CHAPTER 1

The Big Three: Patents, Trademarks, and Copyrights

After reading this chapter you will be able to:

- Understand the various kinds of patents and the nature of the protection offered by each.
- Understand what constitutes patent infringement.
- Understand the major considerations and factors to be borne in mind when securing patents.
- Know the factors involved in choosing a good patent attorney.
- Understand the nature of trademarks and service marks and the requirements for registration of these marks, as well as the proper mode of use of a trademark or service mark.
- Know how to choose a mark and determine whether it is available for adoption.
- Understand the nature of copyrights along with the uses of copyrights in nontraditional applications, such as protection of computer software.
- Recognize work-for-hire situations that may call for a written copyright assignment.
- Understand the doctrine of fair use.

IN THE REAL WORLD

''The Congress shall have the power to . . . promote the Progress of Science and useful Arts, by Securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries.''

—U.S. Constitution, Article I, Section 8

Patents

A patent conveys to its owner the right to prevent others from making, using, selling, offering for sale, or importing the patented invention. Patents are national in nature, having effect only within the territory of the issuing country.

The patent law of the United States provides for three kinds of patents: plant patents, design patents, and utility patents. Plant patents cover asexually reproduced plants and are primarily of interest only to plant breeders. Design patents cover the ornamental design of an article (i.e., its appearance) to the extent that that design or appearance is dictated by aesthetic, rather than functional, considerations. The majority of patents are of the third kind—utility patents—and it is with these that we shall be mostly, but not exclusively, concerned.

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To be patentable, an invention must be:

- Novel
- Nonobvious
- Useful

A utility patent, generally speaking, may cover a device or an article, a composition of matter, a method or process of doing or making something, or, less commonly, a new application for an existing device or material, or a product (otherwise known and, therefore, not patentable) made by a particular new process.

In order to qualify for a patent, an invention must be novel, nonobvious, and useful. The utility requirement is largely self-explanatory and rarely comprises a significant obstacle to patentability. If the invention works, it has utility. A new chemical compound may not be patentable in and of itself, unless there is a useful application for it. The requirement of novelty is satisfied if no single prior art reference discloses all of the features of the invention (i.e., the same invention was not made earlier by someone else). The most challenging, and conceptually most complex, requirement for patentability is nonobviousness. To satisfy this last requirement, the invention must not be merely a combination of elements of prior works, such as would be apparent to a person of "ordinary skill in the art" who was seeking to solve the problem to which the invention is directed (see Chapter 11 for more on this very interesting topic).

Formerly, a United States utility patent had a term of 17 years, commencing on the patent's issue date. Under the current law, however, utility patents have a term of 20 years, commencing on the date of filing of the application on which it is based. The new law applies to patents issuing on applications filed on or after June 8, 1995. Patents issued on earlier filed applications now have a term of either 17 years from the date of issue or 20 years from the date of filing, whichever is longer. Although, in theory, the term of a patent may be extended if its prosecution is unduly delayed by the Patent Office, as a practical matter, a patent term is nonextendable. The primary exception is for those patents directed to pharmaceutical products, in which case the term may be extended to compensate for time lost in securing the applicable regulatory (Food and Drug Administration) approval. Design patents have a term of 14 years from date of issue.

As a result of statutory requirements and rules promulgated by the United States Patent and Trademark Office (USPTO), the format and content of utility patents is relatively standardized. Preceding the textual portions of the patent are one or more pages of drawings of the preferred embodiment of the invention (for all intents and purposes, *preferred embodiment* is synonymous with *best mode*—see the section "What You Don't Tell" later in this chapter for more on this fascinating topic). The patent text begins with a brief statement identifying the subject of the invention. Next comes a background section outlining the problem that is solved by the invention. This statement of the problem may include a description of prior solutions or attempted solutions and the reasons why they were not wholly satisfactory. Following the background section is a section summarizing the invention, including its key features and advantages. Next is a section providing a brief description of the patent drawings, specifying what is being illustrated in each figure. Following this is a rather lengthy section setting forth a detailed description of the invention with reference to the preferred embodiment illustrated in the drawings. These textual portions of the patent are known as the *specification.* The patent concludes with the patent claims, which are the consecutively numbered sentences at the end of the patent document. Preceding the patent text is a cover sheet, which includes a brief abstract and a wealth of other useful information that will be described in a later chapter.

What to Be Concerned About

Few members of the general public have much knowledge about patents. Moreover, much of what is commonly believed about patents is incorrect. Perhaps the most common misconception is that a patent gives its owner the right to practice the patented invention. As noted earlier, a patent conveys the right to prevent others from practicing the patented invention—an exclusionary or negative right. It does *not* convey an affirmative or positive right to the patent owner to practice

the patented invention. The difference between the two types of rights—exclusionary or negative and affirmative or positive—is best (and most often) seen in the context of an *improvement patent* that covers an improvement to an existing article or process that is, itself, covered by an unexpired patent. If, as is frequently the case, practice of the improvement necessitates making the underlying basic or unimproved article or performing the basic process, the holder of the patent on the unimproved article or process can prevent such practice. In these circumstances, the owner of the improvement patent cannot practice his own patented invention. This concept can best be understood with reference to the following hypothetical situation, which will be used for illustrative purposes throughout this book.

Example

Suppose there is no such thing as a fire engine. (This *is* a hypothetical situation and we wish to avoid adding technological complexity to the matter.) Jack lives in a rural area of largely wooden houses that lacks a municipal water system. Lack of a ready supply of water makes combating a fire in one of these houses difficult. Perceiving this problem, Jack proceeds to invent and patent (a utility patent) a fire engine, which comprises a vehicle bearing a tank of water, a pump, and a hose and nozzle (for the moment, we need not concern ourselves with a more specific definition of "fire engine").

