



1-1-2005

# The Value of Cablevision and Its Implications on International Copyright Law and the Internet

Ernesto Omar Falcon

Follow this and additional works at: <https://scholarlycommons.pacific.edu/globe>



Part of the [International Law Commons](#)

### Recommended Citation

Ernesto O. Falcon, *The Value of Cablevision and Its Implications on International Copyright Law and the Internet*, 28 PAC. MCGEORGE GLOBAL BUS. & DEV. L.J. 303 (2014).

Available at: <https://scholarlycommons.pacific.edu/globe/vol28/iss2/8>

This Comments is brought to you for free and open access by the Journals and Law Reviews at Scholarly Commons. It has been accepted for inclusion in Global Business & Development Law Journal by an authorized editor of Scholarly Commons. For more information, please contact [mgibney@pacific.edu](mailto:mgibney@pacific.edu).

## The Value of *Cablevision* and Its Implications on International Copyright Law and the Internet

Ernesto Omar Falcon\*

### TABLE OF CONTENTS

I. INTRODUCTION .....	303
II. THE VALUE OF CLOUD COMPUTING .....	306
III. OVERVIEW OF U.S. COPYRIGHT LAW .....	308
A. <i>The Cablevision Decision</i> .....	311
1. <i>Reproduction Right and Public Performance Right</i> .....	312
2. <i>Cablevision's Progeny: Aereo</i> .....	313
3. <i>Supreme Court Decision on Aereo and its Impact</i> .....	316
IV. INTERNATIONAL COPYRIGHT LAW OVERVIEW .....	318
A. <i>Berne Convention</i> .....	319
B. <i>The Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPS)</i> .....	320
C. <i>The WIPO Copyright Treaty (WCT)</i> .....	322
V. THE EU AND THE COPYRIGHT DIRECTIVE .....	323
A. <i>How the European Court of Justice has Interpreted the "Making Available" Right</i> .....	325
1. <i>How Would Cablevision and Aereo Been Decided Under the Copyright Directive?</i> .....	326
VI. CONCLUSION .....	327

### I. INTRODUCTION

Today an estimated 2.7 billion people are connected to the Internet.<sup>1</sup> Each individual person creates, consumes, exchanges, and receives knowledge and culture from its use. As more people come online, the value of the network

---

\* I want to thank my wife, Katherine Rodriguez, for all of her support during my time of learning in law school. I also wish to thank my faculty advisor Professor Amy Landers for her guidance. Lastly, I wish to thank my classmate Luisa Geiling for her expert assistance in navigating the European Union judicial process.

1. Press Release, Int'l Telecomm. Union, ITU Releases Latest Global Technology Development (Feb. 27, 2013),

[http://www.itu.int/net/pressoffice/press\\_releases/2013/05.aspx#Uv6V3vldV8E](http://www.itu.int/net/pressoffice/press_releases/2013/05.aspx#Uv6V3vldV8E).

increases both economically and socially. Each new connection, which leverages the network effects of existing connections, increases both the productivity and value of the overall network.<sup>2</sup> However, underlying a sizable segment of activity of the network are systems of legal rights. One of the most significant within this technological context is copyright law.<sup>3</sup> This centuries old legal regime has evolved many times over in response to changes in technology.<sup>4</sup>

Copyright has the power to regulate creative expression through a government issued time-limited monopoly granted to authors.<sup>5</sup> Authors are the original creators of a copyrightable work.<sup>6</sup> The policy goal behind the regulation is to incentivize creativity and enhance the public's access to knowledge once the monopoly expires.<sup>7</sup> Despite its ancient origins, copyright has shown a surprising level of adaptability to technology.<sup>8</sup> That is not to say though that each stage of technological development was not met with severe resistance by the old guard industries.<sup>9</sup> Often the disputes revolve around the battle lines drawn by technological innovators who push the envelope against copyright maximalists who opt for an excessively restrictive view of access to copyrighted works.<sup>10</sup> This resistance stems mostly from the comforts presented by the status quo, whereas innovations in the market could result in complete restructuring of whole sectors. One apt example is the advent of high definition video streaming over the Internet coupled with the near extinction of the brick and mortar video rental industry.<sup>11</sup>

This Comment will focus on the latest iteration of this conflict between technological innovators and copyright maximalists in light of the United States Court of Appeals for the Second Circuit's seminal *Cablevision* decision.<sup>12</sup> While the Supreme Court has weighed in on the *Aereo* case, which is the progeny of

---

2. Mark A. Lemley & David McGowan, *Legal Implications of Network Economic Effects*, 86 CALIF. L. REV. 479, 483-84 (1998).

