

Architecture and Control

ESD.68, Spring 2006

Massachusetts Institute of Technology
Cambridge, Massachusetts



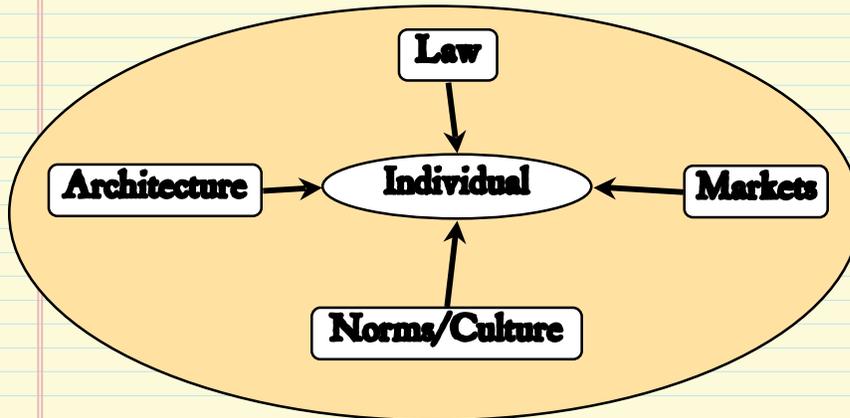
The Views At Conflict

- Content drives the development of the internet	- Content drives the development of the internet
- Content providers need to retain classical forms of control to support the economics of creativity	- The economics of internet distribution change the business of content distribution radically
- The law should protect those controls - And technology should be managed to maintain these controls	- These economic benefits are a sufficient incentive to provide content
	- Technology & law need not change dramatically
- Then, and only then, will content providers participate fully	- Only those willing to adapt to these changing economics will survive

Massachusetts Institute of Technology
Cambridge, Massachusetts



Control - Lessig's "New" Chicago School



Massachusetts Institute of Technology
Cambridge, Massachusetts



Responses To Loss Of Control

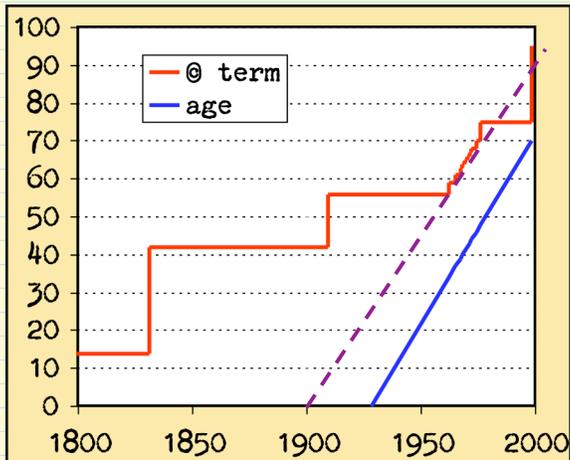
- Legal Initiatives
 - Lawsuits, Legislative & Regulatory Changes
- Technological Initiatives
 - "Digital Bottles", Copy protections, New Formats (SACD, Audio DVD, etc.)
- Economic Initiatives
 - Price reductions, Distribution channels with control
- Behavior/Norm Initiatives
 - Education programs

Massachusetts Institute of Technology
Cambridge, Massachusetts



Copyright Term: One Initiative to Retain Control

Year	Term
1790	14 or 28
1831	42
1909	56
1962	59
1965	61
1967	63
1968	64
1969	65
1970	66
1971	67
1972	68
1974	70
1976	75
1998	95



Massachusetts Institute of Technology
Cambridge, Massachusetts



Corporate Influences; Lobbying and Negotiation

- "Steamboat Willie," Debut of Mickey Mouse, 1928
 - Note Importance of ~25 Years In These Trends
 - May Have Been Latent At Outset
 - Pattern Became Too Obvious To Miss
- 1998 Statute: "Sonny Bono Copyright Term Extension Act"

a/k/a

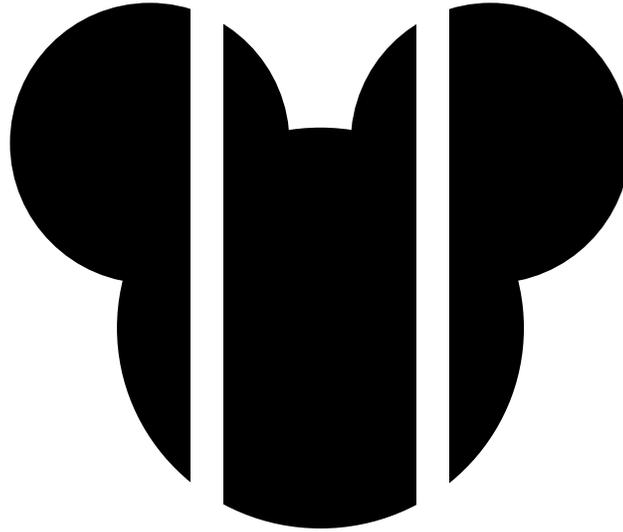
"Mickey Mouse Protection Act"

Year	Term	M/Mouse	Diff
1790	14		
1831	42		
1909	56		
1962	59	34	25
1965	61	37	24
1967	63	39	24
1968	64	40	24
1969	65	41	24
1970	66	42	24
1971	67	43	24
1972	68	44	24
1974	70	46	24
1976	75	48	27
1998	95	70	25