One fine day Jill happens upon a fire engine, on its way to a fire, caught in traffic. Jill perceives that delays caused by traffic are a problem in that they interfere with prompt firefighting efforts. Jill concludes that this problem would be solved, or at least ameliorated, if other motorists could be made aware of the nature of the fire engine and its mission, namely that it is an emergency vehicle on an emergency mission. Jill determines that such awareness could best be achieved by painting the fire engine a distinctive color (red) and providing it with both visual and auditory warning devices (a flashing red light and a bell). Jill proceeds to

patent (again, a utility patent) this improved fire engine, which comprises a fire engine painted red and bearing a flashing red light and a bell.

Under the circumstances of our hypothetical situation, would Jill have the right to make, use, sell, or offer for sale improved fire engines as set forth in Jack's patent (red fire engines with flashing red lights and bells)? The answer to this question is no. In order to make an improved fire engine, Jill must also make a fire engine; Jack, by reason of his patent, has the right to prevent Jill from doing so. Conversely, Jack cannot make, use, sell, or offer for sale an improved version of his fire engine (red paint, flashing light, and bell) because Jill, by reason of her patent, has the right to prevent this. (Cross-licensing often breaks such impasses.)

Another point of misunderstanding with respect to patents is what they cover. Inventors are often a veritable font of misinformation in this regard, speaking broadly (and grandiloquently) about "my invention" or "my basic invention" or—even worse—"my concept," while belittling any "minor changes" or "minor variations" made by an accused infringer. *Do not listen to such people.* What a patent covers is determined by its claims. While the claims are to be construed (i.e., interpreted) in light of the patent specification, it is the claims that determine what the patent covers (more on this subject shortly).

Similarly, technical people, when asked to review a patent (especially after the reviewer's employer has been charged with infringing that patent), will often read the abstract and the summary of the invention, look at the drawings, and opine that the patent is invalid because "it's all old" or "we've been doing that for years." *Do not listen to such people.* Most inventions are improvements on some earlier technology, and most inventions are described in the context of the environment in which they are intended to function. As a result, much of what appears in the patent drawings and is described in the patent specification is old.

However, the scope of a patent is determined by its claims. (We are repeating this point because it merits repetition. It is often overlooked,

occasionally even by judges.) A patent examiner, before allowing (approving) the patent, found some limitation in the claims of the patent that, in his (mostly) expert opinion, constituted a legal basis of patentability. This basis can generally be discerned by an examination of the *file wrapper* of the patent, which is a publicly available copy of all of the documents relating to the issuance of the patent. Never accept any opinion as to patent validity or scope that is not based upon a thorough review of the patent file wrapper by a patent attorney (the courts won't, when it comes to a question of willful infringement).

What You Don't Know

It is often said, "What you don't know won't hurt you." This does not apply in business, nor does it apply with respect to patents. Patent infringement is not a specific-intent tort—in layman's terms, this means that one may infringe a patent without intending to do so. While it may be done innocently, it is patent infringement nonetheless. The fact that you were unaware of the allegedly infringed patent is not a defense to a charge of patent infringement (although, as we will see, it may mitigate the damages). It is, therefore, highly advisable to perform a product clearance patent search before marketing a new product or utilizing a new production process. Preferably, such a search should precede any substantial new product or process investment or development effort.

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Unintentional infringement is infringement nonetheless.

What You Don't Tell

In addition to questions of patent infringement, there are several basic, but not commonly known, requirements for a patent that, if ignored, may result in the invalidation of any patent thereafter obtained.

A patent must be *enabling* and it must include a disclosure of the best mode of practicing the claimed invention. In essence, this means that, based upon the patent document, a hypothetical person of "ordinary skill in the art" (a phrase that appears frequently in patent matters) must be able to practice the patented invention with only a *reasonable* amount of experimentation; and that where there is more than one way to practice the patented invention, the patentee has disclosed what he considers, at the time of filing of the patent application, to be the best way to practice it, known as the *best mode*. Thus, it is vitally important when disclosing an invention to a patent attorney who will draft a patent application that nothing be withheld or concealed. A choice must be made between maintaining a trade secret and obtaining a patent with respect to an invention. Such choices may be difficult. However, if you try to have both, you may wind up with neither. *Do not try to beat the system*. A patent examiner, when examining a patent application, will not challenge, but will accept, the disclosed embodiment of the invention as being the best mode and may not notice a missing detail that defeats enablement. Opposing counsel, in litigation, will challenge *everything* and will likely have almost unlimited resources, including discovery procedures, available. Expect that opposing counsel will miss nothing. Any victory gained by concealing information is likely to be only temporary.

Another frequently (or conveniently) overlooked aspect of patent law pertains to what are described as *statutory bars*. Simply stated, the law requires that an inventor make a reasonably prompt decision as to whether to seek patent protection for an invention. The need to make this decision is triggered by public disclosure of the invention, or by the first sale, or first offer for sale, of articles made in accord with the invention—even if no sale is actually effected.

Once such an event has occurred, a patent application must be filed and received by the USPTO within one year or the law bars patent protection for the invention. The courts strictly enforce this requirement. The one-year period, known as a grace period, is virtually unique to

the United States. Other countries essentially require that a patent application be filed before disclosure or sale of the invention (the so-called "strict novelty" requirement). Therefore, if foreign patent protection is desired, a U.S. patent application should be filed before marketing efforts begin or other public disclosure is made.

What You Don't Disclose

Among the burdens placed on a patent applicant and the applicant's patent attorney (if any—see the later section of this chapter on this topic) is the duty of candor, also known as the duty of disclosure.

Patent examiners have limited time and limited resources with which to search for relevant prior art. In order to aid the examiner in identifying such art and, thereby, preventing the grant of invalid patents, each individual associated with the filing and prosecution of a patent application is impressed with the duty to disclose to the Patent Office all material "known to that individual to be material to patentability." If such an individual fails to satisfy this obligation and withholds known prior art from the Patent Office, such failure, known as *inequitable conduct* (formerly known as fraud on the Patent Office), may result in a patent being found invalid or unenforceable.

