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INTELLECTUAL PROPERTY SOME PRACTICAL AND LEGAL FUNDAMENTALS [n.a1]

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I. INTRODUCTION

Patents, copyrights, trademarks and related interests are known as intellectual property (IP). It has not been long since patents especially were regarded in U.S. courts, and the Supreme Court in particular, as tools of monopolists, and their owners often fared poorly. [n.1] However, people have come increasingly to view privately funded innovation as critical to national economic well-being and to agree that such innovation cannot occur unless companies that succeed in the marketplace can recoup their research, development and marketing costs. That is a major function of IP, and, particularly within the past dozen years, IP has been seen, both here and abroad, as playing a key role in developing technologies for the next century. [n.2]

Each part of IP law is quite complex in itself. For example, approximately 20 courses at FPLC cover practice before the U.S. Patent and Trademark Office (PTO) in patent cases, substantive patent and trade *80 secret law, copyrights, trademarks and unfair competition, and IP licensing -- as well as international, comparative and business-related topics. Still, broad treatment has provenuseful for those who have no need for great depth, as well as for those who are beginning to study IP or attempting to integrate isolated knowledge acquired in courses or careers. [n.3]

Before considering IP as such, one must appreciate the extent to which competition is preeminent in U.S. law. Ironically, some of the strongest evidence of the importance of competition appears in IP cases. [n.4] Thus, notwithstanding renewed or possibly expanded recognition of the value of IP in encouraging innovation, IP owners must understand that anything that prevents others from selling products or services will be limited and strictly scrutinized.

From this perspective, patent, copyright and trade secret protection comprise the first major branch of IP law. [n.5] Each of those may be used to prevent others from, e.g., making or selling protected products or services. Based on a Constitutional provision, [n.6] patents and copyrights are of limited duration and are governed almost exclusively by federal law. Trade secrets are theoretically unlimited in duration and are governed mostly by state law.

Of the three, patents provide the strongest possible protection. They can be used to prevent others from importing, making, using or selling covered technology -- even if that technology was independently created. Yet, they cost thousands of dollars, are difficult to obtain and *81 last no more than seventeen years. Also, among other things, patentable subject matter must usually be both objectively novel and unobvious to those familiar with the relevant technology.

Copyrights often extend fifty years beyond the lifetime of the author and are much more easily and cheaply obtained. An original, i.e., subjectively novel, work is protected as soon as somehow recorded, and a \$20 registration fee need be paid only if its owner wants to bring suit. However, copyrights are weaker than patents because independently created works do not infringe -- even if they are identical. Yet, this weakness is mostly theoretical: If a work is publicly available, defendants face serious practical difficulties in convincing courts that they did not copy. Possibly because of this, Congress and the courts have endeavored to ensure that copyrights cover different subject matter from patents. [n.7] Still, copyrights and patents often provide complementary protection. [n.8]

Trade secret protection, as apparent from the name, protects works that can be and are kept secret. Maintaining secrecy is often expensive; for some works, it is impossible. Protection is weaker than that afforded either patents or copyrights because rights are not infringed if competitors copy publicly available works. Still, secrecy sometimes provides an important option. With production techniques or equipment, for example, patent infringement may be impossible to detect because it is hidden from sight. If so, secrecy is possible and may be preferred. [n.9]

In contrast with patents, copyrights and trade secrets, the other branch of IP law cannot be used to prevent competition in particular goods or services. Rather, it allows firms sometimes to take action to prevent others from providing false and misleading information to consumers. Accurate information makes competition possible. If consumers cannot purchase with good information, including being able to associate prior happy (or unhappy) experiences with particular firms, they receive little advantage from alternative commercial sources.

This second major branch of IP permits firms to enlist the aid of the courts in forcing imitators to compete on the merits, and trademark *82 law is a major component. Trademark rights generally arise automatically upon use of a mark and do not expire. Although registration confers advantages, marks need not be registered for owners to prevent free riding on the goodwill they protect or to stop innocent use of similar marks in circumstances where consumers may be deceived. While trademarks are of no value in protecting work products as such, firms that treat consumers well often find their goodwill to command higher prices. Thus, particularly where research and development costs are not a large fraction of selling price, trademark rights may be ample to support recovery of the costs of innovation.

At least until recently, most lawyers and law schools have paid relatively little attention to IP. [n.10] When law schools have offered courses, [n.11] few students have elected

them. [n.12] Thus, what most lawyers think they know is often wrong. [n.13] For the same reasons, most judges have also not been well informed.

Lawyers trained in science or engineering have traditionally dominated IP practice. Yet, no particular background is needed for trademark or most copyright practice. Also, while technical training and passing a special examination are necessary before anyone can obtain patents on behalf of others, [n.14] once a patent issues, any attorney can assign, license or otherwise dispose of it -- or bring suit against infringers. Moreover, as illustrated below, general attorneys with no interest in IP, and IP specialists practicing within a fairly narrow area, can help clients assess options while they still have options and help clients avoid major pitfalls from which they cannot later be extricated. [n.15]

*83 II. THE PRICE OF IGNORANCE [n.16]

A. Independent Inventors and the Mousetrap Myth
If a man can. . . make a better mousetrap than his neighbor,
though he builds his house in the woods
the world will make a beaten path to his door.

Most people have heard variations on that remark attributed to Ralph Waldo Emerson. [n.17] It is difficult to know exactly what was intended, but many independent inventors seem to construe it to mean that anyone who invents a better mousetrap will become wealthy -- particularly if he or she can patent it. Among patent attorneys this is known as the "mousetrap myth."

Contrast the experience of Chester M. Woolworth, the president of the Animal Trap Company of America. [n.18] In the 1920's, his company sold a mousetrap for five cents. In 1928, Woolworth succeeded in improving the trap, but the improved version cost twelve cents.

Unfortunately, Woolworth failed to consider that, once a mouse had been caught, people usually disposed of both mouse and trap. Consumers seem to have been unwilling to discard a trap costing almost two and one-half times as much. Apparently because they felt obligated to remove the mouse and clean the trap, sales were very low.

Clearly, a patent would not have improved the consumer appeal of Woolworth's invention. Still, each year, hundreds of independent inventors are estimated to spend over \$100 million protecting various products. If an established manufacturer could make a mistake as big as Woolworth's, imagine the odds of the typical independent inventor's succeeding in the market. As the situation was well summarized several years ago: [n.19]

The inventor generally might undertake to promote his own invention in whatever manner he can and to whatever degree of effectiveness. After an unbusinesslike solicitation effort to various companies, resulting in total rejection, he understandably looks for outside help only to find there is little or none available. . . . Thus, somewhat

disillusioned and perhaps embittered, it is no wonder that the typical amateur inventor is eventually driven into the waiting arms of the invention promoter. . . . In an indifferent world, the [promoter] tells the inventor exactly what he has been searching in vain to hear--the promise of success in terms that for the first time he can directly relate to. The [promoter] preys on the inventor's *84 intense ambition by offering him the one thing he must have to sustain himself -- hope. And hope, in the final analysis, is what the [promoter] is selling.

Notwithstanding occasional private suits [n.20] and efforts by public authorities, [n.21] most invention promoters manage to stay in business. The mousetrap myth encourages inventors to hear what they want to hear, and some promoters appear to thrive --particularly those that resist promising more than the very little they usually deliver. [n.22]

B. ENTREPRENEURS WHO CANNOT AFFORD IP PROTECTION

Realizing that it is often easier to patent than to sell an invention, some people may conclude that patent and related protections can be afforded only by large companies. If so, they are as misinformed as independent inventors taken in by the mousetrap myth.

By way of illustration, let's assume that one of Mr. Woolworth's descendants has recently invented another improved mousetrap. She then consults an attorney about setting up a new business. During her visit, Ms. Woolworth also asks about patents and trademarks. The attorney says that he doesn't handle such things but understands that they cost thousands of dollars. Having a limited budget, she quickly dismisses such "expensive" notions.

Later, as her mousetrap moves toward production, Woolworth begins to consider possible product names and asks for suggestions. An employee, inspired by the cat in Disney's "Pinocchio," suggests "Figaro," and Woolworth adopts that as her trademark.

Having heard about the earlier family experience, Woolworth has paid careful attention to what consumers want. Consequently, her mousetraps sell well -- so well that, as her firm begins to break even, a larger firm decides to copy her mousetrap, as well as its instructions and labels, quite closely. With better established marketing channels and other advantages, it undersells her by 20%. She cannot lower her *85 price and stay in business, so Woolworth consults an IP attorney. First, she learns that her printed material is protected by copyright. However, when challenged, the competitor easily evades a serious threat of copyright suit by rewriting what it copied.

Second, she is told that a patent for the mousetrap is no longer possible because a time bar expired one year after her product was offered for sale. [n.23] After being advised that she should also determine whether her mousetrap infringes anyone else's patents, she learns that a minor component does. A license is available, but she calculates that it

would cost more for a license than to dispose of inventory and redesign the product. So, she chooses the latter.

During this episode, trademarks never came up, but shortly thereafter, the employee who had suggested "Figaro" leaves her firm and registers it to himself as a state trademark. About the same time, she receives a letter from Disney objecting to the use of "Figaro" on mousetraps. Because it seems cheaper than litigation, she is advised to select, search and federally register a different mark. This costs about \$1400.00, [n.24] but the value of lost goodwill associated with the original mark and expense of informing consumers of her new brandname prove higher.

No entrepreneur wants to use precious startup capital for legal fees, but few people would purchase a building without clearing the real estate -- surely not if they had legal assistance or financed the purchase. Woolworth's failure to determine whether others might have rights in her original mark or product design was equivalent.

As will become apparent from the following discussion, had her first lawyer been better informed or had she consulted a specialist, our hypothetical modern Woolworth could be much better off. For example, it would have cost little to register copyright in her labels and instructions, [n.25] but this action would have substantially altered the affordability of copyright litigation. Also, the expense of obtaining a *86 patent on her most important mousetrap improvement could well have been justified. [n.26]

III. PROTECTING WORK PRODUCTS

A. Patents [n.27]

1. Their origin and rationale

"Patent" is an abbreviation of "letters patent" and signifies an exclusive grant from a governmental body. An early U.S. version granted railroads exclusive and unlimited rights to tracts of land. [n.28] Again, unlike land grants, patents discussed here have a limited duration. [n.29]

Yet, the rationale is similar: Patents encourage investment in research and development. [n.30] In return, those who make acceptable innovations may exclude others [n.31] from making, using or selling them -- regardless of copying [n.32] -- until the patent expires. Moreover, anyone is free to practice the technology after expiration or try to improve it, even during the patent term.

*87 Those who regard patents as anticompetitive should consider that: [n.33] [T]he patent system encourages competitive effort. . . that would not otherwise take place. The television industry, for example, was for all practical purposes nonexistent a

decade ago -- now it dwarfs the radio industry. . . . Yet, the industry is characterized by huge research [[costs]. . . -- over \$65 million in color television already and the return is yet to come. These expenditures have been made in anticipation of monetary return through patent license royalties. The antibiotics industry, limited to penicillin a decade ago, is now the scene of the most intense competition. . . .

In spite of such arguments, the Supreme Court was especially hostile through the 1960s. It seemed to relish holding patents invalid. Once, Justice Jackson critically noted that the only valid patent was one that had not come before the Court. [n.34]

In 1952, at the urging of the bar, Congress revised and codified the patent law. The situation was still regarded as unsatisfactory, [n.35] and the Senate began a thorough review shortly thereafter. [n.36] All things considered, if only reasonably contested patents are litigated, patentees should have about a 50-50 chance. Yet, in many jurisdictions patent owners rarely prevailed. [n.37] This result led to doubts about the value of patents and, in turn, may have led to reduced levels of U.S. innovation.

For about 25 years, further attempts to strengthen the patent system were not viewed sympathetically. However, in the late 1970's,*88 President Carter and Congress, if not also judges, [n.38] began to see that stronger patent protection might help address trade imbalances. [n.39] One of the first, and perhaps most significant, results was creation, in 1982, of a Court of Appeals for the Federal Circuit [CAFC]. Subject only to infrequent review by the Supreme Court, it exercises exclusive appellate jurisdiction in patent cases. [n.40]

Earlier, two federal courts of appeal had shared jurisdiction to review PTO decisions, [n.41] and all circuits had jurisdiction over patent litigation. [n.42] This arrangement, coupled with infrequent Supreme Court review, facilitated the application of different validity standards in obtaining and enforcing patents, as well as development of diverse infringement standards. [n.43]

Now that judges who review PTO decisions also consider patents in the context of infringement litigation, it seems more likely that only valid patents will be granted. [n.44] It may surprise some people, but corporate patent attorneys in particular would not want it otherwise. While a given firm's patents keep competitors at bay, competitors' patents likewise keep it at bay!

In any event, the CAFC may encourage settlement by eliminating wasteful forum shopping and reducing uncertainty in patent disputes. *89 Moreover, its decisions have led to a perception that valid patents will be enforced. [n.45]

2. Kinds of patents

Three distinct kinds of patents are available in the U.S. -- utility, design and plant, in descending order of number granted. Utility patents are uniformly meant when "patent" is

used alone. That convention is followed here. Their subject matter includes machines, industrial processes, compositions of matter and articles of manufacture. [n.46] These categories are not important, but proper utility patent subject matter has been the subject of considerable litigation. [n.47] Design patents protect ornamental features, [n.48] rather than the function, of articles such as containers [n.49] or light fixtures. [n.50] Also, in contrast with both plant and utility patents, design patents last only fourteen years. [n.51]

Plant patents are most distinct. They reward discovery of previously uncultivated plants, or the breeding of novel plants, that can be asexually propagated. [n.52] One critical distinction is that, because naturally occurring plants may be protected, the subject matter need not be objectively novel. [n.53] Another is that plants can be regarded as infringing only if they are produced by grafting from patented stock. In both regards, plant patents resemble "copyright" far more than they do "patent" protection. [n.54]

*90 3. Acquiring patents

All patents require PTO approval of an application; [n.55] i.e., a patent must issue before any rights are conferred. [n.56] Although the procedure for all three is similar, this discussion, unless otherwise indicated contemplates only utility patents.

Before an application is filed, [n.57] the subject matter should be considered. Although some aspects of an invention may encompass debatable subject matter, [n.58] a specialist may be able to obtain adequate coverage. For example, while one cannot obtain a utility patent on a naturally occurring substance as such, [n.59] a claim drawn on an essentially pure form of that substance (or a method of obtaining it) may be patentable if it satisfies other requirements.

