

THE POISON FRUIT: HAS APPLE FINALLY SEWN THE SEED OF ITS OWN DESTRUCTION?

DANA P. JOZEFczyk*

INTRODUCTION.....	370
I. COPYRIGHT LAW	371
II. THE DIGITAL MILLENNIUM COPYRIGHT ACT.....	373
III. FAIRPLAY	374
A. <i>How does FairPlay work?</i>	375
B. <i>Why iTunes music files are inoperable with non-iPod digital music players</i>	376
IV. INOPERABILITY.....	377
A. <i>Inoperability Alternative Number 1: Apple could have licensed WMA from Microsoft</i>	377
B. <i>Inoperability Alternative Number Two: Apple could license FairPlay to other online music stores</i>	379
C. <i>Inoperability Alternative Number Three: Apple could allow other companies to develop DRM encryption that would be playable on an iPod</i>	381
V. INOPERABILITY AND TYING.....	381
A. <i>Tucker and Somers Background</i>	381
B. <i>Unlawful Tying or Bundling of Online Video and FairPlay Music Files to the iPod</i>	383
1. Individual Coercion	384
2. Per Se Tying	385
3. Rule of Reason	386
C. <i>Court's Holding</i>	386
VI. DRM-FREE iTUNES AND ITS EFFECT ON TUCKER AND SOMERS	387
A. <i>Apple's Potential Argument: Apple's actions are justified by the "business justification" defense, a defense that was only</i>	

* Dana Jozefczyk is a student at University of Colorado Law School. Thanks to my Article Editors, Daniel Estes and Gil Selinger, for taking the time to work with me on this article. Also, thanks to Hiwot Molla, John Bergmayer, Kyaw Tin, and the other editors on JTHTL for their time and efforts in making this article publishable. Finally, thanks to Bryan Shannon for his input and insight.

<i>strengthened when Apple began offering DRM-free music in response to the record companies' licensure policies.</i>	388
B. <i>Plaintiff's Potential Response: Apple's actions have demonstrated that alternatives exist to protect licensed music and, thus, DRM encryption was not a necessity and cannot support the "business justification" defense</i>	389
1. Watermarking and iTunes.....	390
2. Will Plaintiff's tying claim survive Apple's release of DRM-free music?	391
CONCLUSION.....	391

INTRODUCTION

On June 3, 2002, BBC News announced that "Napster, the California company that pioneered the mass-market swapping of music online, has filed for bankruptcy protection from its creditors."¹ Napster was a well known Peer-to-Peer (P2P) network that allowed users to upload copyrighted music files without charge. Napster's legal troubles began in 1999 when the Recording Industry Association of America (RIAA) filed suit against Napster for copyright infringement.² Napster's troubles continued when Metallica discovered the unauthorized circulation of its demo "I Disappear" on the Napster network.³ Unlike other artists in similar situations at that time, Metallica did not passively allow the illegal file sharing to continue and filed suit for copyright infringement in violation of the Digital Media Copyright Act (DMCA, or "the Act").⁴ At the time these suits were filed, the Act was relatively new and the legal community perceived the suit against Napster as the Act's first real test.⁵ The Act prevailed. On July 26, 2000, the District Court of Northern California issued an injunction against Napster, which was later upheld by the Ninth Circuit Court of Appeals.⁶ The

1. *Napster Files for Bankruptcy*, BBCNEWS, June 3, 2002, <http://news.bbc.co.uk/1/hi/business/2023201.stm>.

2. See Matt Richtel, *Napster Charts a New Course After Ruling*, N.Y. TIMES, Feb. 14, 2001, at C5.

3. GABRIEL ALATORRE, ET AL., MASS. INST. OF TECH., COPYRIGHT INFRINGEMENT DUE TO ONLINE FILE SHARING (2005), http://ocw.mit.edu/NR/rdonlyres/Electrical-Engineering-and-Computer-Science/6-901Fall-2005/B28F8F46-AE8B-4323-ACB0-D99937779637/0/online_filesrhng.pdf.

4. Christopher Jones, *Metallica Rips Napster*, WIRED, Apr. 13, 2000, <http://www.wired.com/politics/law/news/2000/04/35670>.

5. Patricia Jacobus, *Napster Suit Tests New Copyright Law*, CNET NEWS, Apr. 11, 2000, <http://news.cnet.com/2100-1023-239092.html>.

6. *A&M Records, Inc. v. Napster, Inc.*, 114 F. Supp. 2d 896 (N.D. Cal. 2000), *aff'd in part by A&M Records, Inc. v. Napster, Inc.*, 239 F.3d 1004 (9th Cir. 2001). For an overview of the Napster case, see *Appeals Court Upholds Napster Injunction*, TIDBITS, Feb. 15, 2001,

injunction barred Napster from “causing, assisting, facilitating, copying, or otherwise distributing all copyrighted songs or musical compositions.”⁷ The decision was met with concern and criticism from major technology and Internet companies. These companies filed lengthy legal briefs, stating that the decision “could threaten the future of much of the technology industry.”⁸ Industry-wide developments in the wake of the Napster decision have confirmed these companies’ greatest concerns.

The Napster decision has come to serve as a primer in a chain of events leading up to the current antitrust suits filed against Apple Computer.⁹ This article will investigate this causal chain and its effect on the current lawsuits pending against Apple. Part I of the article will provide an introduction to the basics of copyright law. Part II will explore the implementation of the DMCA and what it forbids. Part III will examine Apple’s digital rights management (DRM) encryption schematic, FairPlay, in detail and explain what makes FairPlay different from other DRM encryption systems. Part IV will parse out different perspectives on inoperability and how they apply to Apple. Part V will scrutinize the facts and legal arguments of the current U.S. cases, *Tucker v. Apple Computer Inc.* and *Somers v. Apple Computer, Inc.* Part VI of the article will examine how Apple’s release of DRM-free music will affect the *Tucker* and *Somers* plaintiffs’ anti-tying claims. A thorough investigation of the history and legal claims surrounding DRM-protected music yields the conclusion that Apple, by releasing DRM-free music, could have implemented less restrictive measures of music protection than FairPlay to protect its property rights. This conclusion reinforces Tucker’s claim that Apple engaged in anticompetitive behavior in violation of antitrust laws.

I. COPYRIGHT LAW

When a musician creates or produces a song, that work of art is afforded the protections inherent under copyright law. However, recent digital technology advances have made enforcing these protections much more difficult. In particular, the advent of P2P networks in the early 1990s significantly undermined the rights guaranteed under copyright

<http://db.tidbits.com/article/6295>.

7. *Appeals Court Upholds Napster Injunction*, *supra* note 6.

8. John Borland, *Tech Giants Slam Napster Injunction*, CNET NEWS, Aug. 25, 2000, <http://news.cnet.com/2100-1023-244976.html>.

