



U.S. Intellectual Property

By Mark Harper

With its origin in the U. S. Constitution,¹ intellectual property (IP) law is currently one of the best developed and yet complex legal fields in the country. Four types of IP are recognized and protected by law in the United States: patents, trademarks, copyrights, and trade secrets (inventions, branding, artistic works, and company secrets, respectively, in layman's terms). Each is discussed separately below.

Patents

Patents protect inventions; an invention can be literally "anything made under the sun..."² There are three different types of patents: utility, design, and plant. The most common is a utility patent, which provides protection for a process, machine, manufacture, or composition of matter or a new and useful improvement thereof. The next most common type is a design patent, which

provides protection for an original and ornamental design embodied in or applied to an article of manufacture. Plant patents provide protection for a new and distinct, invented, or discovered asexually reproduced plant.

To obtain a utility patent, an invention must be useful, novel, and nonobvious. The first of these legal requirements—the invention must be useful—is a relatively low standard. For example, a "pet rock" or a simple stick doll can be "useful" as a conversation piece or paper weight. Such a use meets the useful standard.

Novelty is a higher standard in that the invention cannot be found in a single reference or piece of "prior art"—it must be proven that it has never existed before. Prior art can include any tangible media such as another U.S. patent or published patent application, an international patent or patent application, a technical or scientific journal article, an advertisement, a YouTube video, a web page, etc. For example, Inventor A invents a wheel with a hub,

FAST FACTS

U.S. intellectual property includes patents, trademarks, copyrights, and trade secrets.

Patents protect inventions; trademarks help businesses protect their commercial identities (brands); copyrights protect original works of an artist, writer, etc.; and trade secrets protect confidential business information.

a rim, and 12 spokes between the hub and the rim. Inventor B invents a wheel with a hub, a rim, and 10 spokes between the hub and the rim. Per the novelty requirement in U.S. patent law, a wheel with 10 spokes is novel compared to a wheel with 12 spokes. As such, the novelty standard is not typically a major issue or burden to meet when attempting to obtain a patent.

The third legal requirement—nonobviousness—is a relatively high standard in that the invention can be deemed obvious in view of a combination of prior art references. An obviousness rejection is made using a combination of prior art references and is quite common. Revisiting the previous wheel example and with the 12-spoke and 10-spoke wheels being used as prior art, a U.S. Patent and Trademark Office examiner could determine that a wheel with 11 spokes is an obvious variation of the 12-spoke and 10-spoke wheels using the actual wheels as references, and thus a patent may not be allowed. As a patent applicant, you have the opportunity to counter an examiner's obviousness finding. Arguments may include showing unexpected results provided by the invention or that references cited by the examiner actually "teach away" from each other, indicating a lack of motivation to combine the references. However, the obvious standard can be difficult to overcome and often requires data to substantiate the arguments being submitted.

The limits of patent protection are (1) only proper subject matter is patentable, (2) a limited term or life of protection is provided, and (3) the rights or limits of protection are based on the *claims* of the patent. For utility patents, the subject matter is the broadest—protecting a process, machine, manufacture, composition of matter, or a new and useful improvement thereof. However, laws of nature, physical phenomena, and abstract ideas cannot be patented. Plant patents protect newly found plant varieties as well as cultivated spores, mutants, hybrids, and newly found seedlings so long as they reproduce asexually. Tuber-propagated plants and plants found in an uncultivated state are excluded from patent protection. Design patents protect the ornamental design of an

article; they do not protect structure or the utility of an article.

The claims of a patent define the metes and bounds of coverage and the scope of the patent in technical language. Infringement of a patent requires meeting all elements in at least one of the patent's claims. Patent claims can be complex and sometimes challeng-

ing to understand, but are essential to determining the scope of the invention.

The length of protection for utility and plant patents is 20 years from the date of filing the application. For design patents, the length of protection is 14 years from the issuance of the patent.

Patent protection gives the patent owner the right to *exclude* others from making, using, selling, importing, and offering to sell the claimed invention. It is important to note that this scope of protection is only an *exclusionary* right; an issued and enforceable patent does *not* give its owner the right to make, use, sell, import, and offer to sell the claimed invention. For example, Inventor X invents and patents the wheel. Inventor Y, who has seen the wheel, invents the bicycle. Compared to the wheel, the bicycle is useful, novel, and nonobvious, and Inventor Y obtains a patent for his invention. However, since Inventor X's patent excludes others from making, using, selling, importing, and offering to sell the wheel, and since the bicycle has two wheels, Inventor Y cannot make, use, sell, import, or offer to sell the bicycle without Inventor X's permission even though he has a patent on the bicycle. Likewise, Inventor X cannot make, use, sell, import, or offer to sell a bicycle without Inventor Y's permission.

Trademarks

Trademarks provide protection to distinctive words, symbols, or other indicators that identify a source of goods or services. As such, trademark law helps a business protect its commercial identity (brand) by not allowing other entities to use a name, logo, etc. (a "mark") that is "confusingly similar" to its own mark. In addition, trademark law seeks to assist consumers when purchasing goods and services by preventing confusion. By preventing others from copying a source-identifying mark, trademark law may reduce a customer's costs of shopping and making purchasing decisions because "it quickly and easily assures a potential customer that *this* item—the item with this mark—is made by the same producer as



other similarly marked items that he or she liked (or disliked) in the past.”³

The legal requirements of trademark law include that the mark cannot be confusingly similar to another mark for similar goods or services. In addition, it must be “in use” in commerce or there must be an “intent to use” the mark in commerce. Other standards that apply to whether trademark protection is allowed and the relative strength of protection include if a mark is arbitrary and fanciful, suggestive, descriptive, or generic. For example, Starbucks® is considered fanciful whereas Apple® for computers is arbitrary, both of which are provided strong protection. Other such marks include McDonalds®, Amazon®, Nike®, and Kodak®. In contrast, the marks “Apple” for a grower or seller of apples (the fruit) or “Doughnuts” for a doughnut bakery are generic and would not be provided trademark protection.