Also, before an application is filed a prior art [n.60] search should also be conducted. [n.61] The invention could be fully disclosed in a patent or elsewhere; if so, it is not novel and is unpatentable. [n.62] Alternatively, a search could show one or more aspects of the invention to lack novelty; in that case, one must convince a patent examiner that the invention would have been "unobvious" to those skilled in the art at the time it was made. [n.63] While a novelty search is not required, omitting it to save money can have serious consequences. Failing to search could *91 easily mean that the cost of preparing and filing an application is wasted. It can also result in less protection than deserved. [n.64] Further, before an application is filed, inventors must be identified. Regardless of ultimate ownership, a U.S. application must be filed in the inventors' names, and they usually must participate in its prosecution. [n.65]

An application consists of a description of the invention (the "specification") with or without drawings, a fee, and an oath or declaration that the applicant is the first and true inventor. [n.66] The specification must describe the invention in terms that enable those skilled in the art to practice it and must conclude with one or more "claims." The first part (usually what patent attorneys mean by "specification") will discuss the inventors'

contribution in the overall context of the field, whereas claims identify what is believed to qualify for protection. [n.67]

Upon receipt, the PTO usually gives applications a filing date and number. [n.68] Based upon the classification of the claimed subject matter, [n.69] they are then assigned to a patent examiner. When applications come up for action, examiners may object on formal grounds or reject one or more claims as substantively unpatentable. [n.70]

During this ex parte process [n.71] called patent "prosecution," ranging from eighteen months to several years, the PTO attempts to ensure that the application is complete and enables others to practice the invention. [n.72] Are the claims reasonably related to the inventor's contribution? [n.73] Do they define proper subject matter that is useful, novel, and not obvious at the time of the invention? [n.74]

*92 As illustrated earlier, [n.75] the novelty requirement is a serious trap, but it is easy to avoid. No one should disclose or try to commercialize an invention without having discussed the situation with a specialist! U.S. law contains a one-year grace period, but if an invention is offered for sale, used or described publicly before filing an application, patentability is lost in most of the world. [n.76]

If a patent attorney is unable to convince the examiner that claims are allowable, they may be abandoned or narrowed, the entire application may be abandoned or refiled, [n.77] or appeals may be taken. Appeals within the PTO, [n.78] and ultimately (short of certiorari to the U.S. Supreme Court) [n.79] review in the CAFC [n.80] can be expensive. However, anyone who considers dropping or narrowing claims to avoid the cost of preparing affidavits or filing appeals should consider that claims can cover the equivalent of a square inch of Arctic tundra or a square mile of Manhattan. [n.81] It is important to consider whether the territory that remains is adequate to the need to protect the invention. [n.82] Also, applicants should be aware that patentees are foreclosed, or estopped, from arguing that activity falling outside of narrowed claims should, upon equitable principles, be regarded as infringing. [n.83]

If an application meets the statutory requirements to the satisfaction of the PTO, it is prepared for issue upon the payment of a further fee. [n.84] At this point, an applicant runs a small risk of being drawn into an inter partes interference. Only one patent may issue for an invention, *93 and, in the U.S., interferences are used to determine who is first. [n.85] Although uncommon, if an interference is declared, inventors need a believable record of what was done -- and when. Thus, as soon as innovative activity begins, they should start a notebook. Trusted third parties should be asked to witness it periodically and to indicate, in writing, that they have read and understood it. [n.86]

4. Patents as property

Patents encompass the right to prevent others from, e.g., making or selling [n.87] protected subject matter for their duration [n.88] and have the attributes of personal property. [n.89]

Also, although no patent rights exist before issue, [n.90] an application may be assigned. [n.91] Employed inventors usually assign their inventions in employment agreements. [n.92] Exclusive rights in applications and patents may be assigned even where the whole is not conveyed, and unrecorded assignments may be void against later transferees without actual notice. [n.93]

Patents can also be licensed, this is often little more than a promise not to sue, e.g., if royalties are paid. If the licensee and licensor (or assignee and assignor) are in the same market, careful attention must *94 be given to antitrust restrictions on horizontal agreements. Restrictions on vertical agreements are not so acute but should also be avoided. [n.94]

The statute also provides that joint owners, in the absence of agreement to the contrary, may each practice the invention without accounting to other(s). [n.95] This statutory clause can create serious problems for independent inventors. Would-be transferees are rarely interested in non-exclusive rights -- particularly where substantial risk capital is needed to market the invention. [n.96] Unless co-owners agree on terms of a transfer, neither may have anything valuable to convey. This can be avoided if the inventors assign their respective interests to a single entity before disagreements arise.

5. Enforcement and defenses

If infringement is discovered and informal means of resolving the dispute fail, patentees and infringers can mediate or arbitrate the dispute. [n.97] Otherwise an action must be brought in federal court. [n.98] Besides being able to seek relief from direct infringers, patentees may also challenge those who induce or otherwise contribute to infringement. [n.99] Remedies include injunction and recovery of up-to-three times damages. [n.100] At a minimum, a reasonable royalty is awarded, and, in exceptional cases, attorneys fees may also be recovered.

In any IP infringement suit, accused infringers have two basic defenses: noninfringement and invalidity. [n.101] Patent claims are presumed*95 valid [n.102] but can be invalidated with clear and convincing evidence -- in what amounts to collateral review of the PTO grant. Once invalidated, claims cannot be asserted in later litigation. [n.103]

Applications are often filed, particularly by those with little money, on relatively trivial inventions. [n.104] These can issue if claims are sufficiently limited. While any given limitation may be obvious, examiners have difficulty showing that several, taken together, are obvious. Although others must copy quite closely to infringe narrow claims,

the Supreme Court has traditionally shown little sympathy for such patentees and tended to find their patents invalid. [n.105]

Also, inventors with limited resources may not appreciate that previously undiscovered art [n.106] is especially harmful to patent validity. Infringers encounter more difficulty convincing a court that a claim is invalid if all prior art was considered by the PTO. It is thus unwise to stint on prior art searches or fail to bring everything remotely relevant to an examiner's attention. Beyond these considerations, inventors must understand that all claims will be invalid if an infringer shows, e.g., that known relevant art was not disclosed during prosecution. [n.107]

Even well-heeled applicants must keep their eye on prosecution costs. Thus, they cannot afford to do other than prosecute domestic and foreign applications with vigor commensurate to the projected market value of their inventions. [n.108] If it is underestimated, prior art searches may miss prior art. After an invention has been commercialized, infringers have an inherent advantage: They know exactly what it is worth and may spend far more on an expanded novelty search. [n.109]

*96 Infringers defending on noninfringement will try to show that the acts fall outside the scope of patent claims. Given that patentees have the burden of proving infringement, this may be easier. Once more poorly financed patentees are particularly vulnerable because claims can be narrower than proven market value would warrant. In that case, imitators may find it easy to design around the claims and prevail on noninfringement. [n.110]

Infringers also have several general defenses. Perhaps the most prominent of these is unclean hands -- likely if the patentee's license contain restrictions going beyond the reach of the patent law [n.111] or violating antitrust laws. [n.112] A similar defense is fraud or inequitable conduct in procuring a patent. If that can be shown, the consequences are far more serious. [n.113] Unclean hands does not bar relief after offensive conduct has ceased, but all claims in an improperly procured patent are invalid.

Finally, defenses can be affected by the relationship between the parties or the special status of the infringer. For example, an injunction will not lie against the federal government [n.114] and, until recently state governments were not liable for damages. [n.115] Where licenses or assignments are involved, transferees have the usual contract defenses and may not be estopped from showing patent invalidity. [n.116]

6. Avoiding infringement

Because independent creation is not a defense and copying is unnecessary for patent infringement, there is always a possibility that relatively new technology will infringe patents. This potential situation can be minimized with a search. [n.117] Still, because pending applications cannot be inspected, [n.118] subsequently issued patents pose a risk that is exacerbated by the possibility of interferences that can last for several years.

*97 Thus, even technology described in the literature, licensed under a patent, or covered by an expired patent, poses some risk. [n.119] Infringement can always be avoided by ceasing to use the technology when a patent issues. Yet, this may be painful if start-up costs have not been recouped or substantial inventory has been accumulated. Where there is risk of later blocking patents, firms need to exercise every possible precaution.

B. Copyrights [n.120]

1. Origins and rationale

As with patents, the legal foundation for copyright law is in the Constitution. [n.121] The first copyright statute was passed in 1790, but not until 1891 did the law protect rights of foreign authors. [n.122] After a major revision in 1909, the law served remarkably well for about fifty years but was replaced in 1976 -- partly because of major advances in relevant technologies. There have since been several amendments, but these amendments have been mostly procedural. [n.123]

Copyright law is intended to promote the progress of "science." [n.124] That law also makes it possible for persons investing time and private capital to recover investments if consumers favor their work. However, as with inventors, few authors support themselves by direct sales *98 to the public. Thus, the law would probably accomplish little if authors could not convey their rights to publishers. Obviously, publishers who copy works without paying, e.g., for authors' time, can beat the prices of those who do, and copyright goes a long way toward preventing such commercial free riding.

Yet, while commercial infringement is comparatively easy to detect and address, equally unfair non-commercial activity often is not. In the case of computer software, for example, individuals can make copies fully equivalent to those on sale -- and for a tiny fraction of the cost. For practical reasons such copying is almost impossible to detect. Thus, users who pay probably are charged more than would be necessary if all users contributed, and in extreme situations, contributing users may not be willing or able to bear the cost.

2. Subject matter: Patents versus copyrights

Copyrightable subject matter is primarily set forth in § 201. For example, § 102(a) reads:

Copyright protection subsists. . . in original works of authorship fixed in any tangible medium of expression, now known or later developed, from which they can be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device. Works of authorship include. . . (1) literary works; (2) musical works including

any accompanying words; (3) dramatic works, including any accompanying music; (4) pantomimes and choreographic works; (5) pictorial, graphic, and sculptural works; (6) motion pictures and other audiovisual works; (7) sound recordings; and (8) architectural works. [Emphasis added.]

From this excerpt it is obvious that copyright protects things well beyond those normally associated with "authors" or "writings." [n.125] However, it has some very important limitations. A major one appears in § 102(b) and represents a clear effort to distinguish patentable subject matter:

In no case does copyright protection of an original work of authorship extend to any idea, procedure, process, system, method of operation, concept principle, or discovery, regardless of the form in which it is described, explained, illustrated, or embodied in such work.

One of the most important antecedents of that provision is an 1879 decision involving bookkeeping forms. Defendant's forms were similar to plaintiff's copyrighted forms but had a different arrangement of columns and used different headings. In finding noninfringement, the Supreme Court said: [n.126]

*99 To give the author of the book an exclusive property in the art described therein, when no examination of its novelty has ever been officially made would be a surprise and a fraud upon the public. That is the province of letters-patent, not of copyright. [Emphasis added.]

That case raises several key points. First, it shows that, notwithstanding many changes in copyright law, very early cases are still important. Second, the emphasized language confirms what was said earlier about the meaning of "art" and "science" in the Constitution. Third, it shows that copyrights, unlike patents, were not examined even for novelty, much less obviousness. Finally, it suggests that patents are more exclusive than copyrights, but that idea is not pursued.

Further insight is provided by a later case in which Justice Holmes reversed two lower courts that had held circus posters not to qualify for copyright. Dismissing an apparent objection that copyright on pictures depicting real scenes would interfere with others' legitimate rights, he noted, "Others are free to copy the original. They are not free to copy the copy." [n.127] Also, dismissing the apparent objection that commercial "art" (in the modern sense) falls within "the useful arts," he held that "A picture is none the less a picture and none the less a subject of copyright that it is used for an advertisement." [n.128] Finally, disposing of the idea that those posters were artistically unworthy, he said "That these pictures had their worth. . . is sufficiently shown by the desire to reproduce them without regard for the plaintiff's rights." [n.129]

Finally, consider a particularly important 1954 case. [n.130] There, plaintiffs had registered copyright in statuettes of dancing figures, the vast bulk being sold as fully equipped lamps. Defendants copied and sold the lamps and argued that plaintiffs' statuettes were protectable only with design patents because, as suggested in Baker, they "required the critical examination given patents to protect the public against monopoly."

[n.131] Pointing out that "Neither the Copyright Statute nor any *100 other says that because a thing is patentable, it may not be copyrighted," [n.132] the court upheld the copyright. In doing so, it noted: [n.133]

Unlike a patent, a copyright gives no exclusive right to the art disclosed; protection is given only to the expression of the idea -- not the idea itself. . . . Absent copying there can be no infringement of copyright. Thus, [plaintiffs] may not exclude others from using statuettes of human figures in table lamps; they may only prevent use of copies of their statuettes as such or as incorporated into some other article. [Emphasis added.]

These cases help one understand patents as well as copyrights and demonstrate the need to understand patents at some level, even if one desires only to do copyright work. The last case in particular also gives insight into two § 101 definitions that further critically limit copyright in an effort to distinguish design patent subject matter:

"Pictorial, graphic, and sculptural works" include two-dimensional and three-dimensional works of fine, graphic, and applied art. . . . [T]he design of a useful article. . . shall be considered a pictorial, graphic, or sculptural work only. . . to the extent [it] incorporates. . . features. . . capable of existing independently of [its] utilitarian aspects. .

A "useful article"... [does] not merely... portray the appearance... or... convey information. An article that is normally a part of a useful article is considered a "useful article." [Emphasis added.]

Because copyright covers sculpture but not "useful" articles, one might get the impression that Congress regards sculpture as "useless," but it merely uses an unfortunate term. Semantics aside, these provisions cause serious problems for creators of works having other than a purely aesthetic function. It also sometimes unfairly discriminates, e.g., between masks that do [n.134] and costumes that may not [n.135] qualify. Works that do not qualify, rather than having automatic protection, are protectable, if at all, only by a scheme that is often prohibitively expensive and prohibitively slow. [n.136] Until recently, this *101 situation faced architects as creators of clearly "useful" works. Now, under § 102(a)(8), architectural works qualify. [n.137] Congress has been urged to consider liberalized protection for other "useful" works, but this has been resisted by the insurance industry lest the costs of replacement automobile fenders, grilles or even shock absorbers be increased. [n.138]

3. Copyrights as property

Provisions governing the ownership and transfer of copyright are more complex and generally more thorough than those governing patents. [n.139] One complexity arises, particularly with regard to unique works, because people may not distinguish between ownership of the work and ownership of copyright in it. [n.140] Another arises because the statute distinguishes between works created "for hire" [n.141] and works created and later assigned to another.

This latter complexity may put copyright ownership at issue. On one hand, if a work is created by a full-time employee, it is "for hire" and the employer owns both the work and the copyright. On the other, if a work is finished before being sold, it is not "for hire" and the author has the copyright unless it is separately conveyed. Commissioned works present special problems and may even be joint works. [n.142] Yet, only a few works can be "for hire" and only if so agreed in writing. [n.143]

*102 Also, the copyright term may be at issue. For works of living authors published after 1978, who do not publish anonymously or under a pseudonym, copyright endures until 50 years after the death of the last survivor. [n.144] If a work is for hire, the term is 75 years from the date of publication or 100 years from creation, whichever is shorter. Moreover, authors (or successors) have a right to terminate assignments or licenses within a five year period beginning 35 years after the grant. [n.145] If a work is for hire, no such right exists. [n.146]

Aside from these matters, copyright and patent licenses and assignments are similar; e.g., it is necessary to record transfers to give constructive notice to later transferees. [n.147]

4. Changes in deposit and notice requirements

Nothing other than a "fixing" by or under the authority of an author is necessary for U.S. copyright protection. [n.148] Neither notice nor deposit are required, but one is obligated to deposit two copies of the best edition of many works with the Copyright Office. Failure to do so on demand can result in penalties. [n.149]

Notice warrants more attention. Under the 1909 Act, failure to provide proper copyright notice when a work was published was fatal: State protection was lost, and federal protection was forfeited. While notice is now unnecessary, [n.150] it is still a good idea. Some countries where an author might have rights under an international treaty still require traditional notice, as well as, e.g., "All rights reserved." [n.151] Also, after previously being free to copy published works lacking notice, people will need time to learn that lack of notice no longer means lack of copyright. [n.152]

5. The continuing need for registration

While registration is unnecessary to have copyright protection, an infringement action cannot be brought by owners of works originating *103 in the U.S. until there is at least an attempted registration. [n.153] However, registration is inexpensive, [n.154] generally straight forward and confers important remedial advantages -- regardless of country of origin. Failure to register unpublished works before infringement forfeits statutory damages and attorney fees -- as does failure to register published works within three months of publication. [n.155]

Registration only occurs after examination, [n.156] and the Copyright Office sometimes rejects an application because of improper subject matter. [n.157] Yet, registration is largely ministerial. Assuming appropriate subject matter, only subjective novelty is required. [n.158] Thus, a great number of valid copyrights could apparently cover essentially indistinguishable works (e.g., photographs of the same tree, taken from the same angle), each in a different owner. [n.159] Even works derived from prior works (e.g., a film based on a novel) qualify, but these are of course subject to rights in originals. [n.160]

6. Enforcement and defenses

Exclusive rights are set forth in § 106. They include the right to copy and sell (or rent) protected works and, for some, the right to perform or display publicly. [n.161]

Persons who directly infringe those rights, induce others to infringe or otherwise contribute to infringement [n.162] must be sued in federal *104 court. [n.163] Subject to possible limitation based on time of registration, [n.164] remedies include injunction, impounding (and destroying or otherwise disposing of) infringing copies, costs and attorneys' fees, damages and profits, and statutory minimum damages. [n.165] Those who infringe willfully and for gain may suffer criminal sanctions. [n.166]

As with patents, invalidity and noninfringement are possible defenses along with generic defenses such as unclean hands [n.167] or fraud on the Copyright Office. [n.168] Yet, while a certificate of registration issued before or within five years after publication constitutes only "prima facie evidence of the validity of the copyright and of the facts stated in the certificate," [n.169] invalidity is an uncommon defense. [n.170]

Litigation is far more likely to turn on whether rights are infringed. A noninfringement defense can be framed several ways, e.g., that a later work was independently created, [n.171] or use of an earlier work was proper. The latter can be further subdivided, e.g., that the use was (1) not one forbidden by § 106, [n.172] (2) one permitted by § 102(b) [n.173] or (3) one permitted by "fair use" as defined in § § 107-120. The last two are most likely to cause trouble for newcomers.