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Do not conceal prior art—it will come back to haunt you!

There are those who would point out that, if the patent applicant does not disclose a prior art reference, it is quite possible that it will not be discovered by the patent examiner. Further, even if the examiner *does* discover the reference, no harm will be suffered. The examiner will not inquire as to possible failure to disclose but will merely proceed with examination of the application. The implied advice, therefore, is to forget any information that might imperil the grant of a patent. *Do not listen*

to such people. Apart from the ethical considerations, there always exists the possibility that the patent will become the subject of litigation. While the patent examiner was handicapped in searching for prior art, opposing counsel will enjoy substantial, if not virtually limitless, resources. Moreover, opposing counsel has recourse to discovery procedures once litigation commences. Files and records can be examined, and witnesses can be deposed. Thus, the "forgotten" reference may well be discovered. Mere discovery is bad enough. If it is also established that the patent applicant was aware of the reference but failed to disclose it to the Patent Office, *real* trouble may ensue. For example, seeking to enforce a patent known to be invalid may constitute a violation of the antitrust laws. Therefore, do not conceal references from your patent attorney, and do not ask your patent attorney to conceal references from the Patent Office. (Although sometimes tedious, patent attorneys are, as a group, highly ethical.)

Design Patents: Where Less Is More

It is commonly believed (even by some patent attorneys, who should know better) that design patents are very limited in scope and, hence, are of little value, except to prevent exact copying of specific product designs. *Do not listen to such people.* Design patents occupy a significant—if not stellar—position in the intellectual property universe.

Because applications for design patents are, both in principle and in execution, quite simple, attorneys often give them short shrift; indeed, they are most often prepared by paralegals (whereby they yield a significant profit margin to the law firm). Drawings or photographs of the subject product, provided by the client, are simply attached to a largely boilerplate application and filed in the Patent Office. Patents issuing on such applications will, in fact, protect the depicted product design and little, if anything, else. If the scope of such patents is found wanting, however, the fault lies not in the inherent nature of design patents but in the lack of effort on the part of those who prepared the applications.

Drawings utilized in design patent applications should be cleaned up—unnecessary design details should be deleted. The more basic the design is, the more difficult it is to circumvent.

More importantly (and less widely known), a patented design need not encompass an entire "article of manufacture." In a landmark decision (*In re Zahn*, 617 F.2d 261, 204 USPQ 988 [CCPA 1980])—a case brilliantly briefed and argued by one of the authors of this book—the Court of Customs and Patent Appeals (the predecessor to the Court of Appeals for the Federal Circuit, also known as the Patent Court) held that a patented design must pertain to a complete article but that the design need not encompass the entire article. Thus, it is possible to patent a design of a *portion* of a product, whereby the appearance of the remaining portion, which does not bear the patented design, is irrelevant to the question of patent infringement. Such a design patent may be quite broad in scope. No manufacturer should ignore design patents.

Provisional Patent Applications: When You Care Enough to Send the Second-Best

Provisional patent applications are, essentially, utility or conventional patent applications from which the claims have been omitted. They may be viewed as merely an optional, preliminary step in the process of securing a utility patent. The filing of a provisional patent application must be followed, within one year, by the filing of a utility patent application. Failure to do so results in the irreversible abandonment of the provisional application.

When first introduced in 1995, the provisional patent application was touted as a low-cost means of establishing a patent application priority date while simultaneously offering the inventor a period of time (one year) to further develop and refine the invention and to decide whether to undertake the costly filing and prosecution of a regular patent application. A further benefit, ostensibly, is derived from the fact that the term of pendency of a provisional patent application is not included in

the 20-year term of a patent. Thus, the provisional patent application, in effect, offered a means of extending the life of a patent by up to a year.

These acclaimed advantages have proven largely illusory, for the simple reason that a provisional patent application is, after all, a patent application and is subject to the same disclosure requirements as a utility patent application—it must be enabling and it must teach each and every limitation that will appear in the claims of the corresponding future utility patent application (i.e., it must provide support for the claims). Indeed, if done properly, a provisional patent application is virtually identical to the specification of the corresponding utility patent application. Thus, while the filing fee for a provisional patent application is considerably less than the filing fee for the corresponding utility patent application, the cost of *drafting* the provisional application is a considerable fraction of the cost of drafting a utility application. Therefore, the total cost savings is nowhere near as significant as some people believe. Moreover, if the further development and refinement of the invention results in technological changes or details not described in the provisional application (how could they be described there if they were created after the filing?), such new developments do not receive the benefit of the filing date of the provisional application.

Finally, there is a serious question as to the value of any patent term extension achieved by the use of provisional patent applications. With the present rapid technological advances, most patented inventions are obsolete long before the patent expires. (Electronics inventions are, on average, obsolete within three to five years of the issuance of the patent.) Thus, it may be much more advantageous to speed the issue of a patent than to delay its expiration. The real advantage of provisional patent applications (if any) may lie in combating the pernicious effects of the *Festo* decision (see Chapter 8).

Some inventors (and, embarrassingly, some patent attorneys) will advocate filing all sorts of technical papers, research reports, and interim project specifications as provisional patent applications. *Do not listen to*

such people. Such documents, without revision, invariably lack the level of detail and completeness necessary to support a future utility patent application.

There are, of course, the rare exceptions to this rule. When one is a day short of expiration of the one-year grace period (which has been triggered by publication of a research paper or sale of the product), one may have no choice but to quickly file the provisional application to avoid crossing the novelty bar. Finally, in certain instances it may be beneficial to delay commencement of the patent term by a year (the protection will commence and expire a year later). Even though one will not gain an extra year of patent life, as often thought, one will push the patent term one year forward. In no event should one consider drafting a provisional patent application *pro se*—by oneself. Only in cases of extreme emergency should such practice be allowed. If a development has potential value, and the inventor wishes to file a provisional patent application while considering the matter further, the application should be prepared by a competent professional.