Massachusetts Institute of Technology
Cambridge, Massachusetts



FREE MICKEY



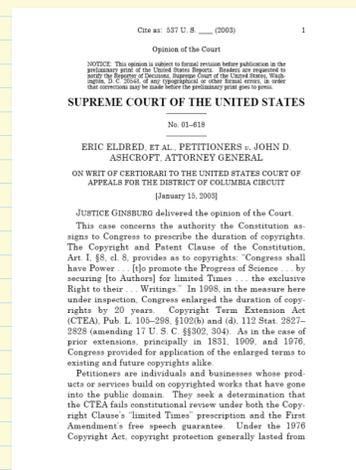
Eldred v. Ashcroft

□ Argument

- Copyright quid pro quo does not obtain when copyright term is extended
 - *Creations have been made*
 - *No need to further incentivize*
- Not “limited Times”
 - *Perpetual extension*

□ Rejected

- Congress can do as they see fit



Massachusetts Institute of Technology
Cambridge, Massachusetts



Comic strips removed for copyright reasons.
Mickey Mouse and Goofy, "Eldred Verdict" strip -
see http://www.waxy.org/archive/2003/01/15/eldred_s.shtml.
Bolling, Ruben. "Tom the Dancing Bug" #633 (January
23, 2003).
Available at <http://dir.salon.com/story/comics/boll/2003/01/23/boll/index.html>
(accessed 18 September 2006).

Massachusetts Institute of Technology
Cambridge, Massachusetts



Ice-T's Take on Napster, the Law and Morality (2000 Aug 7)

The recording companies, "are tripping off the fact this
stuff comes through the computer clean," he said.
"That's the thing. When it comes on the radio, you
can tape it, I can send it to my homeboy. But mail
moves slow and the Internet moves faster."

Photo and text removed for
copyright reasons.

See: Holson, Laura. "Ice-T's
Take on Napster, the Law
and Morality." New York
Times, August 7, 2000.

{...}Why do so many people traffic in music they
haven't paid for? "To me," Ice-T said, "you got the
cops and the robbers. **And, to me, I think human
beings are naturally robbers. I think human beings
want it free. And that's just your nature.** And, if there
is a way around paying, that is what you are going to
do. None of you guys are moral enough to say I would
rather pay \$16 than get it free."

Massachusetts Institute of Technology
Cambridge, Massachusetts



Music: The Legal Context

- First Distinction
 - A “Song”
 - A “Sound Recording”
- Second Distinction
 - Reproduction Right
 - *Making Copies*
 - Public Performance Right
 - *Owned By the “Song” Owner*
 - *Not Owned By the “Recording” Owner*
 - *Changed in 1995 to add “digital audio transmission”*
- Compulsory License (Section 115)
 - If a recording has been distributed, the owner of a song must license the use of the song at a legislated rate

Massachusetts Institute of Technology
Cambridge, Massachusetts



The Actors

- Record Companies
 - Contracts with Recording Artists
 - Financing, Promotion and Distribution of Recordings
 - Royalty Payment To Artists
- Music Publisher
 - Contracts with Songwriters
 - Commercial Exploitation of Songs
 - Licensing for
 - *Recordings*
 - *Sheet Music Printing*
 - *Public Performances, Live and Recorded*
- ASCAP/BMI/SESAC
 - “Performance Rights Societies”
 - Representation of Publishers and Songwriters wrt Performance Licensing
 - “Songs” not “Song Recordings”
- Harry Fox Agency
 - Licensing Agency
 - Specifically To Record Companies for Music Publishers
 - For Reproduction of “Songs” as Phonorecordings
 - Compulsory Licensing Arrangements

Massachusetts Institute of Technology
Cambridge, Massachusetts



The Actors (continued)

- Recording Industry Association of America
 - Trade Association
 - Promotion of Record Company Interests
 - Aggressive Anti-Piracy and Intellectual Property Protection Efforts
- The Recording Artists Themselves
 - Prince
 - Courtney Love
 - Janis Ian
 - Don Henley & The Recording Artists Coalition
 - Metallica

Massachusetts Institute of Technology
Cambridge, Massachusetts



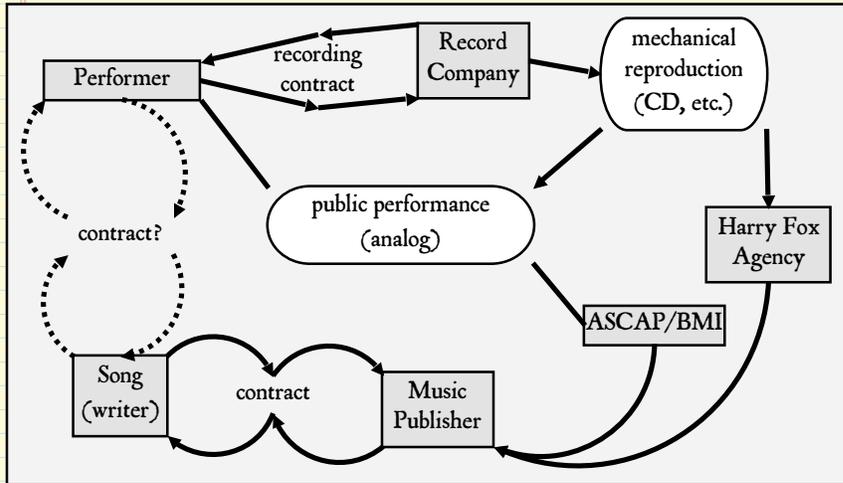
A Complex Structure of Relationships

- Creators of Intellectual Property
 - Composers
 - Performers
 - Arrangers
- Distributors of Intellectual Property
 - Music Publishers
 - Phonorecording Manufacturers
 - Performers
 - Broadcasters, etc.
- Consumers of Intellectual Property