The § 102(b) defense is essentially a subject matter defense that does challenge the validity of the basic copyright. Copyrights do not have claims that point out the author's allegedly copyrightable contribution *105 with particularity. [n.174] Thus, unlike the situation in patent cases, judges often must decide whether what was copied was protected and may conclude that a directory identical to another does not infringe, [n.175] whereas a motion picture that is only substantially similar to an earlier play does. [n.176]

The fair use defense is common. It applies if a work would otherwise infringe [n.177] and was originally created by the courts without statutory guidance. Perhaps half of the statute is devoted to it, [n.178] but it appears most generically in § 107. [n.179] In principle, fair use permits use of another's work where the purpose and amount of

copying pose little likelihood of injury and are justified on policy grounds. [n.180] Were it not for that doctrine, critics and scholars could not quote, or a fortiori copy, another's work without permission -- unless they were prepared to risk having to pay costs, attorneys' fees and statutory damages. [n.181] Teachers and librarians were particularly eager to have their rights precisely spelled out in the statute, but this was not done. [n.182] Indeed it *106 seems impossible to define "fair" with the kind of precision non-lawyers (or law students) may want.

As with patents, copyright litigation can also be affected by the nature of the infringer and prior dealings between the parties. Again, injunctions do not lie against the federal government [n.183] and, until recently, state governments were not liable for damages. [n.184] Prior dealings are more troublesome -- partly because of the work for hire doctrine, [n.185] but problems go beyond that. [n.186]

7. Avoiding infringement

Because independent origin is a defense, one can generally avoid liability with records showing independent creation. Still, in at least one case, where two works were very much alike and the first was well known, that defense failed. There, it was concluded that copying had occurred, even if it was unconscious. [n.187]

When making use of another's work, special caution is warranted -- particularly where there have been prior dealings between the parties. [n.188] Also, bear in mind that notice is no longer required on published works, i.e., one can no longer regard a work without notice as being in the public domain. [n.189] Further, while "fair use" of another's work is permitted, a comparatively small amount of copying may infringe if it interferes with an owner's potential income or is more than incidentally connected with the user's income. [n.190]

C. Trade Secrets

1. Source, subject matter and federal preemption

Trade secret protection originated in common law, and the 1939 Restatement of Torts attempted to codify it. [n.191] More recently there has been a trend toward statutory treatment, and a uniform act has been *107 drafted and adopted in whole or part in several states. [n.192] While the basics are the same, important details vary from state to state. [n.193]

Also, federal law can have a major impact on trade secret law. For example, in the decade following the famous Sears and Compco preemption decisions, [n.194] IP attorneys wondered about the extent to which trade secret law still existed. However, the 1974 Kewanee decision [n.195] found, notwithstanding that their subject matter can and

often does overlap and their functions are similar in enabling firms to recoup development and marketing costs, utility patents and trade secrets can co-exist.

As discussed earlier, potentially patentable subjectmatter is excluded from copyright protection by 17 U.S.C. § 102(b). Yet, trade secrets can also overlap the subject matter protected under § 102(a). [n.196] In that regard, 17 U.S.C. § 301 is critical. Subsection (a) marks a major change in the relative importance of state and federal law. Until 1978, when the current copyright act went into effect, unpublished works were governed mostly by state law and published works were governed exclusively by federal law. [n.197] Since then, federal protection arises automatically when a work is "fixed in a tangible medium." [n.198] Moreover, § 301(b) provides: [n.199]

*108 Nothing in this title annuls or limits any rights or remedies under the common law or statutes of any State with respect to -- (1) subject matter that does not come within the subject matter of copyright. . . , including works of authorship not fixed in any tangible medium of expression, or. . . (3) activities violating legal or equitable rights that are not equivalent to any of the exclusive rights within the general scope of copyright. . . .

Thus, it may not be clear whether federal copyright or state trade secret law controls some controversies. Still, if any part of disputed subject matter falls within copyright, plaintiffs will usually want to bring a federal copyright action and append state counts. When copyright governs, remedies are superior -- particularly if registration is prompt. [n.200] One tradeoff is that state trade secret and other protection, if not preempted, can have potentially unlimited duration, [n.201] but, as discussed below, this will not often be important with regard to trade secrets.

2. Acquiring, preserving and enforcing trade secret rights

Both the Restatement and uniform act cover broad subject matter, but the latter explicitly includes information of potential as well as of current competitive value. It also provides that information is to be regarded as secret if "reasonable measures" are taken to preserve secrecy. [n.202]

Still, both leave a large amount of ambiguity, e.g., where an employee changes jobs. How does one differentiate between information that is, on the one hand, part of an employee's stock in trade and, on the other, property of the employer? [n.203] Employers often try to avoid the issue by using covenants not to compete, but, if covenant conditions are unreasonable [n.204] or in excess of statutory maxima, [n.205] they will be unenforceable. Analogous problems can also arise when a business is sold or *109 when two companies are dealing in other ways, [n.206] particularly if the obligation to preserve or not to use secrets is implied. However, the Restatement and the uniform act do not appear to differ on such issues.

Also, both the Restatement and uniform act forbid use of a trade secret obtained by criminal or tortious conduct. [n.207] Neither would seem to preclude using information obtained by overhearing incautious speakers in a PTO elevator. However, the latter seems

to go beyond this by including "espionage" as wrongful. That term seems designed to include photographing a plant from navigable airspace. [n.208] Does it also include photographing a plant from the roof of an adjacent building or a knothole in a fence? Whatever it might mean, Supreme Court decisions preclude the use of information obtained by independent effort or reverse engineering. [n.209]

3. Outside submissions

Outside idea or invention submissions are a special case and seem best governed by contract law. Lacking a written contract, one should consider the custom in the trade and the professional status of the person providing information. If the outsider is an "amateur," and no established trade practice or prior dealings can be relied upon to establish an implied contract, recovery is unlikely: The outsider may be considered a "volunteer" or, if the information lacks objective novelty, be found to have submitted something of no value. [n.210] In contrast, if a submission comes from a professional and the custom is to accept and pay for the use of "unsolicited" information, a contract may be implied: The recipient may be obligated to pay fair value even if the information lacks objective novelty. [n.211]

*110 Attorneys who have the opportunity to represent an outside submitter should try to get a written agreement. Minimally, it should provide that the recipient, in consideration of the opportunity to evaluate the information, agrees neither to use it without compensation (later to be negotiated) nor to disclose it. However, attempts often fail: [n.212] Companies do not want to risk having to pay for what they already know or to be liable if information gets into the wrong hands. Also, companies may already have many unused, internally-generated ideas and, thus, may not be interested in considering more! [n.213]

4. Trade secrets as property

Secret information has at least some attributes of property. People who obtain it improperly can suffer criminal sanctions. Many states that do not otherwise provide statutory treatment for trade secrets protect them in criminal statutes. [n.214] Also, rights in secret information can be assigned, and the right to use it can be licensed.

Unlike patents and copyrights that have a constitutionally mandated terminus, [n.215] trade secrets have a potentially perpetual duration. [n.216] Yet, as noted in Kewanee, their theoretical duration is undercut by limitations on what constitutes misappropriation. [n.217]

5. Avoiding infringement

Using information not derived from publications, independent research or copying products acquired in the market warrants caution. For example, when hiring research and development personnel from competitors, it seems wise to examine written employment agreements for non-competition clauses. Also, one must never encourage others to disregard contracts: Inducing a breach of contract is usually a willful tort. [n.218]

*111 IV. PRESERVING COMPETITION ON THE MERITS

A. Preventing Misrepresentations Generally

1. Suits forbidden at common law

As mentioned earlier, competition can be thwarted when firms misrepresent the source, quality or price of their goods or services. At common law, private parties could take legal action against such misrepresentation only if they were uniquely affected. [n.219] Consumers can usually show specific injury, and aggregate injury can be very large, but damage suffered by individual consumers is often inadequate to justify suit. [n.220]

Moreover, if a firm is allowed to continue its misrepresentations, aggregate injury may snowball as other firms compete, not by dropping prices or improving products, but by making even more egregious misrepresentations. Such problems were first addressed federally in 1914, when the Federal Trade Commission (FTC) was created and allowed to enjoin "unfair methods of competition." [n.221] However, only after the Wheeler-Lee Amendment of 1938 was the FTC clearly able to enjoin "unfair and deceptive acts and practices" that did not injure competition. [n.222] Not until much later did states begin to deal with such problems. [n.223]

Honest firms may find the cost of suit against a competitor's misrepresentations to be justified, but not until the Lanham Act was passed in 1947, did they have a cause of action. [n.224] Since then, § 43(a) [n.225] has allowed them to seek injunctions [n.226] even though it may be impossible *112 to show special damages, [n.227] i.e., that particular sales were lost because of a competitor's misrepresentations. Modern cases sometimes consider whether defendant's activities sufficiently affect the plaintiff in particular, e.g., to warrant standing, but it is difficult to see why a commercial enterprise would bring suit without a strong conviction of potential harm -- particularly if its competitors could derive as much or more benefit from the suit. [n.228] Indeed, in the latter situation, a firm would probably try to get the FTC or another public entity to take action.

2. Suits permitted at common law

a. Unfair competition, dilution and right of publicity

Trademarks are discussed in detail below, but "unfair competition" [n.229] suits furnish a classic illustration of the difference between this discussion and the previous discussion. If a seller deliberately or carelessly represents its goods as coming from or being sponsored by another, injury is generally clear. Thus, owners of marks have long been able to bring actions if another uses similar marks on competing goods or services. [n.230] To prevail, they usually must show that words or other devices used to indicate source are inherently distinctive or have acquired "secondary" [n.231] meaning. [n.232] They usually must also show that consumers are or are likely to be confused. However, where a defendant intentionally represents its or another's goods or services as those of the plaintiff, both requirements for relief may be presumed. [n.233]

Famous marks present a particularly interesting situation insofar as owners may prevent their use on very dissimilar goods or services *113 -- where "unfair competition" does not literally exist. [n.234] Yet, consumers may be misled in the short term, and both consumers and owners of famous marks may suffer from erosion of a mark's uniqueness. [n.235] Recent state "dilution" statutes seek to expand this law by protecting less well-known marks. [n.236] Still, it is unclear how unique a mark must be to qualify for protection. It is less clear if the marks are not identical. [n.237]

Famous persons can also prevent firms from suggesting associations that do not exist. A variety of theories may be used, [n.238] and "right of publicity" is one of them. [n.239] This right is sometimes described as what public persons get in return for their loss of privacy, but its boundaries are far from clear. While privacy rights do not survive their owner's death, a right of publicity may -- particularly if the person had been engaged in commercial sponsorship while living. [n.240] However, some publicity cases go well beyond preventing misrepresentation and raise preemption issues where the work to be protected has been fixed, e.g., by videorecording, by or under the authority of its owner. [n.241]

*114 b. Trade libel, product disparagement and free speech

Where someone makes injurious statements about a firm (trade libel) or its products (disparagement) injury can often be shown and could even be presumed. Yet, injunctions may be unavailable and damages difficult to recover. Because this area of law is a mix of sometimes arcane common law and, increasingly, unsettled constitutional law, it is not easy to understand.

One should begin by trying to distinguish commercial and non-commercial speech. The latter, under the First Amendment, is not subject to prior restraint, i.e., injunction. [n.242] Also, because the threat of tort liability can deter speech, it is often difficult to recover damages -- particularly if the subject is one of public concern. [n.243] Offers to sell were long regarded as beyond the reach of the First Amendment, but the Supreme Court has since limited public interference with truthful advertising. Perhaps the most durable of

these cases focus on competition and the need to make important information readily available to consumers. [n.244] Also, the FTC has moved against private restraints on competitive advertising. [n.245]

Because of such developments, early cases enjoining, e.g., consumer libel and disparagement are of highly doubtful current vitality, [n.246] as are cases enjoining other disparaging activity. [n.247] Cases awarding damages also need careful scrutiny. [n.248]

Speech involving matters of public interest can be protected in two ways. First, plaintiff may have to show, probably by clear and convincing evidence, that defendant's offensive statements are false. Second, plaintiff may have to show, again perhaps by clear and convincing evidence, that demonstrably false injurious statements were known by defendant to be false or that defendant acted maliciously or in reckless disregard of the truth.

*115 For a public person to get relief, a clear showing of malice or reckless disregard of the truth must be made, and, although there is remarkably little law on point, it seems difficult to imagine why a commercial firm or its goods would not also bear that burden. [n.249] Even when the speaker is a competitor, the burden ought not be lowered, e.g., by presuming malice. [n.250]

In 1988, § 43(a) of the Lanham Act was amended to permit such suits as a matter of federal law if the speaker is engaged in commercial advertising or promotion. [n.251] It will be interesting to see how federal courts develop the law, e.g., whether they do so based on the Constitutional or tort doctrine, [n.252] and the extent to which they find that firms and their products are subject to honest, if mistaken, criticism by competitors who have an especially strong incentive to inform consumers.

3. General Observations on § 43(a)

The Lanham Act may now be used to address a range of unfair trade practices regardless of whether they could be addressed at common law. It bears emphasis that § 43(a) permits federal suit for source misrepresentation, regardless of diversity and the amount in controversy -- or federal trademark registration. [n.253] Moreover, remedies equal those afforded federally registered marks. [n.254] Thus, two alleged benefits of federal registration [n.255] (federal jurisdiction and usually superior remedies) are available to owners of any mark. Still, if a defendant's behavior is particularly egregious, one should at least consider whether punitive damages and other state relief might be better in particular cases. [n.256]

*116 In all cases involving alleged misrepresentations, consumers' impressions are critical. It must be remembered that facially false statements (or facially deceptive marks) may not deceive [n.257] -- and that facially truthful statements may create false impressions. [n.258] Competent surveys are often the best way to resolve those and many similar issues addressed below.

B. Trademarks [n.259]

1. Development of the federal law

Source indicators appear to have been used for thousands of years. [n.260] However, general legal protection against another's use of misleading source indicators is more recent. [n.261] The first federal trademark statute was passed in 1870, but it was struck down in 1879 [n.262] for exercising power conferred by neither the patent and copyright nor commerce clauses. [n.263] Although another trademark statute was enacted in 1881, and still others in 1905 and 1920, these were quite limited, [n.264] and many cases prior to the famous 1938 Erie decision were decided under federal common law. [n.265] For example, in Kellogg, decided shortly thereafter, the Court observed: [n.266] "But no claim has been made that the local law is any different from the general law on the subject, and both parties have relied almost entirely on federal precedents." Efforts to reform the federal law had begun earlier, but it is ironic that *117 the first hearings on a new law were held the same year. [n.267] Because attention was diverted by the war, what ultimately became the Lanham Act was not passed until 1946. [n.268] With few amendments, that is the law today.