3. *Copyright Law*, U.S. COPYRIGHT OFFICE, <http://www.copyright.gov/title17/> (last visited Feb. 14, 2014).

4. *A Brief Introduction and History*, U.S. COPYRIGHT OFFICE, <http://www.copyright.gov/circs/circ1a.html> (last visited Feb. 14, 2014).

5. *Id.*

6. 17 U.S.C. § 201 (2011).

7. *A Brief Introduction and History*, *supra* note 4.

8. *Id.*

9. Nate Anderson, *100 Years of Big Content Fearing Technology—In Its Own Words*, ARS TECHNICA (Oct. 11, 2009, 8:00 PM), <http://arstechnica.com/tech-policy/2009/10/100-years-of-big-content-fearing-technology-in-its-own-words>.

10. Ali Sternburg, *15 Technologies that Content Industries Sued After Diamond Rio*, DISRUPTIVE COMPETITION PROJECT (Oct. 8, 2013), <http://www.project-disco.org/intellectual-property/100813-15-technologies-that-content-industries-sued-after-diamond-rio>.

11. Megan O'Neill, *How Netflix Bankrupted and Destroyed Blockbuster*, BUSINESS INSIDER (Mar. 1, 2011 9:55 AM), <http://www.businessinsider.com/how-netflix-bankrupted-and-destroyed-blockbuster-infographic-2011-3>.

12. *Cartoon Network LP, LLLP v. CSC Holdings, Inc.*, 536 F.3d 121 (2d Cir. 2008) [hereinafter *Cablevision* decision].

*Cablevision*, the Court did little to settle the debate as it continues to escalate. The international reach of copyright law and its interplay with a number of treaties adds further fuel to the ongoing debate.<sup>13</sup>

To set the stage of what is at stake, Part II of this Comment will first explore the economic value the Internet generates for society as the result of the growth in cloud computing. Cloud computing eliminates the need for personal data storage, high energy consumption, and equipment purchases.<sup>14</sup> As a result, consumer and business costs can scale with their needs as wasteful spending is reduced.<sup>15</sup> The savings enjoyed by consumers and businesses are in effect newly created surpluses that can be redirected into other economic channels.<sup>16</sup> However, the cloud computing industry's future is far from certain given that an enormous amount of copyrighted works travels through its systems.<sup>17</sup>

The Comment will next explore the dueling legal scenarios innovators and maximalists wish to chart for copyright law and analyze the potential ramifications each path will have on the future development of the global Internet economy. To do this, Part III of this Comment will provide an overview of U.S. Copyright law with particular focus on the rights of public performance<sup>18</sup> and reproduction<sup>19</sup> granted to authors. Following this review will be an overview of the Second Circuit's *Cablevision* decision whereas a cable company successfully defended its remote storage and recorded video service from copyright liability.<sup>20</sup>

Under *Cablevision*, consumer freedom to make, remotely store, and download private copies was upheld.<sup>21</sup> This legal status has had a positive impact on various cloud computing and content distribution technologies.<sup>22</sup> The most prominent example is evidenced by the subsequent litigation involving the Internet company known as Aereo and its innovative method of converting and distributing television broadcast content following the *Cablevision* model.<sup>23</sup> Part III will conclude with an overview of the *Cablevision* decision and the subsequent Supreme Court *Aereo* decision. Part of this review will explore the

---

13. See *infra* Part IV.

14. FEDERICO ETRO, THE ECONOMICS OF CLOUD COMPUTING 2-3 (2011).

15. *Id.*

16. JAMES MANYIKA ET AL., MCKINSEY GLOBAL INSTITUTE, DISRUPTIVE TECHNOLOGIES: ADVANCES THAT WILL TRANSFORM LIFE, BUSINESS, AND THE GLOBAL ECONOMY 12 (2013).

17. *Id.* at 63.

18. 17 U.S.C. § 106(4) (2011).

19. *Id.* § 106(1).

20. *Cablevision* decision, *supra* note 12.