Choosing a Patent Attorney

Accused criminals have the legal right to represent themselves in court. It is widely acknowledged, however, that one who does so has a fool for a client. Similarly, inventors have the legal right to represent themselves in the Patent Office and, similarly, one who does so has a fool for a client.

Patents are not all equal in the eyes of the law. Some afford broad protection and, hence, are of great value. Others are very narrow in scope and are easily circumvented; these are, obviously, of little value. The quality (and value) of a patent is highly dependent upon the skill and knowledge of the person who drafts and prosecutes the patent application. Expertise in both the relevant technology and patent law and procedure are required. Such expertise is not inexpensive. However, as the old saying goes, "If something is worth doing, it's worth doing well." In business terms, the incremental costs of properly drafting and

prosecuting a patent application are more than adequately compensated by the incremental value of the patent thus obtained.

It must be borne in mind that the starting point in the preparation of a patent application is a blank sheet of paper (or a blank word processor screen). Drafting a patent application is not a matter of filling in blank spaces in a form. Each patent application is an individually crafted work of art (as noted earlier, depending upon the draftsperson—some are more artful than others). Just as no two inventions are alike, so, too, are no two patent applications alike. For this reason, patent practitioners almost always bill for prosecution services by the hour. The chief exception to this general rule occurs when a client has a substantial number of patent applications to be prepared. In such cases, a law firm may quote a fixed price per application, relying on the law of averages—some applications will be relatively complex (and time consuming), while others will be comparatively simple (and quickly completed).

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Trying to save money on a patent attorney is akin to shopping for the cheapest brain surgeon.

Many inventors, or business managers, search long and hard to find the patent practitioner with the lowest billing rate. *Do not do this.* More often than not, an unusually low billing rate connotes a lack of experience or skill, or both. Moreover, the final cost of an application is the hourly billing rate of the draftsperson, multiplied by the number of hours billed. An inexperienced or inefficient practitioner with a comparatively low billing rate often requires more time to complete an application than a more experienced colleague with a higher hourly rate. Because of the variability in the amount of time billed, there is often little correlation between the hourly billing rate and the cost of the completed patent application. Indeed, the more

experienced practitioner may actually prove less costly. If price comparison is absolutely necessary, ask the various candidate practitioners to estimate the cost to draft an application with respect to a specimen invention disclosure.

A factor frequently overlooked when selecting a patent practitioner is the individual's technical background. Patent attorneys and patent agents are, of necessity, quick studies and are generally able to work with inventions in a broad spectrum of technologies. Nevertheless, all other things being equal, it is preferable, in terms of both cost and quality, to secure the services of a practitioner with prior experience in the field of technology to which the invention pertains. Moreover, there are some types of inventions (e.g., pharmaceutical and bioengineering inventions) that should only be handled by practitioners with the corresponding technical education. Inquire as to a prospect's technical background—both education and experience—when making your choice.

A Good Attorney or Another Engineer

Having noted that a patent attorney should have appropriate technical expertise, it must also be borne in mind that a patent is a legal document, the proper drafting of which requires *legal* expertise. Over the past several years, a trend has developed toward ever-increasing levels of technical education among those patent attorneys engaging primarily, if not exclusively, in patent prosecution. This trend is even more pronounced among patent agents. Thus, more and more often one finds patent practitioners with master's degrees or doctorate degrees in technical fields. Some even boast of postdoctoral studies (apparently, they entered the patent field only when spouses—or mothers—insisted they finally get a job).

To an extent, this trend may be driven by the increasing complexity of some of the technologies now being patented and, as such, the trend may be beneficial. To a much greater extent, however, the trend results from one of the most common of management flaws:

the undue attention and preference accorded the familiar and the avoidance of the unfamiliar. Most often, patent practitioners report to a senior member of the client's engineering staff. Such staff members, themselves technologically oriented and having little or no legal knowledge, often prefer patent practitioners who focus on (and talk about) technological rather than legal issues. When retaining patent counsel, make certain to retain a legal adviser, not to hire an addition to the engineering department.

The alert reader will have noticed the use of the term *patent agent*. A patent agent is a person who has passed the Patent Office bar examination. Such a person is entitled to practice in the Patent Office, preparing so-called *patentability opinions* (more on this exciting document follows shortly) and filing and prosecuting patent applications. A patent attorney, by contrast, not only has passed the patent bar but is also an attorney admitted to the bar of one of the 50 states or the District of Columbia. Those activities deemed to constitute the practice of law—rendering patent validity or infringement opinions, engaging in litigation, or drafting license documents—may only be performed by a lawyer, not by a patent agent.

The Process of Obtaining a Patent

Before the drafting of a patent application has commenced, one may request, or the practitioner may recommend, that a *patent search* be performed. Also known as a novelty search, patentability search, or prior art search, this involves searching through the relevant prior art—principally, but not always exclusively, the collection of prior patents and published articles and brochures maintained by the Patent Office—to identify that art which is pertinent to the patentability (novelty and nonobviousness) of the subject invention. While the law does not require such a search, it is almost always a wise measure. Occasionally, such a search will reveal that the invention in question is not patentable—it lacks novelty (it's been done before) or it is obvious in

view of the prior art. Such a revelation, while discouraging, at least results in a savings of the cost of the patent application that would otherwise have been drafted and filed.

Much more frequently, however, the search results enable the patent practitioner to better identify patentable aspects or features of the invention and to focus the patent application on these features. After a patent application has been filed, no new matter may be added to the drawings or the specification—they are essentially frozen when the patent application is filed. While the claims may be (and most often are) amended during the prosecution of the application, they cannot cover anything that is not shown in the drawings and described in the specification. Thus, there is great value to foreknowledge ("forewarned is forearmed") such as may be gained through a patent search.