In § 45, "commerce" is defined as "all commerce which may lawfully be regulated by Congress." [n.269] Given the modern view of the commerce clause, federal law could well have exhausted the field. However, this has not happened, and state law can be significant. [n.270]

2. Rationale revisited

The rationale for trademark law is, as previously mentioned, starkly different from that for protecting work products. While one firm may be forbidden from imitating another's trade dress as well as its name, remedies must be narrowly limited to permit competitors to duplicate otherwise unprotected products. [n.271] There are analogous limits for names. It would do consumers little good if a firm could copy a product but not identify it in a way that consumers would recognize. [n.272]

Notwithstanding these limitations, trademarks are sometimes seen as anticompetitive. Brand names for pharmaceuticals in particular have been controversial, but it would be difficult to eliminate them. [n.273] Critics tend to ignore the need of consumers to search out low cost, reliable products as well as the role of source identity in furthering that end. Antitrust law rests in part on the idea that competition encourages firms to produce the highest quality products or services at the lowest possible price. Still, before this can occur, assuming that other firms have a right to copy a particular product or service, consumers *118 need accurate information about the source and other characteristics of products. [n.274]

Particularly for products without close consumer safety regulation, firms' investments in goodwill may also provide the most reliable assurance of safe product design and quality. [n.275] It is difficult to imagine how a competitive market could function without source indicators -- even so-called "generics" may have them!

3. Obtaining rights: strength of marks

As with trade secrets and copyrights, trademark rights arise automatically once certain conditions have been met. First, a word or other symbol must be used as a source indicator. [n.276] Second, it must be recognized as such. [n.277] Once those conditions exist, the user (not someone who thinks of the mark, as in the earlier hypothetical) can prevent later users -- despite their good faith -- from using the same or a similar mark in such a way as to cause confusion.

The second requirement is most easily met if distinctive marks are chosen. If not, enforcement may be very difficult or impossible. [n.278] For example, at one end of a spectrum, [n.279] marks that merely identify goods or service, e.g., "Two-hour Dry Cleaning," or are associated with other firms, should be avoided. As noted earlier, one cannot get exclusive rights to the common names of products or to functional aspects of *119 trade dress. [n.280] Also, one cannot acquire rights in marks that have already been used by others. [n.281]

Words that describe some aspect of, rather than merely identify, a product or service may eventually acquire source significance. Yet, they are a poor choice because they cannot be readily registered [n.282] and relief will be limited. [n.283] If they merely identify the seller by surname, it will be difficult, at best, to restrict others with the same surname. [n.284] If they merely refer to geographical origin, it will be difficult to restrict others in the same location. Finally, it will be difficult to prevent competitors from using words they need to describe their products. Thus, even if users of surnames or descriptive terms eventually manages to convince consumers that such words indicate a particular commercial source, relief is apt to be limited.

Marks that suggest, without describing, some favorable characteristic of a product are better. Thus, "Whopper" or "Ultra-bright" could become strong marks, given that a competitor will be hard pressed to give an acceptable reason for using the terms as part of the name or description of their product.

Words that misdescribe a product can be either very good or very poor marks. A deceptively misdescriptive term that leads consumers to expect something other than what they get is unlikely to be protected and, worse, is not useful for building goodwill. In contrast, a "Rabbit" brand automobile or "Apple" brand computer equipment is not likely to confuse anyone and may even suggest a favorable characteristic of the product. Yet, one must appreciate that others will retain the right to use such words in the customary way. [n.285]

At the strong end of the spectrum are coined words such as "Kodak" and wholly arbitrary design components of product or packaging. [n.286] However, one should consider truly new products or services for which no common name exists as a special case. In such an instance, one cannot stop with a coined word such as "Xerox" or "Kleenex." A second *120 name must be chosen to identify the product, e.g., "photocopier" or "facial tissue." [n.287] Moreover, a firm must take care to ensure that consumers are aware of and can distinguish the terms. [n.288] This task can be very difficult for a market leader, but the consequence of failure is loss of trademark. Kellogg, mentioned earlier, is illustrative: When the patent on shredded wheat eventually expired, consumers had no other name by which to seek the product. Thus, a competitor was permitted to use it. [n.289]

Once a mark is chosen, protection is acquired in new geographical and product (or service) markets in the same manner as in initial markets -- at least until another firm with pre-existing rights is encountered. [n.290] In some circumstances, rights can also extend beyond markets actually served. [n.291] For example, if a firm sells both granola and shredded wheat under a mark, consumers are apt to assume that cornflakes having that mark have the same source. Further, if a firm is known by a name that it does not formally use, other firms may nevertheless be prevented from using that name. [n.292] In short, a firm's rights extend to any use of the same or a similar mark in circumstances where confusion is likely to occur in the short term.

4. Registering marks

Marks may be registered under state and federal law. The latter is the primary function of the Lanham Act. It provides for two federal registers, principal and supplemental, [n.293] both administered by the *121 PTO. [n.294] Supplemental registration may be more useful than state registration, but principal registration, if possible, is far more valuable. [n.295] It will be the focus of discussion.

In contrast with state law, registration affords national protection for marks, even though their owners may as yet operate, e.g., only in New England. [n.296] Also, if a mark meets the requirements for registration, it will be presumed to indicate source, [n.297] may become incontestable after five years [n.298] and is subject to limited validity challenges. [n.299]

Still it is worth keeping in mind that: [n.300]

Every right a patentee has is given to him by the Patent Office. On the other hand, the acquisition of the right to exclude others from the use of a trademark results from the fact of use and the common law, independently of registration in the Patent Office. The happenstance that trademarks are registered in the Patent Office should not result in confusing the principles involved in dissimilar proceedings with respect to wholly dissimilar rights. It is in the public interest to maintain registrations of technically good trademarks on the register so long as they are still in use. The register then reflects

commercial reality. . . trademark rights, unlike patent rights, continue notwithstanding cancellation of those additional rights which the Patent Office is empowered by statute to grant.

Nevertheless, several hurdles must be overcome. First, registration does not ordinarily create rights, and use must occur before registration. *122 [n.301] Also, at least until recently, the PTO required use to be in rather than merely to affect interstate commerce. [n.302] Since 1988, applications can be based on bona fide intent to use, but registration cannot occur until use [n.303] -- and the PTO may continue to require an effect on interstate commerce before registering a mark. [n.304]

For purposes of registration, marks are subdivided into several categories: [n.305] (1) trademarks, (2) service marks, (3) collective marks and (4) certification marks. [n.306] Although these categories are not legally important, respective examples are: (1) "Bandaid" or "Kool-Aid," (2) "H & R Block" or "The Educational Testing Service," (3) "The Dairymen's Association" and (4) "Underwriter's Laboratories" or "The Good Housekeeping Seal of Approval." There is also a classification scheme for goods and services, but it is insignificant within the U.S. except for purposes of registration. [n.307]

Echoing some points made earlier, the mark itself must be capable of distinguishing a product or service and cannot, e.g.: (1) comprise, e.g., immoral, scandalous, or deceptive matter; (2) be confusingly similar *123 to marks of others; (3) be descriptive or deceptively misdescriptive; or (4) consist of a surname. [n.308] The last two prohibitions may be overcome if an applicant shows five years exclusive use or, better yet, demonstrates that the mark has acquired distinctiveness (or "secondary" meaning). [n.309]

If an applicant survives initial examination, the mark is published for opposition. If it does not get into a contest with another applicant, registrant or user, [n.310] and use has occurred, [n.311] a certificate of registration issues. It is "prima facie evidence of the validity of the registration. . . and registrant's exclusive right to use [it]," [n.312] and lasts for 10 years, subject to the need to file a certificate of continuing use in the fifth year. [n.313] Registration may be renewed every 10 years. [n.314]

5. Marks as property

Trademarks have no value except as part of a business and they serve some function with regard to indicating source or sponsorship. [n.315] Subject to those limitations, trademarks and registrations can be assigned and trademarks can be licensed. A business may be sold without conveying goodwill or assigning marks, but marks cannot be assigned (or probably retained) without the business. [n.316] Trademarks can be licensed with fewer restrictions, and an enormous franchising industry has grown up around this proposition. Thus, one sees children's clothes and toys bearing the marks of television programs and motion pictures -- or drinking glasses, T-shirts and a host of other *124 things bearing the marks of soft drink companies and professional sports teams. [n.317]

In such circumstances, the owner must police the products or services for which the mark is licensed or risk loss of the mark. [n.318]

While IP licenses may often be no more than a promise not to sue, they cannot be so regarded in the trademark arena. Failing to police licensees' use of marks is likely to work a fraud on the public and could be the basis for denying relief. However, trademark law is much stricter: Failure to police may result in forfeiture of rights in the mark even without consumer harm. [n.319] The result may be less harsh if independent parties cross-license to settle an infringement dispute, but, even there, the disputants should consider the broad implications of their agreement. For example, both marks will be weaker, and it will be easier for third parties to adopt more similar marks for more similar goods than would otherwise be possible. [n.320]

6. Enforcement and defenses

Despite federal registration, diversity or amount in controversy, [n.321] or actual competition, [n.322] trademark actions can be brought in federal courts. [n.323] Infringement occurs when a mark is applied to goods when another has a pre-existing right to use the same or a similar mark and when the concurrent use is likely to cause confusion as to source or sponsorship. [n.324]

Remedies available for trademark infringement include (1) injunctive relief, (2) damages, (3) profits, (4) costs and attorneys' fees, and (5) seizure and destruction of infringing articles. [n.325]

*125 As before, defenses include invalidity, noninfringement and general defenses such as unclean hands. [n.326] A defendant can assert general invalidity, i.e., that the mark has been abandoned [n.327] or has become the common name for goods or services in question. [n.328] Also, a defendant can assert invalidity in a particular market, e.g., by virtue of prior use. [n.329]

Noninfringement can be established, e.g., by rebutting the plaintiff's showing of likelihood of confusion. Probably the best way to show, e.g., whether the use of similar marks on camera equipment from different sources or the same mark on both cameras and radios is likely to confuse is to survey purchasers of such equipment. [n.330]

Finally, defendants in trademark infringement often have enormous opportunities to avoid or narrow injunctive relief in light of their right to accurately describe themselves, their geographic location or their products. [n.331]

7. Avoiding trademark infringement

The first step in avoiding trademark infringement is to stay clear of the marks of well known parties and current competitors. Evidence of an attempt to trade on another's

goodwill will generate a presumption that the junior user will in fact accomplish what it set out to do. [n.332]

Next, it is necessary to search for unknown parties who may be using a proposed mark. At a minimum, one must avoid adopting the mark of a federal registrant. Even though the registrant may not be in the local market, its right to enter seems clear. Also, it is a good idea *126 to search beyond federal and state registers. Failure to do so can result in being excluded from any geographical or product markets where others have established rights. Fortunately firms provide search services at a price apt to be less than the cost of a later name change. While these may not spot uses of a mark in very limited geographical areas, they can furnish reasonable assurance of being able to use a mark throughout the country.

Still, even with the best of intentions, it may be difficult to avoid problems with similar marks: Attorneys have characterized the problem of trying to predict likelihood of confusion, hence trademark infringement, as a "black art." [n.333] Sensitivity to general principles of consumer behavior -- especially those appearing repeatedly in cases -- is useful but may prove inadequate to deal with specific situations, [n.334] and a survey of potentially affected consumers may be necessary. [n.335]

Once a mark is cleared, federal registration should be seriously considered before using it because bona fide intent applications allow one to learn whether others will object. If use has begun, federal registration should be considered even more closely. Even state registration, although extremely limited, [n.336] makes it easier for other firms to learn of one's prior use and often makes it easier to get relief. In short, the best defense is a good offense.

V. Conclusion

This article attempts to identify a few egregious pitfalls for those uninformed about IP, but readers should come away with more, e.g., the ability to begin to compare and contrast options in a way that is impossible in detailed treatments of individual IP areas. [n.337] Ultimately, clients decide how much protection they need and can afford for investments in developing and marketing goods and services, but first they need to be apprised of their options and to understand that, e.g., obtaining a design patent on a container might later interfere with trade dress protection. [n.338] This discussion should facilitate such an *127 appraisal in the bulk of cases [n.339] -- particularly because its scope in relation to its size has dictated careful attention to the most important and durable aspects of the law. [n.340]

The article also attempts to provide a general feel for the expanse of IP law. For example, some ask whether IP is really "property" or "torts." After taking a broad look at the area, the question seems silly: IP law involves both traditional property and tort, as well as contract, law. Sometimes, one must attend to those things that come to mind when focusing on "property," i.e., clearing and registering title, reverse condemnation [n.341]

or estates. [n.342] In regard to the last, one must usually consider the scope of overlapping and often competing commercial interests that the law recognizes. [n.343] Because no interest, whether or *128 not denominated as property, is absolute, the meaningful question is not whether one has a "property" interest but whether the law affords a particular interest the necessary degree of recognition and protection, if any, in particular circumstances. Beyond this, protected interests are protected by tort and transferred by contract -- regardless of whether or not, for example, title can or must be registered. It is also important to have a sense of the range of possible causes of action as well as associated defenses, remedies, and certainly costs.

Finally, readers should find many opportunities for applying law developed in one IP area to others. For example, people are often surprised to find the U.S. Supreme Court turning to the patent statute to determine whether Sony's sale of videorecorders constituted copyright infringement. [n.344] This example illustrates that even very distinct parts of IP often have important common foundations. Once this nuance is fully appreciated, the door opens to a host of opportunities, e.g., conversely, when might fair use provisions in the copyright statute be helpful in answering a charge of patent infringement? [n.345] Or, how might the copyrightability of obscene books [n.346] be used to argue for patentability of an "illegal" invention -- and what distinction between patents and copyrights might influence the results in a particular case? The more one considers IP law broadly, the more apparent such opportunities become.

[n.a1]. This paper is designed primarily for early coverage and repeated reference in an IP survey course at Franklin Pierce Law Center [FPLC], and other teachers are welcome to reproduce it for such purposes. I appreciate suggestions by Professor William O. Hennessey, Director of Graduate Programs and Adam C. Solomon, a student at FPLC.

[n.aa1]. Professor of Law and Director of the Innovation Clinic, FPLC. Professor Field is also a former patent examiner and founding member of the FPLC faculty.

[n.1]. A comprehensive review of the situation appears in Martin Shapiro, The Supreme Court and the Patent Office, Chapter 3 in The Supreme Court and Administrative Agencies 143 (1968).

[n.2]. See, e.g., Thomas G. Field, Jr., Maximizing the Return from Genome Research, 5 Risk 95 (1994) (introducing a symposium on thetopic); see also the papers that follow that introduction.

[n.3]. Prior versions of this paper are Intellectual and Industrial Property in a Nutshell, 77 W. Va. L. Rev. 525 (1975); Brief Survey. . . Patent, Trademark, Copyright, 26 Idea 57

(1985) and Brief Survey of Intellectual Property, 31 Idea 85 (1990). Much text is carried forward, but each article has a distinct emphasis.

[n.4]. See, e.g., Sears, Roebuck & Co. v. Stiffel Co., 376 U.S. 225, and its companion, Compco Corp. v. Day-Brite Lighting, 376 U.S. 234 (1964). See also, e.g., Lear, Inc. v. Adkins, 395 U.S. 653 (1969).

[n.5]. This organization closely tracks the syllabus for my course. After years of experimentation, I am satisfied with it, but students are occasionally distressed because it differs from the organization of Edmund W. Kitch & Harvey S. Perlman, Legal Regulation of the Competitive Process (rev. 4th ed. 1991), the casebook I use.