9. *Tucker v. Apple Computer, Inc.*, 493 F. Supp. 2d 1090 (N.D. Cal. 2006) (order denying defendant’s motion to dismiss); *Complaint, Somers v. Apple Computer, Inc.*, No. 5:2007CV06507 (N.D. Cal. Dec. 31, 2007), *available at* <http://docs.justia.com/cases/federal/district-courts/california/candce/5:2007cv06507/198939/1> [hereinafter *Somers’ Complaint*].

law by facilitating the online transfer of free bootlegged music. The proliferation of P2P network users resulted in an enormous number of file downloads in violation of copyright law. In order to understand the violations that occurred, it is first necessary to understand the basics and boundaries of copyright law.

A copyright is a form of legal protection provided to authors of “original works of authorship” by the Copyright Act, found in Title 17 of the U.S. Code.¹⁰ An “original work of authorship” can include literary, dramatic, musical, artistic and intellectual works.¹¹ The 1976 Copyright Act gives the owner of a copyright the rights to reproduce the work in copies or phonorecords, prepare derivative works, distribute copies of the work, perform the work publicly, display the work publicly, and in the case of sound recordings, to perform the work publicly by means of audio transmission.¹² It is illegal for anyone to violate these rights but exceptions do exist such as “fair use” and “compulsory license” under which certain uses of copyrighted works are permitted.¹³

Copyrights are secured when a work is created, and creation occurs when the work is fixed in a copy or phonorecord for the first time.¹⁴ Once a copyright is created, it generally lasts for the lifetime of the author plus seventy years after the author’s death, although exceptions do exist.¹⁵ Notice of copyright to others is not required, but it is often beneficial to the copyright owner because effective notice informs the public that the work is protected by copyright.¹⁶ Since notice is not required under the Copyright Act, it can be difficult for potential infringers to know whether a work is copyrighted or not.¹⁷ Even an individual who does not profit from infringing a copyright can be held liable for violation of the Copyright Act if that individual simply distributes a copyrighted work.¹⁸ This is not to say that all copyright infringers are held criminally responsible. Copyright is mostly civil law,¹⁹ but the Copyright Act does have a provision for criminal offenses.²⁰ The Copyright Act states that a person can be held liable for criminal infringement of a copyright when that individual willfully infringes for

10. See 17 U.S.C. § 102(a) (2006); United States Copyright Office, Copyright Office Basics, <http://www.copyright.gov/circs/circ1.html#wci>.

11. 17 U.S.C. § 102(a).

12. *Id.*

13. *Id.* §§ 107, 115.

14. *Id.* § 101.

15. See *id.* § 302(c) (listing exceptions for anonymous and pseudonymous works).

16. *Id.* § 401(a).

17. See Brad Templeton, Founder of ClariNet Communication Corp., Ten Big Myths About Copyright Explained (Oct. 2008), <http://www.templetons.com/brad/copymyths.html>.

18. 17 U.S.C. § 501 (2006).

19. *Id.* §§ 502-05.

20. *Id.* § 506.

either 1) purposes of commercial advantage or personal financial gain, or 2) distributes or copies one or more copies or phonographs or their equivalent, if such copies are worth over \$1,000.²¹

With the possibility of a civil fine or even a felony charge lurking overhead, one might wonder why a music lover would choose to administer or even download from a P2P network. The answer is that the Copyright Act, as it existed in 1998, did not actively fight music piracy or enforce punishments, thus allowing P2P users to enjoy unfettered use of copyrighted works.²² The record and movie companies, displeased with this trend, pushed for reform and convinced Congress to pass the Digital Millennium Copyright Act of 1998.²³

II. THE DIGITAL MILLENNIUM COPYRIGHT ACT

The DMCA, commonly known for its crippling effect on free P2P networks such as Napster, was Congress' solution to online music piracy. The Act was passed by Congress on October 12, 1998²⁴ and was signed into law by President Clinton sixteen days later.²⁵ The purpose of the DMCA is to update U.S. copyright laws for the digital age and impose criminal sanctions on those who infringe copyrights.²⁶ One aspect of copyright law regulated by the DMCA is the circumvention of technological measures used to protect copyrighted works. In particular, Section 1201 of the DMCA establishes that contracting parties have a responsibility to provide effective protection against circumvention of technological measures used to protect copyrighted works.²⁷ The Act defines a technological measure as one that "effectively controls access to a work" and "requires the application of information, or a process or a treatment, with the authority of the copyright owner, to gain access to the work."²⁸

In order to comply with Section 1201 of the DMCA, companies selling licensed music over the Internet were compelled to develop adequate "technological measures" to protect copyrighted works.²⁹ The common response was the development of DRM. DRM is a comprehensive term for access control technology that limits the use of

21. *Id.*

22. Fred von Lohmann & Wendy Seltzer, *Death by DMCA*, IEEE SPECTRUM ONLINE, June 2006, <http://www.spectrum.ieee.org/jun06/3673>.

23. *Id.*

24. 144 CONG. REC. S12375 (daily ed. Oct. 12, 1998) (statement of Sen. Hatch).

25. Statement on Signing the Digital Millennium Copyright Act, 2 PUB. PAPERS 1902-03 (Oct. 29, 1998).

26. S. REP. NO. 105-190, at 2 (1998).

27. 17 U.S.C. § 1201 (2006).

28. *Id.* § 1201(a)(E)(3)(B).

29. *Id.*

copyrighted digital media. On the most basic level, DRM allows a user to download music legally while at the same time restricts the user's ability to share the legally-downloaded music over P2P networks by encrypting the media file.³⁰ In response to the DMCA provision, Microsoft developed Windows Media DRM in 1999.³¹ Microsoft licensed its Windows Media DRM to online music stores such as SpiralFrog, Directsong, Napster To Go, PassAlong, and Rhapsody to Go.³² Although Windows Media DRM was available for licensure, Apple decided to develop its own DRM called FairPlay to protect music sold through its own online store.

III. FAIRPLAY

Like Windows Media DRM, FairPlay encrypts legally purchased music files from the iTunes Music Store to prevent infringement and protect the copyrighted works. Apple first introduced the iTunes Music Store on April 29, 2003.³³ Music sold through iTunes Music Store differs from music sold by other online media stores in two ways: music files sold through iTunes are 1) AAC files and 2) encrypted with FairPlay DRM.

First, instead of using Windows Media Audio (WMA) or MP3 formats, Apple chose to employ Advanced Audio Coding, or AAC, to encode its iTunes digital audio collection. All three technologies, WMA, MP3, and AAC, are compressed audio files designed to greatly reduce the amount of data necessary to reproduce high-quality versions of the original uncompressed recording.³⁴ The reduced size of compressed audio files allows users to easily download and play the files on their portable music players.³⁵

Audio experts generally agree that WMA and AAC deliver higher quality sound than MP3. WMA was developed by Microsoft to compete with the original MP3³⁶ while AAC was developed by the same audio

30. MICHAEL A. EINHORN & BILL ROSENBLATT, PEER-TO-PEER NETWORKING AND DIGITAL RIGHTS MANAGEMENT: HOW MARKET TOOLS CAN SOLVE COPYRIGHT PROBLEMS 1 (Cato Institute 2005), <http://www.cato.org/pubs/pas/pa534.pdf>.

