The Paths of IP

Notes to the Chart

1. The underlying four-part table, commonplace in economics texts, classifies goods (and by extension, services) according to two criteria. If access to a good can be limited, such as by locks or by law, it qualifies as excludable. If consuming some of a good leaves less for others, it qualifies as rivalrous in consumption.
   a. Private goods, being excludable and rivalrous in consumption, include such things as apples, which can be protected from unwanted consumption and once consumed no longer exist for others to eat.
   b. Toll goods (sometimes called club goods), being excludable and non-rivalrous in consumption, include such things as turnpikes. They can be fenced off yet typically provide more capacity than consumers can use up.
   c. Common goods, being non-excludable and rivalrous in consumption, include such things as a town green, which remains open to all users even though each person's use leave less for others (thus inviting "tragedy of the commons").
   d. Public goods, being non-excludable and non-rivalrous in consumption, include such things as national defense, which protects all citizens regardless of whether they pay or how many they number.

2. The overlaying arrows show how the law changes various sorts of IP from one sort of good into another.
   a. The symbols protected by trademark law suffer rivalry in consumption because unfettered use degrades their ability to distinguish one party's goods or services from another's. Trademark law makes the use of such symbols excludable.
   b. The expressions and inventions covered by copyrights and patents qualify as non-rivalrous in consumption because they cannot be used up. They typically originate in private, excluded from unwanted use, but once made public they require the help of the law—copyright law and patent law—to be made once more excludable.
   c. Trade secrets cover much the same subject matter as patents, and are likewise non-rivalrous in consumption. Confidentiality makes trade secrets excludable; the law helps to ensure that they remain so.