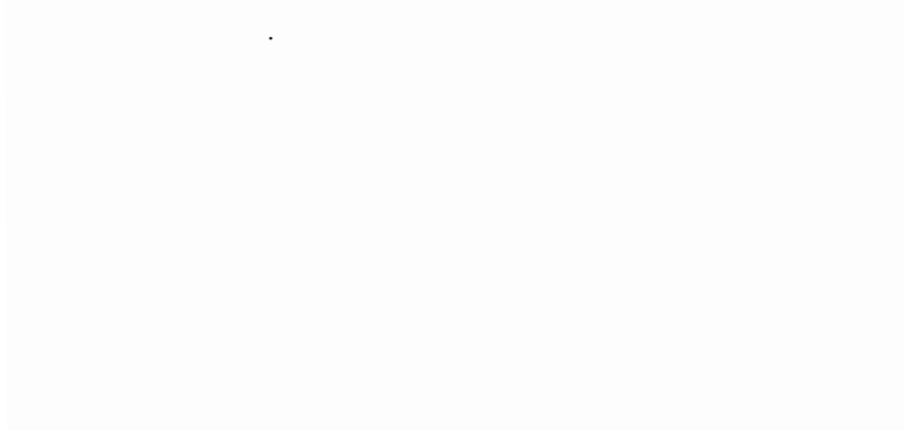


# EXHIBIT C



**ARISTA RECORDS LLC, et al. v. LIME GROUP LLC, et al.**

**EXPERT REPORT OF ARAM SINNREICH**

demonstrates in his book *The Long Tail*, 45 percent of sales revenue at digital music seller Rhapsody can be accounted for by “products not available in [the] largest offline retail stores.”<sup>45</sup> We can also see hints of this market’s size by looking at individual aggregators of independent music. CD Baby, a decade-old and rapidly growing company which sells over 3 million songs by hundreds of thousands of independent artists, reports on its web site that it has paid out a total of over \$157 million to its artists to date, (one-third of which was paid in the past 18 months),<sup>46</sup> suggesting a retail value in the range of \$200 million. Similarly, independent digital music distributor TuneCore, founded in 2005, reported generating over \$32 million in sales for 2009 alone.<sup>47</sup> While these are only pinpoints of data, they indicate a large and rapidly growing market for independently distributed market, off the IFPI/RIAA radar and in competition with major label music sales.

iv. To the Extent That Freely Available Online Music Has Affected Music Sales, LimeWire’s Role is Minimal.

Although the plaintiffs represent LimeWire as one of the primary conduits for free, unpermissioned distribution of music in an otherwise tightly controlled marketplace, nothing could be further from the truth. In fact, the major labels have both willfully ignored and actively promoted numerous other channels for free music distribution online, which collectively account for tens or hundreds of millions of users accessing billions of song files without direct permission or payment. And record labels and recording artists have often encouraged or allowed free online redistribution and/or unremunerated remixing of their copyrighted work, for promotional, commercial and pro-social purposes. In fact, the plaintiffs’ own web sites frequently link to many of these freely available assets in the course of their promotional messaging.

a. *Video Streaming, Download and Conversion to MP3.*

The plaintiffs both freely share artist videos via their “official” YouTube channels, and allow third parties to post unpermissioned copies of artist videos on sites like YouTube and Vimeo. Music fans can stream these videos without payment (and, in some cases, without even viewing

<sup>45</sup> Chris Anderson, *The Long Tail*, 2008 (revised edition).

<sup>46</sup> CD Baby, “About CD Baby,” <http://www.cdbaby.com/about>.