21. *Id.*

22. JOSH LERNER, THE IMPACT OF COPYRIGHT POLICY CHANGES ON VENTURE CAPITAL INVESTMENT IN CLOUD COMPUTING COMPANIES 1 (2011).

23. Brian Stelter, *Aereo Wins a Court Battle, Dismaying Broadcasters*, N.Y. TIMES (Apr. 1, 2013), <http://www.nytimes.com/2013/04/02/business/media/aereo-wins-in-appeals-court-setting-stage-for-trial-on-streaming-broadcast-tv.html>.

impacts on cloud computing, the future of remote storage and Internet based distribution, and the unanswered questions left in its wake.<sup>24</sup>

The remainder of this Comment will broaden the discussion to the international arena. Part IV will review the history of copyright law's internationalization through the Berne Convention.<sup>25</sup> Included in this discussion is a detailing of the obligations of signatories to the Berne Convention and related treaties they must follow.<sup>26</sup> Part V will look specifically into the European Union's (EU) judicial interpretation and legislative activity related to the Berne Convention as well as how those decisions have impacted Internet innovation. The most significant development in the EU is its interpretation of the World Intellectual Property Organization's Copyright Treaty,<sup>27</sup> which led to the issuance of the Copyright Directive.<sup>28</sup> Under the Copyright Directive, authors were given a new explicit "making available" right, which based on recent litigation has been given a broad interpretation.<sup>29</sup> Such an explicit right is unique to the EU and does not exist within the U.S.<sup>30</sup>

Finally, Part VI will tie these issues together to predict and analyze the path of this growing conflict. The EU and the U.S. may chart different interpretative paths for copyright law setting up possible trade disputes. Further complicating this fact is the possibility that both sides of the Atlantic could have correct but different interpretations. Regardless, this Comment recommends that the best policy moving forward would be to adhere to the Second Circuit's *Cablevision* decision and to narrowly interpret the Supreme Court's *Aereo* decision.<sup>31</sup> To conclude otherwise would be to the detriment of the global economic potential of cloud computing and would diminish the benefits of copyright law for the intended beneficiaries: the public.

## II. THE VALUE OF CLOUD COMPUTING

As more and more people are connected and more facilities become interconnected at higher speeds, individuals have less need to directly own

---

24. *Am. Broad. Co. v. Aereo, Inc.*, No. 13-461 (U.S. June 25, 2014) [hereinafter *Aereo* decision].

25. Berne Convention for the Protection of Literary and Artistic Works, Sept. 9, 1886, *revised* July 24, 1971, *amended* Sept. 28, 1979, 102 Stat. 2853, 1161 U.N.T.S. 30 [hereinafter Berne Convention].

26. See Agreement on Trade-Related Aspects of Intellectual Property Rights, Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1C, 1869 U.N.T.S. 299, 33 I.L.M. 1197 [hereinafter TRIPS]; See also World Intellectual Property Organization Copyright Treaty, Dec. 20, 1996, S. Treaty Doc. No. 105-17, 2186 U.N.T.S. 121 [hereinafter WCT].

27. WCT, *supra* note 26.

28. Directive 2001/29/EC, of the European Parliament and of the Council of 22 May 2001 on the Harmonisation of Certain Aspects of Copyright and Related Rights in the Information Society, 2001 O.J. (L 167) 10 [hereinafter Copyright Directive].

29. *Id.* art. 3, at 16.

30. See *infra* Part V.

31. See *infra* Part VI.

multiple components of the computer (storage, portable data devices, and software) to service their daily business and personal needs.<sup>32</sup> At the start of the 21<sup>st</sup> century, Internet companies had made cloud computing widely available on the commercial market.<sup>33</sup> The end goal of the Internet industry is to eventually allow consumers to feel free to store all of their content, particularly items that fall within copyright, onto the cloud for purposes of making them accessible from virtually anywhere.<sup>34</sup> By doing so, businesses, the public sector, and individual consumers will be able to save money from reduced power consumption and fewer equipment purchases.<sup>35</sup> Furthermore, the increases in group collaboration, productivity, reliability in data storage, and advances in software will magnify the effect that the Internet has on the economy.<sup>36</sup>