31. Microsoft, Windows Media DRM FAQ, <http://www.microsoft.com/windows/windowsmedia/forpros/drm/faq.aspx>.

32. For a comprehensive list of online music stores offering files protected by Windows Media DRM, see Microsoft, Online Stores in Windows Media Player, <http://www.microsoft.com/windows/windowsmedia/player/stores.aspx> [hereinafter Microsoft Online Store].

33. PQDVD.com, iPod History and Design, <http://www.pqdvd.com/ipod-software-detail.html>.

34. Marc Saltzman, *Acronym Soup: A Quick Guide to MP3, WMA, and AAC*, SYNC, June 29, 2007, <http://www.sync-blog.com/sync/2007/06/acronym-soup-a-.html>.

35. *Id.*

36. See Real.com, Analysis of the Microsoft Audio Codec,

experts who created the original MP3.³⁷ Apple's iPod can only play files that are in MP3 or AAC format. However, unprotected (DRM-free) WMA files are automatically converted to MP3s when imported into iTunes and can, therefore, be played on the iPod.

The second and more controversial way music sold through iTunes differs from music sold through other online media stores is its employment of FairPlay DRM encryption. While iTunes files can play on five computers and an unlimited number of iPods, FairPlay DRM renders music purchased from iTunes inoperable with digital music players that are not iPods.³⁸ In order to understand why use of FairPlay DRM promotes inoperability two questions must be addressed. First, how does FairPlay work? And second, precisely how are iTunes files inoperable with non-iPod digital music players?

*A. How does FairPlay work?*³⁹

FairPlay DRM encrypts every song purchased from the iTunes store through a series of complex coding processes. Before purchasing media from iTunes, a user has to create an account with Apple's servers. Creation of an account not only registers the user with iTunes but also authorizes the user's PC or Mac with the iTunes Store by creating a user ID for that computer. When a user purchases a song from the iTunes Store using any of five authorized computers, iTunes creates a user key for the purchased song. The purchased track is then scrambled by a master key and the master key is encrypted with the user key. The user key is held by the purchaser's iTunes account and is also sent to the iTunes store. This process results in a system that does not require iTunes to interact with Apple every time it plays a song—the necessary information to play a track is stored in that song's user key within iTunes.

The FairPlay encryption system is capable of authorizing up to five different computers using a single iTunes account. When a new computer is authorized, the Apple server sends the machine all of the user keys for the songs purchased by the user's account. This enables the

<http://www.real.com/msaudio/>.

37. Daniel Eran Dilger, *How FairPlay Works: Apple's iTunes DRM Dilemma*, ROUGHLY DRAFTED, Feb. 26, 2007, <http://www.roughlydrafted.com/RD/RDM.Tech.Q1.07/2A351C60-A4E5-4764-A083-FF8610E66A46.html>; see also iTunesSupport.com, How does FairPlay work?, <http://www.itunesupport.com/node/177>.

38. Dilger, *supra* note 37.

39. This section is based primarily on research conducted by Daniel Eran Dilger and summarized in his article. *Id.* It is modified here with permission from the author. For additional information, see Howard Wen, *JHymn Goes Behind Atoms and Apple to Bring DRM-Free Music*, OSDIR, Jan. 27, 2005, <http://osdir.com/Article3823.phtml>.

user to play previously purchased music on a newly authorized machine.

Once authorization is complete, a user can connect his iPod to any of the five authorized machines and transfer music. However, the complex process of encryption works to protect the purchased tracks from being played by any portable music player that does not have access to the information stored in the user key. By connecting an iPod to an authorized computer, the user is not only transferring music but is also giving the iPod access to the user keys stored on that computer.

An iPod can only play music purchased from the iTunes store once it has decrypted it and can only decrypt the music by accessing the necessary user keys. This arrangement places several limitations on a user's ability to transfer music to an iPod from a computer that is not authorized on the users' iTunes account. First, if a user has music in his iTunes library that lacks a user key—either from another computer or from a computer that has been deauthorized—that music will not be copied to the iPod because the iPod lacks the user keys to decrypt it.

Second, a user cannot dock his iPod to an unauthorized computer and transfer music while at the same time retaining the music already on the iPod. If a user transfers music from an unauthorized computer onto his iPod, the new music will replace his existing music as the new user keys will replace existing user keys and the old music will no longer be playable.

Third, the iPod will not play music protected with DRM other than FairPlay (i.e., Windows Media DRM) because the music lacks the necessary user key. These three aspects of the user key system exemplify how FairPlay's design results in inoperability between the iPod and improperly encoded music. The inoperability between FairPlay encrypted music and non-iPod portable music players, however, is accomplished through a process by which FairPlay DRM actually alters the underlying music file, and renders the altered file unplayable on non-iPod portable music players.

B. Why iTunes music files are inoperable with non-iPod digital music players

Music files purchased from the iTunes store are inoperable with digital music players other than the iPod. Inoperability occurs because FairPlay encryption alters the structure of the typical AAC file so that it can no longer be converted to MP3 format and is not compatible with other players. FairPlay alters the structure of the typical AAC file by replacing a standard element of the file called the "mp4a atom" with a non-standard proprietary "drms atom."⁴⁰ Every four letter sequence at the

40. Wen, *supra* note 39.

beginning of a line of code is an atom, and the replacement drms atom contains the same basic song information as the mp4a atom plus information about the identity of the song purchaser as well as some cryptographic information necessary in ultimately decrypting the music.⁴¹ Because the atom is altered and encrypted, a digital music player that does not have the decryption codes (i.e., one that is not an iPod) cannot unlock the file.⁴² Thus, by altering the structure of an AAC music file, the FairPlay DRM causes that file to be inoperable with other digital music players.

IV. INOPERABILITY

As stated above, Apple's FairPlay DRM creates an overall system of inoperability between iTunes and other portable digital music players as well as protected music purchased from other online digital music stores and the iPod. While critics of Apple have faulted the company for this arrangement, proponents of Apple argue that inoperability is the only way to ensure that music is protected from piracy.⁴³ Counter to this argument, there exist at least three other measures Apple could have taken to protect music from piracy other than creating a system of inoperability: 1) Apple could have licensed WMA from Microsoft; 2) Apple could have licensed FairPlay to other online music stores; or 3) Apple could have allowed other companies to develop DRM encryption that would be playable on an iPod. These alternatives raise an important question—is operating an inoperable DRM system the least restrictive way by which Apple can protect its music?

A. Inoperability Alternative Number 1: Apple could have licensed WMA from Microsoft

Instead of creating FairPlay DRM when opening its iTunes store, Apple could have licensed Windows Media DRM from Microsoft. The first version of Windows Media DRM was released in April 1999, almost two years before Apple announced the release of iTunes and FairPlay DRM.⁴⁴ This early version of Windows Media DRM was compatible with both early versions of Windows (Windows 95 and later) and with Mac O.S. 8.1.⁴⁵ Numerous online music stores chose to license

41. *Id.*

42. *Id.*

43. Dilger, *supra* note 37.

44. Microsoft, Microsoft Windows Media – SDKs and Versions of Windows Media DRM, <http://www.microsoft.com/windows/windowsmedia/forpros/drm/sdksandversions.aspx#version>.

