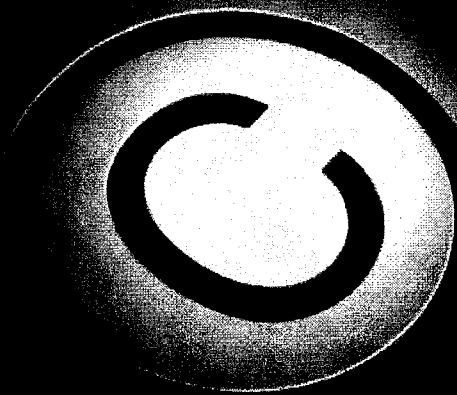


INTELLECTUAL PROPERTY



Protecting Your Most Valuable Asset: Intellectual Property

Roger Braunfeld and Thomas O. Wells

As a company grows, protecting its intellectual property could be key to its valuation. Learn some basics about trademarks, patents, copyrights, and contracts.

During this time of entrepreneurship, many of you, no doubt, have transitioned from an employee to a start-up owner racing to develop the next new thing. Building an organization, managing and motivating people, and finding customers and investors are all difficult and important. But the

most important thing you could do for your new-economy company is to protect your intellectual property. Without hard assets, protected intellectual property could ultimately determine your company's valuation and even prevent a competitor

from entering the same market.

INTELLECTUAL PROPERTY PROTECTION

Companies create intellectual property daily, and the ability to protect it directly affects its value. There are four main types of intellectual property to consider protecting:

- trademarks and service marks,
- copyrights,
- patents, and
- trade secrets.

We also discuss contractual protections that apply to employing IT staffers, consultants, and subcontractors.

Trademarks and service marks

Trademark protection can be very complex, largely because a party can have both common-law (including state) and federal trademark protection. An Internet presence further complicates trademark law, because it potentially throws you into the international arena (see the "Jurisdiction and the Internet: Am I Really Everywhere?" sidebar).

Trademarks (or service marks) are words, names, symbols, or devices used by manufacturers of goods and providers of services to

- identify their goods and services, and
- distinguish their goods and services from those manufactured and sold by others.

For example, Xerox Corp. uses the trademark XEROX to identify its copy machines and to distinguish its machines from other vendors' copy machines.

There are four categories or marks:

- *Generic/Descriptive.* Identifies or describes the qualities, ingredients, or characteristics of a

Inside

**Jurisdiction and the Internet:
Am I Really Everywhere?**

**Employee or Independent
Contractor?**

Jurisdiction and the Internet: Am I Really Everywhere?

Because trademark law has both local and international implications, this is a good place to talk about the Internet and jurisdiction. You may ask why this topic is important. Well, to be quite blunt, once on the Internet, you are arguably everywhere and could be subject to laws wherever "everywhere" interprets you to be! Here are some basic principles to help keep you out of trouble.

First, if you know that your activity is illegal in a particular jurisdiction (whether Tibet or Pennsylvania), consult with an attorney. If you sell something within a locality via the Internet, you are generally subject to the laws of that locality. If you are collecting information about someone within a locality, you may also be subject to the laws of the locality where the individual lives or where the information was collected. This point is especially relevant in Europe as a result of the European Data Directive, which makes it illegal to collect certain types of personal information about Europeans (see www.privacy.org).

If you are merely posting information and nothing else, you may be OK, but then again that depends on the information you are posting. For example, if you post something that is illegal to post in another country (lewd photographs, for example), you may be in trouble. Essentially, the Internet has created many issues related to jurisdiction because of the mere fact that you are arguably everywhere when you use the World Wide Web. You should consult an attorney to understand these issues and help you mitigate potential exposures. Unfortunately, there is no one answer to these types of questions in light of the fact that this is a new medium, and legal systems are constantly changing—locally, regionally, nationally, and internationally.



product (such as Aspirin, Cellophane, and Shredded Wheat).

