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SECONDARY LIABILITY AND THE FRAGMENTATION OF DIGITAL COPYRIGHT LAW

Jacqueline D. Lipton*

ABSTRACT

The digital age brought many challenges for copyright law. While offering enticing new formats for the production and dissemination of copyright content, it also raised the specter of large scale digital piracy. Since the end of the 20th century, content industries have reeled to keep up with technological developments that offer significant promise as well as threats of large scale piracy. There has always been some tension between promoting innovation in content creation and promoting innovation in technologies that enable the enjoyment of copyright works, such as photocopiers, audio tape recorders, video tape recorders, and peer-to-peer file sharing systems. The manufacturers and distributors of these technologies have had to tread a fine line in their marketing and distribution efforts to avoid liability for secondary copyright infringement based on direct infringements by their customers. To this list of technologies, we may now add Internet search engines and online payment systems. This paper considers ways in which copyright law has addressed the secondary liability question in an increasingly digital marketplace. It suggests that the realities of this marketplace necessitate a new look at broader policy issues underlying digital copyright law in order to meaningfully address questions of secondary liability online.

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I. INTRODUCTION

[W]e live in a quicksilver technological environment with courts ill-suited to fix the flow of internet innovation .... The introduction of new technology is always disruptive to old markets, and particularly to those copyright owners whose works are sold through well-established distribution mechanisms. Yet, history has shown that time and market forces often provide equilibrium in balancing interests, whether the new technology be a player piano, a copier, a tape recorder, a video recorder, a personal computer, a karaoke machine, or an MP3 player. Thus, it is prudent for courts to exercise caution before restructuring liability theories for the purpose of addressing specific market abuses, despite their apparent present magnitude.

- MGM Studios Inc. v Grokster

Digital copyright law has raised significant challenges for content industries on a global scale. Digital technology offers new formats for products and services of content-industries. Examples of such formats include CDs, DVDs, and MP3s. Some of these, such as CDs and DVDs, can be marketed through traditional brick and mortar stores. However, digital formats also allow for online distribution of copyrighted content. This, in turn, enables new and more flexible business models; for example, customers can now buy individual copyrighted songs rather than entire albums, and these songs can be downloaded to home computers and hand-held devices such as iPods.

These developments come with a distinct downside for content holders: the new technologies enable digital copyright piracy on a scope and scale never before possible. Technologies that make it cheap and easy for content holders to market their wares globally and make unlimited copies of works at the push of button also enable copyright

1. 380 F.3d 1154, 1167 (9th Cir. 2004); vacated, MGM Studios Inc. v. Grokster, Ltd., 545 U.S. 913 (2005).
pirates to do the same thing. The risks for content holders are exacerbated by the fact that the copyright infringers could potentially reside anywhere in the world, thus raising jurisdictional problems. Additionally, it is relatively easy to be anonymous online, so it may be difficult for content holders to even find primary infringers, let alone deal with the jurisdictional issues their activities may raise.

As a result, copyright holders have established a number of avenues for clamping down on online infringements, some of which are based on traditional copyright doctrine while others have required new legislation. An example of the latter is found in the Digital Millennium Copyright Act of 1998 ("DMCA"),\(^2\) which addresses a variety of concerns of online content industries. Some of the more contentious provisions of the legislation are the anti-circumvention and anti-trafficking provisions.\(^3\) They are an attempt to use law to bolster the effect of encryption technologies utilized by content industries to prevent unauthorized access to, and use of, their works. As no encryption technology can be 100\% effective in this context, the legislation prohibits attempts to circumvent such encryption technologies,\(^4\) and to traffic in devices that circumvent such technologies.\(^5\)

The DMCA also addresses concerns that Internet Service Providers ("ISPs") might be found liable for copyright infringements of their customers. It sets out a new notice and takedown regime to provide a safe harbor for ISPs that comply with notices sent by copyright holders about online copyright infringements.\(^6\) ISPs have been concerned about secondary liability questions relating to direct infringements by their customers. Secondary liability has historically comprised two distinct prongs in copyright law – contributory and vicarious liability.\(^7\) The former doctrine, in fact, has been relatively broadly expanded due to the 2005 Supreme Court decision in *Metro-Goldwyn-Mayer v Grokster*.\(^8\)

