

CHAPTER 1

Patents in Context— Incorporating Patents into Your Business

1.1 THE IMPORTANCE OF PATENTS

Patents and patent strategies are playing a bigger role in such information age technologies as biotechnology and life sciences, telecommunications, the internet, and computers. These technologies are on the cutting edge, entering all facets of everyday life, from food and medicine, to video conferencing using the internet, to making travel arrangements on the web. The new services and products being offered require technologies from previously segregated markets. The distinctions between these markets are blurring, with many companies utilizing technologies now residing in a “common market.” As a result, competition among businesses is changing.

In order to compete, companies are acquiring interests in other companies having the expertise needed to enter new markets, while others, even former competitors, are partnering with each other. In this setting, businesses are using patents as a weapon to hinder competitors from encroaching upon their developed technology, and as a shield to deter others from forcing them out of their own market. Businesses are also using patents to increase their balance sheets, to realize certain tax advantages, or to justify higher valuations, (e.g., allowing them to charge investors (or acquirers) higher share prices or helping convince an underwriter to increase the starting price per share when taking the company public.) Patents are also used to better a business’ position in deals such as strategic alliances and value added reseller (VAR) and original equipment manufacturer (OEM) agreements. However, when a business manages its patent rights poorly, valuable rights may be forfeited to the public domain, or worse—to a competitor who can now either charge the business a toll for its use of key technologies or force the business out of its own market.

Depending upon how a business deals with patents, they can have a positive or negative impact on the business’ general efforts. Some have benefited

enormously from the patent system. IBM's patent and intellectual property licensing efforts generate more than a billion dollars in revenue annually. Nicholas Donofrio, IBM's senior vice president and group executive of corporate technology and manufacturing, credits IBM's patent portfolio with a role in the successful generation of more than \$30 billion worth of OEM agreements signed by IBM's Technology Group in 1999. Recently acquired companies like WebTV and Amati Communications each commanded substantial purchase prices, rumored to be due in large part to their substantial patent portfolios. Priceline.com capitalized on the patent system by patenting its reverse auction technology. However, a lack of attention to patents have caused companies problems. For example, in 1993, Eastman Kodak terminated one of its imaging technology subsidiaries after Wang Laboratories, Inc. brought a patent infringement suit against the subsidiary.

Middle and upper level managers need a basic understanding of the patent process and its laws and strategies from a business-goal perspective so they can recognize the significance of patents in relation to their business efforts, and can employ proper patent management to complement those efforts. This knowledge will be important when management and executives make patent-related decisions such as whether a patent infringement study must be performed; whether the budget for patent matters should be changed; whether to license certain patent technology; and whether to sue a competitor for patent infringement.

Decisions about patents will involve executives even at the highest levels. Patents are frequently worth millions or tens of millions of dollars (sometimes even hundreds of millions), and can be highly pertinent to key partner relationships the business may enter into. They can affect the bottom line, the balance sheet, and the value of the company as a whole. Even more critical, in the off chance key patents are owned by a competitor, markets commanding a substantial portion of the business' total annual revenues could be in jeopardy.

Businesses that provide information-age technological products or services derive profits from their use of technologies. A local telephone company may assemble a telephone network platform to provide services such as call-waiting, call-forwarding, and voice mail. A computer and communications equipment manufacturer may develop and manufacture computers and communications hardware for use in the telephone network platform. A software publisher may develop database software for managing a database to be accessed by the telephone network platform.

In each of these instances, technology is a critical part of the product or service the business offers to its customers, and the unimpeded availability of key technologies can be imperative to the success of the business. Businesses that own patents covering key technologies are therefore at an advantage, while those that do not own such patents are at a disadvantage.

1.2 MARKET PRESERVATION

A properly executed patent plan can preserve a company's existence in the market. For example, DVD consortium members obtaining patents are able to stay in the DVD market; their patent portfolio offsets patent royalties required by competitors so that the royalties do not become cost prohibitive. As another example, patents covering the activities of competitors serve as a deterrent to those competitors enjoining the company from using its own technology and from participating in its markets.