Indeed, a patentability search is becoming almost mandatory in view of the *Festo* decision (more on this later). In essence, the *Festo* decision affixes a steep price to any claim amendment that changes the scope of a claim in order to avoid reading on the prior art. This price is complete loss of the range of equivalents, which would otherwise be available to the patentee under the doctrine of equivalents (a topic discussed more fully in Chapter 8). Thus it is highly advisable to do a patentability search in order to enable drafting of the patent claims in such a manner that they need not be amended later.

Anywhere from 7 to 33 months after an application is filed, depending upon the field of technology to which it pertains and the backlog in that particular section (*art group*) of the Patent Office, a written report known as an *official office action* is issued. In this office action, the patent examiner identifies the prior art believed to be the most pertinent and, generally, rejects some or all of the patent claims as being unpatentable. (If none of the claims are rejected, this may be an indication that you did not claim all to which you were entitled.) A written response to this office action, called either a *response* or an *amendment*, addressing all of the issues raised by the patent examiner,

must be prepared and filed—a task for which the practitioner bills by the hour. Additionally, the practitioner may interview the examiner, either by telephone or in person.

In response to all of this, the examiner will, in several months, generally issue a second office action. At this point, the practitioner can usually advise whether (1) it is highly unlikely that any worthwhile patent protection will be obtained; (2) a patent will likely issue in due course; or (3) the examiner seemingly doesn't understand, is unreasonable, or is being stubborn, necessitating an appeal or other lengthy and expensive procedures. Possibilities 1 and 2 make for an easy decision. Dealing with possibility 3 is one of those situations where decision makers earn their pay.

Once a patent is issued, the Patent Office file, known as the *file wrapper*, is laid open to the public. Patent attorneys avidly study file wrappers as an aid to understanding the meaning of various terms and the scope of the patent claims (not surprisingly, such study is time-consuming and, hence, costly).

Patent Marking: Little Things Mean a Lot

Before damages may be collected from a patent infringer, the patentee must establish that the infringer was warned or notified of the infringement. Once notified, damages accrue from the date of the notice. Notice may be either actual or constructive. Traditionally, *actual notice* is what it sounds like—a letter from the patentee, identifying both the patent and the infringing products and including a clear statement that the patent covered the products or, equivalently, that the products infringed the patent. *Constructive notice*, with respect to a commercialized patent, comprises marking the patented product (or, if impractical, its packaging) with the patent number(s). For patents that are not commercialized, or where the commercialization does not yield a markable product, the marking requirement is excused.

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Marking products with patent numbers is essential for collecting infringement damages and is also good PR for your company. Marking a product with the number of an expired patent, or one that doesn't cover the product, may expose the patentee to liability for false marking.

Clearly, if the patentee is selling (either directly or through a licensee) patented products, it is advantageous that such products be marked with the patent number(s). Patent marking starts the damages clock ticking without the need for a notice letter to an infringer—a letter that may give the recipient standing to bring a declaratory judgment action (see Chapter 8).

Understanding Patent Claims: Rules of the Road

As previously noted, it is the claims of a patent that determine its scope. An understanding of the basic tenets of claim construction is, therefore, exceedingly important.

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Claim limitations are the elements of the claim that determine the scope of the claim.

Patent claims are composed of *limitations*—phrases that identify and describe, or limit, the various components (or steps, in the case of a method or process claim) of the claimed invention. The various words and phrases that appear in the patent claims are to be interpreted or construed according to their normal or accustomed meaning. If no such

accepted definition exists—that is, the patent draftsman has created or coined new words or phrases, or has used words or phrases in an unconventional manner (the patent draftsperson is his own lexicographer)—the patent specification is used as a guide to claim interpretation. If no clear definition is provided in the patent specification, the file wrapper is examined. As a last resort (and only then), testimony of expert witnesses may be introduced. If this still fails to resolve any ambiguity, printed materials are considered.

Every word in a patent claim is deemed to have meaning and significance. None may be ignored. Substantive patent law prohibits two patent claims from covering exactly the same invention. Thus, if (as often happens) two patent claims are largely identical, the nonidentical portions *must* be so construed as to have different meanings (this is known as the *doctrine of claim differentiation*).

Claim terms may not be construed in a manner inconsistent with arguments or statements made by the applicant during prosecution of the patent application nor contrary to reasons that may have been enunciated by the patent examiner as the basis for claim allowance (the *doctrine of file wrapper estoppel*). (This may seem comprehensible, but wait, there's more! See Chapter 8 for remarks concerning the *Festo* case.)

Claims—actually constituent claim limitations—must be construed so as to preserve patentability. In the event that a pertinent *new* (not considered during the prosecution of the patent application) prior art reference is discovered, the patent claims must be interpreted, if at all possible, so as to distinguish over the reference and, hence, to maintain the validity of the claims. Also, if at all possible, claims should be construed so as to cover the embodiment(s) of the invention described in the patent specification.

If these rules seem complex and confusing, they are! As evidenced by the number of reversals handed down by the Court of Appeals for the Federal Circuit (CAFC)—the patent appeals court—many trial judges of the federal district courts get it wrong themselves.

Independent Claims, Dependent Claims: A Way to Simplify the Task of Claim Construction

Patent claims are of two kinds: independent claims and dependent claims. *Independent claims* are those that do not refer to another, preceding claim. Hence, the first claim of a patent (claim 1) is always independent (there *are* no preceding claims). *Dependent claims* incorporate by reference each and every limitation of each of the claims from which they depend (i.e., to which they refer). Many patents include long chains or series of dependent claims, each referring to—and incorporating the limitations of—a preceding claim. Each dependent claim is narrower (i.e., more limited in scope) than the claim from which it depends (see Chapter 8 for a more detailed explanation of this effect). Thus, if an independent claim is not infringed, no claim that depends from it (and, therefore, is of more limited scope) can be infringed. For this reason, attention is inevitably focused on the independent claims, which are generally much fewer in number. In most instances, the dependent claims may be safely ignored.

