"Intellectual Property"

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Intellectual Property Overview

- Legally: patents, copyrights, trade secrets, trademarks
- Property = Rights.
- Knowledge, Know-How, Discoveries, Inventions, Music, Designs, Brands, ... are not property or property rights.
- What is IP? How do you get it?

Patents

- *Right to exclude* others from making, using, offering for sale or selling
- Given in exchange for: *teaching* to the public *all* necessary knowledge to build or apply
- Right to exclude may be bought, sold, assigned, licensed, on any terms.

Copyright

- Right to prevent reproducing, translating, performing, ... a work
- Given when: fixed and published
- Therefore: software is copyrighted.
- Right may be bought, sold, assigned, licensed on any terms.
- Licenses are NOT property rights, but terms of a contract.

Trade Secrets, Trademarks

- Trade Secrets: Right to keep secret certain information, whose economic value derives from keeping it secret.
- MIT doesn't create them.
- Commercial entities use them all the time, and treat them as valuable property rights.
- Trademarks: right to exclude others from using names in business.

Value of Patents and Copyrights

- Who controls who can practice, copy, translate, or perform, how, where, when?
- Right to use can be licensed
- Right to license can be bought and sold

Value to Creators

- Share of licensing royalties
- Your rights as MIT students
- Your rights as MIT employees
- Your rights as scientists and engineers

Free Publication and Creative Licensing

- Inventions can be published = free grant to public
- Copyrighted Works cannot be given freely, must be licensed explicitly.
- Open licenses (GPL, MIT, ...) can create more value than exclusive ones by creating "standards" that create joint value, and requiring "payment" (in the form of required actions) that induce users to create additional value.

Some strategies

- Defend dominant product position
- Weaken/disrupt commercial opponents
- Protect outcome of long, expensive rollout
- Licensing for revenue
- Return for creating public good: standards
- Licensing for litigation returns (called "trolls")
- Defend entrepreneurial venture while weak

Strategy guides choices

- What patents to file?
- How to license patents and copyrights?
- How to hold and exchange trade secrets?
- How to exercise rights sue, threaten, partner, outsource to interested parties? *counterintuitive*
- How to defend against assertions of rights sue, threaten, partner?