Between the spectrum of arbitrary and fanciful versus generic marks are suggestive and descriptive marks. A suggestive mark gives an idea of what the product or service is rather than a description and is typically provided relatively broad trademark protection. Some well-known suggestive marks include Greyhound® for transportation services by bus, Mobil® for gasoline service stations, and Chick-fil-A® for restaurant services. A descriptive mark immediately

describes the associated goods or services and is not provided trademark protection unless or until it achieves secondary meaning; that is, from a consumer’s point of view, the mark is associated with the source of a product or service and not the product or service itself. Examples of such marks include *etrade.com*® for financial services, Best Buy® for retail stores, and Spray ‘N Wash® for laundry soil and stain remover.

A federal registration (noted by the ® symbol) is not required to establish rights in a mark, and common-law rights arise from actual use of the mark. In general, first use of a mark in commerce establishes the right to use the mark with similar goods or services, but only in the geographic area where the mark is used. In contrast, a federally registered trademark provides exclusive use of the mark across the country except in geographic areas where a nonregistered mark has first use.

The length of protection provided to a trademark is perpetual as long as the mark is in commercial use, the quality of the mark is maintained, and the mark is not allowed use as a generic term. Also, the scope of protection is the exclusive use of the mark. The limits of protection provided by trademark law include proper subject matter to be “marked,” a limited term for the mark if not properly maintained, and restriction of protection to defined goods or services.

Copyrights

Copyright protection is provided for “original works of authorship fixed in a tangible medium of expression.” For example, a live performance by an artist or musician in itself cannot be copyrighted since it is not fixed in a tangible medium. However, a recording of the live performance is copyrighted at the time of recording. A copyright automatically attaches to the work at the moment an original work of authorship is created and fixed in a tangible medium such as a recording, painting, photograph, piece of paper, etc. Examples of copyrightable subject matter include literary, dramatic, musical, and artistic works such as poetry, novels, movies, songs, computer software, and architecture. However, copyright law does not protect facts, ideas, systems, or methods of operation, although it may protect the way these things are expressed. Also, material without a copyright notice (©) present in the public domain is still subject to copyright protection unless otherwise stated by the owner of the material.

Even though a copyright automatically attaches to a work at the moment it is created and fixed in a tangible medium or expression, an owner can register the work with the U.S. Copyright Office. Registration is voluntary, but a registered copyright is required for an infringement lawsuit to be properly filed in a U.S. court. Furthermore, registration of a work in the U.S. Copyright Office creates a public record of the work and provides its author with a certificate of registration. Registered works may be eligible for statutory damages and attorney’s fees in successful litigation; in other words, actual damages do not have to be proven in a court of law. Finally, if registration occurs within five years of publication, the registration is considered prima facie evidence in a court of law.

The length of protection provided for U.S. copyrights if created by an individual is for the life of the artist plus 70 years. If the work is created as a work for hire, the length of protection is 95 years from the date of publication or 120 years from creation, whichever is shorter. The scope of protection provides the copyright owner the exclusive right to copy, display, perform, distribute, and create derivative works. However, others can use the work for “fair use” purposes; under certain circumstances, brief excerpts of copyright material can be quoted verbatim for purposes such as criticism, news reporting, teaching, and research without the need for permission from or payment to the copyright holder.

Trade secrets

Trade secret protection is provided for confidential business information. A more formal definition of a trade secret

provided by the Uniform Trade Secrets Act and used in the state of Michigan is:

- information, including a formula, pattern, compilation, program, device, method, technique, or process;
- that derives independent economic value, actual or potential, from not being generally known to or readily ascertainable through appropriate means by other persons who might obtain economic value from its disclosure or use; and
- is the subject of efforts that are reasonable under the circumstances to maintain its secrecy.⁴

Famous examples of trade secrets include recipes for Coca-Cola®, Kentucky Fried Chicken®, Krispy Kreme® doughnuts, the formula for the lubricant WD-40®, and the methodology used to create *The New York Times*® Best Sellers list. The length of protection is perpetual as long as the information is kept secret. The scope of protection provides the right to stop others from using the trade secret, but only if the trade secret is improperly taken. Trade secrets can be lawfully obtained by a third party, such as through reverse engineering and inadvertent disclosure of the trade secret by the owner.

Dating back to the U.S. Constitution, the United States has provided legal protection for intellectual property. The types of IP that are legally protected in the U.S. today are patents, trademarks, copyrights, and trade secrets. The legal requirements, length of protection, scope of protection, and limits of coverage are distinct for each type of IP, as is the type of property that is protected. ■



Mark Harper brings impressive academic credentials and practical knowledge to Dinsmore’s Intellectual Property Department. He obtained multiple degrees in metallurgical engineering before earning his PhD in materials science and engineering. He also holds his own patent, based on his doctoral research. Before attending law school, Mark worked as a research engineer in the metals industry and served as the principal investigator on a \$2.9 million research and development project.

ENDNOTES

1. US Const, art I, § 8: “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.”
2. *Diamond v Chakrabarty*, 447 US 303, 309; 100 S Ct 2204; 65 L Ed 2d 144 (1980).
3. *Qualitex Co v Jacobson Products Co, Inc*, 514 US 159, 164; 115 S Ct 1300; 131 L Ed 2d 248 (1995).
4. 18 USC 1839(3).