The value of this migration is significant. Within the U.S. alone, one study predicts that an increase in Gross Domestic Product (GDP) after a cloud migration will exceed several billion dollars in economic value.<sup>37</sup> Within the European Union, the estimated value of cloud computing reaches as high as .1 percent to .4 percent improvement in GDP growth per year.<sup>38</sup> Furthermore, it is predicted that a full migration will increase the number of available jobs throughout the EU zone anywhere between the tens of thousands to the hundreds of thousands.<sup>39</sup> This is the result of the near elimination of excess initial capital costs in physical computer infrastructure for small business enterprises, which is often a barrier to entry and stifles business creation.<sup>40</sup>

The *Cablevision* decision<sup>41</sup> by the Second Circuit Court of Appeals had a measurable benefit to the U.S. innovation economy.<sup>42</sup> One study measured the increase in venture capital spending between hundreds of millions to more than a billion dollars (though such study was prior to the Supreme Court's *Aereo* decision).<sup>43</sup> Internet companies are traditionally venture capitalists (VC) funded and the general consensus among VCs is potential copyright liability stifles their

---

32. MANYIKA, *supra* note 16, at 29-30, 36.

33. ETRO, *supra* note 14, at 8.

34. Mike Masnick, *How Copyright Has Driven Online Streaming Innovators Insane*, TECHDIRT (Aug. 31, 2012, 10:01 AM), <https://www.techdirt.com/blog/innovation/articles/20120830/13260820222/how-copyright-has-driven-online-streaming-innovators-insane.shtml>.

35. MICROSOFT, THE ECONOMICS OF THE CLOUD 3-4 (Nov. 2010), *available at* <http://www.microsoft.com/en-us/news/presskits/cloud/docs/the-economics-of-the-cloud.pdf>.

36. ETRO, *supra* note 14, at 6.

37. Marco Iansiti & Gregory L. Richards, *Economic Impact of Cloud Computing White Paper* 40 (June 30, 2011) (unpublished working paper), *available at* <http://ssrn.com/abstract=1875893>.

38. ETRO, *supra* note 14, at 13.

39. *Id.* at 7, 14.

40. *Id.* at 7.

41. *See infra* Part III.A.

42. LERNER, *supra* note 22.

43. *Id.*

ability to invest.<sup>44</sup> This stifling effect is magnified by the statutory minimums Congress has set for copyrights where each infringement (even if the copyright has no value) can incur up to \$150,000 in damages.<sup>45</sup> The study found that the guidance from the *Cablevision* decision helped alleviate the possible threat of statutory damages revolving around cloud computing companies.<sup>46</sup>

The EU courts and EU parliament have interpreted their international obligations under copyright law differently by creating a new “making available” right.<sup>47</sup> These interpretations, under similar facts that gave rise to the *Cablevision* decision, are producing different legal outcomes.<sup>48</sup> It is worth noting that the U.S. is under the same international obligations, but legal scholars debate whether or not we are complying with international law.<sup>49</sup>

### III. OVERVIEW OF U.S. COPYRIGHT LAW

*“To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries.”*<sup>50</sup>

Implementing the Constitution’s Copyright Clause, the United States Congress enacted its first copyright law and created time limited monopoly rights for the authors of books, maps, and charts.<sup>51</sup> The rationale underlying the American Copyright Act is economic in nature where authors would be given a limited period of time to exploit their works.<sup>52</sup> Over the Act’s two centuries of history, additional types of works were deemed worthy of a government granted

---

44. See generally Mike Masnick, *Top VCs Tell Congress: PROTECT IP Will Harm Innovation*, TECHDIRT,

<http://www.techdirt.com/articles/20110623/11401714827/top-vcs-tell-congress-protect-ip-will-harm-innovation.shtml> (last visited Feb. 15, 2014).

45. 17 U.S.C. § 504(C)

46. LERNER, *supra* note 22 at 1, 6-7.

47. See *infra* Part V.A

48. See *infra* Part V.A.1

49. See David O. Carson, *Making the Making Available Right Available: 22nd Annual Horace S. Manges Lecture*, 33 COLUM. J.L. & ARTS 135 (2009); See also *The Scope of Copyright Protection: Hearing Before the Subcomm. On Courts, Intellectual Property and the Internet of the H. Comm. On the Judiciary*, 113<sup>th</sup> Cong. (2014).

50. U.S. Const. art. I., § 8, cl. 8.

51. *A Brief Introduction and History*, *supra* note 4.