[n.6]. U.S. Const., art. I, § 8, cl. 8, provides: "The Congress shall have 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." [Emphasis added.]

It is interesting that "science" corresponds to authors (copyrights) and "useful arts" to inventors (patents). When the clause was written, the former obviously meant "knowledge" and the latter "technology." The current patent statute fore-shortens "useful arts" to "art," but the word means technology.

[n.7]. See also generally Brief Survey. . . Patent, Trademark, Copyright, supra note 3, at 89.

[n.8]. See, e.g., Mazer v. Stein, 347 U.S. 201 (1954); see also Application of Yardley, 493 F.2d 1389, 1393, 181 U.S.P.Q. 331, (C.C.P.A. 1974), finding that an applicant can have both a design patent and copyrights on a Spiro Agnew watch.

[n.9]. See, e.g., Kewanee Oil Co. v. Bicron Corp., 416 U.S. 470 (1974).

[n.10]. See, e.g., Association of American Law Schools, The AALS Directory of Law Teachers 1993-94. Even now, IP professors (almost 2 pages total) with more than 10 years of experience occupy less than a column whereas contracts professors (6.5 pages total) with more than 10 years experience occupy almost 4.5 columns.

To my knowledge, the first casebook for an IP survey course was Paul Goldstein, Patent, Copyright, Trademark and Related State Doctrines (1973).

[n.11]. See, e.g., AALS Directory, supra.

- [n.12]. Although enrollments have increased at FPLC, even now less than half of J.D. graduates are likely to have taken an IP course.
- [n.13]. See Goldstein, supra note 10, preface.
- [n.14]. The 1965 Agency Practice Act, codified at 5 U.S.C. § 500, provides that no other federal agency can require an attorney to do more than file a written declaration of representation; see, e.g., Michelle J. Burke & Thomas G. Field, Jr., Promulgating Requirements for Admission to Prosecute Patent Applications, J. Pat. & Trademark Off. (forthcoming)
- [n.15]. Several are illustrated in the next section of this discussion. For further discussion, see Thomas G. Field, Jr., Avoiding Patent, Trademark & Copyright Problems: What You Don't Know Can Hurt You (FPLC 1992) -- one in a series of booklets published by FPLC and the U.S. Small Business Administration for inventors and entrepreneurs.
- [n.16]. Adapted from Avoiding Patent, Trademark & Copyright Problems. . . , supra.
- [n.17]. See Bartlett's Familiar Quotations 605a (14th ed. 1968).
- [n.18]. See Albert J. Kelley, Frank B. Campanella & John McKiernan, Venture Capital: A Guidebook for New Enterprises 12 (Boston College, 2d ed. 1973).
- [n.19]. Richard A. Onanian, Invention Promoters, Invention Management, May 1979, at 3.
- [n.20]. See, e.g., Arnesen v. Raymond Lee Organization, 333 F.Supp. 116, 172 U.S.P.Q. 1 (C.D. Cal. 1971).
- [n.21]. For example, in Jan. 1994, the Federal Trade Commission published Invention Promotion Firms, a pamphlet in its "Facts for Consumers" series.
- Also, that inventors appear to be particularly susceptible to unscrupulous practices seems to have played an important role in regulating patent practitioners; see, e.g., Burke & Field, supra note 14.

[n.22]. Information about such firms and ways to avoid them appears in Invention. . . Truth or Consequences, a pamphlet of the Inventors Awareness Group, a non-profit assistance program located in West Springfield, MA.

[n.23]. U.S. patents are barred for failure to apply within one year of a product's being publicly disclosed or offered for sale; 35 U.S.C. § 102(b). Throughout most of the world, the right is forfeited immediately.

[n.24]. Based on American Intellectual Property Law Association, Committee on Economics of Legal Practice, Report of the Economic Survey 1993, 32 (1992 combined average charges for a trademark registerability search and opinion were \$306, for an application, \$405, and for prosecution, \$451 -- plus a \$210 application fee).

[n.25]. Based on the Economic Survey, supra, at 36, the median charge for copyright registration would be about \$150, but the process is usually so simple that most people do it themselves.

[n.26]. In mid-1994, the combined filing and issue fees would be \$910 for a "small entity" or twice that otherwise. Based on the Economic Survey, supra, at 34, the legal charges for a novelty search, application and prosecution could easily have been under \$7,000. However, escalating maintenance fees are due at 3.5, 7.5, and 10.5 years after issue. They are \$465, \$935 and \$1410, respectively -- again, if one doesn't qualify as a small entity, the fees double.

Inventors can control costs in several ways. For example, if a novelty search is unfavorable, further expense can be avoided, or, if an invention cannot be marketed, a patentee can choose not to pay the maintenance fees. See, e.g., Thomas G. Field, Jr., Seeking Cost-effective Patents (FPLC 1994).

[n.27]. Citations in this part, unless otherwise indicated, are to 35 U.S.C.

[n.28]. See, e.g., Northern Pac. Ry. v. U.S., 356 U.S. 1 (1958). See also, Edmund W. Kitch, The Nature and Function of the Patent System, 20 J. L. & Econ. 265 (1977) wherein he likens patent claims to mining claims.

[n.29]. See supra note 6.

[n.30]. A thorough, if skeptical, review of their early history and rationale appears in Fritz Machlup, An Economic Review of the Patent System, Study No. 15 of the Senate Subcomm. on Patents, Trademarks and Copyrights of the Comm. on the Judiciary, 85th Cong., 2d Sess. (1958). In all, 28 such studies were commissioned. Besides Machlup, others of possible current interest include Study 1, Vannevar Bush, Proposals for Improving the Patent System (1956); Study 2, George Frost, The Patent System and the Modern Economy (1957) and Study 26, Victor Abramson, The Patent System: Its Economic and Social Basis (1960).

[n.31]. In general, IP rights do not permit owners to sell protected works. With regard to copyright for example, it should be clear that no one has a right to sell obscene works or works that infringe privacy rights, even if copyrighted.

[n.32]. Section 271(a).

[n.33]. Frost, supra note 30, at 76.

Compare Shapiro, supra note 1. At 148, he notes:

In a sense all property is monopoly. . . . [M]y monopoly in chair A does not prevent others from making. . . chairs B, C, or D. If, however, I owned the idea of a chair, and others could not make. . . anything embodying that idea, the whole society would be left standing until I chose to sell. . . on my terms.

Unfortunately, Shapiro does not explain, and I fail to see, how patentees have advantages not enjoyed by owners of chairs. Unless their contributions are marketable on terms they set, patent owners get nothing. Consider, e.g., a new cure for AIDS. What would induce its development and testing without patents? Also, if it were offered under "unconscionable" terms, a patent on the cure could be used by the federal government. If so, under 28 U.S.C. § 1498, the patentee would not be entitled to an injunction! In this vein, see generally Thomas G. Field, Jr., Pharmaceuticals and Intellectual Property: Meeting Needs Throughout the World, 31 Idea 3 (1990).

[n.34]. Jungersen v. Ostby & Barton Co., 335 U.S. 560, 572 (1949) (dissenting).

[n.35]. See e.g., Abe Fortas, The Patent System in Distress, 53 J. Pat. Off. Soc'y 810 (1971). For a comprehensive review of the situation through about 1966, see Shapiro, supra note 1.

[n.36]. Supra note 30.

[n.37]. See, e.g., Carole Kitti, Patent Validity Studies: A Survey, 20 Idea 55 (1979). See also, David Lowin, The Presumption Of Validity. . . (FPLC 1979); Thomas G. Field, Jr. and Juanita V. Field, Post Hoc Evaluations. . . , 20 Idea 29 (1979).

[n.38]. See, e.g., Dawson Chemical Co. v. Rohm and Haas Co., 448 U.S. 176 (1980).

[n.39]. See generally, Industrial Innovation: Joint Hearings Before the Senate Comm. on Commerce, Science and Transportation, and Select Comm. on Small Business, and House Comms. on Science and Technology, and Small Business, 96th Cong., 1st Sess., Parts 1 and 2 (1979). The opening statements in Part 1 are of particular interest. As part of a lively exchange, Frank Press stated: "For twenty-five years the question of innovation and Americans' ability to innovate has been. . . around; it's been studied to death;" id., at 40. Unfortunately, this suggests more than is the case. Much data has been collected, but its meaning is difficult if not impossible to discern. See, e.g., Thomas G. Field, Jr., Comment, Perceptions of Chief Patent Counsel at Large Corporations of the Effects of Patent Term. . . on Firm R&D, 32 Idea 277 (1992).

[n.40]. See 28 U.S.C.A. § 1295.

[n.41]. The Court of Customs and Patent Appeals (C.C.P.A.) and the U.S. Court of Appeals for the District of Columbia. Their views of the law sometimes differed, and patentees no doubt took advantage of that.

[n.42]. However, C.C.P.A. judges never saw infringement suits and the U.S. Court for the District of Columbia rarely, if ever, saw them. This could well have biased both courts in favor of patentees. See Shapiro, supra note 1, at 178 and 181-2.

[n.43]. Id. Not until 1966 did the Supreme Court grant certiori at the behest of the PTO; see Brenner v. Manson, 383 U.S. 519, 523.

[n.44]. See supra notes 41 & 42.

[n.45]. At least in the short term, whether this is true seems irrelevant. People act based on what they believe to be true. Indeed, it is possible that such perceptions and attitudes could, at any given point in time, be totally out of phase with more objective assessments of the "value" of patents or other IP -- or be skewed by incomplete data; see, e.g., Erica Bodwell, Published and Unpublished Federal Circuit Decisions. . . , 30 Idea 233 (1990).

Moreover, the enforcement of patents may sometimes be counterproductive; see, e.g., James Lardner, Fast Forward. . . 68 (Mentor 1987).

[n.46]. Section 101.

[n.47]. See, e.g., Diamond v. Chakrabarty, 447 U.S. 303 (1980) or Diamond v. Diehr, 450 U.S. 175 (1981).

[n.48]. Sections 171-73.

[n.49]. See, e.g., In re Morton-Norwich Products, Inc., 671 F.2d 1332, 213 U.S.P.Q. 9 (C.C.P.A. 1982).

[n.50]. See, e.g., Sears, 376 U.S. 225, and Compco, 376 U.S. 234 (1964).

[n.51]. See infra note 88.

[n.52]. See generally § § 161- 64. Plants may also be protected by the Plant Variety Protection Act, 7 U.S.C.A. § § 2321-2583 (1988); this protection is similar but falls within the jurisdiction of the Department of Agriculture.

[n.53]. See, e.g., Chakrabarty, 447 U.S. at 306.

[n.54]. See David Bernstein, Is a Plant Patent a Form of Copyright? 27 Idea 31(1986), but see Imazio Nursery Inc. v. Dania Greenhouse, 29 U.S.P.Q. 2d 1217 (N.D. Cal. 1992).

[n.55]. Section 111.

[n.56]. Section 271(a). "Patent pending" is thus no more than a warning that imitators may later have to stop. Still, there is a penalty for misusing the term; see § 292.

[n.57]. As discussed supra at note 14, only attorneys who have passed a special examination (or equivalent) are permitted to prosecute patent applications before the PTO; see § \$ 31-33. See also, e.g., Arnesen, 333 F.Supp. 116.

[n.58]. See, e.g., cases cited supra, at note 47.

[n.59]. See, e.g., Chakrabarty, 447 U.S. at 306. Actually, early "subject matter" cases seem to be far more concerned with, e.g., correspondence between the scope of disclosure and claims than with subject matter. See O'Reilly v. Morse, 56 U.S. 62 (1854); see also, the discussion of O'Reilly in Application of Tarczy-Hornoch, 397 F.2d 856, 158 U.S.P.Q. 141 (C.C.P.A. 1968).

[n.60]. See supra note 6.

[n.61]. Patent attorneys distinguish several kinds of searches. A "prior art" or patentability search is used to determine whether an invention is sufficiently novel to warrant filing an application. At a minimum, such a search should include domestic patents and leading indices, e.g., Chem Abstracts. A "validity" search is similar, but it is conducted after a patent issues and is likely to be more intensive and to cover a wider scope of prior art, e.g., foreign patents and technical publications. An "infringement" search is conducted to determine whether a new product falls within the claims of current patents. The last need only go back 17 years (the patent term) but may require considerable effort if a new product is particularly complex. Many firms in the Washington DC area provide search services.

[n.62]. Section 102, particularly subsection (a).

[n.63]. Section 103.

[n.64]. For example, failure to discuss advantages over the prior art may preclude later efforts to distinguish that art both within and without the PTO. See, e.g., Graham v. John Deere Co., 383 U.S. 1, 23 (1966).

[n.65]. Sections 116-18. Even if an invention has been previously assigned as a condition of employment, the application must be filed in the inventor's name, not the assignee's; see § 118. With regard to joint inventors, see discussion infra note 92.

[n.66]. Sections 111-15, 41.

[n.67]. Section 112 1; subsequent paragraphs indicate that multiple claims are permissible.

[n.68]. See, e.g., § 111.

[n.69]. Organized by a complex, constantly changing scheme published in the Manual of Classification.

[n.70]. Sections 131-33.

[n.71]. Id. See also § 122.

[n.72]. Section 112.

[n.73]. Id.; see also supra note 59.

[n.74]. Sections 101- 3. Of these, § 103 is usually most difficult; see, e.g., Carole Kitti, Patent Validity Studies: A Survey, 20 Idea 55 (1979). See also, Thomas G. Field, Jr., Law and Fact in Patent Litigation: Form vs. Function, 27 Idea 153 (1987).

[n.75]. Part II.B.

[n.76]. Section 102(b). Foreign law is generally beyond the scope of this discussion; see generally World Intellectual Property Organization, Background Reading Material on Intellectual Property 83 (1988).

[n.77]. See § 120.

[n.78]. Section 134.

[n.79]. See, e.g., supra note 43.

[n.80]. Sections 141-46. In situations not so governed, review may be had under the Administrative Procedure Act; 5 U.S.C.A. § 703 (1977), and CAFC jurisdiction is only arguably conferred under 28 U.S.C.A. § 1295. Although review was not under 5 U.S.C., see, e.g., Wyden v. Comm'r Patents and Trademarks, 807 F.2d 934, 937, 231 U.S.P.Q. 918, 921 (Fed Cir. 1986) (Markey, C.J., dissenting).

[n.81]. Either in terms of the amount of technology covered or their market value. The last seems to be all that counts; see Seeking Cost-effective Patents, supra note 26.

[n.82]. Id.

[n.83]. See Graver Tank & Mfg. Co. v. Linde Air Products Co., 339 U.S. 605 (1950).

[n.84]. See generally § § 151-53; § 41(2) sets the issue fee. Also note that subsequent fees are necessary to maintain the patent in force; see § 41(b). Fees in effect at the time this is written are set out in supra note 26.

[n.85]. Section 135.

[n.86]. The PTO has a "Document Disclosure Program." However, as discussed in a brochure explaining it (available from Commissioner of Patents, Washington, DC 20331), this is not best to establish priority and is useless to avoid time bars discussed supra, e.g., at notes 23 and 62.

It seems that the U.S. will soon approve the General Agreement on Tariffs and Trade (GATT). If so, the statute will permit relatively low-cost (\$150) provisional applications as of Jan. 1995.

[n.87]. For design and utility patents, § 154; for plant patents, § 163.

[n.88]. Plant and utility patents have a seventeen year term; see § § 154 and 163. Design patents have a fourteen year term, § 173. See also, e.g., § 156 providing limited extension of utility patents to compensate for regulatory delay involved in pre-market approval of drugs and related products.

If GATT is approved, at least utility patents will run twenty years from the first filing of a complete application; see supra note 86.

[n.89]. Section 261.

[n.90]. See, e.g., supra note 56. See also Morehouse Mfg. Corp. v. Strickland and Co., 407 F.2d 881, 160 U.S.P.Q. 715 (C.C.P.A. 1969), quotedinfra at note 300.