Because of practical difficulties inherent in proceeding against multiple individual direct infringers online, copyright holders have increasingly resorted to the DMCA's notice and takedown regime as well as secondary liability doctrines to protect their works online. This

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3. Id.
4. Id. § 1201(a)(1).
5. Id. §§ 1201(a)(2), 1201(b)(1).
6. Id. § 512(c).
effectively causes what I call a *fragmentation* of digital copyright law online. By this, I mean that the laws that extend liability for copyright infringement to secondary parties such as ISPs are shattering in a number of different directions to respond to new technological developments. Because digital developments arise very quickly, the law is arguably fragmenting in many different directions extremely quickly. It thus becomes very difficult for anyone to make sense of the secondary liability doctrines under any clear and unified notion of copyright policy.

This paper queries whether the current fast-paced and fragmented development of secondary liability doctrines is warranted or appropriate. It suggests the alternative of focusing instead on addressing underlying policies of copyright law in the digital age to arrive at an appropriate balance of interests online. Without such a focus on more general policy concerns, there is a risk of chilling innovation in online services such as search engines and payment systems, and even peer-to-peer file sharing services. With new models of production and distribution of works developing online at an exponential rate, and significant changes in the entities that create and distribute content, it is now important to revisit underlying copyright policy for the digital age.

Now may be the time to scale back online copyright protection rather than allowing for digital copyright law to make a million small cracks in developing innovation spaces online. This fragmentation is particularly significant if one considers that different countries are adopting different approaches to secondary liability. While the American case law has forked out and arguably accepted three distinct types of secondary liability in recent years, other jurisdictions are at the same time creating different and new forms of secondary liability. These disparities between jurisdictions must be added to the secondary liability fragmentation equation because of the global nature of the digital marketplace. Plaintiffs increasingly have a choice of jurisdiction in which to bring secondary infringement actions because of the global nature of most online conduct. This means that the fragmentation

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10. See discussion *infra* Part II.

Part II briefly surveys the kinds of secondary liability questions that have arisen in recent years in the digital realm, and their respective judicial resolutions to date. Part III advocates considering these problems through a broader lens that examines the purposes of digital copyright law more generally. Part IV sets out conclusions and suggestions for future developments in the area of digital copyright policy generally, and the nature of secondary liability in the digital context in particular.

II. SECONDARY LIABILITY IN THE DIGITAL AGE

First, there were photocopies — enabling easy consumer duplication of copyrighted books. Then audio and video tape recorders came along, enabling easy copying of protected music and video. In none of these cases were the copies particularly good, and in most cases they did not endure particularly well on relevant media. Additionally, the copies were bulky and physically difficult to distribute, even if a copyist was minded to do so.

Enter the digital age. Digital files comprising electronic literature, music, and movies can now freely move around the Internet from business to individual, and from individual to individual. Consumers become producers and distributors. Copies can be made and distributed almost instantaneously at the push of a button. Many unauthorized copies might be chalked up to fair use, or maybe “lawful personal use.” However, many, if not most, unauthorized uses and distributions are unquestionably infringing.