52. Jean-Luc Piotraut, *An Authors’ Rights-Based Copyright Law: The Fairness And Morality of French and American Law Compared*, 24 CARDOZO ARTS & ENT. L.J. 549, 554 (2006).

monopoly.<sup>53</sup> Under the Copyright Act of today, virtually all forms of creative expression that travels over the Internet are protected by copyright law.<sup>54</sup>

The process of obtaining a copyright in the modern era is very simple.<sup>55</sup> An author (the creator of a copyright) simply needs to create a work and record it to a medium so that it may be preserved (fixed), such as a video, a paper, an audio recording, or a computer file.<sup>56</sup> Once the work is fixed, it must also contain a slight modicum of originality and expression.<sup>57</sup> This ensures that works that are unoriginal and more functional and utilitarian in nature remain accessible to the public and not restricted under a copyright monopoly.<sup>58</sup> Once these steps are taken, an author is granted a copyright under federal law.<sup>59</sup> No additional registration requirements are necessary unless the author wishes to take legal action against an alleged infringer of their copyright.<sup>60</sup>

Once a monopoly is obtained by the author over the work, the author is granted six exclusive rights designed to allow for exploitation and monetization of the work subject to a number of limitations and exceptions.<sup>61</sup> An example of an exclusive right and its applicability is the right of distribution.<sup>62</sup> This right enables the author to control any form of distribution of their work as well as grant them the right to refuse distribution all together.<sup>63</sup> Counterbalancing this right is the limitation of the First Sale doctrine, which extinguishes an author's distribution right once a sale has occurred.<sup>64</sup> This was in order to promote commerce by allowing for the resale of personal property between buyers and sellers.<sup>65</sup>

Two of the six exclusive rights, reproduction and public performance, will be the focal point of discussion for this Comment given their relation to Internet technologies and cloud computing. The right of reproduction makes it an

---

53. *A Brief Introduction and History*, *supra* note 4 (adding prints, music, dramatic compositions, photographs and photographic negatives, works of art, and motion pictures to the list of protected works between April 1802 and August 1912).

54. See Ali Sternburg, *15 Technologies that Content Industries sued After Diamond Rio*, DISRUPTIVE COMPETITION PROJECT (Oct. 8, 2013), <http://www.project-disco.org/intellectual-property/100813-15-technologies-that-content-industries-sued-after-diamond-rio>. This article describes the trend of new technologies being met with copyright litigation. It lists fifteen products/ services that have been met with copyright litigation and describes how each product/ service fared.

55. 17 U.S.C. § 101-122 (2011).

56. 17 U.S.C. § 101 (2011).

57. *Feist Publications, Inc., v. Rural Telephone Service Co.*, 499 U.S. 340, 346-47 (1991)

58. *What Does Copyright Protect?*, U.S. COPYRIGHT OFFICE, <http://www.copyright.gov/help/faq/faq-protect.html> (last visited February 14, 2014).

59. 17 U.S.C. § 101-122 (2011).

60. See *Copyright Basics*, U.S. COPYRIGHT OFFICE, <http://www.copyright.gov/circs/circ01.pdf> (last visited February 14, 2014).

61. *Id.* at 1.

62. 17 U.S.C. § 106(3) (2011).

63. 17 U.S.C. § 106(4) (2011).

64. 17 U.S.C. § 109(c) (2011).

65. *Id.*



infringement for unauthorized parties to make a copy of an author's work.<sup>66</sup> However, the act of making a copy does not always automatically result in an infringement.<sup>67</sup> For example, the Supreme Court found that consumers were allowed to make copies of television programming at home with a videocassette recorder (VCR) under the Fair Use doctrine.<sup>68</sup> The Court also held that the act of "time shifting" was protected under the Fair Use doctrine.<sup>69</sup>

The right of public performance ensures that the author of a work can authorize when the work can be performed in a public setting.<sup>70</sup> In drafting the public performance right, Congress found it necessary to provide additional statutory language to establish what constituted a "public" performance.<sup>71</sup> Within the statute, "public" is defined as follows:

To perform or display a work "publicly" means—

*(1) to perform or display it at a place open to the public or at any place where a substantial number of persons outside of a normal circle of a family and its social acquaintances is gathered; or*

*(2) to **transmit** or otherwise communicate a performance or display of the work to a place specified by clause (1) or to the public, by means of any device or process, whether the members of the public capable of receiving the performance or display receive it in the same place or in separate places and at the same time or at different times.*<sup>72</sup> (emphasis added).