- *Suggestive*. Suggests, or describes a quality of, a product (as with Citibank and Automatic Radio).
- *Arbitrary*. The meaning is in common usage but is without meaning when applied to a product (for example, Camel).
- *Fanciful*. Has no meaning except as a trademark (as with Kodak and Clorox).

Federal law gives the greatest protection to fanciful marks. Generic/descriptive marks have limited, if any, protection under the law: A trademark that merely describes a class of goods rather than distinguishing the trademark owner's goods from goods provided by others is ordinarily not protectable.

A court may require further showing of acquired distinctiveness (market recognition) to grant protection for descriptive or suggestive marks. In some cases, a trademark owner can lose trademark protection if its trademark becomes a generic term that fails to distinguish the trademark owner's goods.

For example, KLEENEX originally identified that company's tissue and distinguished it from that of other vendors. Over time, when people needed a tissue, they called for a Kleenex, using the word as the defined term for a tissue. The term Kleenex risked losing trademark protection, as it became a generic term for tissue instead of a unique source identifier. As with Kimberly-Clark Corp. and its mark KLEENEX, many companies spend millions of advertising dollars each year to ensure that their trademarks do not become defined terms.

A trademark also represents something that the mark's owner intends to protect: goodwill. Any person who uses a trademark in a way that is likely to cause confusion or dilute the mark's meaning is a potential infringer. Trademark owners can obtain injunctions and money damages against the confusing use of their trademarks by others.

For example, consider a (fictitious) Privacy Co. that sells a line of privacy tools under the trademark Privacy Protector. If Steal Your Information Co. subsequently starts selling privacy tools under the Privacy Protector trademark, purchasers may think that Steal Your Information's products are related to Privacy's products. Steal Your Information is infringing on

Privacy's trademark. Likewise, if Steal Your Information uses the confusingly similar mark Privacy Protection, it may be liable for infringement.

When you pick a trademark, first make sure that nobody else is using it. One way to determine if anyone is using a trademark is to search the US Patent and Trademark Office (USPTO) Web site (<http://www.uspto.gov>). The best advice, however, is to obtain a professional clearance search from a reputable search company and have an attorney analyze the results. The USPTO Web site is neither complete nor current.

You can also file an application for trademark registration on the USPTO's site. The major benefit of filing for a federally protected trademark is that you can obtain exclusive trademark protection in all 50 states, provided nobody has filed for the mark and nobody already uses the mark within the US. Before you receive the federal registration, you can use TM for goods and SM for services to show that you are protecting the mark. Once you receive federal registration, you can use ®.

Here are a few trademark tips:

- If you want to protect goods or services with a trademark, post it with a TM or SM to show the world that this is your mark, and you want to protect it as such.
- If you think your trademark may not be registrable (for example, because it is too descriptive or could be considered confusingly similar to another mark), file multiple trademarks in association with a product to give yourself more options.

Copyrights

In IT, copyright law is important for software and multimedia developers so that they can control unauthorized exploitation of their works and avoid infringing on copyrighted works owned by others. Copyright law protects the tangible or fixed expression of an idea, not the idea itself (to protect the idea itself, you must pursue trade secret or patent protection). For example, you cannot copyright the Grand Canyon, but you can copyright your original picture of the Grand Canyon and claim the benefit of copyright law for your original picture.

Likewise, Inventor Co. cannot copyright its original idea to run business processes through a network of computers and servers. But it can copyright the program to run business processes through a network of computers and servers.

Two circumstances let Inventor file for copyright:

- the proposed copyrightable work itself is original, and
- the company has fixed the original idea into a concrete form of expression—the written program.

