

RIAA v. The People: Four Years Later

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On September 8, 2003, the recording industry sued 261 American music fans for sharing songs on peer-to-peer (P2P) file sharing networks, kicking off an unprecedented legal campaign against its own customers.¹ Four years later, the recording industry has filed, settled, or threatened, legal actions against well over 20,000 individuals.² The targets are not commercial copyright pirates. They are children, grandparents, single mothers, college professors—a random assortment of the tens of millions of American music fans using P2P networks.³ The industry shows no signs of slowing its lawsuit campaign, with the members of the Recording Industry Association of America (RIAA) filing hundreds of new lawsuits each month⁴—including, most recently, 400 per month targeted against college students.⁵

The lawsuits, however, are not working. Today downloading from P2P networks is more popular than ever, despite the widespread public awareness of lawsuits. At the same time, the lawsuit campaign has enriched only lawyers, rather than compensating artists for file sharing. One thing has become clear: suing music fans is no answer to the P2P dilemma.

I. Prelude: Sue the Technology.

The music industry initially responded to P2P file sharing as they have often responded to disruptive innovations in the past: they loosed the lawyers on the innovators, in hopes of smothering the technology in its infancy. Beginning with the December 1999 lawsuit against Napster, the recording industry has sued major P2P technology companies one after the other: Scour, Aimster, AudioGalaxy, Morpheus, Grokster, Kazaa, iMesh, and LimeWire.⁶ This despite the fact that these same technologies were also being used for non-infringing purposes, including sharing of authorized songs, live concert recordings, public domain works, movie trailers, and video games.

The legal attacks on P2P technologies led to victories in the courts.⁷ But as it was winning the legal battles, the recording industry was losing the war. After Napster was shut down, new networks quickly appeared. Napster was replaced by Aimster and AudioGalaxy, which were then in turn supplanted by Morpheus and Kazaa, which were in turn eclipsed by eDonkey and Bit Torrent.⁸ The number of filesharers, as well as the number of P2P software applications, has kept growing, despite the recording industry's early courtroom victories. Today, P2P networks that rely on open protocols and open source software continue to flourish independently of any particular software vendor. In addition, music fans have been turning to new so-called "darknet" solutions, such as swapping iPods, burning CD-Rs, modifying Apple's iTunes software to permit downloading of other users' libraries,⁹ and extending the Firefox Web browser to facilitate file sharing.¹⁰

The recording industry, bolstered by the June 2005 Supreme Court decision in *MGM v. Grokster*, continues to use legal threats to intimidate P2P technology companies.¹¹ Several P2P software companies have bowed to the legal pressure and announced intentions to make an effort to "filter" infringing material from their networks, including iMesh, BearShare and Kazaa. But the "filters" have proven ineffective because "filtered" P2P applications have been quickly replaced by new,

unfiltered alternatives. Developing unfiltered P2P software is well within the capabilities of small offshore companies, or even individual hobbyist programmers. After all, a college student was able to create Napster in mere months.¹² Bit Torrent was largely the handiwork of one unemployed software developer working in his spare time.¹³ Today, most computer science undergraduates could assemble a new P2P file sharing application in a few weeks time.¹⁴

In short, by 2003, it had become clear that suing the technology was not going to work.

II. Phase One: DMCA Subpoenas by the Thousands.

In the summer of 2003, the RIAA announced that it was gathering evidence in preparation for lawsuits against individuals who were sharing music on P2P networks.²⁰ The RIAA investigators focused on “uploaders”—individuals who were allowing others to copy music files from their “shared” folders. The investigators ran the same software as the other P2P users, searched for recordings owned by their record label masters, and then collected the IP addresses of those who were offering those recordings.²¹

The RIAA investigators, however, cannot tie an IP address to a name and street address without help from the uploader’s Internet Service Provider (ISP). In order to force ISPs to hand over this information, the RIAA resorted to a special subpoena power that its lobbyists had slipped into the Digital Millennium Copyright Act (DMCA) in 1998.²² Under this provision, a copyright owner is entitled to issue a subpoena to an ISP seeking the identity of a subscriber accused of copyright infringement. In the view of the recording industry’s lawyers, this entitled them to get names and addresses from an ISP with a mere allegation of infringement—no need to file a lawsuit, no requirement of proof, and no oversight by a judge.

Thanks to the efforts of EFF, ISPs and numerous public interest groups, the courts ultimately rejected this unprecedented breach of privacy. The RIAA had begun testing the DMCA subpoena power in 2003, when it delivered a few subpoenas to a variety of ISPs

Prelude: Warming Up on College Students

In what would later seem a prelude to the lawsuit campaign against individual file-sharers, the recording industry in April 2003 sued four college students for developing and maintaining search engines that allowed students to search for and download files from other students on their local campus networks.¹⁵

The lawsuits named Joseph Nievelt, a student at Michigan Technological University; Daniel Peng, a student at Princeton University; and Aaron Sherman and Jesse Jordan, both students at Rensselaer Polytechnic Institute. The complaint principally alleged that the students were running an on-campus search engine for music, using software such as Phynd, FlatLan, and DirectConnect to search campus local area networks and index files being shared by students using the file sharing protocols included in Microsoft Windows.¹⁶ The complaints also alleged that the students had, themselves, downloaded infringing music.

The students ultimately settled the cases for between \$12,000 and \$17,500 each.¹⁷ In Jesse Jordan’s case, the settlement amount “happens to be the same amount of money that is the total of his bank account. That is money he has saved up over the course of working three years ... to save money for college.”¹⁸ He later stated that he did not believe he had done anything wrong and had settled to avoid the legal expenses of fighting the lawsuit.

The lawsuits, the first filed against individuals for file sharing, caused an uproar, with both students and university officials expressing dismay at the heavy-handed tactics of the recording industry.¹⁹ At the time, it seemed hard to believe that suing individual college students would soon be not only standard operating procedure for the recording industry.

in what was widely viewed as a “test run.” Verizon (as well as Charter Communications and Pacific Bell Internet Services) fought back in court to defend the privacy of its customers.²³ EFF, alongside a host of public interest and privacy organizations, joined with Verizon in arguing that every Internet user’s privacy was at risk if anyone claiming to be a copyright owner could, without ever appearing before a judge, force an ISP to hand over the names and addresses of its customers.²⁴

Unfortunately, Verizon and the privacy advocates lost the first rounds in court. That gave the RIAA the green light to start delivering thousands of subpoenas in order to build a list of potential lawsuit targets. Between August and September 2003, the RIAA issued more than 1500 subpoenas to ISPs around the country.²⁵

On September 8, 2003, the RIAA announced the first 261 lawsuits against individuals that it had identified using the DMCA subpoenas.²⁶ Among those sued was Brianna Lahara, a twelve-year-old girl living with her single mother in public housing in New York City.²⁷ In order to settle the case, Brianna was forced to apologize publicly and pay \$2,000.²⁸ Durwood Pickle, a 71-year-old grandfather in Texas, was also among the first batch of targets, as was a college football player in Colorado.²⁹

Just as privacy advocates had feared, however, the lack of judicial oversight in the subpoena process resulted in abuses. For example, Sarah Ward, a grandmother living in Massachusetts, found herself among the 261 accused.³⁰ She was innocent—a Macintosh user who had been accused of using the Windows-only Kazaa to download hard-core rap music. Although the RIAA ultimately withdrew the lawsuit against her, in the words of an RIAA spokesperson, “When you go fishing with a driftnet, sometimes you catch a dolphin.”³¹

The subpoena power also attracted other, less scrupulous, copyright owners. A vendor of gay hard-core pornographic videos, Titan Media, began using the DMCA subpoena process to identify and contact individuals allegedly sharing Titan videos on P2P networks. These targets were contacted by Titan and given the choice of being named in a (potentially embarrassing) lawsuit, or purchasing the Titan videos in exchange for “amnesty.”³² Several observers felt that this tactic bordered on extortion.³³

After enduring stinging criticism on Capitol Hill from Senator Norm Coleman, the RIAA changed gears.³⁴ Rather than suing people directly after obtaining their names with DMCA subpoenas, the RIAA began sending threat letters first, giving the accused an opportunity to settle the matter before a lawsuit was filed. In October 2003, the RIAA sent 204 letters to alleged filesharers.³⁵ Most of the targets settled for amounts averaging \$3,000.³⁶ The 80 who did not accept the RIAA offer were sued a few weeks later.³⁷

Before this new tactic could be used extensively, the legal landscape changed. On December 19, 2003, a federal appeals court agreed with Verizon that the DMCA subpoena provision did not authorize the RIAA’s “driftnet fishing” tactics.³⁸ The court overturned the lower court ruling and found that the DMCA subpoenas were available only where the allegedly infringing material was stored on the ISPs’ own computers, not for situations involving P2P file-sharing where the material was stored on a subscriber’s individual computer.

This brought the RIAA's mass-subpoena campaign to a halt. If the RIAA wanted to use the federal subpoena power to identify Internet users, it would have to file a lawsuit and conduct its efforts under the supervision of a judge. In other words, the RIAA would have to play by the same rules as every other litigant in federal court.

By the time the court of appeals decided *RIAA v. Verizon*, more than 3,000 subpoenas had been issued.⁴⁵ More than 400 lawsuits had been brought on the basis of the names obtained with them, and hundreds more had settled after receiving the RIAA demand letter.⁴⁶ Even though the RIAA had used illegal tactics to pursue these lawsuits, none of the defendants who paid received any money back.

The recording industry's campaign against music fans, however, was not over.

III. Phase Two: John Doe Lawsuits by the Thousands.

On January 21, 2004, the lawsuit campaign entered a new phase when the RIAA announced 532 new "John Doe" lawsuits.⁴⁷ In these lawsuits, the record label lawyers sued unidentified "John Doe" uploaders that their investigators had traced to an IP address. After filing the lawsuit, the record labels would ask the court to authorize subpoenas against the ISPs. After delivering these subpoenas and obtaining the real name of the subscriber behind the IP address, the record label lawyers would then either deliver a letter demanding a settlement or amend their lawsuit to name the identified individual.