Provisional Patent Rights: Life before Birth

Among the many popular misconceptions concerning patents, one of the most enduring is that patents have effect as of the date of filing. A surprising number of people believe that a patent springs to life, fully formed, upon filing. Such people occasionally wander into attorneys' offices clutching a copy of a newly filed patent application—more often than not, an application they filed themselves—to seek enforcement of their patent against one or more alleged infringers. Such enforcement is impossible, however, because patents have effect only from the date of issue. Moreover, until recently, patents had no retroactive effect. No liability for patent infringement could arise from any activities occurring prior to the date of patent issue. However, to an extent—and *only* to an extent—this nonretroactivity of patent protection has been altered

by changes in the patent law that have created provisional patent rights. These same changes also reversed the prior rule that pending patent applications be maintained in secret, by the Patent Office, until the patent issued.

Under the changed law, patent applications filed on or after November 29, 2000, are published 18 months after their filing date (actually, 18 months after the earliest claimed priority date—discuss this with a patent practitioner). When an application is published, the entire file wrapper is open to inspection and copying by the public. Moreover, members of the public may, within two months of publication, submit prior art documents to the Patent Office to be considered by the patent examiner during examination of the application.

Once a patent application has been published and an accused infringer has been given actual notice thereof, certain provisional rights apply. If the published patent application ultimately matures into an issued patent, having claims substantially similar (although as yet undecided by the courts, the term *substantially similar* probably means "virtually identical") to those previously published, the patentee—upon issue of the patent and proof that the infringer had actual knowledge of the published patent application—may recover, in addition to other damages, a reasonable royalty in respect of infringement of those claims that occurred during the period between the publication of the application and the issue of the patent. Thus, a certain measure of retroactivity has been introduced into the patent system.

Trademarks

A trademark is a word, symbol, or combination thereof that is used to identify the source, albeit a possibly anonymous source, of goods. Examples of trademarks include Nike, Rolls-Royce, and Kleenex. A service mark performs the same function as a trademark with respect to the provision of services. Examples of service marks include FedEx and Roto-Rooter. A trademark or service mark has a potentially perpetual

life. Although registration confers several advantages on the owner of the mark, it is not legally required. Registration may be at either the federal or state level. Marks that are unregistered are known as *common-law marks*.

Choosing a Mark

When choosing a mark, it is important to remember the function it is intended to perform, namely source identification. It is not the function of a trademark or service mark to describe the goods or services. Marketing and sales personnel frequently seek to adopt marks that describe the product or tell the customer all about it. Such efforts should be strenuously resisted. Product description should be achieved through advertising copy. Trademarks and service marks should be chosen for their distinctiveness.

Marks are categorized according to their inherent distinctiveness. The most distinctive and, hence, the most desirable marks are coined or arbitrary marks. These are either made-up words, such as Kodak or Xerox, or words that have no relation to the goods or services with which they are used, such as Camel as a trademark for cigarettes.

TIPS AND TECHNIQUES

The *trade dress* of a product encompasses the distinctive appearance of the product and/or its packaging and may include the size, shape, color, and texture.

Next, in decreasing order of distinctiveness, are suggestive marks. These are marks that bear some relation to the goods or services with which they are used. The relation is sufficiently tenuous, however, that the goods or services are not described, nor can they be identified from knowledge of the mark alone (for example, Polar as a trademark for ice cream).

The next lower rung on the distinctiveness ladder (a significant step downward, as we shall soon see) is occupied by descriptive marks. These literally describe some feature or attribute of the goods or services, or are laudatory thereof (for example, Speedy as a service mark for a delivery service).

The bottom rung of the ladder is occupied by what are, technically, not marks at all—generic terms. A generic term is the word or phrase by which a product or service is popularly known (for example, *bicycle* is the generic term for a two-wheeled, pedal-powered vehicle). Generic terms are not protectable.

Trademark Clearance

Trademark clearance is the process of determining or seeking to determine whether a particular mark is available for adoption and use as proposed. Just as many inventors will assure you that no patentability search is necessary because they "know the field of technology and there has never been anything like this," so too will many marketing and sales personnel assure you that no trademark clearance is necessary because they "know the market and no one is using this mark." *Do not listen to such people.* Trademark clearance (if the mark is to be used only in this country) is a relatively quick and inexpensive procedure, especially when compared with the disruptions and costs associated with unwittingly infringing the rights of another—litigation costs, damages, and the costs and chaos of suddenly changing to a new mark. If the mark is to be used abroad, it should be searched in each country where it will appear. Such searches can become costly and time-consuming and, therefore, plans should be made accordingly.

Registering a Mark

While requirements and procedures vary somewhat from state to state, obtaining a state registration of a mark is most often a matter of literally

filling in the blank spaces in an application form and paying a small fee. Preparing an application for federal registration is only slightly more complex. As a result, most (if not all) trademark attorneys prepare and file registration applications on a fixed-fee basis. Formerly, use of a mark in interstate commerce was a prerequisite to filing for federal registration. Now, however, the trademark law has changed, and an application for federal registration may be filed based on an intent to use the mark in interstate commerce. Nevertheless, such use must actually commence before the registration is allowed to issue.

TIPS AND TECHNIQUES

A *trade name*, which is the name by which a business is known, cannot be registered as a trademark, but is governed by state and common law.

In order to perform its function—identifying the source of goods—a trademark must be distinctive. A mark that is confusingly similar to other marks cannot serve to distinguish the goods on which it is used from those of others. Some marks—coined, arbitrary, or merely suggestive marks—are deemed to be inherently distinctive. These marks are registerable *ab initio*—immediately upon adaptation and use (the reader is advised that the occasional use of Latin phrases will often impress others).