Copyright law protects *works of authorship*, which include

- *Literary works.* Novels, nonfiction prose, poetry, newspaper articles and newspapers, magazine articles and magazines, computer software, software documentation and manuals, training manuals, other manuals, catalogs, brochures, ads (text), and compilations such as business directories.
- *Musical works.* Songs, advertising jingles, and instrumentals.
- *Dramatic works.* Plays, operas, and skits.
- *Pantomimes and choreographic works.* Ballets, modern dance, jazz dance, and mime works.
- *Pictorial, graphic, and sculptural works.* Photographs, posters, maps, paintings, drawings, graphic art, display ads, cartoon strips and cartoon characters, stuffed animals, statues, paintings, and works of fine art.
- *Motion pictures and other audiovisual works.* Movies, documentaries, travelogues, training films and videos, television shows, television ads, and interactive multimedia works.

- *Sound recordings.* Recordings of music, sound, or words.

- *Architectural works.* Building designs, whether in the form of architectural plans, drawings, or the constructed building itself.

You don't have to register with the Copyright Office to have a copyrighted

work. The work just has to be original and expressed in a fixed form. Nevertheless, registration with the Copyright Office (<http://www.loc.gov/copyright>) is strongly recommended. You must register your copyright before you can file an infringement suit and gain all the protection and benefits of federal law, including the remedy of statutory damages.

There is a nominal fee to register a copyright. The use of a copyright notice is optional for works distributed after 1 March 1989. A copyright notice can take any of the following three forms:

- © followed by a date and name;
- "Copyright" followed by a date and name; or
- "Copr." followed by a date and name.

A copyright owner has five exclusive rights in the copyrighted work:

- The *reproduction right* lets the owner make copies of a work.
- The *modification right*, also known as the derivative-works right, concerns modifying a work to create a new or *derivative work*.

In IT, copyright law is important for software and multimedia developers.

INTELLECTUAL PROPERTY

- A *distribution right* lets the owner publicly sell, rent, lease, or lend copies of the work.
- The *public-performance right* applies mainly to live performances.
- The *public-display right* lets the owner publicly show a copy of the work directly or by means of a film, slide, or television image.

In the case of a motion picture or other audiovisual work, showing the work's images out of sequence is considered "display." Despite these stated rights, a copyright owner has no recourse against another person who, working independently, creates an exact duplicate of a copyrighted work. The independent creation of a similar work or even an exact duplicate does not violate any of the copyright owner's exclusive rights.

Furthermore, you cannot copyright facts. There is also a doctrine of *fair use* that all copyright owners submit to. It permits certain uses—mainly educational—of your copyrighted work. You should consult an attorney before taking action against an infringement.

US copyright owners automatically receive copyright protection in all countries that are parties to the Berne Convention for the Protection of Literary and Artistic Works, or parties to the Universal Copyright Convention. Most countries belong to at least one of these conventions. Members of the two international copyright conventions have agreed to give nationals of member countries the same level of copyright protection they give their own nationals. This is very good in light of the Internet's international implication and the emerging technologies related to it. You may want to search available databases to figure out if copyright law protects a particular work.

Patents

Patents are the most favorable form of ownership in intellectual property protection. A patent, unlike a copyright, protects the idea or invention itself and not just the idea's expression. Furthermore, from the time the patent issues until 20 years after the patent application was filed, the patent owner has the right to exclude others from making, using, or selling the invention. Patent law stimulates invention by allowing people to innovate without fear of their inventions being stolen.

Patents have a downside in that filing a patent application exposes your idea to the world for review, scrutiny, and copy. Also, although 20 years may seem like a long time, it will eventually expire, letting other companies copy and use the patented work. For example, RSA Security Inc.'s original public-key encryption patent, granted in 1983, expired on 20 September 2000.

Individuals can file for different types of patents—utility (business processes, for example), design, and plant. To qual-

ify for a utility patent, an invention must be new, useful, and "nonobvious." For a design patent, a design must be new, original, and ornamental. For plant patents, the subject matter must involve plants. Basically a patent must be novel or unique. For example, you cannot patent a "law of nature."