[n.91]. See also § § 116-118

[n.92]. For further discussion of employed inventors, see, e.g., Peter D. Rosenberg, 2 Patent Law Fundamentals § 11.04 (1989).

[n.93]. Section 261.

[n.94]. See generally, e.g., Jerrold G. Van Cise, William T. Lifland & Laurence T. Sorkin, Understanding The Antitrust Laws 162 (9th ed. 1986).

[n.95]. Section 262. See also § 116.

[n.96]. Such concerns eventually led to specific provisions permitting the government to grant exclusive rights in government inventions; see § \$ 200-212 and, e.g., Lawrence Rudolph, Overview of Federal Technology Transfer, 5 Risk 133 (1994). See also, Ronald E. Barks, Accessing and Licensing Federal Technology, Licensing Law and Business Report, May-June 1992, at 76: "[F]or every \$1 of research, a company spends \$10 to develop the product and another \$100 to take it to market."

[n.97]. Section 294. See also Thomas G. Field, Jr., Patent Arbitration. . . , 24 Idea 235 (1984) and Thomas G. Field, Jr. & Michael Rose, Prospects for ADR in Patent Disputes: An Empirical Assessment of Attorneys Attitudes, 32 Idea 309 (1992). Further, see § 135(d) (arbitration may be used to resolve interferences).

[n.98]. See 28 U.S.C. § § 1338(a), 1400, and 1498.

[n.99]. Section 271(b) and (c). Regarding the latter, see Dawson, 448 U.S. 176. See also § 271(f) and (g).

[n.100]. See generally § § 281-88. Also, § 289 provides minimum statutory damages for design patent infringement.

[n.101]. These are the first two enumerated patent defenses; see generally § 282.

[n.102]. Id., first sentence.

[n.103]. See § § 288 and 290. See also Blonder-Tongue Laboratories, Inc. v. Univ. Ill. Fndn., 402 U.S. 313 (1971).

[n.104]. See, e.g., U.S. Congress, Office of Technology Assessment, Patents and the Commercialization of New Technology 170-74 (Draft June 21, 1982) and Brief Survey. . Patent, Trademark, Copyright, supra note 3, at 89.

[n.105]. See, e.g., Graham, 383 U.S. 1, or Sakraida v. Ag Pro, Inc., 425 U.S. 273 (1976). See also Shapiro, supra note 1. While the CAFC may have more sympathy for such inventors than some circuits have heretofore shown (see, e.g., supra notes 41-43), it remains to be seen whether the Supreme Court will go along.

[n.106]. There is even a possibility of invalidity based on another's earlier secret use of the invention. See, e.g., Dunlop Holdings, Ltd. v. Ram Golf Corp., 524 F.2d 33, 188 U.S.P.Q. 481 (7th Cir. 1975), cert. denied, 424 U.S. 958 (1976).

[n.107]. See, e.g., Handgards, Inc. v. Ethicon, Inc., 743 F.2d 1282, 223 U.S.P.Q. 214 (9th Cir. 1984).

[n.108]. See, e.g., discussion at supra notes 60-62.

[n.109]. Therefore, they may be motivated to investigate, e.g., foreign publications and other prior art that would invalidate the patent under § 102(a).

[n.110]. Compare discussion at supra notes 78-83. See also, Field (1985) supra note 3, at 90-92

[n.111]. See, e.g., Brulotte v. Thys Co., 379 U.S. 29 (1964).

[n.112]. See David Lowin, Whether Patented or Unpatented. . . , 23 Idea 77 (1982).

[n.113]. See, e.g., Handgards, 743 F.2d 1282, 223 U.S.P.Q. 214; see also 37 C.F.R. § 1.56 -- a provision with a very long and checkered career.

[n.114]. See 28 U.S.C. § 1498.

[n.115]. For background, see, e.g., Dianne Plunkett, Plugging the State Immunity Copyright Loophole, 72 J. Pat. & Trademark Off. Soc'y 287 (1990). The situation described there seems to have been addressed with regard to patents in § 296.

[n.116]. See, e.g., Lear, 506 U.S. 653.

[n.117]. Supra note 61.

[n.118]. Section 122. However, in many countries applications are published --sometimes very quickly.

[n.119]. See, e.g., § 101 providing for improvement patents. These are likely to be narrower than so-called "pioneer" patents. If the earlier patents are still in effect, improvement patents cannot be practiced without infringing -- further illustrating the proposition that IP only excludes others.

Many countries avoid such problems, e.g., by granting patents to the first to file and publishing pending applications; see generally World Intellectual Property Organization, supra note 76. Eventually, the U.S. may join them; see, e.g., Homer Blair, Franklin Pierce Law Center: Patent Systems Major Problems Conference, 28 Idea 61(1987).

[n.120]. Citations in this part, unless otherwise indicated, are to 17 U.S.C.

[n.121]. Supra note 6.

[n.122]. See, e.g., William F. Patry, Latman's The Copyright Law 2-15 (6th ed. 1979) for a brief discussion of the early history of copyright law.

For an account of the early situation with foreign authors, see Lardner, supra note 45, at 120. This entertaining book describes the divergent economic interests of the motion

picture and video recorder industries, and to a lesser extent Japan and the U.S., that led to Sony Corp. of Am. v. Universal City Studios, Inc., 464 U.S. 417 (1984).

[n.123]. A major thrust of the 1976 Act was to move the U.S. toward joining the Berne International Copyright Convention. It does not permit formal requisites to protection. After joining, Congress passed "An act to... implement the Berne Convention...," P.L. 100-568, 102 Stat. 2853 (1988). One of the more significant substantive changes was including architectural works within § 102(a). See also § 104(c) regarding possible implied changes.

[n.124]. Supra note 6.

[n.125]. Id.

[n.126]. Baker v. Selden, 101 U.S. 99, 102.

Unfortunately such things have been held not to be appropriate for a patent; see, e.g., Gordon R. Blakney, Jr., Systems of Business Patents, 30 Idea 355 (1990). Yet, remarkably, tests of scholastic aptitude and other psychological characteristics seem to enjoy copyright protection; see, e.g., Educational Testing Services v. Katzman, 793 F.2d 533, 230 U.S.P.Q. 156 (3d Cir. 1986) and Applied Innovations, Inc. v. Regents of the U. of Minn., 876 F.2d 626, 11 U.S.P.Q. 2d 1041 (8th Cir. 1989).

[n.127]. Bleistein v. Donaldson Lithographing Co., 188 U.S. 239, 249 (1903), but see, e.g., Gross v. Seligman, 212 F. 930 (2d Cir. 1914) or Dallas Cowboys Cheerleaders, Inc. v. Scoreboard Posters, Inc., 600 F.2d 1184, 203, U.S.P.Q. 321 (5th Cir. 1979) -- in neither of the latter cases was plaintiff's work copied.

[n.128]. Bleistein, 188 U.S. at 251.

[n.129]. Id., at 252.

[n.130]. Mazer, 347 U.S. 201; see also supra at note 8.

[n.131]. Mazer, 347 U.S. at 215.

[n.132]. Id., at 217.

[n.133]. Id., at 217-18.

[n.134]. See, e.g., Whimsicality, Inc. v. Rubie's Costume Co., Inc., 891 F.2d 452 (2d Cir. 1989) (where arguably uncopyrightable costumes were represented to be copyrightable soft sculpture, the court refused to reach the issue of copyrightability because the registration was obtained fraudulently).

[n.135]. See, e.g., Masquerade Novelty, Inc. v. Unique Industries, Inc., 912 F.2d 663, 15 U.S.P.Q. 2d 1881 (3d Cir. 1990) (masks shaped to resemble animal noses have no function other than that associated with their appearance). Compare costumes that also serve, e.g., to preserve the modesty of the wearer.

[n.136]. Also, one might consider that copyrights may last for a lifetime and beyond whereas design patents last only fourteen years. However, this difference is likely to be insignificant where the problem is that design patents issue too slowly. Thus, makers of clothing, and at one time fabric designs, have been in a difficult situation and unable to resort to self help; see Fashion Originators' Guild of America v. Federal Trade Commission, 312 U.S. 457 (1941); see also Cheney Bros. v. Doris Silk Corp., 35 F.2d 279 (2d Cir. 1929).

[n.137]. Subject to the right, e.g., to photograph a building "ordinarily visible from a public place;" see § 120(a).

[n.138]. Until 1986, in the United Kingdom, such works were protected through the doctrine of "indirect copying," but this seems to have been ended in British Leyland Motor Corp. Ltd. v. Armstrong Patents Co. Ltd., H.L.E. [[1986] 2 W.L.R. 400 (Appeal taken from Court of Appeal).

[n.139]. However, § 201(a) provides that authors of a joint work are co- owners of copyright without, as in the case of the patent statute, specifying their obligation to one another. Compare supra at note 95.

[n.140]. Section 202. See also, e.g., Community for Creative Non-violence v. Reid, 490 U.S. 730 (1989).

[n.141]. Section 101 "work made for hire."

[n.142]. See, e.g., Community for Creative Non-violence, 490 U.S. 730. Also, consider Olan Mills, Inc. v. Eckerd, No. CA3-88-0333-D (N.D.Tx. Apr. 20,1989) (pharmacy infringed by reproducing portraits at the behest of the subjects, notwithstanding suggestion that the latter could authorize reproduction, e.g., as joint authors).

[n.143]. Section 101 "work made for hire" (2).

[n.144]. Section 302.

[n.145]. Section 203(a)(3).

[n.146]. Section 203(a) ("In the case of any work other than a work made for hire. . . ").

[n.147]. Sections 204 and 205.

[n.148]. Section 301(a).

[n.149]. Section 407(d).

[n.150]. Sections 401 and 405.

[n.151]. See, e.g., Patry, supra note 122, at 307--discussing inter-American protection under the 1911 Buenos Aires Convention.

[n.152]. See also § 405(b).

[n.153]. Section 411. See also § 101 "country of origin." But see Pacific and Southern Co. v. Duncan, 744 F.2d 1490, 1499, fn. 17, 224 U.S.P.Q. 131, 137 (11th Cir. 1984) (enjoining infringing works not yet created, much less registered).

[n.154]. The fee is \$20 per registration; see § 708(a)(1). For what constitutes a single work, see 37 C.F.R. § 202.3(b); see also § 202.20 (1989).

[n.155]. Section 412. This provision is ambiguous but might be construed to permit § § 504 and 505 remedies if registration occurred during a period of continuing infringement. See also § 410(c).

[n.156]. Section 410(a).

[n.157]. See, e.g., Esquire, Inc. v. Ringer, 591 F.2d 796, 199 U.S.P.Q. 1 (D.C. Cir. 1978).

[n.158]. See, e.g., Alfred Bell & Co. v. Catalda Fine Arts, Inc., 191 F.2d 99, 90 U.S.P.Q. 153 (2d Cir. 1951).

[n.159]. Id.; see also supra note 127.

[n.160]. See, e.g., Alfred Bell, 191 F.2d 99.

[n.161]. See § 101 "perform or display. . . "; see also, e.g., § 109(c).

[n.162]. See, e.g., Sony, 464 U.S. 417 (1984). One of the most remarkable things about the case is that the Court cited and discussed 35 U.S.C.A. § 271(c) (the patent statute) in deciding whether contributory infringement had occurred. This was found warranted insofar as the doctrine was originally created by the courts, and no provisions appear in the copyright statute. See also, e.g., RCA/Ariola Intern, Inc. v. Thomas & Grayston Co., 845 F.2d 773 (8th Cir. 1988) and Vault Corp. v. Quaid Software, Ltd., 847 F.2d 255 (5th Cir. 1988).

[n.163]. 28 U.S.C.A. § 1338.

[n.164]. Supra note 155.

[n.165]. See generally § § 501-10.

[n.166]. Section 506.

[n.167]. However, at least two Circuits have refused that defense as an attack on copyright validity. See, e.g., Belcher v. Tarbox, 486 F.2d 1087, 1088, 180 U.S.P.Q. 1, 2 (9th Cir. 1973) and Mitchell Bros. Film Group v. Cinema Adult Theater 604 F.2d 852 (5th Cir. 1979).

Regarding possible antitrust problems, see, e.g., Broadcast Music, Inc. v. Columbia Broadcasting System, Inc. 441 U.S. 1 (1979). See also § 109(b)(2).

[n.168]. But see Whimsicality, 891 F.2d 452, discussed supra note 134.

[n.169]. Section 410(c).

[n.170]. But see Morrissey v. Procter & Gamble Co., 379 F.2d 675, 154 U.S.P.Q. 193 (1st Cir. 1967).

[n.171]. If a work is very similar to an earlier distributed work, access as well as copying may be presumed. See, e.g., ABKCo Music, Inc. v. Harrisongs Music, 722 F.2d 988, 221 U.S.P.Q. 490 (2d Cir. 1983). But see, Benson v. Coca-Cola Co., 795 F.2d 973, 230 U.S.P.Q. 592 (11th Cir. 1986).

[n.172]. See, e.g., Muller v. Triborough Bridge Authority, 43 F.Supp. 298 (S.D.N.Y. 1942) (finding a bridge not to infringe a drawing of a bridge). In the U.S., three dimensional works infringe only if they are also copyrightable. Compare, e.g., Fleischer Studios v. Freundlich, 73 F.2d 276, 278 (2d Cir. 1934) and see supra note 138.

[n.173]. See, e.g., Baker, 101 U.S. 99, discussed supra note 126.

[n.174]. See, e.g., Ideal Toy Corp. v. Sayco Doll Corp., 302 F.2d 623, 133 U.S.P.Q. 104 (2d Cir. 1962); at 627, Judge Clark (dissenting) called attention to a third doll, apparently in the public domain, that more resembled an allegedly infringing doll than did the doll said to be infringed. Patent examination attempts to preclude such a result, e.g., by forbidding claims that cover subject matter that can be freely used by anyone.

[n.175]. Feist Publications, Inc. v. Rural Telephone Service Co., Inc., 499 U.S. 340 (1991).

[n.176]. Sheldon v. Metro-Goldwyn Pictures Corp., 81 F.2d 49, (2d Cir. 1936), cert. denied, 298 U.S. 669.

[n.177]. Compare Dallas Cowboys Cheerleaders, 600 F.2d 1184, at 1188, 203 U.S.P.Q. 321, at 323.

[n.178]. Sections 107-120. Some focus on works, e.g., § 120 (architecture), some on users, e.g., § 108 (libraries and archives) and some on activities, e.g., § 106 (transfers of particular copies).

[n.179]. Fair use was a central issue in Sony, 464 U.S. 417 (1984), but neither the 9th Circuit nor the Supreme Court gave adequate attention to its being a defense only for persons unrepresented in the litigation. See Thomas G. Field, Jr., Comment: Reflections on the Betamax Decision, 22 Idea 265 (1982) (criticizing the 9th Circuit). See also Lardner, supra note 45, at 112.

[n.180]. And perhaps when the defendant's conduct is otherwise reasonable; see, e.g., Marcus v. Rowley, 695 F.2d 1171, 217 U.S.P.Q. 691 (9th Cir. 1983) (failure to attribute cited as a reason to deny the fair use defense).

[n.181]. Supra notes 127-129 and discussion.

[n.182]. It is not easy to find, much less interpret, applicable provisions. The Copyright Office has made the task somewhat easier. See Copyright Office Circular 21: Reproduction of Copyrighted Works by Educators and Librarians (1991); this document contains statutory provisions and legislative history as well as "guidelines" that were negotiated during pendency of the Act. The latter cover, e.g., teachers' use of books and periodicals.

[n.183]. See 28 U.S.C. 1498.

[n.184]. See, e.g., Plunkett, supra note 115. The situation with regard to copyrights was addressed in § 501 (a).

[n.185]. See supra at notes 139-42.