<sup>47</sup> Tunecore, “How People Use Nielsen to Hurt Musicians,” <http://blog.tunecore.com/2010/01/how-people-use-neilsen-to-hurt-musicians.html>, January 21, 2010.

advertising), and can set up play lists consisting of their favorite artists' work. This essentially creates permanent, free, on-demand access to music for anyone with Internet access. Even more relevant to the case at hand, consumers can freely and easily download artist videos from YouTube, and convert them to MP3s with a single click. This is possible through a number of freely accessible and easily found resources, including browser plug-in software like Video DownloadHelper and Easy YouTube Video Downloader and at web sites like KeepVid.com and Zamzar.com.<sup>48</sup> Collectively, these software tools have been downloaded hundreds of millions of times, and these web sites garner over a million monthly viewers.<sup>49</sup> This functionality is not limited to personal computers; it is increasingly available for mobile customers, as well. For instance, MiTube, an application that saves YouTube videos to consumers' iPhones, was available for a time in Apple's iTunes Store, and is still popular among the millions of music fans who have "jailbroken" their phones.

b. *Music Blogs and Search Engines.*

At the time of writing, there are thousands of active music blogs, collectively garnering millions of monthly users. A great many of these blogs regularly post MP3s, albums and/or play lists available for free streaming and download. While some blogs focus on sharing out-of-print, orphaned or independent music, many more emphasize major label artists, as well as remixes and mashups of major label music. These blogs can be easily searched for MP3s at sites like [elbo.ws](http://elbo.ws) and Hype Machine ([hypem.com](http://hypem.com)). Hype Machine offers additional functionality, including the ability to stream the MP3s hosted at listed blog sites directly from the search interface (much in the same way that Google offers previews directly from its image search results), and an alphabetized archive of bands and albums with direct free MP3 download access. Not only do the plaintiffs allow these sites to distribute their music openly and broadly, in some cases the labels' marketing and promotion departments

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<sup>48</sup> Quantcast.com estimates that Keepvid.com and Zamzar.com receive about 463,000 and 261,000 unique U.S. visitors per month respectively. See <http://quantcast.com/keepvid.com>; <http://quantcast.com/zamzar.com>.

<sup>49</sup> At the time of writing, the latest version of Video DownloadHelper has been downloaded over 80 million times. See <https://addons.mozilla.org/en-US/firefox/addon/3006/>. The latest version of Easy YouTube Video Downloader has been downloaded over 6 million times. See <https://addons.mozilla.org/en-US/firefox/addon/10137/>.

actively distribute music to bloggers with the understanding that it will be shared, presumably for the same reason they send free CDs and MP3s to radio DJs and music directors -- namely, to develop a wider fan base for the artist in question. As I mentioned above, many major label contracts actually deduct the costs of these "free goods" directly from the artists' royalties, by a factor of about 15 percent.

c. *Online Storage Services.*

There are several highly-trafficked sites, such as Rapidshare and MegaUpload (each receives millions of visitors each month),<sup>50</sup> that allow users to post files of any kind for free retrieval by third parties. Millions of MP3s and music videos are available on these sites, and the inventory is refreshed with every passing day. Downloaders discover unique retrieval URLs for individual songs, albums and videos via blogs, social media services, and email. They may also use specialized search engines like FilesTube.com (which gets millions of unique visitors per month)<sup>51</sup> to search for individual songs, artists and albums across a range of these remote storage sites.

d. *MP3 Download Services.*

Unsecured MP3 downloads, which can be easily shared via email, instant message, optical media, or any of the methods described above, are and have been available for years from a broad range of sites, some licensed by the major labels (e.g. eMusic, Amazon, iTunes) and others operating without their direct permission (e.g. [allofmp3.com](http://allofmp3.com), against which the RIAA dropped its lawsuit in 2008). These sites operate with a range of revenue models, from 99-cent downloads to flat subscriptions to micropayments. At many of these sites (including Amazon and eMusic), full-length MP3 samples and sampler albums are available without any consumer payment at all, as promotional incentives for the artists and services.

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<sup>50</sup> Quantcast.com estimates that Rapidshare and MegaUpload receive about three million and two million unique U.S. visitors per month respectively. See <http://quantcast.com/rapidshare.com>; <http://quantcast.com/megaupload.com>.