Given the scope and scale of online copying and distribution, it is not practical to expect copyright holders to proceed against every
individual who directly infringes.\textsuperscript{18} Putting to one side cost, jurisdictional concerns, and difficulties in even identifying wrongdoers in a largely anonymous online space, the idea of suing people who are often your own customers potentially leads to very bad press. Copyright owners have therefore turned to a strategy of attacking choke points in the chain of online distribution on the basis of secondary liability for users’ direct infringements. These choke points include services that provide general Internet connectivity (such as ISPs, bulletin board operators, etc),\textsuperscript{19} peer-to-peer file sharing capabilities, and more recently\textsuperscript{20} Internet search engines,\textsuperscript{21} and online payments systems.\textsuperscript{22} Legal problems began to arise when it became obvious that there was a mismatch between existing secondary liability doctrines in copyright law and the realities of the online marketplace. The accepted forms of secondary liability for copyright infringement were contributory liability and vicarious liability. Contributory liability was, until 2005, defined as the accrual of liability where the defendant induced, caused or materially contributed to the infringement by a third party with knowledge of the infringing activity.\textsuperscript{23} Vicarious liability arose in cases where a defendant had the right and ability to control a third party’s infringing activities and where the defendant also received a direct financial benefit from the infringement.\textsuperscript{24}

Neither of these tests fit the digital revolution particularly well when applied to the first wave of secondary liability litigation involving peer-to-peer file sharing services. Contributory liability tended to be problematic when it came to establishing that a defendant file-sharing service had the requisite knowledge of the infringing activities of its customers. Vicarious liability was potentially difficult because it was not often easy to prove a direct financial benefit in the hands of the defendant file-sharing service provider that related to its customers’ direct infringements. Additionally, depending on the structure of an

\textsuperscript{18} Of course, copyright holders do also proceed against individual users. \textit{See}, e.g., BMG Music v. Gonzalez, 430 F.3d 888 (7th Cir. 2005).
\textsuperscript{21} Perfect 10 v. Amazon.com, 487 F.3d 701 (9th Cir. 2007).
\textsuperscript{22} Perfect 10 v. Visa, 494 F.3d 788 (9th Cir. 2007).
\textsuperscript{23} \textit{See}, e.g., Gereshwin Publ’g Corp. v. Columbia Artists Mgmt., 443 F.2d 1159, 1162 (2d Cir. 1971).
\textsuperscript{24} \textit{See}, e.g., Shapiro, Bernstein & Co. v. H.L. Green Co., 316 F.2d 304, 307 (2d Cir. 1963).
online service, it was not always easy to prove the ability of the defendant to monitor or control the infringing conduct.

Of course, we know that courts did ultimately find Napster, for example, liable on both counts. 25 With respect to contributory liability, the Ninth Circuit held that Napster had both actual and constructive knowledge of its users' infringing activities. 26 The plaintiffs had given Napster plenty of knowledge of the actual infringing files. 27 Further, the court held that even vicarious liability was made out because a sufficient financial benefit related to the infringement occurred where the availability of infringing material acted as a draw for Napster's customers. 28 Additionally, Napster was found to have the ability to supervise the infringing activities of its customers because it was able to monitor the titles of files traded through its services, even though it did not maintain copies of those files on its own servers. 29

This was somewhat of a departure from existing precedent, but it was arguably reasonable, taking into account the move from real world spaces - such as swap meets where bootleg music is traded 30 - to the online environment. In an online business model, the test of something related to infringement being a draw for the defendant's customers may be the closest analogy there is to charging rent in the real world to a direct infringer who trades bootlegged music at a swap meet. 31 In any event, the Napster court did find real world precedent for the proposition that financial benefit may be made out where the availability of infringing material in a physical venue acts as a draw for customers, and thus enhances the profits the venue operator may make from charging rents to vendors. 32 Additionally, the ability for a secondary liability defendant to use keyword searches to find infringing material is the best online analog to asking a defendant to physically monitor conduct occurring within its physical premises.

26. Id. at 1020-22.
27. Id.
28. Id. at 1023.
29. Id. at 1024.
30. See, e.g., Fonovisa v. Cherry Auction, 76 F.3d 259 (9th Cir. 1996).
31. Id.
32. Id. at 263 ("the defendants reap substantial financial benefits from admission fees, concession stand sales and parking fees, all of which flow directly from customers who want to buy the counterfeit recordings at bargain basement prices. The plaintiff has sufficiently alleged direct financial benefit.").
Then along came Grokster. Grokster technically had no actual or constructive knowledge of any files shared over its peer-to-peer software because it retained no central servers; thus, it argued—and convinced the Ninth Circuit Court— that it could not be contributorily liable for infringing activities of those who utilized its software. It also argued, again successfully in the Ninth Circuit, that it could not be vicariously liable because it had no effective ability to supervise the activities of the infringers using its services. Ultimately, the Supreme Court of the United States found against Grokster on contributory liability grounds, but in so doing, arguably created—or at least unearthed—a new form of contributory liability that had not previously been recognized in copyright law.