This procedure was a distinct improvement over the DMCA subpoenas because it required the RIAA investigators and lawyers to follow the same rules that apply to all civil litigants. It injected judicial oversight into the process and afforded innocent individuals the opportunity to challenge the subpoenas. It did not, however, stop the lawsuits.

Amnesty or "Sham-nesty"?

Alongside the first 261 lawsuits filed in September 2003, the RIAA also unveiled an "amnesty" program dubbed "Clean Slate."³⁹ Filesharers were invited to come forward, identify themselves, delete all their downloaded music, and sign an affidavit promising to stop any unauthorized music sharing.⁴⁰ In exchange, the RIAA promised not to sue the repentant filesharer.

On further examination of the fine print, however, it became clear that the RIAA "amnesty" program delivered considerably less than it promised. First, because the RIAA does not *itself* own any copyrights (those are held by the record labels and music publishing companies), the RIAA was unable to deliver any meaningful protection from civil copyright lawsuits. The RIAA's member companies, as well as songwriters and music publishers, would remain free to sue the filesharers who stepped forward. In addition, the RIAA reserved the right to turn over the information it gathered in response to any valid subpoena from a copyright owner.⁴¹

The RIAA's offer, moreover, only applied to individuals who had not been sued and were not "under investigation." Because it was impossible to know in advance who the RIAA was already investigating, those who came forward to sign the affidavit took the risk that they would incriminate themselves and yet be ineligible for the amnesty.

These disparities between the RIAA's public characterizations of its Clean Slate program and what the program actually delivered led Eric Parke to file a false advertising lawsuit against the RIAA.⁴² In the words of the complaint, Clean Slate was "designed to induce members of the general public . . . to incriminate themselves and provide the RIAA and others with actionable admissions of wrongdoing under penalty of perjury while (receiving) . . . no legally binding release of claims . . . in return."

In April 2004, the RIAA voluntarily eliminated the Clean Slate program, concentrating their efforts on filing lawsuits against individual file-sharers.⁴³ In the end, only 1,108 people signed the Clean Slate affidavit.⁴⁴

The RIAA filed 5,460 lawsuits during 2004, ringing in the new school year with a wave of suits against university students and bringing the total number of lawsuits to 7,437.⁴⁸ By the end of 2005, the total number of suits had swelled to 16,087.⁴⁹ In February 2006, at which point 17,587 had been sued, the RIAA stopped making monthly announcements regarding the precise number of suits being filed. As a result, it is now impossible to get an exact count of the total number of lawsuits that have been filed. The lawsuits, however, have continued, with the RIAA admitting in April 2007 that more than 18,000 individuals had been sued by its member companies.⁵⁰ Assuming that the RIAA has continued to file hundreds of lawsuits each month, the total number of suits likely will approach 30,000 on the fourth anniversary of the lawsuit campaign.

In the majority of these cases, the targets settled their cases for amounts ranging between \$3,000 and \$11,000. They had little choice—even if an individual has a defense, it is generally more expensive to hire a lawyer to fight than it would be simply to settle. Even ignoring the lawsuit can be more expensive than settling; at least one court has entered a default judgment of \$6,200 against a defendant who failed to contest the lawsuit.⁵¹ Another court awarded a \$22,500 judgment against a Chicago woman who attempted to fight the lawsuit against her.⁵²

IV. Personal Effects = Devastating.

There is no question that the RIAA's lawsuit campaign is unfairly singling out a few people for a disproportionate amount of punishment. Tens of millions of Americans continue to use P2P file sharing software and other new technologies to share music, yet the RIAA has randomly singled out only a few for retribution through lawsuits. Unfortunately, many of the people in this group cannot afford either to settle or to defend themselves.

Take, for example, the case of the Tammy Lafky, a 41-year-old sugar mill worker and single mother in Minnesota. Because her teenage daughter downloaded some music last year—an activity both mother and daughter believed to be legal—Lafky now faces over \$500,000 in penalties. The RIAA has offered to settle for \$4,000, but even that sum is well beyond Lafky's means—she earns just \$21,000 per year and receives no child support.⁵³

Or take the case of Cecilia Gonzalez, a recently laid-off mother of five, who owes five major record companies a total of \$22,500 for illegally downloading off the Internet. That's more than three-fourths of what she made the previous year as a secretary. Ironically, Gonzalez primarily downloaded songs she *already owned* on CD—the downloads were meant to help her avoid the labor of manually loading the 250 CDs she owns onto her computer. In fact, the record companies are going after a steady customer—Gonzalez and her husband spent about \$30 per month on CDs. Nevertheless, the RIAA insisted that it would not consider a settlement for less than \$3000, an amount that would bankrupt the Gonzalez family.⁵⁴

Gonzalez is not the only good customer the RIAA has chosen to alienate. The organization recently targeted a fully disabled widow and veteran for downloading over 500 songs she already owned. The veteran's mobility was limited; by downloading the songs onto her computer, she was able to access the music in the room in which she

primarily resides. The RIAA offered to settle for \$2000—but only if the veteran provided a wealth of private information regarding her disability and her finances.⁵⁵

Prof. Gerardo Valecillos, a Spanish teacher and recent immigrant from Venezuela, faces another kind of blackmail. After his ISP advised him that his daughter had illegally downloaded music, Valecillos contacted a lawyer. The lawyer negotiated a \$3000 settlement figure, but that is still far more than Valecillos is able to pay. The sole support for his family of four, Valecillos recently underwent surgery and has been forced to pay legal fees for both a copyright and immigration attorney. If he does not settle, his immigration status may be jeopardized.⁵⁶

John Paladuk was an employee of C&N railroad for 36 years and suffered a stroke in 2006 which left his entire left side paralyzed, and severely impaired his speech, leaving him disabled with his disability check as his only source of income. Despite this, the RIAA has filed suit in Michigan against Mr. Paladuk, even though he lived in Florida at the time of the alleged infringement and has no knowledge of file sharing.⁵⁷

The RIAA does not even bother to make sure that its targets are actually current filesharers. One Florida college senior was named in a civil case based on downloads that had occurred two to three years before, from a computer she then shared with her three roommates. The computer is long gone, making any investigation into the circumstances difficult at best. Fearful of leaving college with a damaged credit record, the student believes that she may have no choice but to meet the RIAA's demand.⁵⁸

In another instance Cassi Hunt, a student at M.I.T., was sued for illegally sharing music. After attempting in vain to negotiate her settlement price of \$3,750 by arguing that she was already in debt to cover tuition, an RIAA representative kindly suggested that she drop out of school in order to pay off the settlement.⁵⁹

One unanswered question is how many entirely innocent people have been caught in the net of the recording industry lawsuits and forced to settle in order to avoid the legal fees involved with defending themselves. In addition to Sarah Ward, the grandmother wrongly accused in the very first round of lawsuits, the RIAA in early 2005 sued Gertrude Walton of Mount Hope, West Virginia, who had passed away months before.⁶⁰ In yet another case, Lee Thao of Wisconsin was sued for sharing files when both the RIAA and the ISP overlooked the fact that Mr. Thao was not actually a customer of the ISP at the time of the alleged infringement, though his old cable modem remained registered to his name.⁶¹ Although these suits were ultimately dismissed, it raises troubling questions about how many others have been misidentified in the lawsuit campaign.

V. Fighting Back

While the majority of lawsuit victims continue to settle or default rather than face the expense of litigation, some accused filesharers are fighting back. In particular,

parents have succeeded in dismissing suits where their children were the ones responsible for the file sharing. (The RIAA has responded by suing the children directly in some of these cases.) Recently, one parents in such a case has been able to recover attorney's fees for the initial suit.

In May 2005, accused filesharer Candy Chan moved to dismiss the record companies' lawsuit against her on the ground that the RIAA had sued the wrong person. The RIAA was forced to withdraw the case, though it later filed a new lawsuit against Ms. Chan's 14-year-old daughter.⁶² This suit was also eventually dismissed in April of 2006 after the RIAA requested that a legal guardian be appointed for Ms. Chan's daughter, but then refused to pay for such a guardian as ordered by the court.⁶³

In August 2005, Patricia Santangelo, a single mother of five, moved to dismiss the lawsuit filed against her by several record companies, arguing that the Complaint that launched the case was not specific enough to state a copyright claim.⁶⁴ Santangelo says that she was not aware that there was a file sharing program on her computer, and that the file sharing account named in the lawsuit belongs to a friend of her children's. The case was dismissed in April of 2007, with the opportunity for Ms. Santangelo to pursue her claim for attorney's fees.⁶⁵

In September 2005, disabled single-mother Tanya Andersen answered the record companies claims against her with some claims of her own—for deceptive business practices, invasion of privacy, and violations of computer fraud and racketeering laws.⁶⁶ The RIAA recently dismissed this case, but Andersen still retains her claim for attorney's fees and her various other counterclaims.⁶⁷

Another victory against the RIAA's tactics came in the case of *Capitol v. Foster*. Debbie Foster was originally sued in November of 2004 when an account she owned was found to be sharing files. Foster admitted owning the account but was ignorant of any file sharing software.⁶⁸ A year and a half after filing suit, the RIAA dismissed the case. In July 2007, the court awarded Ms. Foster \$68,685 in attorneys fees, marking the first time the RIAA has been ordered to pay a defendant's fees.⁶⁹ In the meantime, the RIAA has sued Foster's 20-year old daughter for the alleged file sharing.⁷⁰