You file patent applications with the US Patent and Trademark Office (<http://www.uspto.gov>). To obtain patent protection, your application must demonstrate that the invention meets stringent patent standards. A good first step is to search the USPTO's database and other databases for similar patents. You'll want some idea of how novel your invention is before starting a

patent application. The process is expensive and time-consuming, generally taking at least two years. Although you can file a patent application yourself, the process is very complex. You should consider using an experienced patent attorney or patent agent.

Many inventors first file a *provisional patent* before they undergo the rigors of a full-fledged patent application. A provisional patent application lets you file your invention in secrecy and gives you a year to figure out if your invention is patentable. You must try to be as broad as possible in describing a provisional patent so that it covers the invention for which you eventually intend to file a patent application. The disadvantage of a provisional patent is that it will slow the final patent's review and issuance.

Once the government grants a patent, you may still lose the protection it provides. The validity of an issued patent is subject to challenge in an infringement proceeding. Someone challenging your patent can assert that your patented invention was not novel or nonobvious. In a patent infringement suit, it is not unusual for the courts to determine that the USPTO made a mistake in granting the patent. In this case, you lose your patent protection, and the whole world can then freely use your invention.

One interesting Internet model is BountyQuest.com, which awards a prize of \$10,000 to anyone who can produce *prior art* invalidating a patent because it is not novel. Through BountyQuest.com, companies challenging a patent can request that other parties provide prior art to invalidate the challenged patent. These companies post a bounty of \$10,000, and also pay a posting fee of \$2,500 to the Web site. This model will make it more difficult (and costly) for entrepreneurs to defend a patent.

There are certain do's and don'ts you should know regarding patents. You should always speak with an attorney before doing anything—*anything*—with a potentially patented idea. For example, entrepreneurs should consider filing for a provisional patent before speaking to potential investors who do not execute a confidentiality agreement. Why? Because selling or commercially using the idea before filing for any type of patent essentially negates their

Patents are the most favorable form of ownership in intellectual property protection.

ability to claim international patent protection. Furthermore, entrepreneurs have one year from the date they sell or commercially gain from an idea to file for a US patent. After a year, they forever lose their ability to claim US patent protection for that idea. Finally, an inventor generally has 18 months from the filing of a US patent application before the information in that application is made available to the public. You can avoid the public disclosure of the information contained in the application (before the patent is or is not granted) by making a certification when filing the application, saying you wish to keep the information private. You should seek experienced patent counsel to discuss such matters.

After consulting with an attorney, you may conclude that obtaining a patent is possible, but that it would be indefensible, or that you could not afford to defend it. In this case, it may be worthwhile to explore protecting your idea through trade secret law.

Trade secrets

Simply put, a trade secret is any information that is valuable, that is not generally known, and that you have kept secret. Courts have used the following six factors to determine the existence of a trade secret:

- the extent to which those outside your company know this information,
- the extent to which your employees know the information,
- the extent of measures you've taken to guard the information's secrecy,
- the information's value (commercial advantage) to you and your competitors,
- the effort or money you've expended in developing the information, and
- the ease with which others could acquire the information.

Unlike trademarks, copyrights, and patents, trade secrets are protected only under state law. Trade secret protection attaches automatically when the owner keeps valuable information secret. Common means of protecting trade secrets are through contracts such as nondisclosure agreements or employment agreements. You should scrutinize such contracts to ensure that you don't lose trade secret protection.

Some examples of information that can be protected by trade secret include customer lists, designs, instructional methods, manufacturing processes, document-tracking processes, inventions, and formulas. For example, the formula for Coke is still considered a trade secret.

Trade secret law can protect inventions and processes that may not be suitable for patent. Before obtaining a

Trade secret law can protect inventions and processes that may not be suitable for patent.

patent, patent applicants generally rely on trade secret law to protect their inventions while the patent applications are pending. One advantage of trade secret law over patent law is that a patent expires after 20 years whereas trade secret protection endures as long as the owner meets general requirements for protection (value and secrecy).