Massachusetts Institute of Technology
Cambridge, Massachusetts



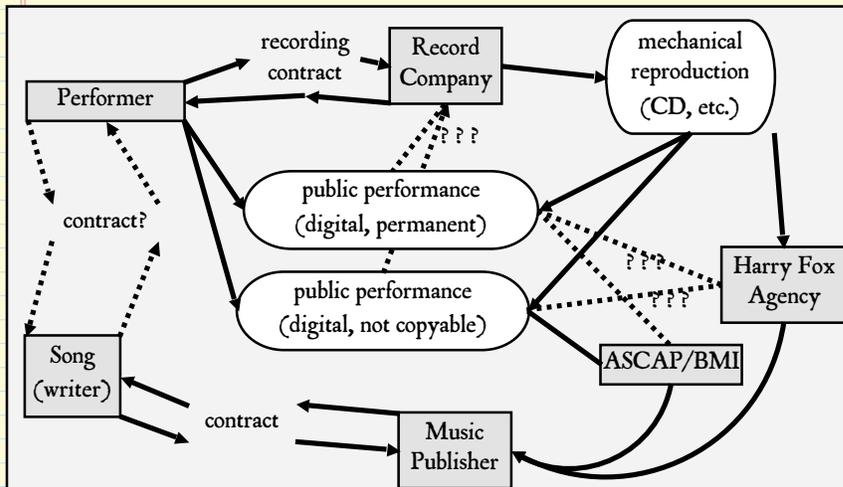
Music Licensing Structures - Current Non-Digital
 ("simplified" - focus on music delivery & mechanical reproduction)



Massachusetts Institute of Technology
 Cambridge, Massachusetts



Music Licensing Structures - Digital Phonorecord Issues



Massachusetts Institute of Technology
 Cambridge, Massachusetts



Why All The Extra Lines?

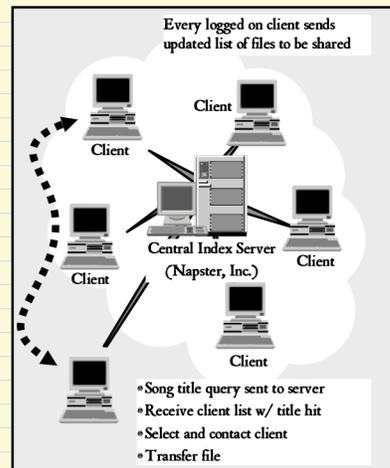
- Record Companies
 - Digital Copies, Persistent Or Otherwise, Are As Good As The Original
 - Could Displace CD Sales - Added To The 1995 Law
- Harry Fox
 - Digital Copies, Persistent Or Otherwise, Are “Mechanical Reproductions”
 - Thus, Copying Licenses Must Be Paid
- ASCAP/BMI/SESAC
 - Digital Distribution Is A “Public Performance”
 - Thus Performance Licenses Must Be Paid

Massachusetts Institute of Technology
Cambridge, Massachusetts



Enter - Napster

- Shawn Fanning -
 - Northeastern U. Undergraduate
 - 1st prerelease - mid-1999
- Concept
 - MP3 Search Engine
 - File Sharing Protocol
 - IRC/Communication Tool Within A Community
- Peer-to-Peer Technology Rather Than Central File Store
 - Central Indexing/Locating Mechanisms
- Explosive Growth
 - Feb 2000; 1.1 million
 - Aug 2000; 6.7 million
 - Feb 2001; 13.6 million US



Massachusetts Institute of Technology
Cambridge, Massachusetts



Pew Study - Upward Trend Percent of Internet Users Who Download Music (+/- 3%)

	7-8/2000	2/2001
< \$30k	28%	36%
\$30k-\$50k	24%	31%
\$50k-\$75k	20%	29%
\$75k+	15%	24%

	7-8/2000	2/2001
Men	24%	36%
Women	20%	23%
Whites	20%	26%
Blacks	29%	30%
Hispanics	35%	46%

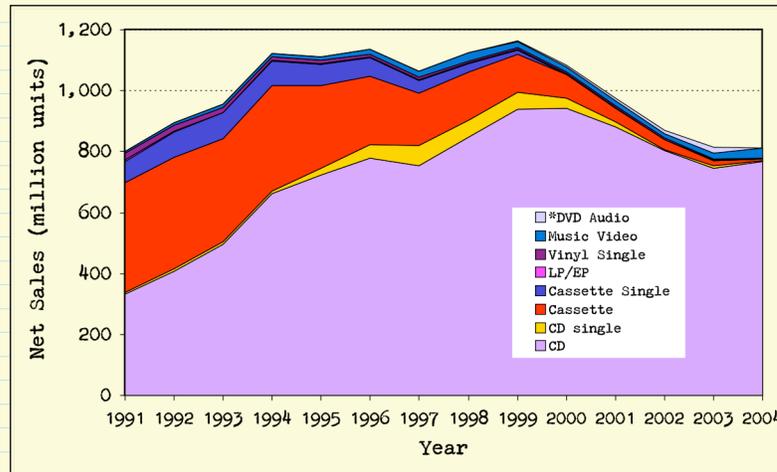
	7-8/2000	2/2001
<High Sch	48%	55%
Grad HS	25%	31%
Some Coll	25%	32%
Grad Coll+	15%	21%