Single-mom Dawnell Leadbetter is also fighting to get her attorney's fees paid after two years of litigation with the RIAA.⁷¹ After having his case dismissed, Rolando Amurao countersued for a declaration of non-infringement and a finding of copyright misuse.⁷² Meanwhile, accused filesharer Suzy Del Cid filed a number of counterclaims against the RIAA, including claims of trespass, computer fraud, civil extortion, and civil conspiracy.⁷³

VI. Phase Three: Pre-Litigation Letters Target University Students

On February 28, 2007, the RIAA announced a new "deterrence and education initiative" targeting college students nationwide.⁷⁴ Under this new initiative, instead of initiating lawsuits, the RIAA sends out hundreds of "pre-litigation" letters each month to a variety of universities with the request that they forward these letters to unidentified students.⁷⁵ These letters identify the IP address of the accused infringer, threaten future legal action with damages upwards of \$750 per song, and offer a deal in the form of a

"reduced" settlement if the student comes forward and pays the non-negotiable amount (around \$3,000) within 20 days of receiving the letter.⁷⁶ If students do not respond to the pre-litigation settlement offer, then the RIAA commences with its traditional "John Doe" suit. In the first six months of this new initiative, the RIAA has targeted 2,926 college students at nearly 100 different campuses across the United States.⁷⁷

The campaign has been supplemented with the creation of a new website, <http://www.p2plawsuits.com>, the latest tool in the RIAA's litigation strategy. At the website, those receiving pre-litigation letters can simply settle their cases by paying the settlement with a credit card, without any aspect of the case ever entering the legal system. This in turn saves the recording industry a substantial sum of money by completely avoiding the costs associated with actually having to file a "John Doe" suit. The "reduced" settlement amount, in other words, represents the record companies' savings from cutting out the middleman—our justice system. At the same time, the costs saved by the RIAA in not filing an actual suit can then be applied towards targeting more students with pre-litigation letters.

The RIAA has put special effort into getting universities to deliver these pre-litigation letters. University response to this effort, however, has been varied, ranging from complete refusal to forward pre-litigation letters to students, to fining students upon receipt. Since the letters are sent under threat of legal action, but before any lawsuit commences, the colleges themselves are under no legal obligation to forward these letters to students who have been targeted. Both the University of Wisconsin and the University of Maine have refused to forward the pre-litigation letters, citing a refusal to be the RIAA's "legal agent."⁷⁸

Stanford University in California has taken the opposite tack. Not only do they forward on such letters, but starting in September 2007, the university will begin charging *students* for complaints they receive from the RIAA. The first offense will come with a \$100 reconnection fee, the second a \$500 fee, and \$1,000 for the third.⁷⁹

Most universities, however, are forwarding RIAA pre-litigation letters on to their students, apparently on the assumption that a student will be better off settling sooner, at the "discounted" rate, rather than later. Some schools impose other limited sanctions on accused students, such as requiring that accused students watch an anti-piracy DVD published by the RIAA.⁸⁰

The RIAA has also tried to use similar tactics against individuals using commercial ISPs. In February 2007, the RIAA contacted a number of ISPs offering to broker a deal: if they agreed to keep records regarding the IP addresses of their subscribers, the RIAA would offer their subscribers these same "cut-rate" settlement offers (which the ISP would then forward to their subscribers).⁸¹ So far, however, no ISP seems willing to act as a collection agency on the RIAA's behalf.

RIAA & Government Pressure on Universities

While the RIAA is using the judicial branch of government to pressure students and universities by threatening lawsuits, it is also trying its hand at applying pressure through the legislative branch. The House of Representatives has had no less than six hearings on the subject of file sharing at universities in the past three years.⁸²

In 2004, Congress commissioned a GAO report on the topic of file sharing on university networks to determine what universities were doing to address copyright infringement on their own networks.⁸³ The report was based on a survey of selected universities. Of the 45 campuses contacted, only 13 agreed to participate in the interview.⁸⁴ The report described the use of P2P software on university networks, while describing campus initiatives to limit the use of such software.⁸⁵ The limited university participation in the survey however, set the stage for numerous congressional hearings on the subject, in which the RIAA more than happily participated.

At the direction of Rep. Howard Berman (Democratic congressman from California's 28th district, home to a number of recording and film industries), the House Judiciary Subcommittee on the Courts, the Internet, and Intellectual Property has held hearings on the subject of file sharing on university networks.⁸⁶ Witnesses at one of these hearings included a number of prominent university information technology officials, as well as the president of the RIAA and the CEO of RedLambda, which sells anti-P2P software known as cGrid.⁸⁷ At the hearing, a number of congressmen, including Berman, described their concern over a "lack of incentives" for universities to stem illegal files haring. They also upbraided the university witnesses for failing to act aggressively enough to address the issue.

Meanwhile, the House Committee on Science and Technology held a hearing discussing the feasibility of implementing p2p mitigation software on university networks.⁸⁸ Witnesses at this hearing included representatives from Universities voluntarily using such systems, and the CEO of AudibleMagic, which creates p2p mitigation software. Only one witness, Dr. Gregory Jackson of the University of Chicago pointed out the futility of such efforts, noting that infringement was driven by market shortcomings and that attempts at such technological fixes will eventually fail.⁸⁹

In May of 2007, a group of bi-partisan Congressmen from both the House Judiciary Committee and the House Education and Labor Committee sent a letter to 20 universities requesting that they respond to an extensive survey regarding their policies regarding network file sharing.⁹⁰ These were universities previously targeted by the RIAA and the MPAA in their Top-25 list of "worst offenders," a list intended to put pressure on particular universities before congress.⁹¹ Congress threatened "unspecified repercussions" if the universities did not provide "acceptable answers" to the survey,⁹² which included questions such as: "Does your institution expel violating students?"⁹³

Congress's intervention on the issue has also gone beyond hearings and investigation. In March of 2007, a bill was introduced in the House Education and Labor Committee supporting the use of tax dollars allotted for education towards implementing software intended to stop P2P file sharing, such as that marketed by RedLambda.⁹⁴ While the bill does not make such expenditures mandatory, the prospect of having educational funds diverted to copyright enforcement technologies is plainly intended to put additional pressure on universities. In July of 2007, Sen. Harry Reid turned up the pressure in a proposed amendment⁹⁵ to the Higher Education Reauthorization Act. Under the proposal, the Secretary of Education would annually single out the 25 colleges and universities with the highest levels of infringing file sharing, based on the number of complaints received from copyright holders. These schools would risk losing federal funding if they didn't implement "technology-based deterrents" to infringement and report to the Secretary about their efforts to stop file sharing. Though Sen. Reid withdrew this proposal, he still did successfully tack on a different amendment that instructs schools to tell students about the possible penalties for copyright infringement.⁹⁶

VII. Is it Working?

Are the lawsuits working? Has the arbitrary singling out of more than 20,000 random American families done any good in restoring public respect for copyright law? Have the lawsuits put the P2P genie back in the bottle or restored the record industry to its 1997 revenues?

After four years of threats and litigation, the answer is a resounding *no*.

A. By the numbers: U.S. filesharers uncowed.

How many Americans continue to use P2P file sharing software to download music? While some surveys suggest a modest reduction in file sharing since the recording industry lawsuits against individuals began, empirical monitoring of the P2P networks has shown P2P usage increasing.

At the end of 2004, a group of computer scientists at UC San Diego and UC Riverside published a study aimed at measuring P2P usage from 2002 through 2004. Drawing on empirical data collected from two Tier 1 ISPs, the researchers concluded:

*In general we observe that P2P activity has not diminished. On the contrary, P2P traffic represents a significant amount of Internet traffic and is likely to continue to grow in the future, RIAA behavior notwithstanding.*⁹⁷

The methodology employed by the researchers had several advantages over the survey-based approaches that had been used in earlier studies. The empirical data eliminated the self-reporting bias that is an inevitable part of surveys, a bias that was almost certainly exacerbated by the high-profile lawsuit campaign. In addition, by measuring traffic at the link level, the study was able to track file sharing that may not show up otherwise due to the use of alternate ports.⁹⁸

Other empirical data bears out the UC researchers' findings. Big Champagne, for example, monitors the peak number of U.S. users of several P2P networks, including Fastrack (i.e., Grokster, Kazaa), iMesh, eDonkey, DirectConnect, and Gnutella (i.e., Morpheus, Limewire, BearShare). Its numbers are accurate enough to be used by major record labels, *Billboard*, *Entertainment Weekly*, and Clear Channel to monitor the popularity of various artists on P2P networks.⁹⁹ Big Champagne's network monitoring indicates that the amount of traffic on P2P networks doubled between September 2003 (when the lawsuits began) and June 2005.¹⁰⁰ The average number of simultaneous users in June 2005 reached 8.9 million, a 20% increase over the previous year, while in May 2006 Big Champagne logged a whopping 10 million, 12% more than the previous year.¹⁰¹

Monthly Average P2P Users	
Monthly	GLOBAL
August, 2003	3,847,565
September, 2003	4,319,182
October, 2003	6,142,507
November, 2003	4,392,816
December, 2003	5,602,384
January, 2004	6,046,998
February, 2004	6,831,366
March, 2004	7,370,644
April, 2004	7,639,479
May, 2004	7,286,377
June, 2004	7,401,431
July, 2004	7,115,975
August, 2004	6,822,312
September, 2004	6,784,574
October, 2004	6,255,986
November, 2004	7,452,184
December, 2004	7,582,248
January, 2005	8,385,612
February, 2005	8,524,938
March, 2005	8,282,986
April, 2005	8,629,307
May, 2005	8,665,319
June, 2005	8,888,436

Source: BigChampagne

American users accounted for 75% of those on P2P networks.¹⁰² Furthermore, as many users are not on P2P networks all the time or are not uploading files, the actual number of P2P users may be much higher.