This new form of secondary liability has come to be known as inducement liability, and was described by the Supreme Court as follows: "one who distributes a device with the object of promoting its use to infringe copyright, as shown by clear expression or other affirmative steps taken to foster infringement, is liable for the resulting acts of infringement." In Grokster, the Supreme Court, while not definitively settling the question of whether the plaintiffs' secondary liability claim had been made out, suggested that there were three factors that weighed in favor of such a finding. They were: (a) each defendant showed itself as aiming to satisfy a known source of demand for copyright infringing music; (b) no defendant attempted to develop any filtering tools to monitor or prevent copyright infringement; and, (c) several defendants made money by selling advertising space and infringing music known to be a draw for custom and therefore also a draw for advertisers.

Effectively, the Grokster decision fragmented secondary liability doctrine into new directions that have now enabled new actions to be taken by copyright holders against other kinds of online service providers such as search engines and payment services. Ironically, the

33. 380 F.3d 1154, 1167 (9th Cir. 2004); vacated, MGM Studios Inc. v. Grokster, Ltd., 545 U.S. 913 (2005).
34. Id. at 1154, 1167 (9th Cir. 2004).
35. Id. at 1164-66.
37. Id. at 918.
38. Id. at 940 ("This evidence alone would not justify an inference of unlawful intent, but viewed in the context of the entire record its import is clear.").
39. Id. at 939.
40. Id.
41. Id. at 939-40.
Grokster decision also failed to stem the tide of online file sharing because new online file-sharing services would continue to attempt to either skirt around the law in Grokster, or simply skirt around the spirit of the law by not being centralized or easily identified by a potential plaintiff.\textsuperscript{42}

Recently, secondary liability suits have been brought against both Internet search engines and online payment system providers. The biggest plaintiff in recent years has been Perfect 10, a company that markets photographs of nude or scantily clad women.\textsuperscript{43} Perfect 10 has not, to date, been exceptionally successful in its litigation against Google and Visa,\textsuperscript{44} but it has been chipping away at the boundaries of secondary copyright liability. While Perfect 10 failed against Visa in the Ninth Circuit,\textsuperscript{45} it has been a little more successful against Google in the same court.\textsuperscript{46}

In the Visa case, the Ninth Circuit found that the activities of the payment system provider were too far removed from the actual infringing activities on merchants’ websites to constitute contributory\textsuperscript{47} or vicarious liability,\textsuperscript{48} even though Perfect 10 had allegedly notified the payment system of the infringements.\textsuperscript{49} However, in the Google litigation, the Ninth Circuit left the door open to secondary liability. The court held that Google could be contributorily liable for copyright infringement under what looks like a merged Grokster/pre-Grokster...