	7-8/2000	2/2001
18-29	37%	51%
30-49	19%	23%
50+	9%	15%

Massachusetts Institute of Technology
Cambridge, Massachusetts



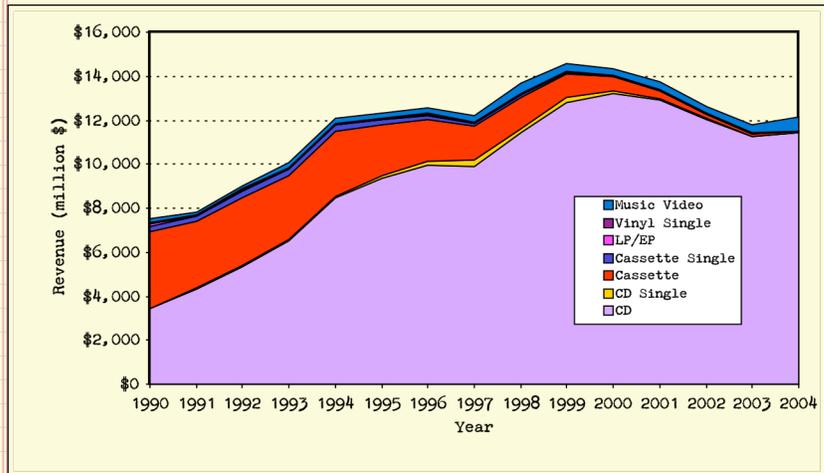
RIAA Year-End Sales Statistics



Massachusetts Institute of Technology
Cambridge, Massachusetts



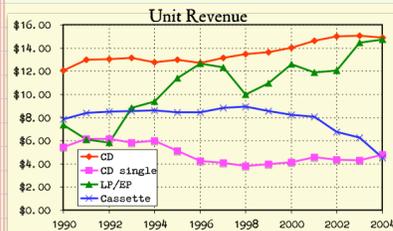
RIAA Year-End Sales Statistics



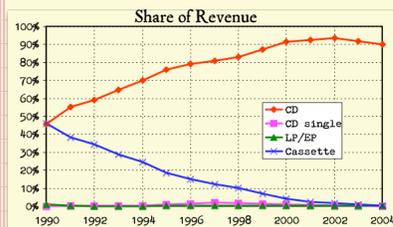
Massachusetts Institute of Technology
Cambridge, Massachusetts



Some Market Observations



- CDs prices rising; LPs moving to parity
- CD single and cassette prices falling

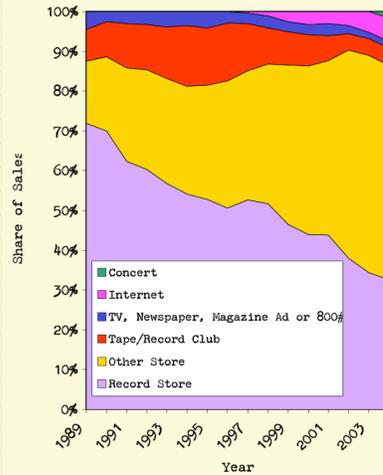


- CDs and cassettes roughly equal shares in 1990
- By 2000, over 90% of revenue derives from CDs

Massachusetts Institute of Technology
Cambridge, Massachusetts



Distribution Outlets Changing



- Precipitous decline in record stores
- Rise in “other” (i.e., “big box”) stores
- Internet distribution beginning to appear on the radar
 - Has outstripped sales rates of singles in some markets already

Massachusetts Institute of Technology
Cambridge, Massachusetts



Immediate Controversy

- | | |
|---|---|
| <ul style="list-style-type: none"> □ Typical Positions - “Napster...” <ul style="list-style-type: none"> ▪ “Is Theft of Intellectual Property; Abuse of Artists” ▪ “Lets Me Sample Before Buying” ▪ “Lets Me Find Music Unavailable Otherwise” ▪ “Lets Me Acquire Only That Which I Like On A CD” ▪ “Lets Me Stick It To The Record Companies” | <ul style="list-style-type: none"> □ Other Points <ul style="list-style-type: none"> ▪ “MP3s Allow Me To 'Space Shift' Just Like Analog Cassettes” ▪ “MP3s Are Infringing Copies” ▪ “MP3s Are/Can Be Degraded Copies, Not Pure Digital Copies” |
|---|---|

Image removed for copyright reasons.
"Boondocks" comic strip, 22 Februray 2001.

Massachusetts Institute of Technology
Cambridge, Massachusetts



RIAA Sues Napster For Copyright Infringement

- RIAA Positions
 - Making Copies
 - > *No Right To Distribute*
 - Playing Phonorecords
 - > *No Licensing*
 - Economic Harm To Artists, Industry
 - Secondary copyright liability
 - > *Contributory*
 - > *Vicarious*
- Napster Counterpositions
 - Fair Use (“space shifting”)
 - Noncommercial Use - Home Recording Act
 - DMCA - Safe Harbor Provision
 - Transitory digital network connections
 - Information location tools
 - Lawful Sharing (uncopyrighted works or copyrights not enforced by owners)

Massachusetts Institute of Technology
Cambridge, Massachusetts



Sony Decision ***(Sony v Universal City Studios, 464 U.S. 417, 1984)***

- A manufacturer of a device that can (even frequently is) used for infringement cannot be held liable for contributory infringement, so long as the device is capable of “substantial noninfringing uses”
- Use of a VCR to “time shift” is not infringement
 - Does violate exclusive right to copy, but
 - Is exempt under “fair use”

Massachusetts Institute of Technology
Cambridge, Massachusetts



Secondary Liability in Copyright Infringement

- Contributory copyright infringement
 - If one has knowledge of infringement;
 - And one “induces, causes or materially contributes to” the infringement
 - One is liable for contributory infringement.
- Vicarious copyright infringement
 - If one has an obvious financial interest in infringement;
 - And one has the right & ability to supervise the infringement;
 - And fails to block the infringement;
 - One is liable for vicarious copyright infringement.