[n.186]. See supra at note 127. See also, Whelan Associates, Inc. v. Jaslow Dental Laboratory, Inc. 797 F.2d 1222, 230 U.S.P.Q. 481 (3d Cir. 1986), but see Landsberg v. Scrabble Crossword Game Players, Inc., 736 F.2d 485, 221 U.S.P.Q. 1140 (9th Cir. 1984).

[n.187]. ABKCo. Music, 722 F.2d 988, 221 U.S.P.Q. 490 (2d Cir. 1983).

[n.188]. See, e.g., supra note 186.

[n.189]. See, e.g., supra at notes 148-50.

[n.190]. See, e.g., Harper & Row Publishers, Inc., v. Nation Enterprises, 471 U.S. 539 (1985).

[n.191]. See § § 757-59.

[n.192]. See William E. Hilton, What Sort of Improper Conduct Constitutes Misappropriation of a Trade Secret, 30 Idea 287, at 297 [Appendix A] (1990).

[n.193]. See Steve Borgman, The Adoption of the Uniform Trade Secrets Act: How Uniform is Uniform? 27 Idea 73 (1986).

[n.194]. 376 U.S. 225 and 234, respectively.

[n.195]. 416 U.S. 470.

[n.196]. To have a conflict, subject matter must be something that can be kept secret. This poses a serious problem for most copyright subject matter. With regard to software where dual protection may be possible, the Copyright Office is muddying the water; see, e.g., Thomas F. Marsteller, Jr. & Robert L. Tucker, Copyrighting Trade Secrets. . . , 25 Idea 211, 218-22 (1984) -- especially the discussion of 37 C.F.R. § 202.20, at 219-20.

[n.197]. See, e.g., Field (1975), supra note 3, at 531 and 537.

[n.198]. Section 301(a); this means that state law is likely to be important only for works that are publicly performed (probably excluding trade secrets) but not recorded. See, e.g., Zacchini v. Scripps-Howard Broadcasting Co., 433 U.S. 562 (1977). Insofar as that performance arguably falls within the subject matter of copyright, it seems that, had Zacchini been inclined to ratify the unauthorized fixing of his performance, the case could have been brought under federal law. See, e.g., Pacific and Southern Co., 744 F.2d 1490, 244 U.S.P.Q. 131.

[n.199]. This provision was heavily influenced by International News Service v. Associated Press, 248 U.S. 215 (1918). See, e.g., 122 Cong. Rec. S.2042-43 (Feb. 19 1976) [letter from the Department of Justice] and H. 10910 (Sept. 22, 1976) [statement. of Rep. Seiberling]. Citing, Sears, 376 U.S. 225 and Compco, 376 U.S. 234, the Department urged that what is now 17 U.S.C. § 301(b)(3) be worded to avoid reinstating the "misappropriation" doctrine as defined by International News Service. The section reads as suggested.

[n.200]. See supra at note 155.

[n.201]. See Goldstein v. California, 412 U.S. 546, 560 (1973) (the Constitutional "limited times" language does not affect state power). See also, e.g., Estate of Elvis Presley v. Russen, 513 F.Supp. 1339, 211 U.S.P.Q. 415 (D. N.J. 1981) (describing a type of work that is not secret and, as long as it is neither fixed nor regarded as within copyrightable subject matter, could have virtually perpetual protection).

[n.202]. In this and other regards the uniform act apparently tries to codify the holdings in E.I. duPont de Nemours & Co. v. Christopher, 431 F.2d 1012, 166 U.S.P.Q. 421 (5th Cir. 1970), cert. denied, 400 U.S. 1024 (1971).

[n.203]. An especially interesting factual and procedural situation appears in American Can Co. v. Mansukhani, 742 F.2d 314, 223 U.S.P.Q. 97 (7th Cir. 1984); see, e.g., at 329, 331.

[n.204]. See, e.g., Reed, Roberts Assoc. v. Strauman, 40 N.Y.2d 303, 307 (1976).

[n.205]. See, e.g., NCH Corp. v. Broyles, 749 F.2d 247, 251, fn. 5 (5th Cir. 1985).

[n.206]. E.g., Kewanee, 416 U.S. 470.

[n.207]. Trade secret law often emphasizes how information is obtained rather than the information itself; see, e.g., Tabor v. Hoffman, 119 N.Y. 30 (1889). See also Kewanee, 416 U.S. 470. But see Smith v. Dravo Corp. 203 F.2d 369, 374, 97 U.S.P.Q. 98, 102. (7th Cir. 1953) (finding "Pennsylvania will not deny recovery merely because the design could have been obtained through inspection") with Van Products Co. v. General Welding & Fabricating Co., 419 Pa. 248 (1965) (holding to the contrary).

[n.208]. See duPont, 431 F.2d 1012, 166 U.S.P.Q. 421.

[n.209]. Bonito Boats, Inc v. Thunder Craft Boats, Inc., 489 U.S. 141 (1989).

[n.210]. See, e.g., Downey v. General Foods, 31 N.Y.2d 56 (1972). Compare Liggett & Myer Tobacco Co. v. Meyer, 194 N.E. 206 (1936), where the idea was arguably more concrete and novel.

[n.211]. See, e.g., Minnear v. Tors, 266 Cal.App.2d 495, (1968) (regarding an idea for a television series -- something excluded from copyright by § 102(b)). But see Murray v. National Broadcasting Co., 844 F.2d 988, 6 U.S.P.Q. 2d 1618 (2d Cir. 1988) (refusing to compensate, for lack of novelty, a professional who allegedly suggested the idea for The Cosby Show).

[n.212]. Indeed, companies are more likely to advance their own agreement disavowing any liability; see, e.g., Burten v. Milton Bradley, 763 F.2d 461, 226 U.S.P.Q. 605 (1st Cir. 1985) (but company was ultimately found liable based partly on evidence of subsequent modification).

[n.213]. See generally, Del I. Hawkins and Gerald G. Udell, Corporate Caution and Unsolicited New Product Ideas, 58 J. Pat. & Trademark Off. Soc'y 375 (1976). See also, supra note 3.

[n.214]. See generally Hilton, supra note 192.

[n.215]. Supra note 6.

[n.216]. Goldstein, 412 U.S. at 560.

[n.217]. 416 U.S. at 489-91.

[n.218]. See, e.g., Harvey S. Perlman, Interference with Contract and Other Economic Expectancies. . . , 49 U. Chi. L.Rev. 61(1982). See also, e.g., Universal City Studios, Inc. v. Nintendo Co. Ltd., 797 F.2d 70, 74, 230 U.S.P.Q. 409, 412 (9th Cir. 1986).

[n.219]. See Mosler Safe Co. v. Ely-Norris Safe Co., 273 U.S. 132 (1927).

[n.220]. See generally, e.g., Thomas G. Field, Jr. Appraising Private and Public Roles in Returning Small Economic Losses to Consumers: A Comparative Inquiry, 29 Mercer L. Rev. 773 (1978).

[n.221]. 15 U.S.C. § 45(a)(1).

[n.222]. Id. For further detail, see Field, supra note220.

[n.223]. See The State Unfair Competition Statutes, in Paul Goldstein, Edmund W. Kitch & Harvey S. Perlman, Unfair Competition, Trademark and Patent Selected Statutes and International Agreements 1 (1993). States that have adopted two important model acts are shown and versions of the acts reproduced following.

[n.224]. See Mosler Safe, 273 U.S. 132.

[n.225]. Unlike the patent and copyright acts, the Act does not correspond to a title in the U.S. Code. Thus, section numbers differ. This can be confusing because lawyers and judges refer to provisions either way. Also, while Lanham Act § 1 is 15 U.S.C. § 1051, merely adding 1050 may not yield correct results; e.g., § 43 is 15 U.S.C. § 1125.

[n.226]. See, e.g., Lanham Act § 43(a) and False Advertising, Ch. 27 in J. Thomas McCarthy, 2 Trademarks and Unfair Competition 335 (2d ed. 1984).

[n.227]. See, e.g., Alpo Petfoods, Inc v. Ralston Purina Co., 913 F.2d 958, 16 U.S.P.Q. 2d 1081 (D.C. Cir. 1990) (reversing an award of profits). Generally an award of damages looks to plaintiff's loss in an attempt to make it whole whereas an award of profits looks to defendant's income in an effort to disgorge ill-gotten gains.

[n.228]. See, e.g., Johnson & Johnson v. Carter-Wallace, Inc., 631 F.2d 186, 208 U.S.P.Q. 169 (2d Cir. 1980).

[n.229]. This is a term of art; it often means much less than what it would literally suggest. See Field (1985) supra note 3, at 59.

[n.230]. See Mosler Safe, 273 U.S. 132.

[n.231]. This is a term of art. Insofar as few words have only two meanings, it suggests that a mark has come to signify a particular commercial source.

[n.232]. See, e.g., Two Pesos, Inc. v. Taco Cabana, Inc., 112 S.Ct. 2753, 2766 (1992) (Justice Thomas, concurring in result).

[n.233]. See, e.g., My-T-Fine Corp. v. Samuels, 69 F.2d 76 (2d Cir. 1934); see also American Chicle Co. v. Topps Chewing Gum, Inc., 208 F.2d 560, 99 U.S.P.Q. 362 (2d Cir. 1953).

[n.234]. See, e.g., Polaroid Corp. v. Polarad Electronics Corp., 287 F.2d 492, 495, 128 U.S.P.Q. 411, 413 (2d Cir. 1961); see also, Aunt Jemima Mills Co. v. Rigney & Co., 247 F. 407 (2d Cir. 1917). Intent is usually a major factor in the calculus of such cases and could give rise to a presumption as in, e.g., My-T-Fine or American Chicle, supra.

[n.235]. Thus, as discussed below, a "strong" mark may become "weak." In this vein, see, e.g., California Fruit Growers Exchange v. Sunkist Baking Co., 166 F.2d 971, 76 U.S.P.Q. 85 (7th Cir. 1947).

[n.236]. See, e.g., Mead Data Central, Inc. v. Toyota Motor Sales, U.S.A., Inc., 875 F.2d 1026, 10 U.S.P.Q. 2d 1961 (2d Cir. 1989).

[n.237]. Id. The court found "Lexus" automobiles not to dilute the mark "Lexis" for computerized legal research services. The analysis bears a remarkable resemblance to that employed in Polaroid, 287 F.2d, at 495, or Application of E. I. duPont DeNemours, 476 F.2d 1357 (C.C.P.A. 1973) -- neither of which involve "dilution" statutes.

[n.238]. See, e.g., Carson v. Here's Johnny Portable Toilets, Inc. 698 F.2d 831, 218 U.S.P.Q. 1 (6th Cir. 1983). Compare Shaw v. Time-Life Records, 38 N.Y. 2d 301, 341 N.E. 2d 817 (1975).

[n.239]. A particularly interesting treatment appears in Stanley K. Murumba, Commercial Exploitation of Personality (Law Book Co. 1986). The author focuses on Australian law but nevertheless discusses germinal English cases as well as more recent ones from the U.S. and other former colonies.

[n.240]. See, e.g., Groucho Marx Productions, Inc. v. Day and Night Co., Inc., 689 F.2d 317, 216 U.S.P.Q. 553 (2d Cir. 1982).

[n.241]. See, e.g., Estate of Elvis Presley, 513 F.Supp. 1339. See also Zacchini, 433 U.S. 562. Such cases resemble International News Service, 248 U.S. 215. Yet, if the work is not "fixed," it has potentially unlimited protection. See supra notes 196-99.

[n.242]. State constitutions may also afford such protection; see, e.g., Willing v. Mazzocone, 482 Pa. 377 (1978).

[n.243]. See, e.g., Bose Corp. v. Consumers Union U.S., Inc., 466 U.S. 485 (1984).

[n.244]. See, e.g., Virginia State Bd. Pharm. v. Va. Citizens Consumer Council, 425 U.S. 748 (1976) (First Amendment bars government restrictions on truthful price advertising).

[n.245]. See, e.g., the FTC's 1979 policy statement on comparative advertising, 16 C.F.R. § 14.15 (1990).

[n.246]. See, e.g., Menard v. Houle, 298 Mass. 546 (1937).

[n.247]. See, e.g., L.L. Bean v. Drake Publishers, Inc., 811 F.2d 26, 1 U.S.P.Q. 2d 1753 (1st Cir. 1987).

[n.248]. Id.

[n.249]. See, e.g., Bose Corp. v. Consumers Union, U.S., Inc. 692 F.2d 189, 202 (1st Cir. 1982), aff'd 466 U.S. 485. Yet, the proposition, while discussed, was assumed, not held.

[n.250]. See System Operations, Inc. v. Scientific Games Develop. Corp., 555 F.2d 1131 (3d Cir. 1977) reversing 414 F.Supp. 750 (D. N.J. 1976) on this issue, but with no First Amendment analysis.

[n.251]. Section 1125(a)(2). For a brief discussion of the prior jurisdictional split, see Field (1985) supra note 3, at 59-60.

[n.252]. See, e.g., Dairy Stores, Inc. v. Sentinel Pub. Co., 104 N.J. 125 (1986).

[n.253]. See, e.g., Federal-Mogul-Bower Bearing, Inc. v. Azoff, 313 F.2d 405, 136 U.S.P.Q. 500 (6th Cir. 1963).

[n.254]. See § 1117.

[n.255]. See, e.g., Patent and Trademark Office, Basic Facts about Trademarks 2 (Draft 1989).

[n.256]. See, e.g., Getty Petroleum Corp. v. Bartco Petroleum Corp., 858 F.2d 103, 8 U.S.P.Q. 2d 1336 (2d Cir. 1988) and Getty Petroleum Corp. v. Island Transp. Corp., 862 F.2d 10, 8 U.S.P.Q. 2d 1687 (2d Cir. 1988).

[n.257]. As discussed below, literally misdescriptive marks, e.g., Apple for computers may be fanciful.

[n.258]. See, e.g., McNeilab, Inc. v. American Home Products Corp., 848 F.2d 34, 6 U.S.P.Q. 2d 2007 (2d Cir. 1988) or Vidal Sassoon, Inc. v. Bristol-Myers Co., 661 F.2d 272, 213 U.S.P.Q. 24 (2d Cir. 1981).

[n.259]. In this section, citations, unless otherwise indicated, are to 15 U.S.C.

[n.260]. See, e.g., Sidney Diamond, The Historical Development of Trademarks, 65 Trademark Rep. 265 (1975). Diamond also discusses many ways marks have been used other than as "source" indicators, e.g., as livestock brands.

[n.261]. Id.; see also Beverly W. Pattishall & David C. Hillard, Trademarks 1 (1987).

[n.262]. Trademark Cases, 100 U.S. 82.

[n.263]. The clause is quoted, supra note 6. Given that goodwill does not expire but is more likely to increase over time, the "limited times" language is alone a significant obstacle -- at least for federal protection; see Goldstein, 412 U.S. at 560.

[n.264]. For brief discussion of the early statutes and their limitations, see 1 Trademarks and Unfair Competition, supra note 226, at 136.

[n.265]. Erie R. Co. v. Tompkins, 304 U.S. 64 (1938), abolished federal substantive common law that had no foundation in federal statutes. Compare Community for Creative Nonviolence, 490 U.S. 730 at 749.

[n.266]. Kellogg Co. v. National Biscuit Co., 305 U.S. 111, fn. 1 (1938).

[n.267]. See Hearings on H.R. 9041, House Committee on Patents, Subcommittee on Trademarks, 75th Cong. 3d Sess. (1938).

[n.268]. Re section numbering, see supra note 225.

[n.269]. § 1127.

[n.270]. But see Burger King Fla., Inc. v. Hoots, 403 F.2d 904, 159 U.S.P.Q. 706 (7th Cir. 1968).