\textsuperscript{43} See Ryan Rodenberg, Bryan Swatt, &Pamela Laucella, Perfect 10 v Visa, Mastercard, et al: A Full Frontal Assault on Copyright Enforcement in Digital Media or a Slippery Slope Diverted?, 8 CHI.-KENT J. INTELL. PROP. 85 (2008).
\textsuperscript{44} Perfect 10 v. Visa, 494 F.3d 788 (9th Cir. 2007).
\textsuperscript{45} Id.
\textsuperscript{46} Perfect 10 v. Amazon.com, 487 F.3d 701 (9th Cir. 2007).
\textsuperscript{47} Perfect 10 v. Visa, 494 F.3d 788, 796 (9th Cir. 2007) (“The credit card companies cannot be said to materially contribute to the infringement in this case because they have no direct connection to that infringement. Here, the infringement rests on the reproduction, alteration, display and distribution of Perfect 10’s images over the Internet. Perfect 10 has not alleged that any infringing material passes over Defendants’ payment networks or through their payment processing systems, or that Defendants’ systems are used to alter or display the infringing images.”).
\textsuperscript{48} Id. at 803-04 (“[The vicarious liability] argument fails. The Napster program’s involvement with--and hence its “policing” power over--the infringement was much more intimate and directly intertwined with it than Defendants’ payment systems are. Napster provided users with the tools to enable the easy reproduction and distribution of the actual infringing content and to readily search out and identify infringing material.”).
\textsuperscript{49} Id. at 793 (“Perfect 10 alleges that it sent Defendants repeated notices specifically identifying infringing websites and informing Defendants that some of their consumers use their payment cards to purchase infringing images. Defendants admit receiving some of these notices, but they took no action in response to the notices after receiving them.”).
The Ninth Circuit in Google held that Google could be liable for contributory infringement if it: (a) had knowledge that infringing images were available using its search engine; (b) could take simple measures to prevent further damage to the copyrighted works; and, (c) failed to take such steps. It remanded the case to the district court for further consideration of these issues, as well as consideration of whether Google could avail itself of the safe harbor under § 512 of the Copyright Act. The answer to both questions depends to a significant extent on the adequacy of any notices sent to Google by Perfect 10.

The Google decision may be regarded as a further fragmentation of secondary liability principles online. As Google obviously did not induce copyright infringement in the way that, say, Grokster did, the application of the straight Grokster inducement test did not really work for the plaintiffs. At the same time, Google’s activities probably did not neatly satisfy the pre-Grokster heads of secondary liability. Google did not materially contribute to infringement with knowledge, and it did not obtain direct financial benefit from infringement that it had the right and duty to control. However, it may have satisfied the new Ninth Circuit test apparently tailored just for it. This test would impose liability on the basis of knowledge of infringement and failure to take reasonable steps to prevent further infringement. Thus, all a plaintiff would have to prove is that the defendant had been notified of infringement and then the duty would be on the defendant to remedy the situation. Failure to do so would result in contributory liability infringement. In many ways, this test now parallels the safe harbor under § 512 of the DMCA. Arguably, the burdens of proof would be different under § 512 as compared with this new contributory liability test. Presumably, under § 512 the burden is on the defendant to establish the safe harbor, while under the contributory liability test, the burden is presumably at least initially on the plaintiff to establish that the defendant had sufficient knowledge of infringing activities and failed to counteract them. Of course, the plaintiff could

50. Id. at 801 (noting that the court in Perfect 10 v. Amazon.com, 487 F 3d 701, 729 (9th Cir. 2007) did not bifurcate its analysis of the standard contributory liability test from the Grokster-inspired inducement test for contributory liability).
51. Perfect 10 v. Amazon.com, 487 F.3d 701, 729 (9th Cir. 2007).
52. Id. ("The district court did not resolve the factual disputes over the adequacy of Perfect 10’s notices to Google and Google’s responses to these notices.").
53. Id. at 730.
54. Id. at 729.
55. 17 U.S.C. § 512(c).
probably satisfy the knowledge requirement fairly easily by providing notice to the defendant of the alleged infringements.

Of course, none of the secondary liability tests deal with the question of whether a defendant can easily remove infringing material or disable access to infringing material. They do not even deal particularly well with the degree of notice required by the plaintiff. Even in cases where the defendant does have sufficient notice of infringement and can technically act to prevent it, the courts and statutes do not take into account the costs and benefits inherent in doing so. It may be that the costs associated with both defending secondary infringement actions and taking technical steps to combat direct infringements by third parties will chill innovation in new technologies, such as search engines, online payment systems, advanced peer-to-peer file sharing services, and whatever comes next. The following discussion considers whether we have in fact moved past a time when we should be fragmenting secondary liability doctrine and applying it in its various new guises in these online contexts, or whether we should go back to underlying copyright policy and reconsider it more fully with respect to new online business models.