The growth in P2P popularity has continued in 2006 and 2007. Big Champagne reports that the average number of simultaneous users on P2P networks had swelled to 9.35 million.¹⁰³ The NPD Group, a marketing research firm, recently announced that 15 Million U.S. households downloaded from P2P networks in 2006, with total P2P file sharing volume up 50% from 2005.¹⁰⁴ This number likely understates the frequency of P2P downloading, given that NPD's numbers are based on data from users who know they are being monitored. Other data suggests that consumers now consider P2P file-sharing applications to be a necessity on their PCs.¹⁰⁵ According to a February 2007 report by the Digital News Research Group, 18.3% of all computer desktops worldwide have LimeWire installed.¹⁰⁶

While the RIAA's assault on P2P goes on, a substantial amount of illegal file sharing occurs beyond the realm of P2P networks altogether, with little recourse for the recording industry. A 2006 poll by the *Los Angeles Times* revealed that 69% of 12-17 year-olds felt that it was legal to copy a CD or DVD they owned and give it to a friend.¹⁰⁷ The NPD Group released a survey in May 2007 that found that “the social ripping and burning of CDs among friends—which takes place offline and almost entirely out of reach of industry policing efforts—accounted for 37 percent of all music consumption, more than file sharing.”¹⁰⁸ RIAA head Mitch Bainwol has publicly acknowledged that CD ripping is becoming a more serious problem than P2P file sharing.¹⁰⁹ At the same time, more and more users are turning to new Internet technologies like instant messaging, modified versions of iTunes, or private or semi-private networks to exchange files, leaving this traffic unaccounted for by most empirical metrics.

BayTSP is another company that monitors P2P file sharing networks. In contrast to Big Champagne, BayTSP uses this data in order to provide copyright enforcement services to major motion picture studios and record labels. BayTSP's data also indicate that P2P file sharing has continued to grow despite the RIAA lawsuit campaign.¹¹⁰ In particular, BayTSP's statistics highlight the growth of newer P2P networks, such as eDonkey, at the expense of incumbent networks, like Kazaa.¹¹¹

A few surveys of Internet users have contradicted these numbers. For example, in November and December 2003, researchers at the Pew Internet and American Life Project called 1,358 Internet users across the nation to ask them whether they continued to download music.¹¹² In March 2003, prior to the RIAA lawsuits, 29 percent of those responding admitted downloading songs from the Internet. This number fell by half, to only 14 percent, in the November/December survey. Many pointed out, however, that this dramatic shift might have been caused by an increased reluctance to admit downloading in light of the widely publicized RIAA lawsuits. In other words, the widespread publicity attending the RIAA lawsuits may have made the respondents more willing to lie about their downloading activities. Pew's own investigators admitted that this may have influenced their results.¹¹³ At the same time, a survey conducted by the NPD Group showed that, overall, P2P file sharing was on the rise in November of 2003, gaining 14% over September's numbers.¹¹⁴

At any rate, the decrease shown by Pew's early surveys soon reversed itself. By February 2004, Pew's survey showed an increase in downloading, partially due to the rise of authorized download services and partly due to increased P2P file sharing.¹¹⁵ By Pew's own conservative estimates, six months after the RIAA lawsuits began, more than 20 million Americans continued to use P2P file sharing software—a number amounting to 1 in 6 Americans with Internet access.¹¹⁶

While it is hard to precisely measure the use of P2P and the amount of illegal file sharing in the U.S., one thing is clear: after more than 20,000 RIAA lawsuits, tens of millions of U.S. music fans continue to use P2P networks and other new technologies to share music. The lawsuit campaign has not succeeded in driving P2P out of the mainstream, much less to the fringes, of the digital music marketplace. Moreover, by most accounts P2P usage is growing rapidly in the rest of the world, where the RIAA has not been able to replicate the scale of its lawsuits against Americans of all ages and backgrounds.

B. Education by Lawsuit: Lesson Learned and Ignored.

The RIAA has frequently justified the lawsuit campaign as the most effective way to get music fans to understand that downloading is illegal and can have serious consequences.¹¹⁷ In the words of top RIAA lawyer, Cary Sherman, “Enforcement is a tough love form of education.”¹¹⁸ There is some evidence to support this view. After all, in light of the recurring headlines in most major media outlets, it would be remarkable if the lawsuits had failed to increase awareness of the record industry's view that file sharing constitutes copyright infringement. An April 2004 survey revealed that 88% of children between 8 and 18 years of age believed that P2P downloading was illegal.¹¹⁹ At the same time, the survey also discovered that 56% of the children polled continue to download music regardless. In fact, the children surveyed were more concerned about computer viruses than about being sued by the record industry. Another April 2004 survey, this one focusing on college-bound high school students, found that 89% of high school students continued to download music despite understanding that it was against the law.¹²⁰ This number decreased slightly in a 2006 survey by Piper Jaffrey that found that 79% of high school students who obtain their music online, 72% use P2P networks to do so.¹²¹ In short, the RIAA's “tough love” message has clearly been delivered, and does not appear to be working.

The “educational” value of the litigation campaign is also diminishing because it has become “business as usual.” Media coverage of the continuing lawsuit campaign has largely dissipated, with stories about the lawsuits migrating from the front to the back pages to not being covered at all.¹²² As a result, since early 2006, the RIAA gave up its monthly press releases announcing how many individuals were being sued.

If the goal of the RIAA was to increase awareness of the copyright laws, that mission has been accomplished, albeit at the expense of financial hardship to over 20,000 arbitrarily chosen individuals. But as press attention fades, the “bang for the buck” provided by suing randomly-chosen filesharers has diminished as well. In other words, if the lawsuits are to continue indefinitely, they cannot be justified as an “educational” measure.

C. Going after the Fans = Unnecessary Roughness.

According to the RIAA's public statements, its lawsuits against individuals were necessitated, in part, by court rulings that blocked it from going after P2P technology vendors. That justification has disappeared as well.¹²³ In June 2005, the Supreme Court announced a new "inducement" doctrine that permits the imposition of liability against anyone "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."

The RIAA characterized the *MGM v. Grokster* decision as "the dawn of a new day—an opportunity that will bring the entertainment and technology communities even closer together, with music fans reaping the rewards."¹²⁴ Presumably, one of those "rewards" could have been the end of the lawsuit campaign. Instead, just two days after the Supreme Court's ruling, the RIAA announced a new wave of lawsuits against 784 music fans.¹²⁵ The recording industry appears to have made suing individual music fans a part of its business-as-usual routine.

D. What about iTunes? A Drop in the Bucket.

Some have justified the lawsuit campaign as a necessary "stick" designed to complement the "carrot" of authorized music services. The notion is that the fear of lawsuits will drive music fans to services like Apple's iTunes Music Store, where they will be hooked on 99 cent downloads and abandon the P2P networks.

Some music fans are finding what they want at the authorized music services and download stores. Apple's iTunes Music Store, the most successful of all the authorized music services, sold 2 billion downloads between April 2003 and January 2007.¹²⁶

But the, volume of downloads sold to date continues to pale when compared to the number of files swapped over P2P networks—an estimated *5 billion each month*.¹²⁷ In other words, the number of files shared on these networks was over 35 times greater than the number of songs purchased on iTunes. The recording industry's own international industry group, the IFPI, estimated in 2006 that there were 40 unauthorized downloads for every legitimate download purchased.¹²⁸ In short, all of the authorized music services together do not yet amount to a drop in the digital music downloading bucket.

If the recording industry is serious about luring music fans away from P2P networks and other methods of sharing, it should be focusing more attention on dangling a tastier carrot, rather than swatting more individuals with the lawsuit stick. The authorized music services suffer from three critical shortcomings when compared to unauthorized alternatives: (1) anti-consumer "digital rights management" restrictions; (2) limited inventory; and (3) high prices.

First, and perhaps most significantly, the offerings from the authorized music services are restricted using digital rights management, or "DRM," technologies.¹²⁹ Thanks to these technologies, music fans find that they cannot copy the music they have paid for to portable devices of their choosing—including Apple's popular iPod. Moreover, several music services, such as Napster and Yahoo, amount to little more than extended rental services—if the service is cancelled, the files stop working.¹³⁰ The

music provided is often streamed, which means the user cannot retain it for future use. Users may have the possibility of purchasing the files permanently, but only by paying another fee.

While these restrictions, when considered in a vacuum, may strike some as reasonable, they make for a less-than-attractive carrot when dangled in front of music fans used to the unencumbered MP3 files they find on P2P networks. At the same time, the DRM technologies have not succeeded in keeping any “protected” songs off the Internet. In fact, the existence of these restrictions gives otherwise law-abiding customers a reason to seek out P2P channels when their legitimate expectations are frustrated (after all, these are the customers who paid for the music they could have obtained for free!).

The backlash against “DRM” on digital downloads has led to the creation of some commercial music services that sell unrestricted tracks, such as eMusic and Amie Street.¹³¹ However, these services are still plagued by pricing issues and especially limited inventory. Steve Jobs announced his own dislike of industry-mandated DRM, paving the way for even Apple to provide DRM-free tracks on iTunes for a premium.¹³²

Second, limited inventory is a problem across the board. Online stores omit both popular performers like the Beatles, as well as obscure (and non-obscure) independent artists and rarities such as live concert recordings. For many popular hip-hop albums, only some tracks are available, with the remainder caught up in Byzantine music industry fights over licensing.¹³³ By contrast, all of these are made available by music fans on the P2P networks.

Third, the pricing of individual music downloads remains too high. The major labels’ own mail order record clubs, such as BMG Music Service, will deliver a CD for as little as \$8.00. Yet that same album costs \$9.99 from the iTunes Music Store. It seems evident that the 99 cent per download price is set more in deference to retail CD prices than profit-maximizing price that a free market would provide. Real Networks vividly demonstrated this when it unilaterally slashed its prices to 49 cents per download (thereby losing money on every sale, since the record labels insist on wholesale prices above 60 cents per download) and saw its sales figures multiply six-fold.¹³⁴ This experiment suggests that the record labels could expand the market for authorized downloads and their own revenues by cutting their wholesale prices in half.