Massachusetts Institute of Technology
Cambridge, Massachusetts



Factors in finding “Fair Use”

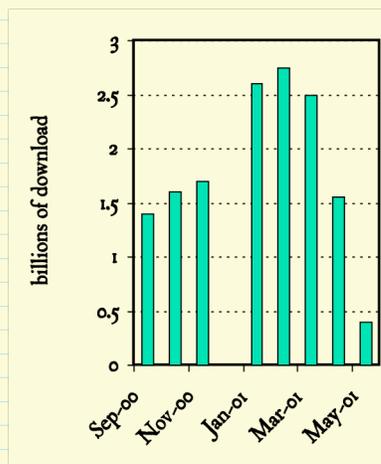
- Purpose and character of use
 - Noncommercial, private, more like it’s fair use
- Nature of the creative work
 - More unique/intense effort to create, less likely it’s fair use
- Amount of the work in question
 - The more that is copied, the less likely it’s fair use
- Effect of the use on the market or potential market
 - More the economic harm, the less likely it’s fair use

Massachusetts Institute of Technology
Cambridge, Massachusetts



Napster Loses - Immediate Consequences

- February, 2001 - Peaked
 - Trailed Off Rapidly Thereafter
 - Ultimately, Complete Shutdown
- Still Weak, Tried To Convert To Subscription Service
 - Purchased By Bertelsmann
 - Declared Bankruptcy
 - Only Remaining Asset: Brand Name
- Sold to Roxio; Has resurfaced as subscription service

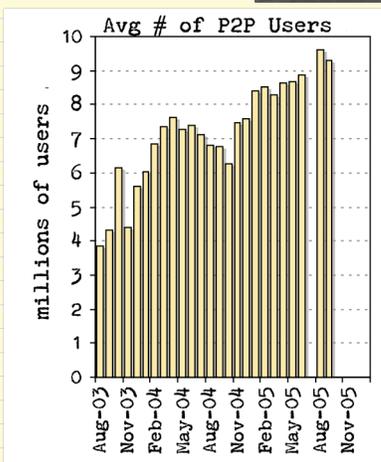


Massachusetts Institute of Technology
Cambridge, Massachusetts



Alternatives Immediately Emerge

- Variants designed to attack legal limits of Napster
 - "Pure" peer-to-peer - no central server
 - Buddy-list based-sharing systems ("Darknets")
 - Encrypted/Obfuscated clients
- Some substantially successful, albeit with some issues
 - File sharing surpasses Napster at its peak
 - Emergence of some odd business models (BigChampagne)



Massachusetts Institute of Technology
Cambridge, Massachusetts



Grokster, KaZaA

- Evolution of the Sony Betamax decision
 - “Substantial noninfringing uses”
- Napster lost this argument (one of several)
- Grokster also lost, but it took the Supreme Court
 - Sony doctrine skirted, preserved
 - *Concurring opinions spar over extent of preservation*
 - Notion of “inducement” for economic gain

Massachusetts Institute of Technology
Cambridge, Massachusetts

Cite as: 545 U. S. ____ (2005) 1

Opinion of the Court

NOTICE: This opinion is subject to formal revision before publication in the preliminary print of the United States Reports. Readers are requested to notify the Reporter of Decisions, Supreme Court of the United States, Washington, D. C. 20543, of any typographical or other formal errors, in order that corrections may be made before the preliminary print goes to press.

SUPREME COURT OF THE UNITED STATES

No. 04-480

METRO-GOLDWYN-MAYER STUDIOS INC., ET AL.,
PETITIONERS v. GROKSTER, LTD., ET AL.

ON WRIT OF CERTIORARI TO THE UNITED STATES COURT OF
APPEALS FOR THE NINTH CIRCUIT

[June 27, 2005]

JUSTICE SOUTER delivered the opinion of the Court.

The question is under what circumstances the distributor of a product capable of both lawful and unlawful use is liable for acts of copyright infringement by third parties using the product. We hold that one who distributes a device with the object of promoting its use to infringe copyright, as shown by clear expression or other affirmative steps taken to foster infringement, is liable for the resulting acts of infringement by third parties.

I

A

Respondents, Grokster, Ltd., and StreamCast Networks, Inc., defendants in the trial court, distribute free software products that allow computer users to share electronic files through peer-to-peer networks, so called because users' computers communicate directly with each other, not through central servers. The advantage of peer-to-peer networks over information networks of other types shows up in their substantial and growing popularity. Because they need no central computer server to mediate the exchange of information or files among users, the high-



Grokster: A New Secondary Infringement Doctrine

- Inducement
 - If there is an affirmative act to promote infringement;
 - And there was intent to do so as well;
 - Then one is liable for inducement infringement liability
- Contrast with “Brief *Amici Curiae* Of Computer Science Professors Harold Abelson,... David Clark,... Edward Felten,... Brian Kernighan,... and David S. Touretzky”
http://www.eff.org/IP/P2P/MGM_v_Grokster/20050301_cs_profs.pdf
 - “*Amici* have no knowledge of the particular motives of Respondents, but caution against the inference that a particular design decision, such as a decision to include encryption or not to use filtering technologies, necessarily represents bad faith. It may simply represent good, conservative engineering.”