III. SECONDARY LIABILITY AND DIGITAL COPYRIGHT POLICY

The nature of online activity has changed dramatically since the end of the 20th century when digital copyright holders first started lobbying Congress and the courts to protect existing business models. We are now moving into an era of Internet activity that has often been referred to as Web 2.0. 56 This new Internet is distinguished from what came before because it is a distributed, interactive, peer-based technology, as opposed to a forum for dissemination of information to passive recipients. 57 Commentators on Internet business models are

56. Wikipedia currently defines “Web 2.0” in the following terms: Web 2.0 is a term describing changing trends in the use of World Wide Web technology and web design that aims to enhance creativity, secure information sharing, collaboration and functionality of the web. Web 2.0 concepts have led to the development and evolution of web-based communities and its hosted services, such as social-networking sites, video sharing sites, wikis, blogs, and folksonomies.

increasingly arguing that old business models are now dead, and that, to be successful, businesses must find ways of embracing the new, more interactive Internet – an Internet built on shared resources and trust between customers and corporate concerns – rather than the use of proprietary laws and technologies to protect the value of businesses. In fact, it has been suggested that today’s customers demand that businesses rethink notions of intellectual property online.

With respect to the digital music industry in particular, Tapscott and Williams have suggested that: “[t]oday the music industry finds itself launching one expensive lawsuit after another against Internet music companies, and even against its own customers. Many labels are desperately struggling to prop up the old way of doing business while straining to figure out the new.” Obviously, these authors were not specifically addressing doctrines of secondary liability for copyright infringement here. However, the increasing fragmentation of secondary liability doctrine in copyright law is arguably part of this larger picture. This is the picture of an industry becoming increasingly out of touch with the realities of the new marketplace, clinging to old business models, and relying on old - but increasingly unsuitable - legal principles to protect it. It may be that the problems with contributory liability in the digital copyright world are simply a symptom of the decreasing suitability of copyright law in general to deal with digital business models involving creative content.

Consider Perfect 10, for example. Perfect 10 can sue whomever it wants, but it will never truly manage to protect the business model that it desires: that is, full or predominant control over all its copyright images.

58. TAPSCOTT & WILLIAMS, supra note 57, at 38 (“The immutable, standalone website is dead.”).
59. Id. at 39 (“The losers launched Web sites. The winners launched vibrant communities. The losers built walled gardens. The winners built public squares. The losers innovated internally. The winners innovated with their users. The losers jealously guarded their data and software interfaces. The winners shared them with everyone.”).
60. Id. at 43 (“For today’s new Web companies, building trust is the alternative to controlling customers.”).
61. Id. at 53 (“Smart companies ... won’t send out cease-and-desist letters; they will find creative ways to engage N-Geners in the product development and distribution process.”).
62. Id. at 52
   File sharing now accounts for half of the world’s Internet traffic – much to the chagrin of Hollywood – signaling that the Net Generation is renegotiating the definitions of copyright and intellectual property. Indeed, N-Geners are not only creating new art forms, they’re helping to engender a new creative and philosophical openness. The ability to remix media, hack products, or otherwise tamper with consumer culture is their birthright, and they won’t let outmoded intellectual property laws stand in their way.
63. Id. at 58.
online against any unauthorized copying and distribution. Today, it is simply too easy to copy and distribute digital images globally at the push of a button. Ultimately, courts and legislatures will have to recognize the fact that the existing business model, lucrative as it may have been for content providers in the physical world, simply cannot survive Web 2.0, even if it appeared to withstand the initial challenges posed by Web 1.0.\textsuperscript{64}

However, in the meantime, much damage can be done to the digital economy, and much innovation may be chilled in online services generally if secondary liability continues to fragment, and therefore effectively to expand in scope. Innovative developments in search engine technology, payment systems methodology, and probably many other areas of online activity could be stifled if anyone transacting in any way on the Internet is potentially liable for secondary copyright infringement because their activities incidentally brush up against some direct infringement. The duration and costs of litigation will also increase as lawyers are forced to argue more and more heads of secondary liability, in more and more jurisdictions.