45. *Id.*

Windows Media DRM, including AOL MusicNow, FYE, Musicmatch Jukebox, Napster, Yahoo Music, PassAlong, CinemaNow, and Wal-Mart music downloads.⁴⁶ Not only have online music stores chosen to license Windows Media DRM, but many companies that manufacture portable digital music players have ensured that their products will be compatible with files encrypted with Windows Media DRM. These portable digital music companies include Archos, Cingular, Cowon, Creative Labs, Denon, Digitrex, D-Link, Ericsson, Insignia, iRiver (a Samsung product), Motorola, Nokia, Palm, Pioneer, Phillips, Roku, RCA, Samsung, SanDisk, Sony, and Toshiba.⁴⁷ However, since Microsoft's DRM can only protect WMA files and not AAC files, by choosing to use the AAC encryption, Apple precluded the possibility of Windows Media DRM licensure and failed to join the army of Windows Media DRM compatible companies.

Even though Windows Media DRM is unable to protect AAC files, it remains possible for Apple to license Windows Media DRM if it desires. In order to protect its files with Windows Media DRM, Apple would first have to switch new files to a WMA format and convert old AAC files to WMA format before the files could be protected. Once the files were successfully converted to WMA format, Apple could then license Windows Media DRM to protect its music. Since Microsoft charges royalty fees of \$0.20 per unit or an annual maximum fee of \$800,000 dollars to license Windows Media DRM, using 2005 sales figures, Apple could license Windows Media DRM at a cost of about \$0.03 per iPod sold.⁴⁸

Despite the obvious upside of interoperable DRM, two arguments support Apple's decision not to license Windows Media DRM from Microsoft. The first is an argument against monopolies. Economists since Adam Smith have documented the issues surrounding un- or under-regulated monopolies and cautioned the public against them. If Apple licenses Windows Media DRM from Microsoft, it will contribute to a Microsoft monopoly over DRM protection. As a competitor, Apple has no incentive to pass business over to Microsoft because it has already created DRM protection on its own.

The second argument against licensure is rooted in the fact that Microsoft's DRM code is frequently cracked and Apple could not

46. Microsoft Online Store, *supra* note 32.

47. Microsoft, Top Portable Media Devices, <http://www.microsoft.com/windows/windowsmedia/devices/topdevicepicks.mspx>.

48. *See, e.g., Tucker*, 493 F. Supp. 2d at 1094; Microsoft, Windows Media Licensing Royalties for Final Products, http://www.microsoft.com/windows/windowsmedia/licensing/final.aspx#WindowsMediaDRM10_Final.

rationally license a mediocre product.⁴⁹ In 2006, a program was released called FairUse4WM that removed Windows Media DRM encryption from WMA files.⁵⁰ Windows has since secured the breach, but to those who argue against licensure, programs such as FairUse4WM strengthen an anti-licensure argument. This is not to say that Apple's FairPlay code has been free from attack by hackers. Programs such as QTFairuse, PlayFair, and PyMusique are all hacker designed programs that have exposed Apple's DRM to security breaches in the past.⁵¹ However, since Microsoft has not developed a truly superior DRM, Apple does not have an incentive to license it.

B. Inoperability Alternative Number Two: Apple could license FairPlay to other online music stores

With the seemingly common aim of interoperability, one would think that if Apple is unwilling to license Windows Media DRM from Microsoft, it would be willing to license FairPlay so that consumers could achieve interoperability between all portable digital music players and all music sold by online music stores. This thought pattern, however, does not reflect Apple's demonstrated business decisions. Indeed, Apple's unwillingness to license FairPlay has been a central issue in lawsuits and legislation arising out of the European Union.⁵² The French legislature recently passed a bill regarding inoperable DRM that attempted to force Apple to license FairPlay.⁵³ Apple, nevertheless, was saved from the dictates of the French legislature when the French Constitutional Council held the bill unconstitutional in part.⁵⁴ France is not the only country interested in mandatory licensure of FairPlay. The Danish Minister of Cultures warned that forthcoming legislation regarding Apple's DRM schematic would be adopted in 2007.⁵⁵ Norway took its

49. Jeremy Reimer, *Windows Media DRM Cracked*, ARS TECHNICA, Aug. 28, 2006, <http://arstechnica.com/news.ars/post/20060828-7607.html>.

50. *Id.*

51. Nate Anderson, *Hacking Digital Rights Management*, ARS TECHNICA, July 18, 2006, <http://arstechnica.com/articles/culture/drmhacks.ars>.

52. Thomas Crampton, *Key Parts of 'iPod Law' Struck Down in France*, INT'L HERALD TRIBUNE, Sept. 12, 2006, (Finance) at 13 (citing the 1789 Declaration on Human Rights, the French Constitutional Council declared major portions of the 'iPod law' unconstitutional. In particular, the Council found that "companies could not be forced, without compensation, to make music sold online compatible with any music device.").

53. Charles Jade, *Parts of French "iPod Law" Ruled Unconstitutional*, ARS TECHNICA, July 29, 2006, <http://arstechnica.com/news.ars/post/20060729-7380.html>.

54. *Id.*

55. Ken Fisher, *Denmark Next in Line to Challenge Apple, DRM*, ARS TECHNICA, Mar. 26, 2006, <http://arstechnica.com/news.ars/post/20060326-6463.html> (expressing optimism that "DRM interoperability would be backed by the various record labels who are eager to see legal alternatives to piracy flourish online.").

qualms against Apple one step further. The Consumer Council in Norway lodged a complaint charging Apple with violation of Norwegian contract law. The complaint alleged that Apple breached a contract between itself and Norwegian consumers when it restricted consumer use of music by employing FairPlay DRM.⁵⁶ These international legal matters reflect the views of many U.S. consumers—that Apple should license FairPlay to make the digital music industry as interoperable as commercially feasible.

On its face, licensing FairPlay appears to be a win-win scenario. The consumer wins because licensing FairPlay will create an interoperable DRM, allowing the consumer to play music purchased from any licensing music store on an iPod. Apple would also seemingly benefit from licensing FairPlay by collecting royalties from use of its license. Although Apple concedes that licensure royalties would provide a slight benefit, it argues that the potential detriments of such a licensure would outweigh the benefits of royalty payments.⁵⁷

These potential detriments were described by Apple President Steve Jobs in an open letter dated February 7, 2006.⁵⁸ In this letter, Jobs lists two primary reasons why Apple refuses to license FairPlay DRM. First, licensing a DRM entails disclosing some of the DRM's secrets to many people in many different companies, and with widespread exposure, these secrets may leak.⁵⁹ If these secrets leak, then the DRM could be disabled and legally purchased music could be used in an illegal fashion.⁶⁰ Second, fixing a leak would be more difficult if it had to be conducted by many licensees instead of just one company.⁶¹ If leaks such as this were to occur, Apple would no longer be able to guarantee DRM protection, and the "Big Four" music companies—EMI, Sony BMG, Universal, and Warner—may not sell as much of their music catalog to Apple.⁶² The potential of a leak, coupled with the difficulty of fixing such a leak, led Mr. Jobs to categorically reject any proposals to license FairPlay.⁶³

56. *Apple DRM is Illegal in Norway, Says Ombudsman*, OUT-LAW, Jan. 24, 2007, <http://www.out-law.com/page-7691> (quoting Ombudsman Torgeir Waterhouse that the Norwegian Marketing Control Act requires "balanced and fair rights to the consumer when they purchase music form [sic] iTunes Music Store and similar download services.").

