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Intellectual Property Law: A Brief Introduction

Intellectual property (IP) law comprises a set of exclusive rights to exclude others from making, copying, or using certain intangible creations of the human mind. The U.S. Constitution provides Congress with two powers relevant to IP rights. First, the IP Clause empowers Congress to grant "Authors and Inventors the exclusive Right to their respective Writings and Discoveries" in order "[t]o promote the Progress of Science and useful Arts." Second, the Commerce Clause allows Congress to regulate interstate and foreign commerce. Generally, IP rights are intended to encourage innovation and the spread of knowledge by providing incentives to create new works and generate useful inventions. IP law may also serve other purposes, such as promoting fair competition, preventing consumer confusion, or deterring economic espionage.

The U.S. economy is increasingly knowledge-based, with a growing focus on technology and innovation. A recent study by the U.S. Patent and Trademark Office (PTO) found that IP-intensive industries—such as computer technology, entertainment, apparel, and pharmaceuticals—account for 47 million American jobs and \$7.8 trillion in economic value, representing 41% of U.S. gross domestic product. IP law, given its economic and cultural significance, is thus more important than ever to Congress.

At the federal level, IP includes four main forms of legal protection: patents, copyrights, trademarks, and trade secrets. These legal protections are each distinct, although often confused. Each form of IP protects a different type of intellectual creation, has a different procedure for obtaining rights, and grants the IP owner rights that vary in scope and duration. As a result, each of these different areas of law is best considered separately. This product provides a brief overview of each form of federal IP protection.

Patent Law

Whoever invents or discovers "any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof" may apply to obtain a patent before the PTO. Patents can be obtained on almost any invention made by humans, save for laws of nature, abstract ideas, and natural phenomena. For example, new pharmaceutical drugs are often patented. The key requirements for a patent are that the claimed invention is novel, useful, and nonobvious; that the inventor is the first person to file a patent application; and that the patent application discloses sufficient technical information about the invention to the public.

The process for obtaining a patent before the PTO—called "patent prosecution"—is fairly demanding. The patent application must contain a written specification that describes the claimed invention such that a person skilled in the relevant field is able to make and use the invention. During prosecution, a PTO patent examiner reviews the claimed invention to determine if it is (1) truly novel, useful, and nonobvious; (2) directed at patentable subject matter; and (3) adequately described in the patent application. This process typically involves significant back-and-forth between the putative inventor and the PTO patent examiner, and may take several years before the patent is issued (i.e., granted), or the application is rejected.

If the PTO grants the patent, the patentee has the exclusive right to make, use, sell, and import the invention for a set term of years. Most patents issued today expire 20 years from the date that the application was filed, although the patent term may be extended for certain reasons, such as delays in patent prosecution. Any other person wishing to practice the invention needs permission from the patent holder during this period.

To enforce the patent, the patent holder may sue alleged infringers in federal court and seek injunctions (i.e., a judicial order to cease infringing activity), damages, and other legal remedies. Patents are presumed to be valid, but accused infringers may defend against lawsuits by claiming noninfringement (i.e., what they did was not covered by the patent) or invalidity (i.e., the patent should never have been issued because, for example, the invention was not new).

Under procedures created in 2011, certain patent validity disputes may be heard by the PTO's Patent Trial and Appeal Board's administrative patent judges, as well as in court. In the case of allegedly infringing imports, patent holders may pursue remedies through the U.S. International Trade Commission.

Copyright Law

Copyright grants creators of "original works of authorship" a set of exclusive rights in their creative works. Forms of expression that are copyrightable include literary works (such as books and computer code); musical works and sound recordings; pictorial, graphic, and sculptural works; audiovisual works (such as movies and television); and architectural works. The key requirements for a copyright are that the work is independently created, at least minimally creative, and fixed in some tangible form. For example, an unoriginal collection of facts (such as an alphabetical telephone number directory) or a work copied verbatim from another is not copyrightable. Moreover, copyright does not extend to ideas, processes, systems, discoveries, or methods of operation.

Copyright attaches once a work is created and fixed in a tangible medium of expression (e.g., recorded in a computer file or on a piece of paper). Unlike patents and

trademarks, the copyright holder does not need to apply with the government to obtain a copyright. To sue in federal court, however, American copyright holders must first register their copyright with the U.S. Copyright Office.