Massachusetts Institute of Technology
Cambridge, Massachusetts



And, Of Course, Suits Against Direct Infringers

- Over 15,000 lawsuits filed
- Almost all settled, without litigation
 - Cecelia Gonzales v. RIAA -- not so lucky
 - Summary judgement against her (\$22,500)
- Patricia Santangelo (*Elektra v Santangelo*)
 - “an Internet-illiterate parent, who does not know Kazaa from kazoo, and who can barely retrieve her e-mail.”
 - Challenge on evidence -- show that *she* did it

Massachusetts Institute of Technology
Cambridge, Massachusetts



Artists Split on the Subject

- Disdain for Record Companies
 - Outstanding FTC Consent Degree On Price Collusion in CD Market
 - High Profile Artist Controversies
 - › *Prince, Courtney Love, Janis Ian*
 - › *Recording Artists' Coalition*
- Others Working With RIAA
 - Metallica, Dr. Dre
- Independents On The Outside, In Many Respects

Massachusetts Institute of Technology
Cambridge, Massachusetts



Pew Study: Artists, Musicians and The Internet (12/2004)

Artists, Musicians and the Internet: Summary of Findings at a Glance

32 million Americans consider themselves artists and about 10 million of them get some kind of compensation for their creations and performances.

American artists have embraced the internet as a creative and inspiration-enhancing workspace where they can communicate, collaborate, and promote their work.

Notable numbers of artists say the internet has been a boon to their marketing efforts.

For some artists, the internet has had a helpful social impact as they network with other artists, communicate with their fans, and stay in touch with friends when they are on the road.

Artists are divided, but not deeply concerned about the file-sharing that happens online. They want control over their creations, but most do not say internet piracy is a big threat.

Artists think unauthorized peer-to-peer file-sharing should be illegal, and most would go after the companies, rather than individual file-sharers.

Artists are split about what constitutes fair use of digital material.

Online artists are also active consumers of media content online. But those who download files say if they get content for free, they usually support the artist or author in other ways.

Source: Madden, Mary. *Artists, Musicians and the Internet*. Washington, DC: Pew Internet & American Life Project, December 5, 2004.

http://www.pewinternet.org/PPF/r/142/report_display.asp

Massachusetts Institute of Technology
Cambridge, Massachusetts



Complicating Factor - Distribution As A Player

- Injuries To Artists - Generally Decried
- Injuries To Users - Generally Decried
- Injuries To Record Companies - Generally Applauded

Images removed for copyright reasons.

- 1) Griffith, Bill. "Overthrowing Royalties." *Zippy the Pinhead*, May 23, 2001.
- 2) Napster promotional image.

Massachusetts Institute of Technology
Cambridge, Massachusetts



The Recording Industry Business Model

- "Courtney Love Does the Math" - Courtney Love; Salon; June 14, 2000
 - Presented While in Litigation With Her Record Company
 - Settled Out of Court
- Is Copyright Working?
 - Conflict Between Artists and Industry
 - Utilitarian Arguments For Copyright
- Article Objective: To Demonstrate The Unfairness Of The Industry To The Basic Performer (vs the Superstars)
- Presents The Basic Elements Of A Modern Recording Contract

Massachusetts Institute of Technology
Cambridge, Massachusetts



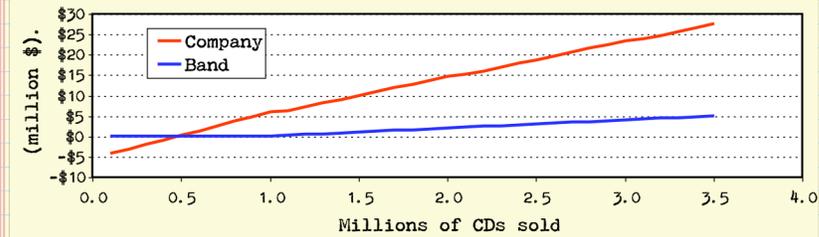
Economics - Courtney Does the Math

- | | |
|--|--|
| <ul style="list-style-type: none"> □ Monies Received By The Band <ul style="list-style-type: none"> ▪ Advance.....\$1,000,000 ▪ Royalties.....\$2,000,000 <ul style="list-style-type: none"> ➢ 20% of Assumed \$10/unit □ Monies Expended By The Band □ NOT to Record Company <ul style="list-style-type: none"> ▪ Agent.....\$100,000 ▪ Legal.....\$25,000 ▪ Manager.....\$25,000 ▪ Taxes.....\$170,000 □ TO Record Company <ul style="list-style-type: none"> ▪ Recording Costs.....\$500,000 ▪ Recouped Video Costs.....\$500,000 ▪ Recouped Tour Support.....\$200,000 ▪ Recouped Promotion.....\$300,000 ▪ Recouped Advance.....\$1,000,000 □ Net: \$40,000 | <ul style="list-style-type: none"> □ Monies Expended By Record Company <ul style="list-style-type: none"> ▪ Advance.....\$1,000,000 ▪ Video Production.....\$1,000,000 ▪ Tour Support.....\$200,000 ▪ Radio Promotion.....\$300,000 ▪ CD Manufacturing.....\$500,000 <ul style="list-style-type: none"> ➢ Assumed per 1,000,000 units ▪ Publisher Royalty.....\$750,000 <ul style="list-style-type: none"> ➢ \$.75/unit ▪ Marketing.....\$2,200,000 □ Monies Received By Record Company <ul style="list-style-type: none"> ▪ Sales Gross: \$10,000,000 ▪ Recouped Video Costs.....\$500,000 ▪ Recouped Tour Support.....\$200,000 ▪ Recouped Promotion.....\$300,000 ▪ Recouped Advance.....\$1,000,000 □ Net: \$4,000,000 |
|--|--|

