, the employee who initially discovered it and the consultant who was brought in to suggest ways to facilitate its application to the paper. Indeed, in the process of hiring the consultant, ABC required the execution of an agreement which obligated the consultant not to disclose any information about ABC's development and to assign to ABC any patentable inventions which he might make in the course of his consultancy.
- 17. In addition, the process of applying the adhesive by adding a thinning agent and heating the mixture of adhesive and thinning agent at the point of application to achieve uniformity and speed of operation might qualify for patent protection. This process could also be protected as a trade secret. The documentation and drawings supporting the production machines to manufacture the notepad could also be protected under the trade secret protection which TRIPS obligates all members of the WTO to provide.

- 18. Whether ABC Company seeks to protect the process of applying the adhesive by a process patent or by trade secret would be dependent upon a number of considerations. Would the process satisfy the criteria of novelty, utility and nonobviousness? What are the prospects of competitors developing a similar process in their efforts to produce a competing product? What additional benefit would ABC derive from a process patent for manufacturing the product if it can obtain a patent on the product? In addition, obtaining a patent for the process, in addition to the product, also entails extra attorney's fees, national fees, maintenance fees, etc. ABC decides to patent the notepad and the adhesive and to protect the manufacturing process and documentation regarding the production model of the machine as trade secrets. ABC has each employee who has had access to the trade secrets, or who may have access to them, sign confidentiality agreements in which they agree not to disclose or use, other than for ABC, the trade secrets. Moreover, ABC ensures that all of the documentation and drawings constituting the trade secrets have a confidential legend placed on them and are secured under lock at night. In addition, access to ABC's facility is carefully controlled, and visitors are required to sign a visitors book.
- 19. One important consideration for ABC as it contemplates manufacturing and selling the new notepad is whether ABC may lawfully do so. Are there any adversely held patents which could block or impede ABC's commercialization of the notepad? A search should be made of the relevant unexpired prior patents with special attention given to the patent portfolios of ABC's competitors. This search should be updated when the final commercial product has been developed.

#### PROTECTION: WHEN

- 20. ABC has decided what it will seek to patent; what precautions should it take as it moves toward production of the notepad? The patent laws of most countries, including Japan and western Europe, have what is referred to as absolute novelty. This means that virtually any disclosure of the invention prior to the filing of a patent application is a bar to obtaining a patent in those countries. Disclosure in this sense is very broad; any oral or written description of the invention or any sale of the invention will constitute a patent defeating disclosure of the invention. It is therefore very important for ABC to file its patent applications in its home country before any announcement of the new product and before samples reach the public.
- 21. Although the United States has what is referred to as a one-year grace period, this frequently creates difficulties for small companies who do not realize that the rules of the game are different in much of the rest of the world. Under the one-year grace period of the United States, an inventor has one year a period of grace after publicly disclosing his invention in which to file a patent application. While this grace period preserves the rights of the inventor to obtain a patent in the United States after he has disclosed his invention, such a disclosure would preclude the inventor from obtaining a patent in most of the countries in the world. This has created a recurring problem for small and medium size companies in the United States who understandably first look at the requirements they must satisfy in the United States only to learn later that they have forfeited patent rights in the rest of the world.

#### PROTECTION: WHERE

- 22. ABC was aware of this situation and promptly filed patent applications in the industrial property office of its home country before any disclosure of its inventions. It now must consider in which additional countries it wishes to obtain patents to protect existing or future markets. This is a difficult question since obtaining patents in several countries can quickly become a very expensive proposition. There will typically be attorney's or agent's costs associated with the filing of each national patent application, national fees, translation costs, and periodic maintenance fees following patent grant (and in some cases, even before grant) which rise steeply over the life of the patent. ABC's competitors are free to produce or sell ABC's product in any country where ABC has no patent protection.
- 23. ABC would obviously wish to obtain patent protection in its major existing markets. This might include Japan, the United States, and two or three of the major European markets, for example, Germany, France and the United Kingdom. While this would not protect ABC from competition in those countries where it chose not to obtain protection, obtaining patents in the major markets of the world undermines the attractiveness to a competitor of tooling up to compete in the remaining markets in which there will be fewer sales and more limited profits.
- 24. When must ABC commit its resources to obtain patent protection in those markets in which it seeks to operate? There are two approaches it might follow. First, under Article 4 of the Paris Convention for the Protection of Industrial Property, ABC has one year after its initial patent applications are filed in which to file patent applications in any of the other markets in which it might wish to sell its product or its competitors might wish to manufacture it. Filing within the one year period allows ABC to obtain the priority or filing dates of its home country applications for each counterpart application filed during this period. This means that ABC, as a practical matter, would have perhaps 10 or 11 months to confirm that the notepad was commercially viable and to garner the resources needed for filing patent applications in several additional countries. ABC will not have the full 12 months because of the time needed for agents and attorneys in each of those countries to translate and prepare applications for filing. Moreover, the closer to the twelfth month ABC waits to initiate the filing process in other countries, the more costly will be the services of the attorneys, translators, etc.
- 25. This does not give ABC a great deal of time before it must commit additional resources for its international patent application filing. An alternative is to utilize the Patent Cooperation Treaty. The PCT, to which approximately 85 countries now adhere, allows ABC to file a single application in one of the PCT languages and to defer the additional costs for translations, national fees, and attorney's fees for either 20 or 30 months, depending upon whether ABC Company uses only chapter 1 or also uses chapter 2 of PCT.
- 26. In this regard, the United States initially declined to participate in chapter 2, which meant that U.S. companies could only utilize the international search of chapter 1 to evaluate their inventions and delay the major costs for only 20 months. The benefit of the additional 10 months' delay under chapter 2 before these major costs had to be incurred, along with the