57. Open Letter from Steve Jobs, CEO of Apple Inc., "Thoughts on Music" (Feb. 6, 2007), <http://www.apple.com/hotnews/thoughtsonmusic/> [hereinafter Jobs' Letter].

58. *Id.*

59. *Id.*

60. *Id.*

61. *Id.*

62. *Id.*

63. Jobs' Letter, *supra* note 57; see also Louis Hau, *Apple To Big Music: Set It Free*, FORBES.COM, Feb. 6, 2007, http://www.forbes.com/2007/02/06/jobs-apple-drm-tech-media-cx_lh_0206apple.html (listing the "big four" music companies and giving EMI's response to Jobs' letter).

C. *Inoperability Alternative Number Three: Apple could allow other companies to develop DRM encryption that would be playable on an iPod*

Not only will Apple neither license Windows Media DRM nor offer FairPlay for license, it also has thus far declined to allow other companies to sell music protected by a DRM schematic other than FairPlay, which could still be played on an iPod. In 2004, RealNetworks attempted to sell its own DRM music protection called Harmony.⁶⁴ Unlike other DRM music at the time, Harmony-encrypted music could be played on the iPod.⁶⁵ Apple lashed back, stating “we are stunned RealNetworks has adopted the tactics and ethics of a hacker to break into the iPod, and we are investigating the implications of their actions under the DMCA and other laws.”⁶⁶ Despite this strong language, RealNetworks did not back down. Rather, RealNetworks stated that it never broke the DMCA because the statute “explicitly allows the creation of interoperable software.”⁶⁷ In response to RealNetwork’s refusal to discontinue Harmony, Apple altered the iPod’s design rendering Harmony-encrypted music unplayable on the iPod.⁶⁸ Although the matter was never litigated, the clash between Apple and RealNetworks demonstrates Apple’s commitment to being the exclusive company able to manufacture DRM music playable on the iPod.

V. INOPERABILITY AND TYING

Although Apple successfully defended its inoperable FairPlay DRM from the attacks explored above, two recent pending U.S. cases, *Tucker v. Apple Computer, Inc.* and *Somers v. Apple Computer Inc.*, have paved another avenue upon which inoperability can be challenged: antitrust tying.⁶⁹

A. *Tucker and Somers Background*

The allegations brought forth against Apple in *Tucker* and *Somers* are markedly similar. Therefore, to simplify discussion concerning the cases at hand, this article will only thoroughly discuss the more advanced

64. Ryan Naraine, *Apple: RealNetworks Hacked iPod*, INTERNETNEWS.COM, July 29, 2004, <http://www.internetnews.com/bus-news/article.php/3387871>.

65. *Id.*

66. *Id.*

67. *Id.*

68. John Borland, *Apple Fights RealNetwork’s “Hacker Tactics”*, CNET NEWS, Dec. 14, 2004, http://news.cnet.com/Apple-fights-RealNetworks-hacker-tactics/2100-1027_3-5490604.html.

69. See *Tucker*, 493 F. Supp. 2d 1090; *Somers’ Complaint*, *supra* note 9.

case, *Tucker*, as the facts and legal arguments in *Somers* practically mirror the *Tucker* case.

Plaintiff Melanie Tucker brought an antitrust class action suit against Apple Computer on seven counts, three counts alleged violation of the Sherman Act and the remaining four counts alleged violation of related state law.⁷⁰ Specifically, under the Sherman Act, the plaintiff alleged Apple engaged in “(1) unlawful tying or bundling of Online Video and FairPlay music files to the iPod; (2) unlawful acquisition or maintenance of monopoly power in the digital music player market; and (3) attempted monopolization of the online music and video markets.”⁷¹

Tucker filed the suit after she purchased an iPod from Apple and, periodically thereafter, purchased music from iTunes Music Store and transferred her downloaded music files to her iPod.⁷² In her complaint, Tucker identified three separate markets in the U.S. in which Apple conducts business.⁷³ The first of these markets is the “Online Music Market.”⁷⁴ “The ‘Online Music Market’ is the market for digital music delivered to the consumer by way of Internet download.”⁷⁵ At the time of the hearing, Apple’s share of the Online Music Market was 83 percent.⁷⁶ The second market identified by the plaintiff is the “Online Video Market.”⁷⁷ The Online Video Market is the market for downloading digital video files that can be played on a computer or a video enabled digital music player.⁷⁸ Apple’s share of the Online Video Market was found to be “at least 75 percent.”⁷⁹ The third market identified by plaintiff is the “Digital Music Player Market.”⁸⁰ The Digital Music Player Market is the market for portable battery powered devices that can store and play a large number of music files.⁸¹ The Digital Music Player Market is comprised of two different types of portable music players: hard drive based and flash drive based.⁸² Apple’s share in these markets is about 90% and 70% respectively.⁸³

Tucker alleged that Apple deliberately made music from the iTunes Music Store inoperable with other digital music players and that Apple

70. *Tucker*, 493 F. Supp. 2d at 1093.

71. *Id.* at 1095.

72. *Id.*

73. *Id.* at 1094.

74. *Id.*

75. *Id.*

76. *Tucker*, 493 F. Supp. 2d at 1094.

77. *Id.*

78. *Id.*

79. *Id.*

80. *Id.*

81. *Id.*

82. *Tucker*, 493 F. Supp. 2d at 1094.

83. *Id.*

deliberately manufactured the iPod so it is unable to play music purchased from competitors' online music stores.⁸⁴ According to the complaint, inoperability is achieved through both the construction of the iPod and the workings of FairPlay DRM.⁸⁵ Tucker examined each obstruction to inoperability in turn.

First, Tucker examined the structure of the iPod. Apple's core processor is the "Portal Player System-On-A-Chip."⁸⁶ This processor naturally supports WMA files, but Apple changed the configuration of the processor so that it only plays FairPlay protected AAC files.⁸⁷ Deliberately disabling a feature of a computer, as Apple has allegedly done, is known as "crippling" the product.⁸⁸ Software that has been altered in such a manner is known as "crippleware."⁸⁹ Since iPod is "crippled" from using any DRM other than FairPlay, iPod owners' only option for transferring music to an iPod is to do so through iTunes.⁹⁰

Second, the plaintiff addressed Apple's FairPlay DRM, and argued that it renders music purchased on iTunes incapable of playback on any digital music player other than iPod and, thus, obstructs interoperability.⁹¹

Last, Tucker contended that these features of iTunes and iPod allowed Apple to charge a supracompetitive price.⁹² Stemming from the above contentions, the plaintiff alleged three antitrust claims against Apple, the first of which, unlawful tying, is at the heart of the discussion below.⁹³

B. Unlawful Tying or Bundling of Online Video and FairPlay Music Files to the iPod

Section 1 of the Sherman Act proscribes contracts, conspiracies, and combinations that restrain trade.⁹⁴ "Tying in violation of Section 1 can either be a per se violation or a violation of the rule of reason."⁹⁵ Tucker's complaint alleged that Apple participated in both per se tying and tying in violation of the rule of reason. A plaintiff seeking to establish a per se

84. *Id.*

85. *Id.*

86. *Id.*

87. *Id.*

88. *Tucker*, 493 F. Supp. 2d at 1094.