Massachusetts Institute of Technology
Cambridge, Massachusetts



Profits as a function of sales volume

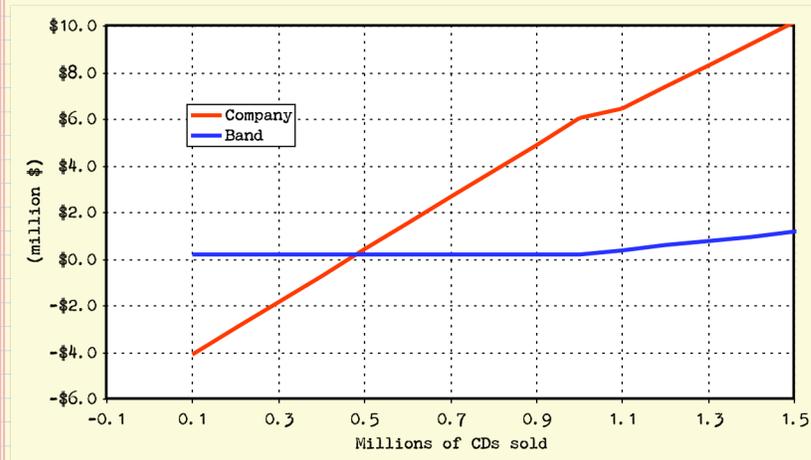


- ❑ Assume “recoupable” costs come out of royalties/sales
- ❑ If sales are not high enough, record company “eats” the loss
- ❑ Assume CD production costs constant with volume and produced in million-unit lots
- ❑ Assume no profit to company on recording studio time

Massachusetts Institute of Technology
Cambridge, Massachusetts



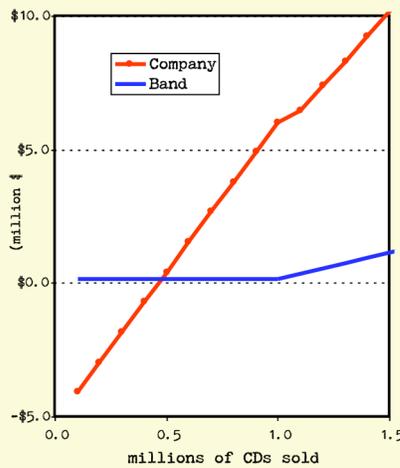
Profits as a function of sales volume - detail



Massachusetts Institute of Technology
Cambridge, Massachusetts



Profits as a function of sales volume - detail

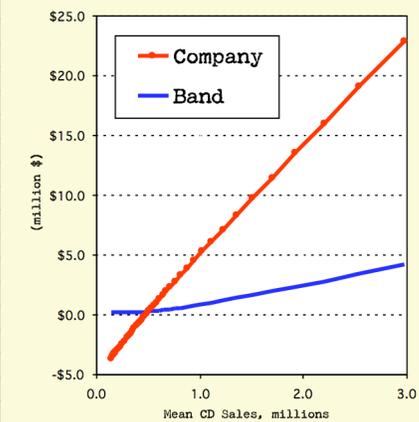
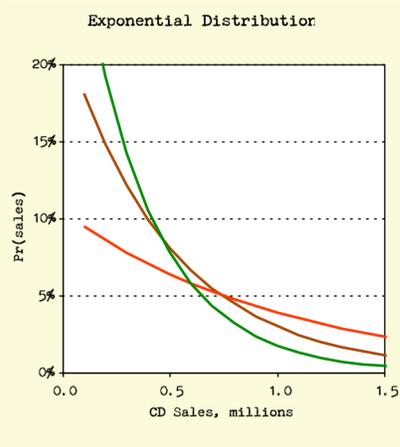


Units	Company	Artist
100,000	\$(4,075,000)	\$180,000
200,000	\$(2,950,000)	\$180,000
300,000	\$(1,825,000)	\$180,000
400,000	\$(700,000)	\$180,000
500,000	\$425,000	\$180,000
600,000	\$1,550,000	\$180,000
700,000	\$2,675,000	\$180,000
800,000	\$3,800,000	\$180,000
900,000	\$4,925,000	\$180,000
1,000,000	\$6,050,000	\$180,000
1,100,000	\$6,475,000	\$380,000
1,200,000	\$7,400,000	\$580,000
1,300,000	\$8,325,000	\$780,000
1,400,000	\$9,250,000	\$980,000
1,500,000	\$10,175,000	\$1,180,000
1,600,000	\$11,100,000	\$1,380,000
1,700,000	\$12,025,000	\$1,580,000
1,800,000	\$12,950,000	\$1,780,000
1,900,000	\$13,875,000	\$1,980,000

Cambridge, Massachusetts



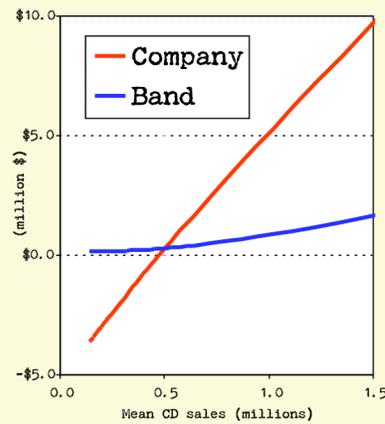
What about uncertainty?