Holders of copyrights generally have the exclusive right to reproduce the work, publicly perform and display it, distribute it, and prepare derivative works from it. For most works created today, the copyright does not expire until 70 years after the death of the author. Once the copyright is registered, copyright holders may sue infringers in court to seek injunctions and damages.

"Fair use" is an important limitation on copyright that permits certain socially valuable uses that would otherwise be infringements (e.g., using portions of a copyrighted work in a parody or book review). Fair use is governed by a fourfactor test: courts will consider the purpose and character of the use, the nature of the original work, the substantiality of what was copied, and any market harm from the use. Courts also consider whether the use is "transformative," that is, whether it adds new expression, has a different purpose, and/or alters the original work with new expression or meaning. In addition to fair use, the Copyright Act contains a number of more specific statutory limitations for particular uses, such as for certain uses by libraries, in classroom education, or during religious services.

Trademarks

Trademarks are the third main area of federal IP law. Although a form of IP, trademark protection is not derived from the Constitution's IP Clause. Rather, Congress's power to regulate interstate commerce is the source of authority for federal trademark law. Trademark law seeks to protect consumers from unfair competition by preventing businesses from misrepresenting the source of goods or services, as well as encouraging brands to invest in the quality and consistency of their goods and services. In general, any "word, name, symbol, or device" may be used as a trademark to identify a particular business's goods or services. Familiar examples include brand names and logos, such as NIKE and its "swoosh" symbol.

The availability of trademark protection depends on the distinctiveness of the proposed mark. Generic and deceptive terms may not be registered or protected as a trademark in any case. Descriptive terms (e.g., New York Pizza, Fast Dry Cleaners) and surnames cannot be trademarked unless the term acquires an association with a particular source of a product (so-called "secondary meaning"). Arbitrary or merely suggestive terms may be immediately registered and protected as marks without a showing of secondary meaning.

To obtain a federal trademark, a business is required to register the mark with the PTO. (Limited common law rights are available without registration.) Each registration for a mark is limited to a particular type of good or service. Trademark rights also are available under state law.

Owners of trademarks have the right to prevent other businesses or persons from using similar marks to identify their goods or services, if such use is likely to cause consumer confusion. Like other forms of IP, trademark owners may sue alleged infringers to obtain injunctions and damages in court. Accused infringers may defend on various grounds, including that the trademark is not valid, or that the marks or products involved are too distinct to actually confuse consumers. If properly renewed and maintained, trademark rights may last indefinitely.

Trade Secrets

Like trademarks, Congress's power to protect trade secrets derives not from the IP Clause, but from the Commerce Clause. Trade secrets protect commercially valuable, confidential information. Its subject matter is broad, reaching any form of business, scientific, or technical information that has value from not being generally known or ascertainable to another person (e.g., a competing business). Examples include secret recipes, formulas, financial information, source code, or manufacturing processes. Matters of public knowledge or information generally known in an industry may not be a trade secret.

Until relatively recently, trade secret protection was primarily a matter of state, not federal, law. In 1996, Congress created criminal remedies for certain thefts of trade secrets, such as economic espionage to benefit a foreign government. Later, in the Defend Trade Secrets Act of 2016, Congress created a general civil remedy for trade secret violations. Protection for trade secrets remains available under state law, which has generally similar requirements.

Owners of commercially valuable information need not formally apply with federal or state governments to obtain legal protection for an asserted trade secret. However, the owner must take "reasonable measures" to keep the information secret. For example, an owner may restrict access to the information, require confidentiality agreements of employees who receive the information, or place the information on secure computer systems.

The owner of a valid trade secret may not legally prevent all acquisitions, uses, and disclosures of the information. Rather, federal and state law provide a legal remedy only when a trade secret is "misappropriated." Misappropriation includes acquisition of a trade secret through "improper means," such as theft, bribery, computer hacking, or a violation of a nondisclosure agreement, as well as disclosures knowingly made in violation of a duty to maintain secrecy. Acquiring a trade secret through lawful means, such as reverse engineering or independent discovery, is not a misappropriation.

Owners of trade secrets may sue in court to prevent actual or threatened misappropriations and obtain monetary damages for losses caused by misappropriations. Certain types of trade secret misappropriation carry federal criminal penalties as well, such as the unauthorized appropriation or transmission of a trade secret with the intent to benefit a foreign government. As long as the information remains secret, trade secrets may last indefinitely.

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