89. *Id.*

90. *Id.* at 1094-95.

91. *Id.* at 1094.

92. *Id.*

93. *Id.* at 1095.

94. 15 U.S.C. § 1 (2000).

95. *Tucker*, 493 F. Supp. 2d at 1096 (citing *County of Tuolumne v. Sonora Cmty. Hosp.*, 236 F.3d 1148, 1157-58 (9th Cir. 2001)).

tying arrangement must establish that there exists “1) a tie between two separate products or services sold in separate markets; 2) sufficient economic power in the tying product market to affect the tied market; and 3) an effect on a substantial volume of commerce in the tied product market.”⁹⁶ Implicit in these three elements is the requirement that the seller of the tying product “force[s] the buyer into the purchase of the tied product that the buyer did not want at all, or might have preferred to purchase elsewhere on different terms.”⁹⁷ This final element, in effect, is an element of coercion and needs to be included in a plaintiff’s complaint if the same is to survive a motion to dismiss.⁹⁸

In its response to Tucker’s claim, Apple contended that the plaintiff failed to state a claim upon which relief can be granted and moved to dismiss the tying claims pursuant to Federal Rule of Civil Procedure 12(b)(6). In accordance with this Rule, the court may dismiss a complaint for failure to state a claim based on either lack of cognizable legal theory or absence of sufficient facts to support such a legal theory.⁹⁹ When analyzing a motion to dismiss, “the court must presume that all factual allegations of the complaint are true and draw reasonable inferences from those factual allegations in favor of the non-moving party.”¹⁰⁰ In the present case, Apple argued that the plaintiff failed to state a claim in three different legal theories of Tucker’s complaint, namely: failure to allege an act of individual coercion; failure to allege a per se tying violation; and failure to allege an antitrust violation under a rule of reason analysis.¹⁰¹ Each allegation is discussed below.

1. Individual Coercion

Apple first moved to dismiss the tying claim on the ground that the plaintiff failed to allege any “individual coercion.”¹⁰² To succeed in a tying claim, a plaintiff must allege some “modicum” of coercion.¹⁰³ In other words, a plaintiff cannot allege an antitrust tying violation if she acted out of free will and was not compelled to act by the defendant. The *Tucker* court acknowledged this necessity, but stated that the law did not require an allegation of coercion at the individual level and that an allegation at the market level was all that was needed for the action to

96. *Id.*

97. *Id.* (quoting *Jefferson Parish Hosp. Dist. No. 2 v. Hyde*, 466 U.S. 2, 12 (1984)).

98. *Id.* at 1097.

99. *Id.* at 1096.

100. *Id.*

101. *Tucker*, 493 F. Supp. 2d at 1096.

102. *Id.* at 1096-97.

103. *Id.* at 1097.

survive a motion to dismiss.¹⁰⁴ In analyzing Tucker's coercion assertion, the court looked to the language of the Ninth Circuit, quoting that "the essence of an antitrust tying violation is not the seller's unilateral refusal to deal with a buyer who refuses to buy the tied product, but the use by the seller of its 'leverage' to force a purchaser to do something he would not do in a competitive market."¹⁰⁵ While Tucker's complaint did not allege individual coercion, it did allege coercion in the general sense (i.e., that iPod owners are coerced into purchasing music from iTunes because Apple placed technological restraints on the iPod).¹⁰⁶ Applying the standards set forth by the Ninth Circuit, the court held that the plaintiff sufficiently alleged coercion and denied Apple's motion to dismiss this count.¹⁰⁷

2. Per Se Tying

In her complaint, Tucker posited two theories of antitrust tying. First, Apple deliberately used technological restrictions to force purchasers of Apple's iPod (tying product) to purchase online music and online video only from iTunes Music Store (tied product).¹⁰⁸ And second, Apple deliberately used technological restrictions to force purchases of online music and online video from iTunes.¹⁰⁹ Through these two theories, the plaintiff alleged that Apple's conduct constituted a per se tying violation.¹¹⁰ A tying claim consists of three elements "1) a tie between two separate products or services sold in separate markets; 2) sufficient economic power in the tying product market to affect the tied market;" and 3) as a result of these first two elements, there has been an effect on the substantial volume of commerce in the tied product.¹¹¹ Tucker's claim could only survive a motion to dismiss if it sufficiently alleged all three of these elements.

Apple contested the first element of the per se tying claim—namely by refuting the claim that iTunes and iPod are actually tied.¹¹² In defense of this argument, Apple stated that "[s]ome people buy iPods and never buy music from iTMS. That some people, like Tucker, choose to buy

104. *Id.*

105. *Id.* (quoting *Murphy v. Bus. Cards Tomorrow, Inc.*, 854 F.2d 1202, 1204 (9th Cir. 1988), *partially overruled on other grounds*, *Townsend v. Holman Consulting Corp.*, 929 F.2d 1358 (9th Cir. 1990)).

106. *Id.*

107. *Tucker*, 493 F. Supp. 2d at 1097.

108. *Id.*

109. *Id.*

110. *Id.*

111. *Id.* at 1096.

112. *Id.* at 1097.

both does not constitute unlawful tying.”¹¹³ Addressing Apple’s contention, the court examined whether the complaint sufficiently alleged all three elements of the tying claim.¹¹⁴ First, the court acknowledged that the plaintiff alleged a tie between separate products sold in two separate markets, which the complaint described as the Digital Music Player Market and the Online Video and Music Markets.¹¹⁵ Next, Tucker alleged that each product, iPod and iTunes, is both a tied and tying product.¹¹⁶ The plaintiff then alleged significant market power in each of the tying markets with 83% market share of the Online Music Market, 75% market share of the Online Video Market, and 90% market share in the Digital Music Player Market.¹¹⁷ Last, the court found that the plaintiff alleged that Apple’s conduct sufficiently affected the tied product markets. Since Tucker alleged all three of elements of a per se tying claim, the court found Apple’s argument that some consumers do not buy products in both markets unavailing.¹¹⁸ As a result, the court denied Apple’s motion to dismiss this claim.¹¹⁹

3. Rule of Reason

The rule of reason requires a fact finder to weigh the anti-competitive and pro-competitive effects of defendant’s business practices to determine whether the practice is unreasonable on balance.¹²⁰ To meet this burden, a plaintiff must show that “the activity is the type that restrains trade and the restraint is likely to be of significant magnitude.”¹²¹ Since the court found that the plaintiff properly alleged these elements in her per se tying claim, it did not find a reason to explore the rule of reason and denied Apple’s motion to dismiss.¹²²

C. Court’s Holding

The court held that the plaintiff alleged illegal tying claims sufficient to withstand a motion to dismiss. *Tucker* is still awaiting trial, as is the factually similar *Somers*.