Is it possible to come up with a secondary liability test that avoids these problems? Is there some clear rule we might employ to distinguish those defendants who truly are complicit in the infringements of third parties from those who are only incidentally touching on those infringements? Probably not. In \textit{Grokster}, the inducement idea looked promising, but it has now effectively been extended or garbled in \textit{Google} to capture those whose business models are not aimed in any significant way at encouraging or facilitating copyright infringements. Now, innovators like Google have to expend resources defending these actions as well as potentially being ordered to re-work their search engines to counter direct copyright infringement. Further, if secondary liability doctrines ever do extend to areas such as payment systems, we may see a really significant stifling of electronic commerce activity. Without current payment systems provided through services such as Visa and Mastercard, we may need to revert to the convoluted encrypted email

\textsuperscript{64} The Wikipedia definition of Web 1.0 contrasts it with Web 2.0 and cites the following authority:

Terry Flew, in his 3rd Edition of \textit{New Media} described what he believed to characterize the differences between Web 1.0 and Web 2.0: 'move from personal websites to blogs and blog site aggregation, from publishing to participation, from web content as the outcome of large up-front investment to an ongoing and interactive process, and from content management systems to links based on tagging (folksonomy)'

formats for online payments that were initially contemplated at the dawn of the electronic commerce age.65

Even peer-to-peer file sharing has suffered some unfortunate blows to innovation. Surely much early peer-to-peer file sharing was utilized for illegal downloading of copyrighted music. However, there are many other uses for these technologies that are not copyright infringing. Who knows if the Napster model was the technologically optimal model for legal file sharing, or if the newer versions such as Grokster and BitTorrent are technologically better? They are certainly better at hiding shared content from copyright holders, but are they more efficient in practice, or did secondary copyright liability litigation chill innovation in the file sharing industry back in Napster’s day? In other words, is secondary copyright liability chilling, or skewing, innovation in file-sharing technologies so that developers now focus on avoiding copyright litigation rather than on creating the most efficient file sharing methodologies? Might the same fate befall other online industries, such as search engines and payment systems?

Is it time now for copyright holders to focus on new business models that might emphasize proprietary interests in intellectual property less, and perhaps play up relationships of trust and confidence with their customers? If, for example, the online music and video industries opened up more of a discussion with their customers to find out what services customers wanted, and what prices they were prepared to pay, and how customers may contribute to the enterprise overall, they may be more successful financially. If customers agree to certain services at a reasonable price, they may be more prepared to blow the whistle on those cheating the system; that is, if they feel they are on the same team as the music providers, and are not in an adversarial relationship with them.

Additionally, if content industries are not providing, say, digitized copies of older music or movies, and fans choose to create such copies on their own, could they work in concert with recording and movie studios for a form of profit sharing in relation to releasing the digital copies online in a cooperative way? This may not be as far-fetched as it sounds. Recent experiments in both profit and non-profit industries are replete with examples of successful collaborative enterprises of this

kind. If content industries started to more seriously explore these new kinds of business models there would arguably be less pressure on the existing copyright system to accommodate them. There would certainly be less pressure on the older secondary liability doctrines to fragment into pieces to cope with each new development in online technology that might incidentally unearth an illegal copy of a photograph or song.

IV. CONCLUSION

This paper has argued that the existing law of secondary liability, particularly contributory liability in copyright law, has become fragmented as courts try to keep pace with technological developments that are not aimed at facilitating infringement. The continued mutation of the secondary liability doctrine online threatens to chill important innovations in technology on a global scale. When these concerns about chilling innovation are coupled with realities of the digital marketplace and the move to new online business models, we can see that reliance by copyright holders on both old business models and old laws is not appropriate. Secondary liability for copyright infringement is but one example where focusing on the past is potentially impeding the future of technological innovation.

66. Supra note 57.