benefit of obtaining a preliminary international examination, persuaded the United States to withdraw its reservation and participate in chapter 2. Considerable savings can be achieved by companies utilizing chapter 2 of PCT where they discover, as a result of the international search or international preliminary examination, that their patent protection will be of limited value or where they learn prior to the 30th month that the product is not commercially viable. In these instances, companies can forego the major expenses of seeking patents in several countries.

Looking at the United States as one of the markets in which ABC will wish to sell the notepad, it must be borne in mind that the United States operates on a first-to-invent system. Almost all other countries have a first-to-file system. Thus, unlike those countries in which the first inventor to file a patent application will receive the patent, in the United States, it is the inventor who can prove that he or she was the first to make the invention that will receive the patent. In the past, non-US inventors were restricted to their filing date in their home country for purposes of establishing a date of invention. Inventors were not permitted to prove a date of invention by reference to activities occurring outside the United States. With the TRIPS Agreement, all that changed on the first of this month. Article 27 precludes the United States from maintaining that rule. Now, inventors from any WTO country can establish the date on which they made their invention by proving facts regarding inventive acts in their home country. This, then, means that written records must be kept, dated, read and initialed by colleagues of the inventor to use in the event that the inventor gets into a contest in the United States regarding who is the first inventor. An alternative, though perhaps not as efficient, would be for the inventor to file one or more "provisional" patent applications. These were introduced in the United States by the legislation which implemented the 20-year term required by the Uruguay Round. Provisional patent applications do not require a claim, or an oath or declaration, and can be filed for \$150 (\$75 for a small business). More than one provisional patent application can be filed, reflecting the progress made in refining an invention as a commercial embodiment is perfected. The provisional patent application(s) must be followed by a non-provisional or complete patent application within one year of filing of the earliest provisional patent application on which an applicant wishes to rely.

#### **MARKETING**

- 28. Even if ABC Company is successful in obtaining patents, it clearly needs a marketing strategy to maximize the exclusive rights it will enjoy under patent protection. Trademarks are central to that marketing strategy.
- 29. There are many different sources for creating new trademarks. Some observers suggest that the creation of new marks be left to the people in the marketing departments who will be responsible for eventually selling the product. Since ABC does not have an established marketing department as such, the task of selecting a trademark is given to its small sales staff. After all, they must convince customers to purchase the new product.
- 30. There are certain precautions that one must have in mind in selecting a new trademark, however. The mark cannot be merely descriptive of the product and it cannot be a generic term. Suggestive marks are those which, as their name implies, suggest a product or its

characteristics, but is not merely descriptive of the product. While a suggestive mark does run the risk that it might be found to be merely descriptive, its suggestive property facilitates association between the mark and the product in consumers' minds. A coined or invented term, for example KODAK or EXXON, does not run a risk of descriptiveness, but will generally require a greater investment to create the good will one normally wishes to associate with a trademark. In addition, one needs to think whether a name that has been chosen might mean something rude or unflattering in a foreign language.