1.3 SHAREHOLDER VALUE

Patents can be used to command royalties, and are assets which could affect the valuation of the company. Thus, patents can complement exit strategies such as initial public offerings, mergers, and acquisitions. Patents defined in terms of their relevance to the business can serve as a substantial factor in the valuation of the business. Similarly, acquired companies have commanded substantially larger purchase prices when the company has a successful strategically executed patent program. Large companies have acquired ownership interests in companies, in part because of their patent portfolio.

Patents can indirectly contribute to shareholder value by preserving a business and deterring others from suing the company. Patents can have an impact on, and sometimes directly affect, the bottom line in terms of profits and revenues. This will affect the earnings in a given quarter or year, and thus the perceived value of the company.

1.4 DEALS

If proper patent strategies are employed, substantial deals can be negotiated with more ease and closed quicker, with less argument as to intellectual property interests. The existence of a patent filing before contract negotiations begin clears up any ambiguity as to whether ownership of a particular technology would be transferred to the customer as part of the contract, or whether that technology was already owned by the company before the contract was entered into. In the case of trade secret technology, a company which has a patent pending can more freely disclose its technology to prospective customers, thus flexing its muscles without fear of losing its protection, whereas, if the company's only protection is its trade secret rights, it will have to get a nondisclosure agreement signed before showing its product to a prospective customer. Many customers, small and large, will not sign nondisclosure agreements. Even if they do, the secrecy obligation they agree to may last for only a limited

time, perhaps one to three years. Agreements negotiated for longer periods of time tend to get undercut with hard-to-recognize language providing loopholes and booby traps. Even with a good nondisclosure agreement, there is no guarantee that employees of both companies will protect the information.

For example, a fictitious company called Capital Software receives a request for proposal (RFP) from a leading telecommunications company. The RFP asks for certain types of information, poses a list of questions, and requires that all information requested be supplied and that all questions be answered. The RFP also requires that all information provided in the response not be deemed confidential or proprietary. This creates tension between Capital Software's legal department and its sales department. Sales wants to remove all obstacles to making the sale, while Legal remains concerned that the information provided will no longer be the property of the company. Even if Capital Software responds to the RFP, it faces a risk that a competitor will be awarded the contract, while Capital Software has divulged trade secret information to the telecommunications company. Patents can provide companies like Capitol Software with an added safeguard. Even if Capital Software discloses valuable information, it can rely on its patent rights to protect against third parties using the technology without its permission.

1.5 THE NATURE OF PATENT RIGHTS

Patent rights are like options. Any company that develops its own ideas automatically acquires, with no additional effort, for a limited time, patent rights (i.e., the option to file for and obtain a patent covering such ideas). To exercise the option (secure the patent rights), a patent application must be timely filed. Bad patent management habits can cause the option to be needlessly forfeited. The ability to obtain a patent could be diminished or negated completely.

1.6 PATENTS AT THE MANAGEMENT LEVEL

Several business objectives are common to most businesses. They strive to generate sustained profits and, where possible, to increase those profits. Businesses must successfully manage their cash flow. It is also critical that they meet revenue goals, and generate perceived shareholder value. Other common objectives include achieving a sustained growth in revenues, maintaining good morale among company personnel, maximizing the quality of the company's products and services, and achieving a positive public image.

It is difficult to devise and implement a plan to achieve these and other objectives. Steps will need to be defined, clarified, and scheduled, and their success needs to be measured. When the objectives are long-range, they are more vague, and the plans needed to achieve them are typically more complex and

less predictable. Planning for an accomplishment in five years is less certain, while short-range plans dealing with the immediate year will be more comprehensive and specific.

Patents are long-range objectives, and are thus difficult to incorporate into the planning process. It takes two to four years to obtain a patent. It is difficult to speculate on the importance a given patent application will have four or even 10 years into the future, especially when patents are easily misunderstood and the yet-to-be obtained patent is still an unknown quantity.

However, a well-developed and implemented patent plan is within the reach of most businesses. Many businesses implement patent plans which allow them to produce assets and business tools that can create value. Meanwhile, the effort and cash needed to earn their patent rights (including research and development and related efforts and costs) have already been spent. As many companies have demonstrated, patent efforts need not divert the attention of management away from priorities like sales revenues goals, cash management, earnings, and shareholder value. Nor do patents need to hinder core efforts supporting the business, such as sales, finance, product development, and marketing.