Owners lose trade secret protection if they fail to take reasonable steps to keep the information secret. Trade secret law does not protect generally known information. If you obtain a patent that the courts subsequently invalidate, you cannot claim the benefit of trade secret protection, because that

invention or process is no longer a secret. When you have a trade secret, you have the right to prevent others from misappropriating and using it. Industrial espionage is a common form of trade secret misappropriation.

CONTRACTUAL PROTECTION

The IT professional turned entrepreneur must also understand how to contractually protect herself and her company. (For samples of legal text in contracts, see <http://computer.org/itpro/it2001/extras/f2011x1.pdf> on the *IT Pro* Web site.) For example, a software entrepreneur may consider building a prototype of her new technology to raise money to get something to market. This direction gives the entrepreneur her first major decision: Hire employees and build the prototype in-house, or hire a software development firm. Significant speed to market and cost concerns underlie this decision. The entrepreneur must address contractual protections for either situation.

Work-made-for-hire agreements

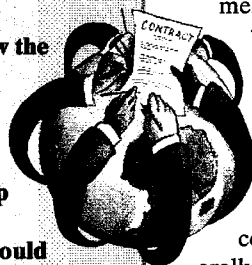
In building the prototype, the entrepreneur must obtain strong work-made-for-hire and confidentiality agreements from those working on the project. The general rule under copyright law is that the work's creator owns the work. In this case, who is the creator: the employer who tells you to create the work, his employees, or an independently hired company/individual? A work-made-for-hire relationship is a major exception to this rule. In the case of a work made for hire, the employer or other person for whom others prepared the work is the work's creator. Unless the parties have expressly agreed otherwise in a written, signed instrument, the employer or person for whom others prepared the work owns all of the rights related to the project.

Work made for hire applies to independent contractors and nine categories of work specified in the Copyright Act. Essentially, there are two types of workers: employees and independent contractors. Work created for the employer by an employee working within his scope of employment will generally be the employer's intellectual property, although there is a patent exception: If the work's creation

Employee or Independent Contractor?

In 1989, the US Supreme Court resolved some of the confusion surrounding the differences between an employee and an independent contractor. The court concluded that "common-law agency principles" applied for determining whether an employee or an independent contractor prepared the work. The court enumerated the following factors to determine whether the creator is an employee or independent contractor:

- the hiring party's right to control how the work was accomplished,
- the skill required,
- who provided the materials and tools,
- where the work was performed,
- the duration of the relationship between the parties,
- whether or not the hiring party could assign additional projects to the hired party,
- the extent of the hired party's discretion over when and how long to work,
- the payment method,
- who hired and paid assistants for the project,
- whether the work was part of the hired party's regular business,
- whether the hiring party is in business,
- whether the hiring party pays employee benefits, and
- the hired party's tax treatment.



falls outside the scope of employment, the employee may own the intellectual property. This issue often arises with university professors. However, most colleges and universities now have their professors sign work-made-for-hire agreements to ensure that the university owns the intellectual property produced by the professor.

The independent contractor issue is a little trickier. In order for the person who engages the independent contractor to own the intellectual property,

- the parties must agree in writing to consider the work to be created a work made for hire, and
- the proposed work must constitute one of the enumerated categories of work as defined in the Copyright Act.

Categories include contributions to a collective work, translations, supplementary works, compilations, instructional texts, tests, answer materials for a test, and atlases. In

the absence of a signed written agreement, the independent contractor owns the property he creates. In the absence of an agreement, the person engaging the creator's services argues that the creator is an employee, whereas the creator argues that he is an independent contractor. In the US, the law considers several criteria in distinguishing between an employee and an independent contractor; for a list, see the "Employee or Independent Contractor?" sidebar. The key is to avoid this issue, by hiring both employees and independent contractors pursuant to a work-made-for-hire agreement.

Confidentiality agreements

As discussed earlier, the lack of a confidentiality agreement can be fatal to the entrepreneur's protection of trade secret intellectual property. You should obtain confidentiality agreements from employees, consultants, independent contractors, and strategic partners. Prospective investors are the only people that probably will not sign a confidentiality agreement—another reason to at least file for a provisional patent. An agreement with employees, consultants, and independent contractors will generally differ from that with strategic partners.

