

Intellectual Property

I. Differences Between intellectual property (IP) and tangible (physical) property (TP)

- A. Tangible/Intangible Type/Token: Physical property yields control of a particular tangible item while intellectual property ranges over entire classes of things.

For example:

tangible property = cars, computers, land, paper, factories, etc.

intellectual property = ideas, theories, movies, plays, books, paintings, processes of manufacture, music, computer programs, etc.

- B. Excludability: Both TP and IP can be excluded from others — for example, I can exclude you from using my car and I can also exclude you from using my computer program. But in one sense IP cannot be excluded. Once the ideas are disclosed, once they enter the minds of other people, the ideas can almost never be corralled again.
- C. Non-rivalrous consumption: My using and "consuming" an intellectual work does not interfere with your using and consuming it. Take, for example, my recipe for spicy Chinese noodles. I can use the ideas to make dinner and so can you. This is not the case for most physical property. My use of a computer excludes your concurrent use.
- D. Zero-Sum Differences: TP seems to be zero-sum while IP does not. If I own a car then there is one less car for others to use — my gain is their loss (the benefits and losses sum to zero). The amount of physical stuff available for use is finite, so if I am using some physical item that means that everyone else cannot.

Intellectual property does not appear to be zero-sum. My having, using, and consuming an intellectual work does not mean that others cannot also use the work. My gain does not necessitate their loss.

- E. The Commons: The commons is characterized as that pool of items that are available for acquisition and exclusion. The physical property commons includes all the unclaimed land and tangible goods (for example, the moon). Crudely, the TP commons is all the stuff that is currently unowned.

The intellectual property commons is similar in that it includes all of the unowned ideas that exist or will exist. The IP commons, however, includes currently (privately) owned intellectual works — two individuals can own the same set of ideas.

Discovered IP and created or invented IP

II. Copyrights, Patents, Trade Secrets, and Moral Rights

A. Copyright: The domain of copyright is expression. Section 102 of the 1976 Copyright Act determines the subject matter of copyright protection.

□ 102: (a) Copyright protection subsists, in accordance with this title, 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: literary works; musical works, including any accompanying words; dramatic works, including any accompanying music; pantomimes and choreographic works; pictorial, graphic, and sculptural works; motion pictures and other audiovisual works; sound recordings; architectural works; and computer software.

1. The Copyrights: There are five exclusive rights that copyright owners enjoy and three major restrictions on the bundle. The five rights are, the right to reproduce the work, the right to adapt it or derive other works from it, the right to distribute copies of the work, the right to display the work publicly, and the right to perform it publicly.
2. The Copyright Restrictions: Each of these restrictions limits the rights that copyright holders enjoy.
 - a. The idea/expression distinction — copyright protects expressions, not ideas. So, Einstein may copyright his article explaining general relativity, but he cannot copyright the ideas that make up the theory. If you expressed his theory in your own words you may be guilty of plagiarism, but you would not violate a copyright.
 - b. The fair use rule — the copyrights are limited in that even copyrighted expression can be used without permission if the use is non-profit, educational, part a news story, etc.
 - c. Limited Duration — all five copyrights lapse after the lifetime of the author plus fifty years.

B. Patents: Patent protection is the strongest form of protection, in that a twenty-year exclusive monopoly is granted over any expression or implementation of the protected work. The domain or subject matter of patent law is the invention and discovery of new and useful processes, machines, articles of manufacture, or compositions of matter.

1. In return for public disclosure and the ensuing dissemination of information the patent holders is granted the following rights: the right to make; the right to use; the right to sell the patented item, and; the right to authorize others to sell the patented item.

Unlike copyright, patent law protects the totality of the idea, expression, and implementation. Moreover, the bundle of rights conferred by a patent exclude others from making, using, or selling the invention regardless of independent creation. For twenty years the owner of a patent has a complete monopoly over any expression of the idea(s).

- C. Trade Secret: A trade secret is almost unlimited in terms of the content or subject matter that may be protected and typically relies on private measures, rather than state action, to preserve exclusivity.

A trade secret is any information that can be used in the operation of a business or other enterprise and that is sufficiently valuable and secret to afford an actual or potential economic advantage over others.

As long as certain definitional elements are met, virtually any type of information or intellectual work is eligible for trade secret protection. It may be a formula for a chemical compound, a process of manufacturing, a method of treating or preserving materials, a pattern for a machine or other device, or a list of customers.

An intellectual work is not a secret if, it is generally known within the industry, it is published in trade journals, reference books, etc., and, it is readily copyable from products on the market.

If the owner of a trade secret distributes a product that discloses the secret in any way, then trade secret protection is lost. Imagine that Coke's secret formula could be deduced from a chemical analysis of a sample. If this were the case, then Coke Inc. would lose trade secret protection for its recipe.

D. Moral Rights: Continental Systems of Intellectual Property

Article 6 *bis* of the Berne Convention articulates the notion of "moral rights" that are included in continental European intellectual property law. It says,

Independently of the author's economic rights, and even after the transfer of the said rights, the author shall have the right to claim authorship of the work and to object to any distortion, mutilation or other modification of, or other derogatory action in relation to, the said work, which would be prejudicial to his honor or reputation.

The doctrine protects the personal rights of creators, as distinguished from their economic rights, and is generally known in France as "droits morales" or "moral rights." These moral rights consist of the right to create and to publish in any form desired, the creator's right to claim the authorship of his work, the right to prevent any deformation, mutilation or other modification thereof, the right to withdraw and destroy the work, the prohibition against excessive criticism, and the prohibition against all other injuries to the creator's personality.

III. Barlow Summary: "The Economy of Ideas"

John Barlow of the Electronic Frontier Foundation argues that the traditional legal institutions of copyright and patent cannot accommodate the "galloping digitization of everything not obstinately physical." Rather than trying to "patch" or "retrofit" these legal institutions, Barlow claims that digital property must be protected by moral norms and new technological mechanisms such as encryption.

Table 1.1 Systems of Property

Property regime	Subject matter	Restrictions on subject matter	Rights conferred on property holders	Limitations on rights
Copyright	expression: writings, photos, music, computer software	fixation, originality, nonutility	rights to: reproduce, adapt, distribute copies, display, and perform publicly	limited term: rights lapse after author's lifetime plus 50 years, allows independent creation, fair use, first
Patent	inventions, processes, compositions of matter, articles of manufacture	usefulness, novelty, nonobviousness	exclusive rights to: make use of, sell, and produce	limited term: rights lapse after twenty years, excludes independent creation
Trade secret	expressions, inventions, processes, compositions of matter, articles of manufacture, words, ideas	secrecy, competitive advantage	rights to: use, manage, derive income, capital, and no term limits, rights against	does not exclude independent creation
Trademark	words, symbols, marks, or combinations thereof	common use restriction (i.e., generic or merely descriptive symbols are excluded)	exclusive rights to: use, manage, security, transmissibility (no term limits on	no limitations on rights so long as the word or symbol does not become generic
Law of ideas	ideas or collections of ideas	novel and original, mature or concrete, misappropriated	rights to: use, manage, derive income, security, transmissibility, and no term limits	owner's rights lapse when idea becomes common knowledge; does not exclude
Tangible/ physical property	individual physical or tangible items	separable or distinctness, dangerous weapons, hazardous materials	full ownership rights, including liability to execution	eminent domain, taxation on income, inheritance tax