[n.271]. See Kellogg, 305 U.S. 111; Sears, 376 U.S. 225 and Compco, 376 U.S. 234, reach a similar result. However, they are far more significant because they are decided on preemption rather than substantive law -- that states could disregard.

[n.272]. Thus, in Kellogg, a competitor could call its product "shredded wheat." This is the trademark "fair use" doctrine, and it is codified at § 1115(b)(4). See also, e.g., Prestonettes, Inc. v. Coty, 264 U.S. 359 (1924) and Champion Spark Plug Co. v. Sanders, 331 U.S. 125 (1947). Compare Cliff's Notes, Inc. v. Bantam Doubleday Dell Publishing Group, Inc., 886 F.2d 490, 12 U.S.P.Q. 2d 1289 (2d Cir. 1989).

[n.273]. As compared to, e.g., mandating generic substitution. See, e.g., Federal Trade Commission, Drug Product Selection (Staff Report 1979). See also, e.g., Pharmaceutical Soc'y N.Y., Inc. v. Lefkowitz, 586 F.2d 953 (2d Cir. 1978).

[n.274]. See, e.g., Virginia State Bd. Pharm., 425 U.S. 748 and discussion supra at note 244. Again, such results can be obtained without resort to the First Amendment; see supra note 272. See also, e.g., HyperTherm, Inc. v. Precision Products, Inc. 832 F.2d 697, 4 U.S.P.Q. 2d 2799 (1st Cir. 1987) and Calvin Klein Cosmetics Corp. v. Lenox Laboratories, Inc., 815 F.2d 500, 2 U.S.P.Q. 2d 1285 (8th Cir. 1987).

[n.275]. See, e.g., Wesley J. Liebeler, The Deregulation of Industry: How Far Should We Go? 51 Ind. L. J. 735, 739-45, particularly fns. 14 and 15 (1976). Liebeler's general thesis is that for "credence" goods, i.e., ones that have qualities reasonably well-informed consumers cannot judge either before or after purchase, producers' reputations serve as collateral against misconduct. While his conclusion that the Food and Drug Administration is unnecessary is extreme, his underlying point seems well taken.

[n.276]. See, e.g., Hanover Star Milling Co. v. Metcalf, 240 U.S. 403 (1916); see also Morehouse Mfg. Corp. v. J. Strickland & Co., 407 F.2d 881, 160 U.S.P.Q. 715 (C.C.P.A. 1969).

[n.277]. Such a mark is said to have "distinctiveness" or "secondary meaning." See, e.g., France Milling Co. v. Washburn-Crosby Co., 7 F.2d 304, 306 (2d Cir. 1925).

[n.278]. Id.

[n.279]. For a general discussion of the spectrum, see, e.g., Zatarains, Inc. v. Oak Grove Smokehouse, Inc., 698 F.2d 786, at 790, 217 U.S.P.Q. 988, at 993 (5th Cir. 1983).

[n.280]. See, e.g., supra at notes 271-72.

[n.281]. See, e.g., France Milling, 7 F.2d at 306.

[n.282]. See, e.g., § 1152(e), but see § 1152(f).

[n.283]. See, e.g., § 1115(b)(4).

[n.284]. See, e.g., Taylor Wine Co., Inc. v. Bully Hill Vinyards, Inc., 590 F.2d 701, 201 U.S.P.Q. 65 (2d Cir. 1978). But see Hat Corp. Am. v. D. L. Davis Corp., 4 F.Supp. 613 (D. Conn. 1933).

[n.285]. See, e.g., 698 F.2d 786, 217 U.S.P.Q. 988.

[n.286]. See, e.g., In re Leblanc, 429 F.2d 989 (C.C.P.A. 1970).

[n.287]. See, e.g., Kellogg, 305 U.S. 111. See also, DuPont Cellophane Co. v. Waxed Products Co., 85 F.2d 75 (2d Cir. 1936) (the only generic term is "transparent glycerinated cellulose hydrate regenerated from viscose;" imagine the likelihood that consumers would use it).

[n.288]. Some hire clipping services to report misuses of their marks by magazines and newspapers. See, e.g., Shannon, Dow Shall not Take its Trademark Lightly, Concord [NH] Monitor, Oct. 6,1987, at Dl.

[n.289]. Kellogg, 305 U.S. 111.

[n.290]. See, e.g., France Milling, 7 F.2d 304.

[n.291]. See, e.g., Aunt Jemima, 247 F. 407.

[n.292]. See, e.g., Coca-Cola Co. v. Busch, 44 F.Supp. 405 (E.D. Pa. 1942), permitting the plaintiff to stop another from calling its product "Koke- Up" even though "coke" was only, at the time, a consumer nickname!

[n.293]. The principal and supplemental registers are governed by § § 1051 et seq. Section 1091, permits registration of marks that do not meet the requirements of § 1052(e) on the latter; but many benefits are denied under § 1094. Yet, federal supplemental registration may provide more effective notice to others than registration in a particular state.

[n.294]. Not until 1975, was Trademark added to the name of the Office; P.L. 93-596.

[n.295]. See, e.g., Burger King, 403 F.2d at 908, 159 U.S.P.Q. at 708, 709: Under 15 U.S.C. 1115(b). . . , the federal certificate can be "conclusive evidence" of registrant's "exclusive right." And 15 U.S.C. § 1127 of the Act provides that "The intent of this chapter is. . . to protect registered marks used in such commerce from interference by State . . . legislation." The Illinois Act, however, provides only that a certificate of registration "shall be admissible . . . evidence as competent and sufficient proof of the registration. . . "

Moreover, we think that whether or not Illinois intended to enlarge the common law..., the Illinois Act does not enlarge its right... where the federal mark has priority.... Congress intended the Lanham Act to afford nation-wide protection to federally-registered marks, and that once the certificate has issued, no person can acquire any additional rights superior to those obtained by the federal registrant. [citations omitted].

[n.296]. Id. But see Dawn Donut Co. v. Hart's Food Stores, Inc., 267 F.2d 358, 365, 121 U.S.P.Q. 430, 435 (2d Cir. 1959) (court refused to grant legal or immediate equitable relief where defendant adopted the mark without actual notice and plaintiff was not in the geographical market).

[n.297]. Section 1057(b).

[n.298]. See, e.g., § 1065, proviso 3.

[n.299]. Section 1065.

[n.300]. Morehouse, 407 F.2d at 888, 160 U.S.P.Q. at 720 (C.C.P.A. 1969). But see Zirco Corp. v. AT&T, 21 U.S.P.Q. 2d 1542 (TTAB 1992). See also supra note 294.

[n.301]. Morehouse supra. But see § 1126 (registration of marks under international conventions).

Many countries do not require use prior to registration, so § 1126 permits registration of marks that may be used nowhere in the world.

[n.302]. See Larry Harmon Pictures Corp. v. The Williams Restaurant Corp., 929 F.2d 662, 18 U.S.P.Q. 2d 1292 (Fed. Cir. 1991), cert. denied 112 S.Ct. 85 (1991). Notwithstanding that "commerce" was defined before Wickard v. Filburn, 317 U.S. 111 (1942) was decided, the court interpreted the language according to the law in effect when the bill passed. See Peter C. Christensen & Teresa C. Tucker, The "Use in Commerce" Requirement for Trademark Registration after Larry Harmon Pictures, 32 Idea 327 (1992).

The main problem with the PTO's narrow view of "commerce" is that someone like Hoots, supra note 270, can be excluded from registration and later be penalized. See also, In re Taylor, 133 U.S.P.Q. 490, 491 (Bd. App. 1962) where the Board failed to appreciate that the word "commerce" can mean different things in different statutes.

[n.303]. Section 1051(b)-(d); see also § 1057(c) providing that, contingent upon registration, "the filing of the application. . . shall constitute constructive use of the mark, conferring a right of priority. . . . "Prior to 1988, attorneys often resorted to "token use;" see Blue Bell, Inc. v. Farah Mfg. Co., Inc., 508 F.2d 1260, 185 U.S.P.Q. 1 (5th Cir. 1975).

[n.304]. See supra note 302, but bear in mind that firms with a small effect on interstate commerce are unlikely to attempt to register -- much less appeal.

[n.305]. Sections 1052-54.

[n.306]. Again, definitions are in § 1127; e.g., "trademark" is defined as "any word, name, symbol or device. . . used. . . to indicate the source of goods, even if that source is unknown." See, e.g., Leblanc, 429 F.2d 989, 166 U.S.P.Q. 561 (C.C.P.A. 1970); see also In re DC Comics, Inc., 689 F.2d 1042, 215 U.S.P.Q. 394 (C.C.P.A. 1982).

[n.307]. Section 1112.

[n.308]. Section 1052.

[n.309]. Section 1052(f) provides that five years of exclusive use may be accepted as prima facie evidence of distinctiveness. See also supra note 231.

[n.310]. Sections 1063-64 and 1066.

[n.311]. Section 1051(c) or (d).

[n.312]. Sections 1057(b) and 1115(a).

[n.313]. Section 1058, especially (b). See also § 1065, proviso 3.

[n.314]. Section 1059.

[n.315]. Regarding trademarks as property, compare Hanover Star, 240 U.S. 403, with E. I. duPont de Nemours Powder Co. v. Masland, 244 U.S. 100, 102 (1917) (Justice Holmes: "The word property as applied to trademarks and trade secrets is an unanalyzed expression of certain secondary consequences of the primary fact that the law makes some rudimentary requirements of good faith.").

See also Manhattan Industries, Inc. v. Sweater Bee by Banff, Ltd., 627 F.2d 628, 207 U.S.P.Q. 89 (2d Cir. 1980) (in a contest between two new users over a mark previously used by another, the court refused exclusivity to either).

[n.316]. Such an assignment is invalid; see, e.g., Pepsico, Inc. v. Grapette Co., 416 F.2d 285, 163 U.S.P.Q. 193 (8th Cir. 1969).

[n.317]. See, e.g., Wyatt Earp Enterprises, Inc. v. Sackman, Inc., 157 F.Supp. 621, 116 U.S.P.Q. 122 (S.D.N.Y. 1958).

[n.318]. An unpoliced license is called a "license in gross"; see, e.g., Alligator Co. v. Robert Bruce, Inc., 176 F.Supp. 377, 122 U.S.P.Q. 276 (E.D. Pa. 1959). A licensor may also have to defend product liability suits; but see, e.g., Torres v. Goodyear Tire & Rubber Co., Inc. 857 F.2d 1293 (9th Cir. 1988) (finding no licensor liability).

[n.319]. See, e.g., Alligator, 176 F.Supp. 377, 122 U.S.P.Q. 276.

[n.320]. See, e.g., California Fruit Growers Exchange v. Sunkist Baking Co., 166 F.2d 971, 76 U.S.P.Q. 85 (7th Cir. 1948).

[n.321]. Section 1121.

[n.322]. Section 1115.

[n.323]. Section 1125(a).

[n.324]. Section 1114. Although the case was decided in a different context, i.e., an opposition, duPont, 476 F.2d 1357, 177 U.S.P.Q. 563, lists twelve factors (plus a catchall) for determining likelihood of confusion.

[n.325]. Sections 1116-18.

[n.326]. Section 1115(b)(7); also § 1116: "injunctions according to the principles of equity;" see, e.g., Cameo v. Plough, Inc., 185 U.S.P.Q. 228 (N.D. Ohio 1975). Moreover, at one time a wide range of improper conduct (unrelated to the mark per se) could seriously affect an ability to register, see, e.g., Thomas G. Field, The Fourth Dimension in Labeling. . . , 25 Food Drug Cosm. L. J. 347 and 372 (1970); but see Satinine Societa, 209 U.S.P.Q. 958 (Bd. App. 1980).

See also, e.g., Fuller v. Fuller Brush Co., 595 F.Supp. 1088, 224 U.S.P.Q. 575 (E.D. Wis. 1984) (entertaining case that presents the unusual defense of malicious prosecution).

[n.327]. Section 1127 states, as part of a "definition," that "Nonuse for two consecutive years shall be prima facie evidence of abandonment."

[n.328]. See, e.g., § 1064(c). See also Trademark Clarification Act of 1984, P.L. 98-620, 98 Stat. 3335 (1984), amending § 1064(c). But see Park 'N Fly, Inc. v. Dollar Park and Fly, 469 U.S. 189 (1985).

[n.329]. Section 1115(b)(6).

[n.330]. See also supra at note 257-58.

[n.331]. See supra at notes 271-74.

[n.332]. See, e.g., My-T-Fine, 69 F.2d 76.

[n.333]. Yet, it seems no more so than attempting to predict whether certain conduct will be regarded as negligent.

[n.334]. See, e.g., Application of E.I. duPont de Nemours, 476 F.2d 1357, 177 U.S.P.Q. 563 (C.C.P.A. 1973).

[n.335]. See, e.g., supra at notes 257-58 & 330.

[n.336]. See supra at note 295.

[n.337]. See, e.g., Field (1985), supra note 3, at 85-89 (considering options for protecting a "sound sculpture").

[n.338]. See, e.g., Sears, 376 U.S. 225 and Compco, 376 U.S. 234 (1964). Compare, e.g., Morton-Norwich, 671 F.2d 1332.

[n.339]. See e.g., Field (1985) supra note 3, at 85-89 (examining the options for the creator of a "sound sculpture"). As another interesting example, consider the options for the maker of a new perfume; see How to Buy a Fragrance, Consumer Reports, Dec. 1993, at 765-71.

[n.340]. For recent, longer treatments of similar scope, see Robert C. Dorr & Christopher H. Munch, Protecting Trade Secrets, Patents, Copyrights and Trademarks (1990, with supplements) (342 pages without supplements), Donald S. Chisum & Michael A. Jacobs, Understanding Intellectual Property Law (1992) (unpaginated, but over 1000 pages) or J. Thomas McCarthy, Desk Encyclopedia of Intellectual Property (1991) (385 pages).

McCarthy's book contains definitions of IP terms of art, and I found every arcane term I could think of. Chisum & Jacobs is truly comprehensive, but details were not current even as it was published. The parts of most durability would seem to be the introduction and historical discussions, but I could find nothing comparing and contrasting various options.

Of these, Dorr & Munch seems most useful for practitioners. Yet, as pointed out in a review in 70 Denv. U. L. Rev. 111, e.g., at 114-5 (1992), I regard it as less useful than it could be:

The final chapter, Protecting Software, contains some information tending to serve the ends of how to work with specialized counsel, when to cut corners and how to safely save money. Unfortunately, the discussion is limited and comes too late in the book.

... If future supplements or editions focus attention on securing the most... protection for the least money..., this book could easily become a "must have" for many general lawyers.

[n.341]. See 28 U.S.C. § 1498.

[n.342]. The interests of those who create in comparison with those who later improve patentable or copyrightable subject matter closely resemble those of landlord and tenant, respectively. For example, assuming that both patents are in force, the improvement patentee's rights are subservient to those of the first patentee, but the latter cannot practice technology covered by the improvement patent.

[n.343]. See, e.g., John E. Cribbet, Principles of the Law of Property 4 (1962). There Dean Cribbet observed in part, "[P]roperty can exist in relation to an infinite number of things. . . It is just as true but less obvious, that. . . patents, trademarks, copyrights, and even goodwill can be brought within the ken of property." But, again, consider Justice Holmes' comment quoted supra at note 315.

[n.344]. See supra at note 162.

[n.345]. Consider the situation faced by a maker of X who makes some Y as a by-product. Assume, first, that someone else has a patent on Y. Assume, second, that as much Y as possible is removed from X and destroyed. Is the patent infringed for making Y -- or for selling it?

[n.346]. See, e.g., Belcher v. Tarbox, 486 F.2d 1087, 180 U.S.P.Q. 1 (9th Cir. 1973) and Mitchell Bros. Film Group v. Cinema Adult Theater, 604 F.2d 852, 203 U.S.P.Q. 1041 (5th Cir. 1979).