RIAA v. The People:
Two Years Later

By the
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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] The targets were not commercial copyright pirates. They were children, grandparents, single mothers, college professors—a random assortment of the tens of millions of American music fans using P2P networks.[2] On the two-year anniversary of the lawsuit campaign, the recording industry had sued over 11,500 Americans for file sharing (as of November 2005, the number is over 15,000).[3] The industry shows no signs of slowing its lawsuit campaign, with the Recording Industry Association of America (RIAA) announcing approximately 700 new suits each month.[4]

The lawsuits, however, are not working. Today downloading from P2P networks is more popular than ever, despite the widespread public awareness of the lawsuits. After two years, 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 always responded to disruptive innovations: 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 sued major P2P technology companies one after the other: Scour, Aimster, AudioGalaxy, Morpheus, Grokster, Kazaa, and iMesh.[5] 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 were initially successful in the courts.[6] 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.[7] The number of file sharers, as well as the number of P2P software applications, just kept growing, despite the recording industry's early courtroom victories. More recently, music fans have been turning to new so-called "darknet" solutions, such as swapping iPods, burning CD-Rs, and modifying Apple's iTunes software to permit direct downloading.[8]

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.[9] Several P2P software companies have bowed to the legal pressure and announced intentions to make an effort to "filter" infringing material from their networks. Of course, these "filtered" networks are likely to be replaced by new, unfiltered applications. Developing such 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.[10] Bit Torrent was largely the handiwork of one unemployed software developer working in his spare time.[11] Today, most computer science undergraduates could assemble a new P2P file sharing application in a few weeks time.[12]

In short, 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.[18] 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.[19]

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.[20] 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 judge ever sees the subpoena.

Thanks to the efforts of EFF, ISPs and numerous public interest groups, the courts ultimately rejected this unprecedented breach of privacy, but not before thousands of names and addressees were handed over.

The RIAA had begun testing the DMCA subpoena power in 2003, when it delivered a few subpoenas to a variety of ISPs 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.[21] 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

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.[13]

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.[14] 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.[15] 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."[16] 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.[17] At the time, it seemed hard to believe that suing individual college students would soon be standard operating procedure for the recording industry.

before a judge, force an ISP to hand over the names and addresses of its customers.[22]

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.[29]

On September 8, 2003, the RIAA announced the first 261 lawsuits against individuals that it had identified using the DMCA subpoenas.[30] Among those sued was Brianna Lahara, a twelve-year-old girl living with her single mother in public housing in New York City.[31] In order to settle the case, Brianna was forced to apologize publicly and pay $2,000.[32] 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.[33]

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.[34] 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."[35]

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."[36] Several observers felt that this tactic bordered on extortion.[37]

Amnesty or "Sham-nesty"?

Alongside the first 261 lawsuits filed in September 2003, the RIAA also unveiled an "amnesty" program dubbed "Clean Slate."[23] File sharers were invited to come forward, identify themselves, delete all their downloaded music, and sign an affidavit promising to stop any unauthorized music sharing.[24] In exchange, the RIAA promised not to sue the repentant file sharer.

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 labels, as well as songwriters and music publishers, would remain free to sue the file sharers 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.[25]

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.[26] 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.[27] In the end, only 1,108 people signed the Clean Slate affidavit.[28]

After enduring stinging criticism on Capitol Hill from Senator Norm Coleman, the RIAA changed gears.[38] 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 file sharers.[39] Most of the targets settled for amounts averaging $3,000.[40] The 80 who did not accept the RIAA offer were sued a few weeks later.[41]

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.[42] 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.[43] 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.[44] 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 Hundreds.

On January 21, 2004, the lawsuit campaign began a new chapter when the RIAA announced 532 new "John Doe" lawsuits.[45] 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.

The RIAA filed 5,460 lawsuits during 2004, ringing in the new school year with a wave of suits against university students.[46] Continuing this strategy, the RIAA has announced additional "John Doe" suits every month in 2005: in January, 717 lawsuits;[47] in February, 753 lawsuits;[48] in March, 753 lawsuits;[49] in April, 1,130 lawsuits;[50] in May, 740 lawsuits;[51] in June, 748.[52] On the two year anniversary of the lawsuit

campaign, the record labels had filed 11,561 lawsuits against individual music fans.[53] 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.[54] Another court awarded a $22,500 judgment against a Chicago woman who attempted to fight the lawsuit against her.[55]

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, increasingly, 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 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 $4000, but even that sum is well beyond Lafky's means—she earns just $21,000 per year and receives no child support.[56]

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.[57]

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 has offered to settle for $2000—but only if the veteran provides a wealth of private information regarding her disability and her finances. As of this writing, she has refused to be blackmailed into providing the RIAA with the intimate details of her personal life, much less pay the settlement figure the RIAA demands.[58]

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, however, his immigration status may be jeopardized.[59]

The RIAA does not even bother to make sure that its targets are actually current file-sharers. 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.[63]

One unanswered question is how many 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.[64] Although that suit was ultimately dismissed, it raises troubling questions about how many others have been misidentified in the lawsuit campaign.

Fighting Back

While the majority of lawsuit victims continue to settle rather than face the expense of litigation, some accused filesharers are fighting back. In May 2005, accused file-sharer Candy Chan moved to dismiss the record companies' lawsuit against 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.[60]

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 filed against her was not specific enough to state a copyright claim.[61] Santagelo says that she was not aware that there was a filesharing program on her computer, and that the filesharing account named in the lawsuit belongs to a friend of her children's.

Most recently, in September 2005, another alleged file-sharer, 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.[62]

These challenges have thrown a wrench in the RIAA litigation machine. If the resistance continues, the RIAA may be forced to reconsider its "force them all to settle" approach to litigation.