113. *Tucker*, 493 F. Supp. 2d at 1097.

114. *Id.* at 1097-98.

115. *Id.* at 1097.

116. *Id.*

117. *Id.* at 1098.

118. *Id.*

119. *Tucker*, 493 F. Supp. 2d at 1098.

120. *Id.*; see also *Bhan v. NME Hosps., Inc.*, 929 F.2d 1404, 1413 (9th Cir. 1991).

121. *Bhan*, 929 F.2d at 1413.

122. *Tucker*, 493 F. Supp. 2d at 1098.

VI. DRM-FREE iTUNES AND ITS EFFECT ON *TUCKER* AND *SOMERS*

Since the court in *Tucker* denied Apple's motion to dismiss in December 2006, two major changes occurred in Apple's online music store. First, iTunes began offering some of its catalog as DRM-free music.¹²³ Beginning in May 2007, Apple and EMI (one of the four biggest record labels) teamed up and offered EMI's entire catalogue DRM-free through iTunes Music Store.¹²⁴ This new DRM-free service is called "iTunes Plus" and when first launched, sold DRM-free music on iTunes at \$1.29 per song while the DRM music was still offered for sale at \$0.99 per song.¹²⁵ Apple attributed the increased price of its iTunes Plus music not only to the DRM-free status of the music, but also to the enhanced sound quality.¹²⁶ Apple, however, is not the only online music retailer bitten by the DRM-free bug. In the fall of 2007, both Amazon and RealNetworks began offering DRM-free music but only charged between \$0.89 and \$0.99 per song, respectively.¹²⁷ Unable to justify the increased song price for DRM-free music when the same music was being offered for the market price of DRM music by competing online music retailers, Apple announced in October 2007 that it was ready to lower the price of its iTunes Plus music to \$0.99 per song.¹²⁸ Even though Apple began offering EMI's entire catalogue as DRM-free music for the same price of music that has DRM, EMI music does not constitute the entirety of the iTunes library, and as a result, many music files are still only available with DRM encryption.

That was all about to change. In January 2009, Apple announced that it expected to offer its entire catalog DRM-free by the end of the first quarter of 2009.¹²⁹ These successive changes beg the question: Will recent developments in Apple's iTunes music store will affect *Tucker's* and *Somers's* tying claims?¹³⁰ First both plaintiffs need to argue illegal

123. Kristen Nicole, *iTunes DRM-Free Music Now Available*, MASHABLE, May 30, 2007, <http://mashable.com/2007/05/30/itunes-upgrade/>.

124. *Id.*

125. *Id.*

126. *Id.*

127. Press Release, RealNetworks, Rhapsody Teams with Universal Music Group for DRM-Free Music Test (Aug. 10, 2007), http://www.realnetworks.com/company/press/releases/2007/rhap_umg.html; Joshua Topolsky, *Amazon Launches DRM-Free "Amazon MP3" Music Downloads*, ENDGAGDET.COM, Sept. 25, 2007, <http://www.engadget.com/2007/09/25/amazon-launches-drm-free-amazon-mp3-music-downloads/>.

128. Posting of Scott McNulty to The Unofficial Apple Weblog, <http://www.tuaw.com/2007/10/16/itunes-plus-price-drop-today-or-tomorrow/> (Oct. 16, 2007) [hereinafter McNulty Post].

129. Press Release, Apple, Changes Coming to the iTunes Store (Jan. 6, 2009), <http://www.apple.com/pr/library/2009/01/06itunes.html>.

130. Even though DRM-free music was released before *Somers* filed suit, her complaint

tying by demonstrating “a tie-in between two distinct products or services.”¹³¹ By offering music as DRM-free and thus eliminating the FairPlay tying mechanism, does Apple render these plaintiffs’ arguments moot or strengthen their underlying allegations? This article addresses several potential answers below.

A. Apple’s Potential Argument: Apple’s actions are justified by the “business justification” defense, a defense that was only strengthened when Apple began offering DRM-free music in response to the record companies’ licensure policies.

Under antitrust law, if the elements of an illegal tying claim are established and the products are deemed to be illegally tied, the defendant is liable for violation of the Sherman Antitrust Act. However, tying law does recognize certain per se tying defenses to an otherwise illegal tying practice.¹³² One of these defenses is known as the “business justification” defense.¹³³ In cases involving the business justification defense, the court may find ample evidence of a tying violation, either per se or through a rule of reason analysis, but hold that the defendant is not guilty of an otherwise illegal tying arrangement because there are sound business interests that justify the conduct.¹³⁴ A common illustration used by courts when determining whether conduct is necessary under the business justification defense is the “one legged man” scenario.¹³⁵ As one court put it, it does not seem necessary that a seller sell only one shoe (out of a pair) to a one legged man when business interests would require that the shoes be sold as a pair.¹³⁶ As demonstrated by the one legged man illustration, the business justification must be compelling, and if a

reaches back to December of 2005 when Apple did not offer DRM-free music and thus Apple’s release of DRM-free music will affect the *Somers* suit as well. See *Somers’ Complaint*, *supra* note 9, at 3.

131. *Mozart Co. v. Mercedes-Benz of N. Am.*, 833 F.2d 1342, 1345 (9th Cir. 1987) (quoting *Robert’s Waikiki U-Drive, Inc. v. Budget Rent-A-Car Sys.*, 732 F.2d 1403, 1407 (9th Cir. 1984)).

132. See *Les Shockley Racing Inc. v. Nat’l Hot Rod Ass’n*, 884 F.2d 504, 507 (9th Cir. 1989); *Int’l Norcent Tech. v. Koninklijke Philips Elec. N.V.*, No. CV 01-00043 MMM (SSx), 2007 WL 4976364, at *6-7 (C.D. Cal. Oct. 29, 2007); see also Arik Johnson, *Tying Arrangements: Illegal Tying is One of the Most Common Antitrust Claims*, AURORA WDC, Oct. 30, 2007, http://www.aurorawdc.com/arj_cics_tying_arrangements.htm.

133. See, e.g., *Carpa, Inc. v. Ward Foods, Inc.*, 536 F.2d 39, 46 (5th Cir. 1976) (“The burden of supplying a business justification for what otherwise would be an illegal tie rests with the party asserting the defense.... Such a limited defense traditionally has been allowed in tie-in cases despite the *per se* characterization.”); *Ciminelli v. Cablevision*, 583 F.Supp. 158, 162 (E.D.N.Y. 1984) (“[I]t is well settled that business justification may serve as a defense to a *per se* violation of the antitrust laws, as, for example, an illegal tying arrangement.”).

134. See Johnson, *supra* note 132.

135. *Id.*

136. *Dehydrating Process Co. v. A.O. Smith Corp.*, 292 F.2d 653, 655 (1st Cir. 1961).

defendant can establish such a necessity, then otherwise illegal tying actions will not be held as antitrust violations.