<sup>51</sup> Quantcast.com estimates that Filestube.com generally receives about 8.2 million unique U.S. visitors per month. See <http://quantcast.com/filestube.com>.

e. *Other Unlicensed P2P File Sharing Networks.*

LimeWire is only one of dozens of popular peer-to-peer file sharing programs. Software like uTorrent, Frostwire, Vuze and Bearshare offer users access to the same “back end” sharing technologies, like BitTorrent and Gnutella, that LimeWire offered. In other words, LimeWire represented only one, minimally differentiated, avenue of entry into a global network of sharers who connect through dozens of highly-trafficked entry points. Although it was for a time the most popular P2P client, LimeWire’s closure has little if any consequence in terms of the availability of the same files to the same users of the same back-end networks.

f. *A Capellas and Instrumental Versions.*

Across a broad range of musical genres, including pop, R&B, rock and hip-hop, it is common practice for record labels to release both a capella (vocal-only) and instrumental (vocals omitted) versions of hit songs to the public at large. One of the primary strategic reasons for doing this is to allow DJs at clubs and radio stations to remix the music, adapting it to the specific tastes of their audiences, and thus promoting the “official” version of the work in the process. However, a widely acknowledged second-order effect of this market strategy is to enable millions of fans worldwide to create and redistribute their own remixes and mashups of the work, without official permission and without paying royalties. At the time of writing, Google searches for the titles of each of the top three songs on the Billboard Hot 100, followed by the word “remix” in each case, yield 1.3 million, 53.8 million, and 7 million results, respectively.

g. *Creative Commons Licensing.*

Although it has existed for less than a decade, tens of thousands of artists have already licensed hundreds of thousands of tracks under a Creative Commons license, which reserves copyright while relaxing many of the constraints commonly associated with proprietary music, such as proactively allowing free redistribution and remixing. Although the bulk of these artists and songs are not major label-affiliated, several high-profile artists have released music under this license, including the Beastie Boys, Kristen Hersh, Nine Inch Nails, David Byrne, DJ Vadim, Radiohead,

Snoop Dogg and Youssou N'Dour.<sup>52</sup> Contrary to some public characterizations of the Creative Commons license, it doesn't eliminate the possibility of commercial exploitation; to the contrary, as I will discuss further below, bands like Nine Inch Nails have recognized career high revenues for work they released under this license, while enabling fans to share their work without threat of lawsuits.

h. *Mixtapes.*

In the hip-hop musical community, some of the top-selling albums are not official label releases, but "mixtapes" -- CDs and MP3 play lists featuring remixed classics alongside new radio singles and guest "drops" from celebrity rappers and DJs. These mixtapes are often distributed and promoted through environments and businesses not traditionally known for music retail, such as nightclubs, barbershops and parking lots. Record labels often pay popular mixtape DJs tens of thousands of dollars, as well as providing free, pre-market goods, in exchange for the promotional benefit their artists receive from inclusion on such a disc. Mixtapes do not only promote new and emerging rappers; many of today's top hip-hop stars, including 50 Cent, Drake and Lil Wayne, continue to contribute to mixtapes in order to maintain their air of authenticity and to stoke their fan bases between official market releases. Although it's true that record labels and the RIAA often call upon law enforcement agencies to crack down on mixtape distributors, they also continue to pay for mixtape inclusion. In some instances, such as the celebrated case of DJ Drama and Don Cannon, the forces behind the wildly successful "Gangsta Grillz" mixtape franchise, the labels both pay and prosecute.<sup>53</sup> As the *New York Times* reported in 2007, based on an interview with former EMI executive Ted Cohen, this strategy is "typical of the music industry's 'schizophrenic' approach to promotions; a label's marketing department wants to get its artists' songs in front of as many people as possible, even if it means allowing or ignoring free downloads or unlicensed videos on YouTube."<sup>54</sup> As DJ Drama told me when I

<sup>52</sup> Drew Wilson, "Creative Commons Responds to ASCAP," <http://www.zeropaid.com/news/89521/creative-commons-responds-to-ascap/>, June 25, 2010.