E. Incubating New “Darknet” Technologies.

The RIAA lawsuit campaign may also be encouraging music fans to migrate to file sharing technologies that will be both more efficient for users and harder for the RIAA to infiltrate. To the extent filesharers are worried about the RIAA lawsuits, many are simply opting to continue downloading while refraining from uploading (this is known as “leeching” in the lexicon of the P2P world).¹³⁵ Because the RIAA lawsuit campaign has, thus far, only targeted uploaders, “leechers” can continue downloading evidently without risk. Given the global popularity of P2P, there is no shortage of offshore uploaders for U.S. filesharers to rely on.

In response to the RIAA lawsuits, many filesharers are beginning to opt for new file sharing technologies that protect their anonymity. Software such as DirectConnect,

WASTE, and AllPeers offer secure, encrypted file sharing capabilities to groups of friends.¹³⁶ Infiltrating these private P2P circles is much more difficult than simply trolling public P2P networks. Other technologies, such as MUTE, Freenet, the I2P Network, and JAP provide file sharing capabilities in a context that protects the anonymity of the uploader.¹³⁷ In these networks, the content is encrypted and copied through a number of intermediate points in a manner that obfuscates its source. Many other users are opting to share using the “buddy list” and file sharing capabilities in popular instant messaging clients, like those offered by Yahoo and AOL.

Internet-based file sharing, moreover, may soon be supplanted by hand-to-hand file sharing. As noted previously, burning and exchanging CDs among friends is commonplace. The cost of digital storage media is falling rapidly, while capacity has risen substantially in the past few years. The HD-DVD-R and HD-DVD-RW formats allow users to burn 15-30 GB of content onto a single disc.¹³⁸ Meanwhile, Blu-Ray's recordable formats, BD-R and BD-RE, are capable of storing between 25 and 50 GB per disc, for which PC-based burners have been available since July 2006.¹³⁹ TDK has even showcased a BD-R disc capable of storing 100 GB.¹⁴⁰ Hard drives also continue to fall in price and expand in capacity. As of July 2007, a 500 GB drive can be had for about \$120, offering music fans the ability to collect and share extremely large music collections from and among their extended circle of friends and acquaintances. USB flashdrives, while currently limited to a few GB in capacity, have also gained in popularity, providing another convenient means for quickly sharing files.

VIII. What to Do Instead.

Four years and more than 20,000 lawsuits later, the RIAA's campaign of suing individual American music fans has failed. It has failed to curtail P2P downloading. It has not persuaded music fans that sharing is equivalent to shoplifting. It has not put a penny into the pockets of artists. It has failed to drive the bulk of filesharers into the arms of authorized music services. In fact, the RIAA lawsuits may well be driving filesharers to new technologies that will be much harder for the RIAA's investigators to infiltrate and monitor.

There is a better way. EFF advocates a voluntary collective licensing regime as a mechanism that would fairly compensate artists and rightsholders for P2P file sharing.¹⁴¹ The concept is simple: the music industry forms one or more collecting societies, which then offers file sharing music fans the opportunity to “get legit” in exchange for a reasonable regular payment, say \$5 per month. So long as they pay, the fans are free to keep doing what they are going to do anyway—share the music they love using whatever software they like on whatever computer platform they prefer—without fear of lawsuits. The money collected gets divided among rightsholders based on the popularity of their music. In exchange, file sharing music fans who pay (or have their ISP or software provider or other intermediary pay on their behalf) will be free to download whatever they like, using whatever software works best for them. The more people share, the more money goes to rights-holders. The more competition in P2P software, the more rapid the innovation and improvement. The more freedom for fans to upload what they care about, the deeper the catalog.

This has been successfully done before. For decades, “collecting societies” like ASCAP, BMI and SESAC have been collecting fees from radio stations, performance venues, bars and restaurants. Once the fee is paid, these establishments are entitled to play whatever music they like, from whatever source, as often as they like. Music fans today deserve the same opportunity to pay a fee for the freedom to download the music they love.

Some lawsuits would still be necessary, the same way that spot checks on the subway are necessary in cities that rely on an “honor system” for mass transit. But the lawsuits will no longer be aimed at singling out music fans for multi-thousand dollar punishments in order to “make an example” of them. They will no longer be intended to drive fans into the arms of inferior, over-priced alternatives.

Instead, the system would reinforce the rule of law—by giving fans the chance to pay a small monthly fee for P2P file sharing, a voluntary collection system creates a way for fans to “do the right thing” along with a realistic chance that the majority will actually be able to live up to the letter of the law.

¹ John Borland, “RIAA sues 261 file swappers,” *CNET News.com*, September 8, 2003, http://news.com.com/2100-1023_3-5072564.html.

² See Justin Engel, “Music Industry Targets CMU,” *The Saginaw News*, Apr. 16, 2007 (quoting the RIAA as filing 18,000 lawsuits); and recent RIAA press releases citing about 400 complaints against universities per month, found here: http://www.riaa.com/newsitem.php?news_year_filter=2007&resultpage=5&id=0BB7A35D-544B-2DD2-F374-4F680D6BAE9B and http://www.riaa.com/newsitem.php?news_year_filter=2007&resultpage=4&id=B3196098-01D3-FCD7-E97E-E8F8384E4986 and http://www.riaa.com/newsitem.php?news_year_filter=2007&resultpage=3&id=7408966D-245D-A17D-4869-C0DB1E7ADA97 and http://www.riaa.com/newsitem.php?news_year_filter=2007&resultpage=2&id=C2476AFF-A70F-0567-76C2-FC3ECEE93D8E and http://www.riaa.com/newsitem.php?news_year_filter=2007&resultpage=1&id=7710D405-A886-F768-B8AD-EBC0E4831DD1.

³ Associated Press, “Elderly man, schoolgirl, professor among file-swapping defendants,” *USA Today*, September 9, 2003, http://www.usatoday.com/tech/news/techpolicy/2003-09-09-riaa-defendants_x.htm.

⁴ See, e.g., RIAA Continues Enforcement Of Rights With New Lawsuits Against 784 Illegal Filesharers, RIAA Press Release, Jun. 29, 2005, http://www.riaa.com/newsitem.php?news_year_filter=2005&resultpage=7&id=8B83713E-4BD3-F311-29FB-AE9100E49FF1; John Borland, “RIAA files 754 new file-swapping suits,” *CNET News.com*, December 16, 2004, http://news.com.com/RIAA+files+754+new+file-swapping+suits/2110-1027_3-5494259.html.

⁵ See Eliot Van Buskirk, “A Poison Pen From the RIAA,” *Wired*, Feb. 28, 2007, <http://www.wired.com/politics/onlinerights/news/2007/02/72834>.

⁶ Courtney Macavinta, “Recording industry sues music start-up, cites black market,” *CNET News.com*, December 7, 1999, http://news.com.com/Recording+industry+sues+music+start-up%2C+cites+black+market/2100-1023_3-234092.html?tag=st.rn (Napster); Thomas C. Green, “MPAA, RIAA sue Scour over copyrights,” *The Register*, July 24, 2000,

http://www.theregister.co.uk/2000/07/24/mpaa_riaa_sue_scour_over/ (Scour); John Borland, "RIAA sues Aimster over file swapping," *CNET News.com*, May 25, 2001, <http://news.com.com/2100-1023-258259.html?legacy=cnet> (Aimster); John Borland, "Suit hits popular post-Napster network," *CNET News.com*, October 3, 2001, at http://news.com.com/Suit+hits+popular+post-Napster+network/2100-1023_3-273855.html (MusicCity, Kazaa and Grokster); Borland, "Audiogalaxy hit by RIAA suit," *CNET News.com*, May 24, 2002, <http://zdnet.com.com/2100-1106-922904.html> (AudioGalaxy); John Borland, "RIAA sues iMesh file-trading firm," *CNET News.com*, September 19, 2003, http://news.com.com/2100-1025_3-5079454.html?part=msnbc-cnet&tag=alert&form=feed&subj=cnetnews (iMesh); Ed Oswald, "RIAA Sues LimeWire Over Piracy," *BetaNews*, Aug. 4, 2006, http://www.betanews.com/article/RIAA_Sues_LimeWire_Over_Piracy/1154722015 (LimeWire).

⁷ See *A&M Records, Inc. v. Napster, Inc.*, 239 F.3d 1004 (9th Cir. 2001), <http://news.findlaw.com/hdocs/docs/napster/napster032502opn.pdf>; Napster, Aimster, Scour, and Audiogalaxy all ultimately were liquidated or filed for bankruptcy.

⁸ John Borland, "Peer to peer: As the revolution recedes," *CNET News.com*, December 31, 2001, <http://news.com.com/2100-1023-277478.html>; John Borland, "P2P users traveling by eDonkey," *CNET News.com*, Aug. 28, 2005, http://news.com.com/P2P+users+traveling+by+eDonkey/2100-1025_3-5843859.html.

⁹ See Lee Rainie, et al., "Music and video downloading moves beyond P2P," Pew Internet & American Life Project, Mar. 2005, http://www.pewinternet.org/pdfs/PIP_File_sharing_March05.pdf; Mitch Bainwol, "Building a Brighter Future – Making and Selling Great Music," <http://www.narm.com/2005Convention/Bainwol.pdf>.

¹⁰ <http://www.allpeers.com/>.

¹¹ Sarah McBride, "File-Sharing Firms are Urged to Protect Music Industry Rights," *Wall Street J.*, D8, Sept. 15, 2005.

¹² See generally Joseph Menn, ALL THE RAVE: THE RISE AND FALL OF SHAWN FANNING'S NAPSTER (2003) (chronicling the rise and fall of the original Napster).