TIPS AND TECHNIQUES

A trademark may be a slogan, such as Citibank's ''Citi never sleeps''; or a package shape, such as the wasp-waisted Coca-Cola bottle; or a color, such as Owens Corning's pink fiberglass insulation.

Marks that lack inherent distinctiveness—descriptive marks—are only registerable upon a showing that they have achieved secondary meaning; that is, that they have become so associated with the goods in the mind of the public that they do, in fact, distinguish those goods. Such a showing may be made through the use of consumer surveys (very expensive) or by establishing that the applicant has used the mark continuously, and substantially exclusively, for at least five years (a so-called Section 2[f] application). This latter approach, quite obviously, requires the trademark owner to endure a lengthy (five-year) period of uncertainty before (hopefully) achieving registration of the mark. The moral of the story: Avoid descriptive marks.

(*Note*: The foregoing paragraph pertains primarily to the issues involved in federal registration. Some states, apparently, will register anything.)

Like the Patent Office, the Trademark Office issues written reports in respect of applications, to which written response must be made. Here the similarity ends. In most cases, prosecution of a trademark application is much less complex and much less costly than prosecution of a patent application.

Once an application has been approved by the examining attorney, it is published for opposition—the mark, the goods or services, and the identity of the applicant are published in the weekly *Official Patent and Trademark Gazette*—and interested parties are afforded 30 days (extensions of time are freely granted) in which to file an opposition setting forth reasons why registration should be denied. If no opposition is filed,

IN THE REAL WORLD

According to a 2010 study by Kantar Retail and BrandZ, the five most valuable trademarks in the world are Google, IBM, Apple, Microsoft, and Coca-Cola.

a registration is issued. If an opposition is filed, there is an *inter partes proceeding* (litigation) before the Trademark Trial and Appeal Board, which decides the matter (subject, of course, to appeal).

Proper Trademark Usage: Use It Right or Lose It

If a trademark ceases to serve primarily as an identification of the source of goods and instead comes to identify the goods themselves (i.e., if it becomes the generic term for such goods), the rights to exclusive use of the mark are lost. Notable examples of such lost marks are escalator, thermos, and aspirin. Proper trademark usage is directed to the prevention of such loss. Prior to release, all publications should be reviewed for proper trademark use. (Although the rules of proper trademark usage are beyond the scope of this book, remember: A trademark is not an adjective and should be followed by the appropriate generic term.)

It is also prudent to monitor the *Official Gazette*, so as to be able to oppose registration of marks that may cause confusion with respect to your own or may dilute or reduce the distinctiveness of your marks.

Once a mark is federally registered, it is identified by the symbol®. The letters TM or, occasionally, SM (for service marks) are used to identify unregistered or common-law marks, or marks that have only state registrations. Thus, the presence of the designation TM or SM after a mark merely means that someone is claiming proprietary rights thereto, not that the claimant actually *has* such rights. This is not meant, however, to suggest that rights claimed under common law may be safely ignored. Many unregistered marks are extremely strong. Check before proceeding.

Having now touched upon the problem of genericness, we should backtrack to an issue relating to the selection of a mark. A trademark, or service mark, is an adjective and should be used in conjunction with the appropriate generic term. If a product or service is truly the first of its kind, no accepted generic term will exist. In such case, or if the existing generic term is awkward and unwieldy—"acetylsalicylic acid" (aspirin)

does not fall trippingly from the tongue—a mark may be adopted by the public as the generic term, resulting in loss of the owner's proprietary rights. To avoid such a loss, create a generic term, in addition to the trademark, and foster its adoption and use by the public; for example, "ASPIRIN™ pain reliever."

Copyrights

A copyright is an exclusionary right. It conveys to its owner the right to prevent others from copying, selling, performing, displaying, or making derivative versions of a work of authorship. The duration of a copyright depends upon several factors but in no event is shorter than 70 years. (If your planning horizon exceeds 70 years, consult a copyright specialist.) Although registration confers several advantages on the owner of the copyright and is a prerequisite to a suit for copyright infringement, it is not legally required. Prompt registration provides remedies that make lawsuits affordable. Statutory damages of $150,000 (or more, plus attorney fees) for willful infringement can be obtained if published works are registered within three months of publication or if unpublished works are registered before they are infringed.

Copyrights differ from patents in that they only protect against actual copying. A work created by another, without copying, is not an infringement, no matter how similar it may be to a copyrighted work. Moreover, copyright protects only the expression of an idea, not the idea being expressed. Thus, information or data included in a copyrighted work is not protected against appropriation and use by others, although copying of the presentation and arrangement is barred.

TIPS AND TECHNIQUES

A copyright protects the expression of an idea, not the idea itself.

Copyrights are generally associated in the common mind with novels, movie scripts, music, and song lyrics. For this reason, and because of their limited scope of protection, they are often overlooked or ignored by businesspeople. Copyrights do, however, have application in the protection of product manuals and instruction booklets, training materials, and marketing and sales publications. More importantly, copyright has been utilized to protect computer software, although in recent years, computer software has often become the subject of patent applications.

Copyright Registration

Copyright arises automatically when the original work of authorship is fixed in a tangible medium; for example, music is written as notes on a sheet of paper or its performance is recorded on a tape or CD. Registration of a copyright, which may be done at any time during its life, is merely a matter of filling in the blank spaces on a simple two-page form (instructions are printed on the form), attaching (depositing) one or two copies of the subject work of authorship (see instructions) including a small (currently $35.00) filing fee, and sending it to the Library of Congress. Copyright law has no equivalent of the enablement requirement found in patent law. It is perfectly acceptable (and commonly done) to register a copyright on a computer program with significant portions of the program omitted from the copy or copies deposited. This allows registration of the copyright in the program without providing a complete and working copy to a prospective infringer.