When properly pursued, patents can have a strategic or even a tactical relevance to core business efforts, and should complement and augment other areas. The key is to incorporate good intellectual property habits into the business' culture. Just as the doors are locked at night to prevent theft, routine steps can be taken to protect and preserve the interests of the company in its information and technology.

Managers tend to pay more attention to the areas into which their superiors inquire most. Thus, for example, a sales manager may give attention to achieving sales revenue goals at the expense of training the sales team. A prolonged neglect of sales training can, of course, adversely affect sales—by, for example, causing a decline in morale and an inefficient use of resources towards sales efforts.

Similarly, R&D efforts may take priority at the expense of obtaining, with patents, ownership rights in the developed techniques and products. However, the value of the expended efforts to develop such techniques and products is diminished if the company's use of such techniques and products can be brought into question where others may freely use the same with less or no R&D costs.

Managers in technology-driven businesses will not knowingly produce products while forfeiting the right to use the developments or forfeiting a proprietary interest in the same. Nonetheless, their focus is on producing a product, as it should be. The basic precautions they take regarding intellectual property rights, if further honed, would go a long way toward maximizing the value of the R&D efforts invested.

Before a business can improve its intellectual property habits, it will encounter a transition barrier. Just as with the introduction of any new process or

system (e.g., consider the logistical difficulties associated with switching all of the business' computers to a new word processing package), there will be a barrier to entry. Without the support and mandate from the top, initial investment will not become quickly, fully, and properly part of the company's habits. The same goes for patent management. At companies like AT&T, Lucent, IBM, and Texas Instruments, just about everyone has a part in protecting the business' patent rights. For example, IBM regularly patents its developments. When it does not patent a particular technology, it publishes to reduce the risk others will patent the same development and thereby bar IBM from using its own developed technology.

The introduction of such a "lock the door" culture requires the involvement of the executive team managers and technical personnel alike. An incentive plan is usually put in place to motivate engineers and developers (1) to record their developments on a regular basis, thereby producing evidence of their developments, and (2) to submit disclosures of them for patenting or publishing as may be appropriate.

Middle and upper-level managers now have an increasing need to recognize the significance of patents in relation to the business, and to incorporate a patent strategy in short-term internal business planning and in long-term corporate strategic planning. Those already executing a patent policy can benefit from improving their current understanding of patents and the range of opportunities they present. Promoting an understanding of patents among business executives will improve the communication between executives and patent counsel. A goal of this book is to bridge the communication gap that may exist between the decision makers in a business and patent attorneys.

While important patent issues are presented to the reader, there is no absolute advice as to how a particular business should address a patent problem when it arises. The way a business handles each patent situation can, and should, vary, depending upon many factors, including the size of the business, the business' financial situation, public opinion, and the mission and philosophy of the business. Accordingly, it is always critical to carefully evaluate with patent counsel the legal effects a proposed course of action could have. Moreover, any action or inaction will have its own set of risks, which will need to be weighed against the benefits.

1.7 PATENTS DESCRIBED, IN COMPARISON TO OTHER TYPES OF INTELLECTUAL PROPERTY

Patents can be distinguished from other types of property in some respects yet are similar in others. Property rights give an owner some type of dominion or control over something. In many respects, property rights serve as an incentive for the owner to invest in, or add value to, something. For example, real property rights may give an owner dominion over land. Because the owner retains

control over the land, the owner may invest time and effort to improve the land and then reap the rewards of that time and effort.