¹³ Associated Press, "'BitTorrent' Gives Hollywood a Headache," *USA Today*, Dec. 10, 2004, http://www.usatoday.com/tech/news/techpolicy/2004-12-10-bittorrent-hollywood_x.htm.

¹⁴ Edward W. Felten, "P2P in 15 Lines of Code," *Freedom to Tinker Blog*, Dec. 15, 2004, <http://www.freedom-to-tinker.com/?p=738>.

¹⁵ Scott Carlson, "Recording Industry Sues 4 Students for Allegedly Trading Songs Within College Networks," *Chron. of Higher Educ.*, Apr. 4, 2003 <http://chronicle.com/free/2003/04/2003040401t.htm>; Dawn C. Chmielewski, "Students accused of piracy," *S.J. Merc. News*, Apr. 4, 2003.

¹⁶ John Borland, "RIAA Sues Campus File Swappers," *CNET News.com*, April 3, 2003, <http://news.com.com/2100-1027-995429.html>; Complaint available at <http://news.findlaw.com/hdocs/docs/riaa/arcopeng40303njcmp.pdf>.

¹⁷ Nick Wingfield, "College Students Settle Suit Filed by Recording Industry," *Wall Street J.*, May 1, 2003 <http://online.wsj.com/article/0,,SB105182439529211800,00.html>.

¹⁸ *Id.*

¹⁹ Scott Carlson, "Recording Industry Sues 4 Students for Allegedly Trading Songs Within College Networks," *Chron. of Higher Educ.*, Apr. 4, 2003 <http://chronicle.com/free/2003/04/2003040401t.htm>.

²⁰ Lisa Bowman, "Labels Aim Big Guns at File Swappers," *CNET News.com*, June 25, 2003 http://news.com.com/Labels+aim+big+guns+at+small+file+swappers/2100-1027_3-1020876.html.

²¹ *Id.*

- ²² 17 U.S.C. § 512(h).
- ²³ Archived court documents for *RIAA v. Verizon Internet Services, Inc.*; *RIAA v. Charter Communications, Inc.*; and *Pacific Bell Internet Services v. RIAA* can be found at the following URLs, respectively: http://www.eff.org/legal/cases/RIAA_v_Verizon/; <http://www.eff.org/IP/P2P/Charter/>; and <http://www.eff.org/IP/P2P/riaa-v-thepeople.php>.
- ²⁴ See http://www.eff.org/legal/cases/RIAA_v_Verizon/20030516_eff_amicus.pdf.
- ²⁵ See Katie Dean, “Senator Takes a Swing at RIAA,” *Wired.com*, Sept. 17, 2003, http://www.wired.com/news/politics/0,1283,60461,00.html?tw=wn_story_related
- ²⁶ See “Recording Industry Begins Suing P2P Filesharers Who Illegally Offer Copyrighted Music Online,” RIAA Press Release, September 8, 2003, http://www.riaa.org/newsitem.php?news_year_filter=2003&resultpage=6&id=85183A9C-28F4-19CE-BDE6-F48E206CE8A1.
- ²⁷ Helen Kennedy, “C-notes for Brianna,” *New York Daily News*, September 11, 2003, <http://www.nydailynews.com/front/story/116703p-105168c.html>.
- ²⁸ “Not-so-Jolly Rogers,” *The Economist*, September 10, 2003, http://www.economist.com/agenda/PrinterFriendly.cfm?Story_ID=2050467.
- ²⁹ “Grandfather caught in music fight,” *BBC News*, September 9, 2003, <http://news.bbc.co.uk/2/hi/entertainment/3092854.stm> (Durwood Pickle); Jefferson Graham, “RIAA lawsuits bring consternation, chaos,” *USA Today*, September 10, 2003, http://www.usatoday.com/tech/news/techpolicy/2003-09-10-riaa-suit-reax_x.htm (Matthew McChesney).
- ³⁰ John Schwartz, “She Says She’s No Music Pirate. No Snoop Fan, Either,” *New York Times*, September 25, 2003, <http://www.nytimes.com/2003/09/25/business/media/25TUNE.html?ex=1098849600&en=6960e362c873ed2e&ei=5070>.
- ³¹ Dennis Roddy, “The Song Remains the Same” *Pittsburgh Post-Gazette.com*, Sept. 16, 2003.
- ³² See Grant Gross, “Congress Scrutinizes RIAA Tactics,” *IDG News*, Sept. 17, 2003, <http://www.pcworld.com/news/article/0,aid,112535,00.asp>
- ³³ Letter from Phil Corwin to Senate Judiciary Committee, Feb. 24 2004, available at http://lawgeek.typepad.com/lawgeek/2004/03/kazaa_lobbyist.htm.
- ³⁴ See Katie Dean, “Senator Wants Answers From RIAA,” *Wired News*, August 1, 2003 <http://www.wired.com/news/politics/0,1283,59862,00.html>
- ³⁵ John Borland, “Record industry warns of new lawsuits,” *CNET News.com*, October 17, 2003, http://news.com.com/Record+industry+warns+of+new+lawsuits/2100-1027_3-5093078.html?tag=nl.
- ³⁶ Paul Roberts, “RIAA Sues 532 ‘John Does,’” *IDG News*, January 21, 2004, <http://www.pcworld.com/news/article/0,aid,114387,00.asp>.
- ³⁷ John Borland, “RIAA files 80 new file-swapping suits,” *CNET News.com*, October 30, 2003, http://news.com.com/2100-1027_3-5099738.html?tag=nefd_top.
- ³⁸ See *RIAA v. Verizon*, 351 F.3d 1229 (D.C. Cir. 2003) http://www.eff.org/legal/cases/RIAA_v_Verizon/opinion-20031219.pdf.
- ³⁹ See “Recording Industry Begins Suing P2P File Sharers Who Illegally Offer Copyrighted Music Online; Will Agree Not to Sue P2P Users Who Voluntarily Pledge to Stop Distributing Music Illegally,” RIAA Press Release, September 8, 2003, http://www.riaa.com/newsitem.php?news_year_filter=2003&resultpage=6&id=85183A9C-28F4-19CE-BDE6-F48E206CE8A1.

-
- ⁴⁰ See http://www.riaa.com/newsitem.php?news_year_filter=2003&resultpage=6&id=85183A9C-28F4-19CE-BDE6-F48E206CE8A1.
- ⁴¹ Fred von Lohmann, "'Amnesty' for Music File Sharing Is a Sham," *Los Angeles Times*, September 10, 2003, http://www.eff.org/share/20030910_fred_latimes.pdf.
- ⁴² See Complaint, Parke v. RIAA (Cal. Super. Ct. filed Sept. 9, 2003) <http://www.techfirm.com/parke.pdf>.
- ⁴³ Associated Press, "Music Biz Kills Amnesty Program," *Wired News*, April 19, 2004, <http://www.wired.com/news/digiwood/0,1412,63133,00.html>.
- ⁴⁴ *Id.*
- ⁴⁵ Roy Mark, "High Court Bounces Latest RIAA Effort," *InternetNews.com*, Oct. 12, 2004, <http://www.internetnews.com/bus-news/article.php/3420681>.
- ⁴⁶ *Id.*
- ⁴⁷ John Schwartz, "Recording Industry Is Accusing 532 People of Music Piracy," *New York Times*, January 21, 2004, <http://www.nytimes.com/2004/01/21/business/21WIRE-MUSIC.html?ex=1098849600&en=6fbab6ab32a03237&ei=5070&hp>.
- ⁴⁸ The RIAA lawsuits began focusing on university students in September of 2004. See "RIAA Brings Lawsuits Against 762 Illegal File Sharers," RIAA Press Release, September 30, 2004, http://www.riaa.org/newsitem.php?news_year_filter=2004&resultpage=5&id=E578CA9B-0323-652D-60E0-0FC0B4DE626A.
- ⁴⁹ For a running tally of lawsuit totals through February 2006, as compiled from RIAA press releases, see "RIAA Watch," <http://sharenomore.blogspot.com/>.
- ⁵⁰ See Justin Engel, "Music Industry Targets CMU," *The Saginaw News*, Apr. 16, 2007 (quoting the RIAA as filing 18,000 lawsuits).
- ⁵¹ Ted Bridis, "Some Twists in Music Piracy Lawsuits," *BizReport*, August 23, 2004, <http://www.bizreport.com/news/7847/>.
- ⁵² Bob Mehr, "Gnat, Meet Cannon," *Chicago Reader*, Feb. 4, 2005 <http://www.chicagoreader.com/TheMeter/050204.html>.
- ⁵³ See "Single mom overwhelmed by recording industry suit," *Gazette Times*, May 27, 2004, <http://www.springfieldnews.com/articles/2005/07/01/updates/updates0098.prt>.
- ⁵⁴ See Bob Mehr, "Gnat, Meet Cannon," *Chicago Reader*, Feb. 4, 2005, <http://www.chicagoreader.com/TheMeter/050204.html>.
- ⁵⁵ Personal communication with EFF, Apr. 8, 2005.
- ⁵⁶ Personal communication with EFF, March 12, 2005.
- ⁵⁷ See "RIAA Sues Stroke Victim in Michigan," *Recording Industry v. The People Blog*, Mar. 13, 2007, <http://recordingindustryvspeople.blogspot.com/2007/03/riaa-sues-stroke-victim-in-michigan.html>.
- ⁵⁸ Personal communication with EFF, July 6, 2005.
- ⁵⁹ Cassi Hunt, "Run Over by the RIAA Don...t Tap the Glass," *The Tech*, Apr 4, 2006, <http://www-tech.mit.edu/V126/N15/RIAA1506.html>.
- ⁶⁰ Associated Press, "Music Industry Sues 83-year-old Dead Woman," *Boston Globe*, Feb. 4, 2005, http://www.boston.com/news/odd/articles/2005/02/04/music_industry_sues_83_year_old_dead_woman/.
- ⁶¹ "RIAA Drops Another Case In Chicago Against Misidentified Defendant," *Recording Industry v. The People Blog*, May 3, 2007, <http://recordingindustryvspeople.blogspot.com/2007/05/riaa-drops-another-case-in-chicago.html>.