<sup>53</sup> Samantha M. Shapiro, "Hip-Hop Outlaw (Industry Version)," *N.Y. Times*, <http://www.nytimes.com/2007/02/18/magazine/18djdrama.t.html?pagewanted=1>, February 18, 2007.

<sup>54</sup> *Ibid.*

interviewed him for my book *Mashed Up* in 2008, "Everybody [at the label] is like, 'Don't talk about it, don't tell, but we support you. Here's this record – don't tell nobody where you got it from.'"

i. *Rewarding of DJs for Mashups and Remixes.*

In some cases, major labels and artists respond to DJs who have remixed and redistributed their work without permission by rewarding them, rather than punishing them. This reward comes in the form of (a) access to the original "master" recordings (yielding a higher quality of audio, as well as backing tracks and outtakes inaccessible to other DJs), (b) an opportunity to commercialize their previously underground, noncommercial remixes, and/or (c) inclusion of the remix or mashup into the artist's own recorded or live materials. For instance, mashup producer Go Home Productions told me during an interview that the rightsholders for the Doors' recordings were so taken with his Doors/Blondie mashup "Rapture Riders," that they gave him the master tapes to provide him with unfettered access to the original Jim Morrison vocals. Similarly, as I related in my book *Mashed Up*, Kylie Minogue responded to the Soulwax mashup of her song "Can't Get You Out of My Head" with New Order's "Blue Monday" by incorporating a live version of the mashup into her concert set lists. This was despite the fact that Soulwax's mashup was widely interpreted as a critique of Minogue's song for its brazen musical borrowing from the earlier New Order song.

**B. Sharing Can Help Sales, Revenues and Profits.**

i. Direct Industry Benefits.

Although file sharing has presented strategic and economic challenges to the music industry, it has also delivered significant benefits, both helping traditional record sales and opening new avenues for economic exploitation.

a. *Benefits of File Sharing for Recorded Music Sales.*

In 2000, as a music industry analyst at Jupiter Research, I published the results of survey analysis showing that, among US adults (sample size: 2,258), Napster users were 45 percent more likely than non-Napster users to have increased their music purchasing habits over the previous 12 months. This was the case even once I controlled the data



for other factors, including age, income, and overall music purchasing volume. This study also found that the majority of Napster users remained unchanged in their music purchasing habits, although among those who did change, increasers outnumbered decreasers by a factor of 3 to 1.<sup>55</sup>

In 2002, I published follow-up research, again based on a Jupiter survey, showing that file sharing continued to have a mixed effect on music purchasing habits, with a net positive effect overall. In fact, we found that file sharers were 75 percent more likely than the average online music fan to have increased their music purchasing habits since they started visiting online music sites.<sup>56</sup>

In the years since then, a number of other researchers have reported similar or complementary findings. A sample of these include:

- 2004: Harvard/UNC study by Oberholzer and Strumpf showing that file sharing increases album sales for releases that sell more than 600,000 units.<sup>57</sup>
- 2006: Peitz and Waelbroeck find that file sharing is responsible for a net industry profit "because consumers can make more informed purchasing decisions because of sampling and are willing to spend for the original although they could consume the download for free."<sup>58</sup>
- 2006: Gopal, et al argue that "online search and sampling capabilities" represented by P2P "have a beneficial impact on sales," although another effect is to redistribute sales revenue from superstars to lesser-known recording artists.<sup>59</sup>

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<sup>55</sup> Aram Sinnreich, "Digital Music Subscriptions: Post-Napster Product Formats," Jupiter Research, 2000.

<sup>56</sup> Aram Sinnreich, "File-Sharing: To Preserve Music Market Value, Look Beyond Easy Scapegoats," Jupiter Research, 2002.

<sup>57</sup> Felix Oberholzer & Koleman Strumpf, "The Effect of File Sharing On Record Sales: . An Empirical Analysis," 2004.

<sup>58</sup> Martin Peitz & Patrick Waelbroeck, "Why the Industry May Gain From Free Downloading – The Role of Sampling," 2006.

<sup>59</sup> Ram D. Gopal, et al., "Do Artists Benefit From Online Music Sharing?," 2006.