Intellectual property rights provide people with dominion over ideas or information embodied in a form worthy of protection. Some of the types of intellectual property rights are trademarks, trade secrets, copyrights, and patents. Trademarks (or service marks) give their owner dominion over how they identify their product (or service), so their owner need not fear that others will use an identical or confusingly similar name. An example of a trademark is the brand name “Coke®” used to identify a carbonated beverage. Trade secrets give their owner dominion over valuable “secrets” properly guarded by the owner. An example of a trade secret is the recipe for the Coke® brand beverage. Copyrights give their owner dominion over the way an idea is expressed in some tangible medium. An example of a copyrighted work is a book, movie, or song. U.S. patents (utility patents) give the owner temporary dominion over new advances in technology as embodied in a new and useful invention. The invention may be a process, machine, manufactured item, or composition of matter. An example of a (formerly) patented invention is Samuel Morse’s telegraph. The term “patent” as used in this book, refers to a utility patent. There are other types of patents, namely design patents and plant patents, which are beyond the scope of this book.

If an invention is both novel and unobvious, the invention may be patentable. Patents are granted for a limited term, which historically expires 17 years from the date the patent is granted. For patent applications filed after June 8, 1995 (with limited exceptions), the patent term will expire 20 years from the date the patent application is filed. Through its life, a patent gives its owner the right to exclude others from making, using, or selling the invention in the United States and its territories. If someone uses a technology covered by a patent without permission from the patent owner, the patent owner will be legally entitled to recover damages no less than a reasonable royalty, and may be able to have the unauthorized use stopped for the remainder of the patent’s term.

Obtaining patents is more involved and expensive than other types of intellectual property. In order to obtain patent rights, for example, an applicant must undergo an application process akin to a judicial proceeding. In addition, receipt of a patent may require waiting two or more years and paying thousands of dollars in government fees as well as tens of thousands of dollars in attorney fees. Much more attention and effort must be devoted to deciding when to apply for a patent and the scope of protection needed in order for the patent to be of sufficient value to the business. Therefore, a decision to pursue patent protection will not be automatic. The cost and burden of filing for a patent need to be weighed against its anticipated benefit. Before applying for a patent on an invention, a technology search is frequently obtained.

A copyright registration may be obtained in less than a year for a modest filing fee, without the help of an attorney. Copyright, and also trade secret, procedures allow the applicant to employ a standard process to secure his or her

rights, without concern as to whether or how the rights should be secured. For example, if an author desires copyright protection for a work (e.g., a computer program or a painting), the author simply places a copyright notice on the work and optionally also files an application to register the copyright with the U.S. Copyright Office. In fact, these steps are not even necessary, as the mere creation of a work will give the author rights under the copyright laws.

Each type of intellectual property offers its own degree of protection for its owner. In order for there to be copyright infringement, the accused infringer must have had access to the work, and there must be some evidence of copying (e.g., the works are very similar to each other). In order for there to be trade secret infringement, there must have been an improper taking of the secret information. If someone independently creates the same technology or discovers the secret technology by reverse-engineering, they cannot be liable for trade secret infringement. Patents are easier to infringe unintentionally. Liability for patent infringement does not require copying or deriving the technology from a patent. If a company uses patented technology without permission, even if the company independently develops the technology, it is liable for patent infringement. Risks to a patent infringer may include being banned from using the technology altogether and having to pay up to three times the calculated profits lost by the patent owner, plus costs, attorney fees, and interest. At a minimum, a patent infringer would be liable for a reasonable royalty for its use of the patented technology.

1.8 OVERVIEW OF THE BOOK

This book proposes a general approach to patent policy which includes four main objectives.

1. The first objective is to minimize liability for patent infringement to third parties. To achieve this objective, the firm should be aware of patents owned by competitors and obtain patents covering competitors' activities as a deterrent to being sued by those competitors.
2. A second objective is to obtain patents for technological advancements which are already being developed within the business. An investment has already been made to develop these advancements. By obtaining patents, assets which can be bought and sold like personal property, the business can leverage additional value from this investment, thereby increasing the value of the business.
3. A third objective is to obtain patents in order to strengthen the business' position in dealings with third parties. As one example, when entering into a business venture with another company, the business that owns key patents may be able to negotiate a larger ownership interest in the venture. As another example, a standards committee may be considering

adopting a new technological standard. In that situation, the owner of a patent covering the proposed standard is in a better position to utilize the standard technology than another business with no patent.

4. A fourth objective is to use patents as a source of income for the business. The income could be substantial, greatly increasing the business' profit margin, or it could be more modest, merely offsetting the cost of a patent acquisition program.