V. Is it Working?

Are the lawsuits working? Has the arbitrary punishment of more than 15,000 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 two years of threats and litigation, the answer is a resounding *no*.

A. By the numbers: U.S. file sharers 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.*[65]

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.[66]

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.[67] 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.[68] The average number of simultaneous users in June 2005 reached 8.9 million, an all-time high and a 20% increase over the previous year.[69] American users accounted for 75% of those on P2P networks.[70] Furthermore, because many users are not on P2P networks all the time or are not uploading files, the actual number of P2P users stands to be much higher. In addition, more and more users are turning to instant messaging, modified versions of iTunes, or private or semi-private networks to exchange files, leaving this traffic unaccounted for by most empirical metrics.

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

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.[71] In particular, BayTSP's statistics highlight the growth of newer P2P networks, such as eDonkey, at the expense of incumbent networks, like Kazaa.[72]

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.[73] 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.[74] 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.[75]

At any rate, the decrease shown by Pew's survey soon reversed itself. By February 2004, Pew's survey showed an increase in downloading, partially due to the rise of authorized download services and party due to increased P2P file sharing.[76] 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.[77]

While the data about the number of Americans currently using P2P file sharing software to download music is not entirely consistent, one thing is clear: two years and more than 15,000 RIAA lawsuits later, tens of millions of U.S. music fans continue to use P2P networks 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.[78] 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.[79] 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.[80]

The "increased awareness" dimension of the RIAA lawsuit campaign is also diminishing. Media coverage of the continuing lawsuit campaign is beginning to fade. As the RIAA's monthly announcements become routine, the story has migrated from the front to the back pages to not being covered at all.[81] 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 15,000 arbitrarily chosen individuals. As press attention fades, however, the "bang for the buck" provided by suing randomly-

chosen file sharers will diminish as well. 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. Two years later, that justification has disappeared as well.[82] In June 2005, the Supreme Court reversed the lower courts and announced a new "inducement" doctrine that permits a finding 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."[83] 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.[84] The recording industry appears to have made suing individual music fans a part of its business-as-usual routine.

D. What about iTunes? Not Even 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. Sales of digital downloads accounted for $310 million in 2004.[85] However, the hundreds of millions of downloads sold to date continue to pale when compared to the *billions* of files swapped over P2P networks. Apple, the most successful of all the authorized music services, sold 500 million downloads between April 2003 and July 2005.[86] In contrast, estimates put the number of files that move across P2P networks at 5 billion each *month.*[87] In other words, the number of files shared on these networks was over 35 times greater than the number of songs purchased on iTunes. 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.[88] 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.[89] 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!) by these restrictions.

A second problem is the limited inventories of authorized music, which 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.[90] 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.[91] 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. Unfortunately, it appears that music industry executives, rather than sweetening the carrot for music fans, are intent on *raising* prices for authorized digital downloads.[92]

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 file sharers 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).[93] 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. file sharers to rely on.

In response to the RIAA lawsuits, many file sharers are beginning to opt for new file sharing technologies that protect their anonymity. Software such as DirectConnect, WASTE and Grouper offer secure, encrypted file sharing capabilities to groups of friends.[94] Infiltrating these private P2P circles is much more difficult than simply trolling public networks like Kazaa. Other technologies, such as MUTE and Freenet,

provide file sharing capabilities in a context that protects the anonymity of the uploader.[95] 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. University students are sharing within their campus networks using software that enhances the sharing capabilities of Apple's own iTunes software.[96]

Internet-based file-sharing, moreover, may soon be supplanted by hand-to-hand file sharing. The cost of digital storage media is falling rapidly, while capacity is rising. Recordable "Blu-ray" and "HD-DVD" optical disks capable of holding 40 gigabytes (equivalent to 10,000 songs) will be available in 2005.[97] Sony has announced plans for a 100 gigabyte Blu-ray recordable optical disk by 2007.[98] Hard drives are also continuing to fall in price and expand in capacity, offering music fans the ability to collect and share extremely large music collections from and among their extended circle of friends and acquaintances.

VI. What to Do Instead.

Two years and more than 15,000 lawsuits later, the RIAA's campaign of suing individual American music fans has failed. It has failed to curtail P2P downloading. Even when supplemented by classroom "education" programs funded by the entertainment industries, it has not persuaded music fans that sharing is equivalent to shoplifting. It has failed to drive the bulk of file sharers into the arms of authorized music services. In fact, the RIAA lawsuits may well be driving file sharers to new technologies that will be much harder for the RIAA's investigators to infiltrate and monitor.

There is a better way. EFF has been advocating a voluntary collective licensing regime as a mechanism that would fairly compensate artists and rightsholders for P2P file sharing.[99] The concept is simple: the music industry forms a collecting society, 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 rights-holders 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 to fans to publish what they care about, the deeper the catalog.

At least one major label appears willing to experiment with a licensing solution. Sony BMG has partnered with Playlouder MSP, a British digital music service, to make Sony's musical catalogue available online. PlayLouder subscribers can exchange music freely, at any bitrate. Sony and other copyright holders receive a portion of the subscription fees, based on how often their songs are shared.[100] Playlouder uses

network uses acoustic fingerprinting technology to track which files are shared, and how often. [101]

This has been successfully done before. For almost 100 years, collecting societies like ASCAP, BMI and SESAC have been collecting fees on song reproductions and performances, beginning with royalties for the publication of sheet music and expanding, as necessary to include new formats, such as broadcast radio, jukeboxes, TV, “elevator music,” and movies. 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.

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