## Copyright and P2P

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### Copyright

- Covers original works of authorship, fixed in a tangible medium of expression
  - Literary works (including computerprograms)
  - M usic works, including lyrics
  - Dram atic works, including musical accompaniment
  - Pantom in es and choreographic works
  - Pictorial, graphic, and sculptural works
  - M otion pictures and other audiovisual works
  - Sound recordings
  - Architecturalworks

## Copyright

- Doesnotcover
  - Titles, names, shortphrases, slogans
  - Ideas, procedures, m ethods, system s, processes
  - Concepts, principles, discoveries, or devices
- Lasts a very long time
  - Life of author, plus 70 years

# Exclusive Rights of © Owner

- W ithout perm ission of © owner, illegal to:
  - Reproduce the work in copies or phonorecords
  - Prepare derivative w orks
  - D istribute copies or phonorecords to the public
  - Perform the work publicly
  - For audio recordings, to perform publicly by digital audio transmission
- Public is free to make other uses

#### FairUse

- Exception for socially beneficial uses, which would otherwise infringe
- Four-factor test to determ ine whether a use is fair:

- Transform attive use: parody, com m entary, education,...

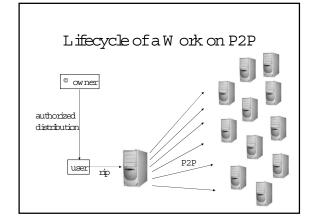
- Nature of the work
- Nature of the use (commercial, educational, commentary, parody, etc.)
- $\mbox{\mbox{\sc A}}\mbox{\sc m}$  ount of w ork used, in relation to w hole
- Effectofuse on m arket for original work
- Two categories of fair uses recognized:
  - Homeuse: time-shifting, space-shifting,...

### Theory Beyond (U.S.) Copyright

- U tilitarian theory incentive to create
  - Author controls som e uses
  - Can charge others for use
  - Incentive to create
- Balance
  - Creator revenue vs. public access
  - Previous creators vs. new creators

### Peer-to-PeerTechnology

- Ordinary users share files
- Search facility
- W idely used to distribute copyrighted files
  - Illegal to use this way (unauthorized copying)



### CopyrightOwnerResponses

- Anti-ripping technology
  - Topic of nextm ini-lecture
- Technological disruption of P2P networks
- Sue direct infringers (end users)
- Sue P2P vendors

## Technological Disruption of P2P

- Distribute spoofed files
  - Easy, but users/designers have counterm easures
- Targeted denial-of-service attacks
  - M ightwork, but legally iffy
- Disrupt self-organization algorithms
  - Legally iffy
- Infiltrate with misbehaving nodes
  - Legally iffy

### Sue Direct Infringers

- Thousands of suits filed by RIAA
- M PAA has started too
- Possible dam ages \$30k \$150k per infininging work
  - But settle for \$3k or so
- Hasitworked?
  - Succeed in educating users
  - Notmuch deterrent effect seen; too many people to sue
  - U sers m ove to new P2P networks

#### Sue P2P V endors

- M ore viable target than end users.
- But: not direct infringers
  - V endors don't copy files their users do.
- Sue vendors for secondary infringement
  - "aiding and abetting"

### Secondary Infringement

- Contributory infringement
  - Infringem entby another
  - Know ledge of specific acts of infringement
  - Material contribution to infringement
- Vicarious infringement
  - Infringen entby another
  - Right and ability to control infringing behavior
  - Financial benefit from infringement

## Secondary Infringem ent: H istory

- 1984:Sony v.U niversal ("Betamax") (Sup.Ct.)
  - VCR legal; has "substantial noninfringing use"
- 1999: Napster (9th Circuit)
  - Illegal; centralm atch-m aking server too involved
- 2003: A im ster (7th C incuit)
  - Illegal: design to avoid know ledge of infringement; no legitimate justification offered for design; balancing test
- 2004: Grokster (9th Circuit)
  - Legal: no specific, actionable know ledge; no control overuse of system
  - May go to Supreme Court

#### Is CurrentU se of P2P H arm ful?

- Argum entforharm:
  - ~25% drop in music sales
  - lots of P2P infringem ent
  - surveys show downloads substitute for sales
- Argum entagainstharm:
  - som e users sam ple w orks on P2P, buy later
  - people mostly download things they wouldn't buy, so no harm done
  - other explanations for drop in music sales (som e support from econom etric studies)
  - harm to  $^{\tiny \mbox{\scriptsize 0}}$  ow ners, but bigger benefit to others

Questions /D iscussion