-
- ⁶² Orders and pleadings collected at <http://recordingindustryvspeople.blogspot.com/2005/09/priority-records-v-chan-riaa-case.html>.
- ⁶³ Order and pleadings collected at <http://recordingindustryvspeople.blogspot.com/2006/04/riaa-case-against-14-year-old-brittany.html>.
- ⁶⁴ Timothy O'Connor, "Taking on the Records Companies" *The Journal News*, <http://www.thejournalnews.com/apps/pbcs.dll/article?AID+/200508>.
- ⁶⁵ "Elektra v. Santangelo -- Case Closed Except for Defendant's Attorneys Fees," *Recording Industry v. The People Blog*, April 10, 2007, <http://recordingindustryvspeople.blogspot.com/2007/04/elektra-v-santangelo-case-closed-except.html>.
- ⁶⁶ "Oregon RIAA Victim Fights Back; Sues RIAA for Electronic Trespass, Violations of Computer Fraud & Abuse, Invasion of Privacy, RICO, Fraud," *Recording Industry v. The People Blog*, Oct. 3, 2005, <http://recordingindustryvspeople.blogspot.com/2005/10/oregon-riaa-victim-fights-back-sues.html>.
- ⁶⁷ "RIAA Drops its Case Against Tanya Andersen," *Recording Industry v. The People Blog*, Jun. 4, 2007, <http://recordingindustryvspeople.blogspot.com/2007/06/riaa-drops-its-case-against-tanya.html>.
- ⁶⁸ Eric Bangeman, "Victim of RIAA "driftnet" awarded attorneys' fees," *Ars Technica*, Feb. 7, 2007, <http://arstechnica.com/news.ars/post/20070207-8786.html>.
- ⁶⁹ Eric Bangeman, "RIAA's Final Tab for Capitol v. Foster: \$68, 685.23," *Ars Technica*, July 16, 2007, <http://arstechnica.com/news.ars/post/20070716-riaas-final-tab-for-capitol-vs-foster-68685-23.html>.
- ⁷⁰ See Eric Bangeman, "Victim of RIAA "driftnet" awarded attorneys' fees," *Ars Technica*, Feb. 7, 2007, <http://arstechnica.com/news.ars/post/20070207-8786.html>.
- ⁷¹ http://www.eff.org/legal/cases/interscope_v_leadbetter.
- ⁷² http://www.eff.org/legal/cases/lava_v_amurao/.
- ⁷³ See Answer and Counterclaims at http://www.ilrweb.com/viewILRPDF.asp?filename=umg_delcid_070601AnswerCounterclaims.
- ⁷⁴ See Eliot Van Buskirk, "A Poison Pen From the RIAA," *Wired*, Feb. 28, 2007, <http://www.wired.com/politics/onlinerights/news/2007/02/72834>.
- ⁷⁵ See Thomas Mennecke, "RIAA Announces New Campus Lawsuit Strategy," *Slyck*, Feb. 28, 2007, <http://www.slyck.com/story1422.html>.
- ⁷⁶ Ken Fisher, "Students largely ignore RIAA instant settlement offers," *Ars Technica*, March, 26, 2007, <http://arstechnica.com/news.ars/post/20070326-students-largely-ignore-riaa-instant-settlement-offers.html>.
- ⁷⁷ See Susan Butler, "Sixth Wave of RIAA Pre-Litigation Letters Sent to Colleges," *The Hollywood Reporter Esq.*, July 19, 2007, http://www.hollywoodreporteresq.com/thresq/ip/article_display.jsp?vnu_content_id=1003613999; RIAA Press Releases: May 2, 2007, http://www.riaa.org/newsitem.php?news_year_filter=2007&resultpage=2&id=C2476AFF-A70F-0567-76C2-FC3ECEE93D8E; Apr 11, 2007, http://www.riaa.org/newsitem.php?news_year_filter=2007&resultpage=3&id=7408966D-245D-A17D-4869-C0DB1E7ADA97; Mar 21, 2007, http://www.riaa.org/newsitem.php?news_year_filter=2007&resultpage=4&id=B3196098-01D3-FCD7-E97E-E8F8384E4986; Feb 28, 2007, http://www.riaa.org/newsitem.php?news_year_filter=2007&resultpage=5&id=0BB7A35D-544B-2DD2-F374-4F680D6BAE9B; Aug. 16, 2007, http://riaa.com/newsitem.php?news_year_filter=&resultpage=&id=8F561EB9-6C3D-D867-324D-18882703F7C2.
- ⁷⁸ Nick Penzenstadler, "UW warns music sharers," *The Badger Herald*, Mar. 19, 2007,

http://badgerherald.com/news/2007/03/19/uw_warns_music_share.php; and Tony Reaves, "UMS refuses to hand student info to RIAA", *The Maine Campus*, <http://media.www.mainecampus.com/media/storage/paper322/news/2007/03/26/News/Ums-Refuses.To.Hand.Student.Info.To.Riaa-2792041.shtml>.

- ⁷⁹ See Stanford's "Student DMCA Complaint Policy & Reconnection Fee" description found here: <http://www.ilrweb.com/viewILRPDF.asp?filename=stanford%20policy>.
- ⁸⁰ "AP: Music companies targeting colleges," *eSchool News*, Feb. 21, 2007, <http://www.eschoolnews.com/news/showstory.cfm?ArticleID=6876>.
- ⁸¹ See letter to ISPs from the RIAA, found here: <http://www.ilrweb.com/viewILRPDF.asp?filename=ISPLetter>; and Eric Bangeman, "Leaked letter shows RIAA pressuring ISPs, planning discounts for early settlements," Feb. 13, 2007, <http://arstechnica.com/news.ars/post/20070213-8832.html>.
- ⁸² http://www.eff.org/IP/P2P/RIAA_v_ThePeople/example_letter_sent_to_universities.pdf; "Committee Looks at Technology to Limit Illegal File sharing," *House Science and Technology Committee*, Jun 5, 2007, <http://science.house.gov/press/PRArticle.aspx?NewsID=1858>.
- ⁸³ Report found here: <http://www.gao.gov/new.items/d04503.pdf>.
- ⁸⁴ "File Sharing; Selected Universities Report Taking Action to Reduce Copyright Infringement," United States General Accounting Office, May 2004, p.22, <http://www.gao.gov/new.items/d04503.pdf>.
- ⁸⁵ *Id.*, at 8-12.
- ⁸⁶ The hearing is archived here: <http://judiciary.house.gov/oversight.aspx?ID=280>.
- ⁸⁷ For more information on cGrid see: <http://arstechnica.com/news.ars/post/20070311-cgrid-the-real-p2p-punisher.html>.
- ⁸⁸ See "Committee Looks at Technology to Limit Illegal File sharing," June 5, 2007, <http://science.house.gov/press/PRArticle.aspx?NewsID=1858>.
- ⁸⁹ See witness testimony of Greg Jackson before the House Science and Technology Committee found at: http://democrats.science.house.gov/Media/File/Commdocs/hearings/2007/full/05june/jackson_testimony.pdf.
- ⁹⁰ An example of such a letter, a long with the survey may be found here: http://www.eff.org/IP/P2P/RIAA_v_ThePeople/example_letter_sent_to_universities.pdf.
- ⁹¹ See Jacqui Cheng, "Forget party schools: The RIAA lists the top piracy schools in the US," *Ars Technica*, Feb 22, 2007, <http://arstechnica.com/news.ars/post/20070222-8900.html>; and Ken Fisher, "MPAA names its Top 25 movie piracy schools," *Ars Technica*, April 2, 2007, <http://arstechnica.com/news.ars/post/20070402-mpaa-names-its-top-25-movie-piracy-schools.html>
- ⁹² See William Triplett, "Congress threatens colleges," *Variety*, May 2, 2007, <http://www.variety.com/article/VR1117964133.html?categoryid=18&cs=1>.
- ⁹³ "Survey of University Network and Data Integrity Practices," p.4, found here: http://www.eff.org/IP/P2P/RIAA_v_ThePeople/example_letter_sent_to_universities.pdf.
- ⁹⁴ For complete coverage of this bill, see <http://www.opencongress.org/bill/110-h1689/show>.
- ⁹⁵ The original version of the amendment, introduced as SA2314, can be found here: http://frwebgate.access.gpo.gov/cgi-bin/getpage.cgi?dbname=2007_record&page=S9514&position=all
- ⁹⁶ See Declan McCullagh, "Universities win Senate fight over anti-P2P proposal," *News.com*, July 24, 2007, http://news.com.com/8301-10784_3-9749071-7.html.

