

## Copyright, Copy Protection, and Trusted Systems

- Reading the tea leaves of *MGM v. Grokster*

Majority Souter (Scalia, Thomas)	Inducement
Ginsburg, Rehnquist, Kennedy	Inducement Plus
Breyer, Stevens, O'Connor	Inducement Minus

- One of your college friends is launching a tech start-up and invites you on as General Counsel. The first product in development, VidFinder, is a collaborative filtering engine to help users find videos they might like amid the terabytes of video content online.
- In light of *Sony*, *Napster*, and *Grokster*, what kinds of advice do you offer VidFinder?

## Copyright and Secondary Liability

- Indirect liability
  - Direct infringement
  - Responsibility of a second party for that infringement
    - Contributory
    - Vicarious
    - Inducement

## *Captiol Records, Inc. v. Does 1-250*

### Exhibit A

Due #14 (67.87.48.91 2003-12-04 08:26:24 (EST))

COPYRIGHT OWNER	ARTIST	RECORDING TITLE	ALBUM TITLE	SR#
Elektra Entertainment Group Inc.	Eagles	Hotel California	Hotel California	N18950
Sony Music Entertainment Inc.	Nas	Hate Me Now	I Am	175-149
UMG Recordings, Inc.	Ja Rule	Love Me Hate Me	Rule 3:36	270-080
UMG Recordings, Inc.	DMX	Slippin'	Flesh of My Flesh, Blood Of My Blood	188-98 /
Atlantic Recording Corporation	Trick Daddy	Take It to da House	Thugs Are Us	303-748
UMG Recordings, Inc.	Shaggy	It Wann't Me	Hot Shot	286-657

1 For an injunction providing:

"Defendant shall be and hereby is enjoined from directly or indirectly infringing Plaintiffs' rights under federal or state law in the Copyrighted Recordings and any sound recording, whether now in existence or later created, that is owned or controlled by Plaintiffs (or any parent, subsidiary, or affiliate record label of Plaintiffs' ("Plaintiffs' Recordings"), including without limitation by using the Internet or any online media distribution system to reproduce (i.e., download) any of Plaintiffs' Recordings, to distribute (i.e., upload) any of Plaintiffs' Recordings, or to make any of Plaintiffs' Recordings available for distribution to the public, except pursuant to a lawful license or with the express authority of Plaintiffs. Defendant also shall destroy all copies of Plaintiffs' Recordings that Defendant has downloaded onto any computer hard drive or server without Plaintiffs' authorization and shall destroy all copies of those downloaded recordings transferred onto any physical medium or device in Defendant's possession, custody, or control."

2 For statutory damages for each infringement of each Copy Recording pursuant to 17 U.S.C. § 504

3 For Plaintiffs' costs in this action.

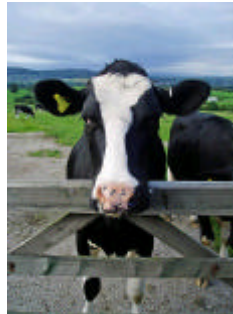
4 For Plaintiffs' reasonable attorneys' fees incurred herein.

## Darknet

- The idea of the darknet is based upon three assumptions:
  1. Any widely distributed object will be available to a fraction of users in a form that permits copying.
  2. Users will copy objects if it is possible and interesting to do so.
  3. Users are connected by high-bandwidth channels.

The *darknet* is the distribution network that emerges from the injection of objects according to assumption 1 and the distribution of those objects according to assumptions 2 and 3.

## DRM and the smart cow



- All it takes is one cow to push open the gate; the others just have to follow.
- On the Internet, it's easy to follow.

## A Better Way Forward?

- If you can't stop Peer-to-Peer
- And you can't sue all its infringing users
- Should you try to license it instead?

## Or Use Tech+Law to Fight Back?

- 17 U.S.C. § 1201(a)(1)(A) No person shall circumvent a technological measure that effectively controls access to a work protected under this title.
- (a)(2) No person shall manufacture, import, offer to the public, provide, or otherwise traffic in any technology, product, service, device, component, or part thereof, that
  - (A) is primarily designed or produced for the purpose of circumventing a technological measure that effectively controls access to a work protected under this title;
  - (B) has only limited commercially significant purpose or use other than to circumvent a technological measure that effectively controls access to a work protected under this title; or
  - (C) is marketed by that person or another acting in concert with that person with that person's knowledge for use in circumventing a technological measure that effectively controls access to a work protected under this title.

## § 1201, definitions

- (a)(3)(A) to "circumvent a technological measure" means to descramble a scrambled work, to decrypt an encrypted work, or otherwise to avoid, bypass, remove, deactivate, or impair a technological measure, without the authority of the copyright owner; and
- (B) a technological measure "effectively controls access to a work" if the measure, in the ordinary course of its operation, requires the application of information, or a process or a treatment, with the authority of the copyright owner, to gain access to the work.