Apple has long emphasized that employing FairPlay DRM was not a choice, but a necessary measure mandated by the Big Four record companies to enforce compliance with the DMCA. According to Steve Jobs, “when Apple approached these companies to license their music to distribute legally over the Internet, they were extremely cautious and required Apple to protect their music from being illegally copied.”¹³⁷ These four record companies control over 70% of the world’s music, and FairPlay is Apple’s response to demands these companies place on online music stores.¹³⁸ At the end of his letter, Jobs claimed that “if the Big Four Music companies would license Apple their music without the requirement that it be protected by DRM, we would switch to selling only DRM-free music in our iTunes Store.”¹³⁹

Shifting the blame for inoperability of FairPlay DRM from Apple to the record companies has been Apple’s illegal tying counterargument since its DRM dilemmas began. Now that EMI is willing to license its catalogue to Apple as DRM-free music, Apple may argue that it is no longer necessary for them to employ FairPlay DRM to protect the music for EMI.¹⁴⁰ Furthermore, because Apple no longer uses FairPlay DRM on music from EMI’s catalogue, Apple could argue that iPod and iTunes are no longer tied because DRM-free music sold can be played on every digital music player and DRM-free music sold from other online music stores can play on the iPod. By arguing that FairPlay DRM was a necessary measure for music licensure mandated by the record companies, Apple may be able to demonstrate a necessary business justification and escape liability for antitrust violation.

B. Plaintiff’s Potential Response: Apple’s actions have demonstrated that alternatives exist to protect licensed music and, thus, DRM encryption was not a necessity and cannot support the “business justification” defense

The business justification defense, while seemingly an ideal exit route for Apple, is not an easy hurdle to clear. In order to establish that the actions it took were justified, Apple must demonstrate that its actions were implemented for a legitimate purpose and no less restrictive alternative was available.¹⁴¹ On first blush, it may appear that this was the

137. Jobs’ Letter, *supra* note 57.

138. *Id.*

139. *Id.*

140. McNulty Post, *supra* note 128.

141. *See Mozart Co.*, 833 F.2d at 1349; *Phonotele, Inc. v. AT&T*, 664 F.2d 716, 738-39 (9th Cir. 1981).

case; Apple's only choice was to use DRM, and now that EMI is licensing its music DRM-free, Apple is free of that burden. This observation, however, is misconceived. Apple still needs to comply with the DMCA and the music sold on iTunes must still be protected against piracy. Instead of using DRM, Apple implemented a new form of protection: digital watermarking coupled with other forms of data storage.

1. Watermarking and iTunes

The phrase "digital watermarking" was first coined in 1992 by Andrew Tirkel and Charles Osborne.¹⁴² Watermarking is the process of imbedding information into a digital file and is primarily used for copyright protections.¹⁴³ For example, a downloaded file may contain the downloader's personal information, including IP address, credit card number, and other private data. Apple does exactly this.

Apple is using watermarking to hide an iTunes music purchaser's personal information, such as full name and account email, in the purchased iTunes track.¹⁴⁴ This personal encryption is not unique to Apple's DRM-free music.¹⁴⁵ As discussed above, DRM music also has the user's personal information stored within it. But watermarking is not the only form of data storage used by Apple in its iTunes tracks. Music files purchased on "iTunes Plus" also contain large amounts of information in what seems to be a table format.¹⁴⁶ The information in these tables has not yet been decrypted, but through comparison to other AAC files, researchers have determined that the information stored on iTunes tracks is not only massive in size but detailed in nature.¹⁴⁷ Although Apple has not officially commented on the purpose of the controversial watermarking and information storage on its DRM-free files, it suggested that the obvious reason these measures were enacted was so Apple can track users who try to distribute DRM-free files over P2P networks and thus still protect the music licensed to them by

142. A.Z. Tirkel et al., *Electronic Water Mark*, in DIGITAL IMAGE COMPUTING: TECHNIQUES AND APPLICATIONS 666-73 (1993).

143. Digital Watermarking World, Digital Watermarking Frequently Asked Questions, <http://www.watermarkingworld.org/faq.html#SECTION00022000000000000000> (Aug. 26, 2005).

144. Nick Farrell, *Apple's DRM-free Music has Poison Tip: Tells Everyone About You*, THE INQUIRER, May 31, 2007, <http://www.theinquirer.net/en/inquirer/news/1036750/apples-drm-free-music-has-poison-tip>.

145. See Tirkel, *supra* note 142.

146. Peter Eckersley, *Apple's DRM-Free AAC Files Contain More Than Just Names and E-Mail Addresses*, ELECTRONIC FRONTIER FOUNDATION, May 30, 2007, <http://www EFF.org/deeplinks/archives/005282.php>.

147. *Id.*

EMI.¹⁴⁸

2. Will Plaintiff's tying claim survive Apple's release of DRM-free music?

Tucker's and Somers' complaints alleged that Apple intentionally used inoperable DRM; while Apple countered that it had no other choice.¹⁴⁹ Apple's defense can be opposed on two grounds: behavioral and, the more legally compelling, technological. As discussed above, Apple demonstrated through its past actions, including its disagreement with RealNetworks, that it would rather choose inoperability over interoperability.¹⁵⁰ While this refusal does not amount to legal evidence against Apple, it does speak to Apple's attitude regarding its tied product. The second, and more legally compelling, counter to Apple's defense is that Apple could have used watermarking technology to protect its music instead of DRM. Since watermarking technology existed prior to the release of iTunes and was actually built into iTunes files before they were offered as DRM-free, implementing a system of inoperable DRM was not the only way that Apple could protect its music. Apple, therefore, had access to a "less restrictive alternative," which it could have used instead of FairPlay DRM. Since such an alternative existed that did not inhibit interoperability, Tucker may be able to argue that Apple cannot prevail with the business justification defense. With no defense to justify its actions, Apple could be held liable for an illegal tying arrangement in violation of antitrust law and, thus, Tucker's and Somers' suits may well prevail.

CONCLUSION

The controversy concerning Apple's FairPlay DRM schematic has affected consumers across the globe. The exodus of DRM from some of the most popular online music stores saves consumers new to the online music community from having to suffer the ill effects of DRM encrypted files. Furthermore, those consumers who have purchased Apple's DRM music, which is now available in a DRM-free form, can update their files and rid themselves of the burdensome encryption. Unfortunately, fairly large populations of music purchasers remain who still experience the tying effects of Apple's products. These consumers remain tied because the DRM music that they purchased does not have a DRM-free update. They are left in a situation similar to those experienced by Tucker and

148. Scott Shuey, *Apple's Latest Trick to Enforce Digital Rights*, GULFNEWS.COM, Oct. 29, 2008, <http://archive.gulfnews.com/articles/07/06/09/10131156.html>.

149. *Tucker*, 493 F. Supp. 2d at 1096.

150. *Id.*

Somers in the pending suits against Apple. Fortunately for consumers in this situation, Apple might have sewn the seed of its own destruction by releasing iTunes Plus. Since Apple demonstrated that it could employ a less restrictive means to protect its music than FairPlay, it should not prevail on a business justification defense to an illegal tying claim. Assuming that these plaintiffs can establish the other elements of the *per se* claim, Apple will be held liable for its anticompetitive conduct. Consumers around the world can only hope that the monetary and punitive damages imposed on Apple after such a result would change Apple's business practices and perhaps then Apple would finally start playing fair.