Massachusetts Institute of Technology
Cambridge, Massachusetts



Profits as a function of sales volume - detail

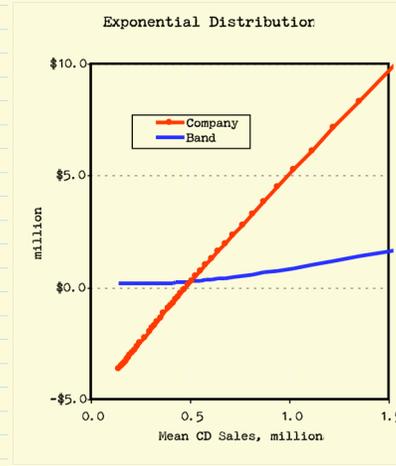
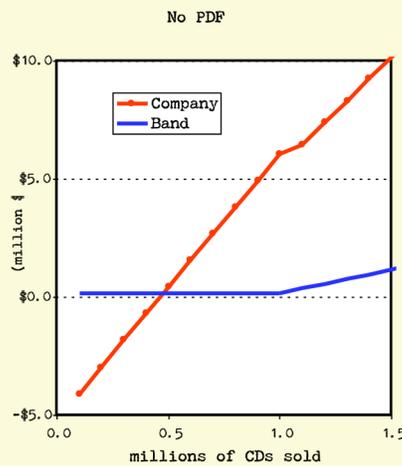


	Company	Band
152,000	-\$3,487,667	\$180,007
179,000	-\$3,189,757	\$180,098
205,000	-\$2,897,168	\$180,504
230,000	-\$2,613,884	\$181,540
303,000	-\$1,808,042	\$191,111
347,000	-\$1,337,304	\$203,153
409,000	-\$675,804	\$229,755
452,000	-\$233,656	\$254,075
506,000	\$320,187	\$291,758
551,000	\$774,200	\$328,314
606,000	\$1,319,794	\$378,461
638,000	\$1,635,874	\$410,374
714,000	\$2,379,319	\$492,843
760,000	\$2,819,892	\$546,116
812,000	\$3,317,700	\$609,786
940,000	\$4,531,722	\$778,260
1,112,000	\$6,146,103	\$1,025,178
1,222,000	\$7,161,057	\$1,190,667
1,352,000	\$8,357,934	\$1,393,770
1,507,000	\$9,780,598	\$1,644,246

Massachusetts Institute of Technology
Cambridge, Massachusetts



Comparison



Massachusetts Institute of Technology
Cambridge, Massachusetts



Conclusions?

- Of Course, the Shape of the Distribution Can Change a Lot
 - But, What Does the Base Analysis Suggest?
 - Are the Companies That “Unfair?”
 - Or, Is There Something Else?
- Note:
 - Also see Steve Albini’s “The Problem With Music”
 - Other Artists With Perspectives Online
 - > *(Links : IP Controversies : Digital Music : Record Industry Practices)*
 - > Prince - <http://www.npgmusicclub.com>
 - > Janis Ian - <http://www.janisian.com>

Massachusetts Institute of Technology
Cambridge, Massachusetts



So, Maybe The Record Company Has A Case

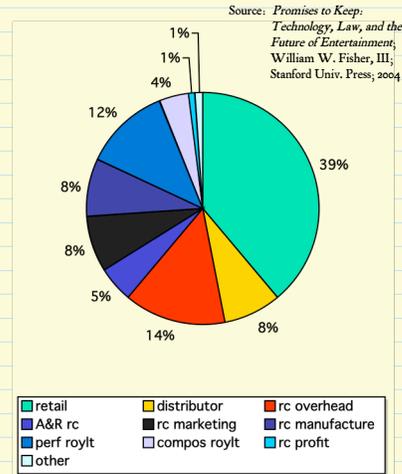
- But Digital Distribution Should Have Some Economic Consequences
- The Physical versus the Digital Product
 - Changes in delivery
 - Changes in retail
 - Changes in product
 - Changes in control

Massachusetts Institute of Technology
Cambridge, Massachusetts



Different Economics?

- Consider this breakdown in costs for an \$18 CD
 - 39% retailer
 - 8% distributor
 - 14% record co. overhead
 - 13% record co. marketing
 - 8% CD manufacture
 - 1% record co. profit
 - 12% artist profit/royalty
 - 4% song publisher royalty

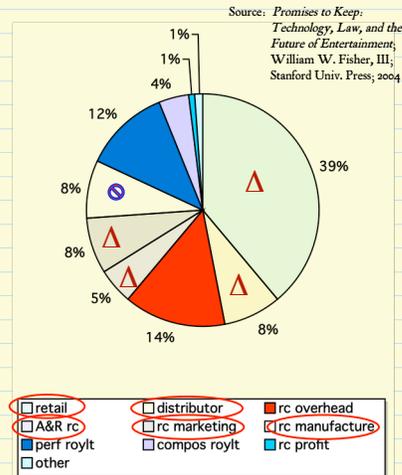


Massachusetts Institute of Technology
Cambridge, Massachusetts



Different Economics?

- Consider this breakdown in costs for an \$18 CD
 - ~~▪ 39% retailer~~
 - ~~▪ 8% distributor~~
 - 14% record co. overhead
 - ~~▪ 13% record co. marketing~~
 - ~~▪ 8% CD manufacture~~
 - 1% record co. profit
 - 12% artist profit/royalty
 - 4% song publisher royalty



Massachusetts Institute of Technology
Cambridge, Massachusetts



It's Not Just About PaP/Music

- Digital technology has led to many new opportunities
- But certain constructions of the law are turning those opportunities into a stranglehold on freedom & culture
 - Image removed for copyright reasons. Editorial cartoon, with person labeled "RIAA" saying "Beware, YOU might be next."
- How far do we want to go to protect this construct?
- What do we get out of it?

Massachusetts Institute of Technology
Cambridge, Massachusetts



The Views At Conflict

- Content drives the development of the internet	- Content drives the development of the internet
- Content providers need to retain classical forms of control to support the economics of creativity	- The economics of internet distribution change the business of content distribution radically
- The law should protect those controls	- These economic benefits are a sufficient incentive to provide content
- And technology should be managed to maintain these controls	- Technology & law need not change dramatically
- Then, and only then, will content providers participate fully	- Only those willing to adapt to these changing economics will survive

Massachusetts Institute of Technology
Cambridge, Massachusetts