## Access v. Copy

- 1201(a)(1): unlawful to circumvent access controls
- 1201(a)(2): unlawful to traffic in tools to circumvent access controls
- 1201(b)(1): unlawful to traffic in tools to circumvent *copy* controls
- Unlawful to circumvent *copy* controls?

- Life-Time, Inc., distributes free CD-ROMs through a mass mailing campaign. The CD-ROMs contain a huge collection of celebrity photos and interviews. Readers who use the CDs in their computers find that they can sample--i.e. get access to--up to three interviews, selecting from a list. After the user selects and views three interviews, the program offers an 800 number that, when called, allows the user to offer a credit card number and be charged \$9.95 for twenty more interviews. After payment is verified, the caller is given an "unlock" code that causes the program to permit viewing of the additional requested interviews.

- Jane Doe is sent a copy of the CD, explores it, and thanks to her undergraduate work in computer science is able to crack the CD's protection scheme and view all 2,000 interviews at her leisure without paying for a single one.
- Should the law penalize Jane in any way for what she did? Does it?

- John Roe is a film student making a documentary about "celebrity culture." He buys access to 20 interviews and in one, finds a great quote he'd like to use in his film -- unfortunately the supplied software doesn't let him take clips.
- Can John use the quote in his film?
- Can Jane give John the software he needs to extract the video clip?

#### Alice in Wonderland eBook

Permissions:  
 "This book cannot be lent or given to someone else"  
 "This book cannot be read aloud"



### Universal v. Corley

- Major movie studios v. 2600 Magazine, "The Hacker Quarterly"
- 2600 posted and linked to DeCSS
- Movie studios sued under §§ 1201(a)(2) and (b)(1)



## DVD Decryption in Perl

```
#!/usr/bin/perl
# 472-byte qrpff, Keith Winstein and Marc Horowitz <sipb-iap-dvd@mit.edu>
# MPEG 2 PS VOB file -> descrambled output on stdout.
# usage: perl -l <k1>-<k2>-<k3>-<k4>-<k5> qrpff
# where k1..k5 are the title key bytes in least to most-significant order

s"$"/2048;while(<>){G=29;R=142;if(!(@a=unqT="C""_) [20]&48)(D=89;_=unqb24,qT,@
b=map(ord qb8,unqb8,qT,_^$a[-D])@INC;s/_/$1$&/Q=unqV.qb25;_H=73;O=$b[4]<9
[256]$b[3];Q=Q>>8^(P=(E=255)&(Q>>12^Q>>4^Q/8^Q))<17,O=O>>8^(E&(F=(S=O>>14&
7^O)
^S^8^S<<6))<9;_(map(U=_%16orE^R^=110&(S=(unqT,"\\xb\\t\\xbz\\x14d")[_/16%8]);E
^=(72,@z=(64,72,G^=12*(U-270:S&17)),H^=_%64?12:0,@z)[_%8])(16..271))[_]^((D>>=8
)+=P+(-F&E))for@a[128..$#a]);print;qT,@a};s[D-HO-U_]J$$$&/g;s/q/pack+/g;eval
```

Is it illegal to display this slide?

(David S. Touretzky's Gallery of CSS Descramblers)

## Is this wardrobe illegal?



- John Roe pays \$19.95 for a DVD of "Tarzan." When he puts it into his standard DVD player, he finds that it shows promotional trailers at the beginning – and he can't fast-forward past them. He doesn't want his young children to be exposed to this commercialism in their own home, so he programs DVD software on his Linux-based computer to skip directly to the beginning of the movie when he inserts the DVD.
- Should the law penalize John for what he did? Does it?

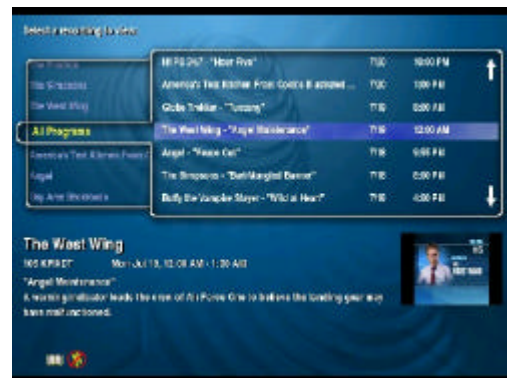
## Lexmark v. Static Control

- Printer company v. toner cartridge remanufacturer
- Lexmark claims SCC microchip circumvents access-controls limiting access to copyrighted printer software
- But the program is available, unencrypted, to anyone who buys a printer



## Broadcast Flags

- "Digital Broadcast Content Protection" 47 CFR 73.9002(b) and following:
- *"No party shall sell or distribute in interstate commerce a Covered Demodulator Product that does not comply with the Demodulator Compliance Requirements and Demodulator Robustness Requirements."*



## Code is finer-grained than law

- Code can prevent uses law couldn't practically reach (even if earlier law technically prohibited them)
- This preemptive power stops many potential fair use challenges, preventing judicial review of whether a use is fair or foul