-
- ⁹⁷ Andre Broido et al, "Is P2P dying or just hiding?", November/December 2004, <http://www.caida.org/outreach/papers/2004/p2p-dying/p2p-dying.pdf>.
- ⁹⁸ *Id.*
- ⁹⁹ Jeff Howe, "BigChampagne is Watching You," *Wired*, October 2003, <http://www.wired.com/wired/archive/11.10/filesshare.html>.
- ¹⁰⁰ "P2P Volume Climbs Again in June, User Levels Near 9 Million," *Digital Music News Blog*, July 8, 2005, <http://www.digitalmusicnews.com/yesterday/july2005#070805p2p>.
- ¹⁰¹ *Id.*; and John Boudreau, "Illegal file sharing showing no letup," *San Jose Mercury News*, Jul. 3, 2006, http://seattletimes.nwsourc.com/html/businesstechnology/2003101281_btfile_sharing03.html.
- ¹⁰² *Id.*
- ¹⁰³ Eric Bangeman, "P2P Traffic Shifts Away From Music, Towards Movies," *Ars Technica*, July 5, 2007, <http://arstechnica.com/news.ars/post/20070705-p2p-traffic-shifts-away-from-music-towards-movies.html>.
- ¹⁰⁴ "The NPD Group: Legal Music Downloads Were Fastest Growing Digital Music Category in 2006," *NPD Group*, Mar. 14, 2007, http://www.npd.com/press/releases/press_0703141.html.
- ¹⁰⁵ Nathaniel Good, Jens Grossklags, David Thaw, Aaron Perzanowski, Deirdre Mulligan, and Joseph Konstan, "User Choices and Regret: Understanding Users' Decision Process about Consensually acquired Spyware," *I/S: A Journal of Law and Policy for the Information Society*, Vol. 2, No. 2, pp. 283-344 (2006).
- ¹⁰⁶ See "Digital Media Destop Report," *Digital Music News Research Group*, February, 2007, <http://www.digitalmusicnews.com/research/report/feb/feb2007desktopmain>.
- ¹⁰⁷ Charles Duhigg, "Is Copying a Crime? Well...", Aug. 9, 2006, <http://www.latimes.com/entertainment/news/la-fi-pollmusic9aug09,0,5791738.full.story?coll=la-home-headlines>.
- ¹⁰⁸ See Jeff Leeds, "Plunge in CD Sales Shakes Up Big Labels," *N.Y. Times*, May 28, 2007, at E1.
- ¹⁰⁹ See Mitch Bainwol, "Building a Brighter Future – Making and Selling Great Music," available at <http://www.narm.com/2005Convention/Bainwol.pdf>.
- ¹¹⁰ See, e.g., Jack M. Germain, "Filesharers Can No Longer Hide," *TechNewsWorld*, February 2, 2005, <http://www.technewsworld.com/story/40247.html> (quoting BayTSP's CEO stating that "theft of intellectual property is so prevalent on the Internet that I will never put myself out of business").
- ¹¹¹ See Leigh Philips, "Fast Track network sees decline in users, eDonkey gaining in popularity," *Digital Media Europe*, Mar. 10, 2005, <http://www.dmeurope.com/default.asp?ArticleID=6614>; John Borland, "Kazaa loses P2P crown," *CNET News.com*, October 11, 2004, http://news.com.com/Kazaa+loses+P2P+crown/2100-1038_3-5406278.html.
- ¹¹² Lee Rainie, Mary Madden, et al., "The impact of recording industry suits against music file swappers," Pew Internet & American Life Project, January 2004, http://www.pewinternet.org/pdfs/PIP_File_Swapping_Memo_0104.pdf.
- ¹¹³ See *id.* at 3 ("There may be a fraction of internet users who are simply less likely to admit to either downloading music or sharing files due to the negative media portrayal of the activity").
- ¹¹⁴ "The NPD Group Notes Recent Increase in Music File-Sharing," January 16, 2004, http://www.npd.com/dynamic/releases/press_040116.htm. As of March 2005, only 12 percent of P2P users reported purchasing a song from a legal music download service in the previous month. See "Progress Report: Digital Music Landscape Shifting, but Slowly," The NPD Group, June 23, 2005, http://www.npd.com/dynamic/releases/press_050623.html.
- ¹¹⁵ Lee Rainie, Mary Madden, et al., "The state of music downloading and file-sharing online," Pew

Internet & American Life Project, April 2004, http://www.pewinternet.org/pdfs/PIP_File_sharing_April_04.pdf.

- ¹¹⁶ *Id.* at 1. By January 2004, 24 million Americans reported sharing files, though the means of file-sharing was unspecified. Lee Rainie, Mary Madden, et al., “Music and video downloading moves beyond P2P,” Pew Internet & American Life Project, March 2005, http://www.pewinternet.org/pdfs/PIP_File_sharing_March05.pdf.
- ¹¹⁷ See, e.g., “Recording industry Begins Suing P2P Filesharers Who Illegally Offer Copyrighted Music Online,” RIAA Press Release, Sept. 8., 2003, http://www.riaa.org/newsitem.php?news_year_filter=2003&resultpage=6&id=85183A9C-28F4-19CE-BDE6-F48E206CE8A1.
- ¹¹⁸ See Steve Knopper, “RIAA Will Keep On Suing,” *Rolling Stone*, June 9, 2005, available at http://www.rollingstone.com/news/story/7380412/riaa_will_keep_on_suing.
- ¹¹⁹ Dave McGuire, “Kids Pirate Music Freely,” *WashingtonPost.com*, May 18, 2004, <http://www.washingtonpost.com/wp-dyn/articles/A37231-2004May18.html>.
- ¹²⁰ “Higher Education's Problems with Illegal Student Downloading Have Just Begun,” News Release, April 16, 2004, http://www.bentley.edu/news-events/pr_view.cfm?CFID=668768&CFTOKEN=74886326&id=1440.
- ¹²¹ Brad Cook, “TMO Reports - Analyst's High School Survey Sees Continued iPod Domination,” *The Mac Observer*, Oct. 3, 2006, <http://www.macobserver.com/stockwatch/2006/10/03.2.shtml> (referring to Piper Jaffrey's survey).
- ¹²² A Westlaw search of the nation’s major newspapers for the round of lawsuits filed on June 29, 2005 returned no results.
- ¹²³ Lisa Bowman, “Labels Aim Big Guns At Small File Swappers” *CNET News.com*, June 25, 2003, http://news.com.com/Labels+aim+big+guns+at+small+file+swappers/2100-1027_3-1020876.html?tag=st.rn.
- ¹²⁴ “RIAA Statement On MGM V. Grokster Supreme Court Ruling,” RIAA Press Release, June 27, 2005, http://www.riaa.org/newsitem.php?news_year_filter=2005&resultpage=7&id=DE79FC7C-A22E-931E-CF31-59E03950450C.
- ¹²⁵ *Id.*
- ¹²⁶ See “iTunes Store Tops Two Billion Songs,” Jan 9, 2007, <http://www.apple.com/pr/library/2007/01/09itunes.html>.
- ¹²⁷ “RIAA Continues Enforcement of Rights With New Lawsuits Against 784 Illegal Filesharers,” June 29, 2005, http://www.riaa.org/newsitem.php?news_year_filter=2005&resultpage=7&id=8B83713E-4BD3-F311-29FB-AE9100E49FF1.
- ¹²⁸ See “Universal Backs Free Music Offer,” BBC News, Aug. 29, 2006, available at <http://news.bbc.co.uk/2/hi/business/5294842.stm>.
- ¹²⁹ For a comparison of the restrictions imposed on major authorized music services, see Electronic Frontier Foundation, “The Customer is Always Wrong: A User’s Guide to DRM in Online Music,” <http://www.eff.org/IP/DRM/guide/>.
- ¹³⁰ *Id.* See also Tenley Woodman, “Napster tunes in with new deal: Download us for a song,” *Boston Herald*, Mar. 30 2005, <http://theedge.bostonherald.com/musicNews/view.bg?articleid=75625>; Dinesh Sharma, “Yahoo Expands its Music Service,” *CNET News.com*, August 18, 2005, http://news.com.com/Yahoo+expands+its+music+service/2100-1027_3-5838155.html; Edward Baig, “Music Subscription Services Can Be a Good Deal,” *USA Today*, May 25, 2005, http://www.usatoday.com/tech/columnist/edwardbaig/2005-05-25-subscriptions_x.htm.
- ¹³¹ See Erik Schmidt, “Does DRM Enable Online Music Innovation?,” *TechLawForum.Net*, Mar. 28,

2007, <http://www.techlawforum.net/internet-policy/net-law/does-drm-enable-business-models/>.

- ¹³² See Steve Jobs, "Thoughts on Music," Feb. 6, 2007, <http://www.apple.com/hotnews/thoughtsonmusic/>; and "Apple Unveils Higher Quality DRM-Free Music on the iTunes Store," Apr. 2, 2007, <http://www.apple.com/pr/library/2007/04/02itunes.html>.
- ¹³³ Amy Harmon, "Copyright Hurdles Confront Selling of Music on the Internet," *New York Times*, C1, Sept. 23, 2002.
- ¹³⁴ Jefferson Graham, "Real says digital song sale doubled market share," *USA Today*, September 9, 2004, http://www.usatoday.com/money/industries/technology/2004-09-08-real_x.htm.
- ¹³⁵ See "Leeching," Wikipedia, <http://en.wikipedia.org/wiki/Leeching>.
- ¹³⁶ Direct Connect, <http://dcplusplus.sourceforge.net/>; WASTE, <http://waste.sourceforge.net/>; AllPeers, <http://www.allpeers.com/>.
- ¹³⁷ MUTE, <http://mute-net.sourceforge.net/>; Freenet, <http://freenet.sourceforge.net/>; I2P Network, <http://www.i2p.net/>; JAP, <http://anon.inf.tu-dresden.de/>.
- ¹³⁸ Paul Kalendar, "Toshiba Readies Write-Once HD-DVDs," *PC WORLD*, June 8 2005, <http://www.pcworld.com/article/id.121250-page.1/article.html>.
- ¹³⁹ "Sony Unveils First Blu-Ray Disc Drive Burner," *Sony Electronics: news & information*, Jul 18, 2006, http://news.sel.sony.com/en/press_room/consumer/computer_peripheral/storage_sol_others/release/23478.html.
- ¹⁴⁰ "TDK Showcases 100 GB BD-R Disc," *CDRinfo*, June 30, 2005, <http://www.cdrinfo.com/Sections/News/Details.aspx?NewsId=14336>.
- ¹⁴¹ For more information about voluntary collective licensing, see EFF's white paper, "A Better Way Forward: Voluntary Collective Licensing of Music File Sharing" http://www.eff.org/share/collective_lic_wp.php; see generally William Fisher, *Promises to Keep*, Stanford University Press, 2004.