Non-compete and non-solicitation agreements

Non-compete and non-solicitation agreements are also important tools for the entrepreneur. Non-compete agreements prevent your workers from working with a competitor. The rules for enforceability vary by state. However, a general principle is that the covenant not to compete should specifically define the business it prohibits the worker from working in. It should also define the term of the non-compete (typically, the duration of employment plus 6 months) and the geographical restrictions. State law controls how long a non-compete can remain in effect. With the Internet, geographical restrictions should be less important.

Non-solicitation agreements prohibit a former worker from going after your current workers or your existing or potential customers. These provisions are more common than non-compete agreements and should generally be part of all employment agreements.

Software development agreements

If you elect to initially develop software by hiring a software development firm, the contract should include certain provisions. First, agree on a budget. Poorly managed software development can quickly spin out of control with expenditures, so the entrepreneur should approve and execute all change orders. Software development agreements should prohibit the information disclosure by the development firm and provide the work-made-for-hire language discussed earlier.

On the other side of the fence, the software development firm will want to carve out the future use of generic code. Generic code is reusable software that is not peculiar to the entrepreneur's project. So the entrepreneur should get a broad license to use this generic code.

Also, the agreement should prevent the software development firm from working for a competitor during the engagement and for a certain period of time afterward. Be wary of provisions that grant the software development firm ownership of the software under development until you make the last payment. This provision can cause substantial problems if a billing dispute arises, or if the software firm files for bankruptcy and the bankrupt trustee claims an ownership interest in such software.

One major problem with developing software through a software development firm is control over intellectual property. Although entrepreneurs can have work-made-for-hire and confidentiality agreements with the software firm, they will probably not have such agreements with each programmer that works on the project. If the development firm has significant turnover or downsizes, it will be difficult to protect the improper disclosure of intellectual property by these former employees. Therefore, one suggestion is to use the software development firm to quickly build a prototype or software foundation, but add the bells and whistles in-house with your own employees.

One final note: As with all professional service firms, software developers have some great programmers and some bad ones. Although the software development firm will resist, entrepreneurs should push for a provision that lets the entrepreneurs veto the use of certain programmers. For example, a software development firm could use a large software development contract as a training ground for new employees. This training-ground environment can cause the budget to spin out of control and delay the software's development.

There are other contracts that entrepreneurs need. These include agreements for stock options, subscriptions for investors, Web site hosting, and office space leases. The Internet offers many samples of these agreements—for example, see <http://www.b4blaw.com>; this site's start-up and small business section includes numerous agreements and sample memos.

If you are an entrepreneur, or are thinking about becoming one soon, you need to understand how to protect your intellectual property and business. You must obtain this protection through a combination of governmental filings, state and federal laws, and contracts. Because intellectual property can be a new-economy company's only valuable asset, you should constantly evaluate and implement such protection. ■

Roger Braunfeld is an attorney with Blank Rome Comisky & McCauley LLP in the Emerging Business Group. (Blank Rome provides legal advice on various issues, including

business, technology, intellectual property, securities, and venture capital.) Contact him at Braunfeld@blankrome.com.

Thomas O. Wells is CEO and cofounder of b4bpartner Inc., a company that provides enabling technology to financial institutions and Internet vertical markets for the secure preparation, execution, delivery, and tracking of electronic agreements. He is a member of the bar, a board-certified tax law lawyer, and a certified public accountant in Florida. Contact him at twells@b4bpartner.com.

Check it out!

CISE

CISE PORTAL

COMPUTER.ORG/CISEPORTAL

**A comprehensive,
peer-reviewed
resource for
the scientific
computing field.**

**Areas of
expertise include**

- Astronomy
- Chemistry
- Visualization
- Signal Processing
- Professional Resources

and more...