Copyright Notice

A copyright notice consists of the symbol ©, or the word *copyright*, followed by the year of first publication and the name of the copyright owner. Formerly, publication of a work without a copyright notice caused loss of copyright. For this reason, some people believe that they are free to copy any work that does not bear a copyright

notice. *Do not listen to such people.* This aspect of the copyright law was changed more than two decades ago. While a copyright notice remains a requirement if damages are to be recovered from an infringer, the owner of a work published without a notice may obtain an injunction barring further infringement. Thus, the mere absence of a copyright notice does not indicate that a work may be freely copied. Similarly, a copyright notice should be placed on all of one's own works before they are published.

To clarify a point, copyright registration is not a prerequisite to the use of a copyright notice. Thus, one may include a copyright notice in a publication before registering the copyright with the Copyright Office.

Work for Hire: Sounds Simple, But It Isn't

A *work for hire* is, generally speaking, a work created by an employee within the scope of her employment or, if the parties expressly agree in writing, a work specially commissioned for use as a contribution to a collective work.

The copyright in a work initially vests in the author or authors who created the work. However, in the case of a work for hire, the *employer* is legally considered to be the author. Thus, the copyright of such a work vests in the employer. But what about a work created by a consultant? A consultant is not an employee (if you don't believe this, just ask the IRS); as a result, the copyright in a work (other than a contribution to a collective work) created by a consultant will vest in the consultant, not in the client. Thus, for example, in the absence of a written copyright assignment, a computer program written by a consultant may be used by the client but not duplicated or upgraded by the client (the upgraded program would be a *derivative work*). It is therefore extremely important to ascertain the correct employment status of all of those individuals called upon to create computer programs, advertising and promotional materials, and so forth. If they are not employees, working within the scope of their employment, get a written copyright assignment.

Fair Use or Foul

Not all unauthorized uses of copyrighted material constitute an infringement. Some use of others' works is permitted, even without the approval of the copyright owner. Such use, known as *fair use*, is one of the most important, and least well-defined, limits to copyright protection.

The statutory basis for this doctrine, 17 United States Code §107, sets forth the factors that are to be considered in determining whether a particular use is fair use. In general, uses that advance public interests, such as criticism, comment, news reporting, teaching (including multiple copies for classroom use), scholarship, or research, are favored, while commercial uses are disfavored.

Not all commercial uses are forbidden. Most magazines and newspapers are operated for profit, yet they are not automatically precluded from availing themselves of the benefit of the doctrine. One of the most critical considerations is the extent of the "amount and substantiality of the portion used in relation to the copyrighted work as a whole." If the use is of such an extent and nature as to significantly impinge upon the value of the work or the copyright owner's income derived therefrom, it is not likely to be considered a fair use.

IN THE REAL WORLD

Unlike accidents, which mostly occur in the home, copyright infringement most commonly occurs in the workplace. Otherwise honest and law-abiding citizens routinely make copies of magazine and technical journal articles and duplicate computer software, both for themselves and for their colleagues, without seeking permission from the copyright holders. If you are a part of this mob of scofflaws, beware! There are organizations hunting you.

In the Real World (continued)

The Copyright Clearance Center, Inc., enforces the copyrights in a vast array of periodical publications. The Clearance Center offers licenses for the copying of their clients' works and takes action against those who copy without such licenses. Similarly, the Business Software Alliance (BSA) takes action against those who make unauthorized copies of their clients' proprietary computer software. For example, in January 2001, a Chicago firm called ThoughtWorks, Inc., agreed to pay $480,000 to the BSA to settle claims of illegal use of Microsoft and IBM office productivity software by ThoughtWorks' employees.

If you are making photocopies and just can't break the habit or have lots of unlicensed copies of software in use, it's probably best to find these folks before they find you.

Summary

A patent is the legal right to prevent others from practicing the patented invention. A patent does *not* guarantee the right of the patentee himself to practice the patented invention.

There are three types of patents: utility patents, design patents, and plant patents. A utility patent may cover a device or an article, a composition of matter, a method or a process of doing or making something, a new application for an existing device or material, or a product (not otherwise patentable) made by a particular new process. Design patents cover the ornamental design of an article. Plant patents cover asexually produced plants.

In order to be patentable, an invention must be novel, nonobvious, and useful. The requirement of nonobviousness is typically the most significant hurdle to be surmounted. If an invention would be obvious to one of ordinary skill in the art seeking to solve the problem addressed by the inventor, that invention is not patentable. In this regard, it is important to note that inventors and their attorneys are under an obligation to

disclose to the Patent Office any prior art of which they are aware that would be relevant to the questions of novelty and nonobviousness of their invention.

Utility patents include a specification and patent claims. The specification comprises drawings and a written description of the preferred embodiment of the invention. The claims determine the scope of the patent monopoly. The specification must provide sufficient information to enable one of ordinary skill in the art to practice the patented invention (the enablement requirement).

Choice of a patent attorney is a complex question involving a trade-off between technical and legal skills. Effective cooperation with a patent attorney may minimize the cost of patent prosecution.

A trademark serves to identify the source of the goods on which it appears. A service mark serves the same function with respect to services. Marks may be registered at either the state or federal level, or they may be used without registration; such unregistered marks are known as common-law marks. Based upon their level of distinctiveness, marks may be categorized as arbitrary or coined, suggestive, or descriptive.

Before adopting a mark, a search should be performed to ascertain whether it is indeed available. Once adopted, a mark should be used properly to avoid loss of exclusive rights therein.

A copyright is the right to prevent others from unauthorized reproduction, dissemination, or modification of a work of authorship. Unlike patents, copyrights do not protect against independent re-creation. Although traditionally considered with respect to music, literature, and works of art, copyright now finds broad application with respect to the protection of computer software.

The exclusive rights afforded by a copyright are limited by the doctrine of fair use, which allows the unauthorized copying of limited portions of another's work under certain specified circumstances.