- 31. Most frequently, however, the biggest hurdle is to avoid similarity to other trademarks already used or registered for the same or similar goods. Usually it is desirable for a firm not to limit itself in its initial selection to a single potential trademark, but rather to produce a list of several marks in order to increase the possibility of finding one that will not run afoul of some of the possible pitfalls.
- 32. Any mark which a firm contemplates adopting must be searched very carefully in the national register of the country in which the company exists. In countries where trademark rights are based on use, it is generally desirable to search other sources such as state or provincial trademark registers to ensure that no superior rights exist. Frequently, it becomes necessary to negotiate with owners of a mark disclosed by the search to see if an agreement can be reached that would allow a company to adopt its preferred mark for its specific product.
- 33. The ABC Company, considering the possibilities, had decided upon the trademark "TAX." Phonetically, it connotes the adhesive qualities of the individual sheets in each packet. But while suggestive, it is not merely descriptive of the product.
- 34. Having selected the mark, it is important to register it. In many countries, rights in a trademark are acquired by the first person to file an application or register the mark. Furthermore, many countries do not require use to file or register marks, so that a company's marks can be at risk if proper attention is not given to protecting them initially.
- 35. Unlike patent protection which can be exceedingly expensive if one seeks patents in several countries, trademarks can be registered for considerably lower costs, but there will clearly be limits considering the resources available to small and medium size companies and the fact that there are 180 or so jurisdictions where trademarks can be registered. Only in those countries where ABC plans to sell the product initially and in the reasonable future is it realistic for ABC to register its mark.
- 36. There are some regional trademark systems which can assist in lowering the costs of acquiring protection. The three Benelux countries have a common register, and the European Community Trademark Office will be open for business on April 1. The Madrid Agreement facilitates filing in up to 42 countries, and the Madrid Protocol will become operational this April as well.

37. It will be important for ABC to educate its employees on the correct use of the trademark to prevent its loss. Incorrect use and/or bad policing have led to the cancellation of registrations for escalator, aspirin and tabloid. Therefore, ABC must be constantly vigilant to ensure that its employees, its advertising, and the public refer to the new product as "TAX brand notepads" and that misuse of the trademark by third parties is promptly addressed.

#### LICENSING AND DISPUTES

- 38. While every inventor or company would prefer to supply the demand for its products worldwide, this is frequently not realistic, especially for small and medium size enterprises. Limits on production capacity, lack of a worldwide distribution network, trade barriers and a host of other considerations suggest that ABC may need to enter into a joint venture or license its patents, trade secrets and trademarks in order to supply worldwide demand for its TAX brand notepads.
- 39. ABC might approach a competitor in, for example, the United States and propose a 50/50 joint venture to produce the notepads in which ABC would contribute patents and technology and the competitor the necessary capital. Alternatively, ABC might license its patents and trade secrets to a U.S. firm for 20 to 50% of the profit from the sale of the notepads, expressed as a percentage of the net sales price. Such a license could be exclusive or non-exclusive within the United States. If an exclusive license is granted, ABC would want to obtain a performance guarantee in the form of a lump sum annual payment based on the estimated annual sales volume of the notepads. This encourages best efforts by the exclusive licensee.
- 40. Care must be taken in deciding in what countries to license ABC's technology. While disputes with a licensee over patent and trade secret issues could be effectively resolved in the United States, litigation costs can quickly mount into the millions of dollars. Japan, on the other hand, is known for the narrow interpretation its courts give patent claims; litigation can take a protracted period of time and is also quite expensive. Moreover, to enforce trade secrets, Japanese law requires they be disclosed in open court, thus essentially destroying them.
- 41. Trademark licensing presents another set of issues. In many countries, a trademark can be lost if the trademark owner does not exercise control over the quality of the products on which the mark is used. Even where this is not the law of the country, exports of the trademarked product could reach a country where it is a requirement. Moreover, it is desirable from the trademark owner's perspective to maintain consistent quality so that consumers will continue to ask for the product when patent protection is no longer in force.
- 42. Perhaps the most critical factor in licensing is for ABC to carefully choose its licensees and seek mutually beneficial terms. Disputes are counter-productive and very disruptive. Consideration should be given at the outset to including provisions in the license agreements to compel use of alternative dispute resolution to deal with any disagreements which might arise. For example, one means of avoiding the problem noted earlier, with regard to the difficulty of enforcing trade secrets in Japan, would be to specify in the license agreement that binding arbitration would be sole method for resolving any disputes involving ABC's trade secrets.

43. Similar considerations apply to infringement of ABC's industrial property rights by unlicensed competitors. Reasonable business compromises should be considered and weighed in light of the costs and ADR should always be kept in mind.

#### CONCLUSION

44. Awareness that valuable industrial property can be created and may exist in any firm is fundamental. Prompt, careful action to protect and preserve that property will enhance the profitability of the firm and promote its growth. The added protection provided under the TRIPS Agreement will magnify these benefits.

### Post Script

Of course, it is not 10 or 20 years ago and the 3M Corporation has already invented, patented, and very successfully marketed its Post-it<sup>TM</sup> brand notes. This fictional example has been presented merely to demonstrate some of the considerations a small firm should give to the protection, marketing and exportation of a new product.

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