Furthermore, the statute defines "transmit" as follows:

*"To "transmit" a performance or display is to communicate it by any device or process whereby images or sounds are received beyond the place from which they are sent."*<sup>73</sup>

The *Cablevision* court conducted a two-part test to determine if a work had been publicly performed.<sup>74</sup> First, the court determined whether a work had been

---

66. 17 U.S.C. § 106(a)(1) (2011).

67. 17 U.S.C. § 107 (2011).

68. Sony Corp. of America v. Universal City Studios, Inc., 464 U.S. 417, 454-56 (1984). [hereinafter *Betamax* decision]

69. *Id.* at 449

70. 17 U.S.C. § 106(4) (2011).

71. WILLIAM F. PATRY, PATRY ON COPYRIGHT CH. 14. THE RIGHT TO PUBLICLY PERFORM THE WORK (Thomson Reuters, 2013).

72. 17 U.S.C. § 101

73. *Id.*

74. *Cablevision* decision, *supra* note 12 at 139.

transmitted according to the statute.<sup>75</sup> Secondly, the court analyzed whether the audience receiving the performance could be considered a public audience or a private audience.<sup>76</sup> How a court determines whether a public performance has occurred has significant ramifications.

Lastly, infringers under modern copyright jurisprudence are either primarily or secondarily liable.<sup>77</sup> This is due to the fact that technology has made the act of copyright infringement a multi-party affair where one actor may commit the infringement but receive material support from another party who purposefully plays a role in supporting the infringement.<sup>78</sup> For example, party A supplies computer equipment to party B who intends to make illegal copies of a copyrighted work. They agree to share profits on the joint venture, but only party B is directly liable for making the illegal copies. Courts have found that party A will be *secondarily* liable for providing material support and purposefully coordinating with party B. Meanwhile party B will be primarily liable under traditional copyright law norms for directly infringing on the copyright.<sup>79</sup>

#### A. *The Cablevision Decision*

Cablevision, a cable television provider in the New York market, announced in 2006 that it planned to launch a remote storage DVR (RS-DVR) service.<sup>80</sup> The purpose behind the network system was to replace traditional DVR service and reduce capital expenditures on equipment purchases of DVR set top boxes over the years by housing all storage data at a server facility.<sup>81</sup>

However, shortly after announcing its plans, broadcast networks and content companies including FOX, CBS, ABC, NBC, Disney, Paramount, Universal, and more filed for a lawsuit.<sup>82</sup> These plaintiffs alleged that Cablevision was directly

---

75. *Id.* at 135.

76. *Id.* at 139.

77. See generally David M. Sohn Et. Al. *Interpreting Grokster: Limits on the Scope of Secondary Liability for Copyright Infringement*, 2006 STAN. TECH. L. REV. 3 (explaining the contours of the inducement theory of secondary copyright infringement); *Frequently Asked Questions (and Answers) about Piracy or Copyright Infringement*, STANFORD CENTER FOR INTERNET & SOCIETY, <http://www.chillingeffects.org/piracy/faq.cgi> (explaining the tests courts apply for contributory and vicarious liability under the Copyright Act).

78. Catherine Gellis, *Navigating the DMCA*, in INTERNET LAW FOR THE BUSINESS LAWYER 323, 328 & 332 (Juliet Moringiello ed., 2014)

79. See generally, *Cablevision decision*, *supra* note 12.

80. David Lieberman, *Cablevision tests 'remote storage' DVR use*, USA TODAY, Mar. 27, 2006, [http://usatoday30.usatoday.com/tech/products/services/2006-03-27-cablevision-dvr\\_x.htm](http://usatoday30.usatoday.com/tech/products/services/2006-03-27-cablevision-dvr_x.htm).

81. Marguerite Reardon, *Cablevision wins DVR appeal*, CNET (Aug. 4, 2008), [http://news.cnet.com/8301-1023\\_3-10006580-93.html](http://news.cnet.com/8301-1023_3-10006580-93.html).

82. Paul Miller, *Surprise! TV Networks Sue Cablevision for Network DVR*, May 25, 2006, ENGADGET, <http://www.engadget.com/2006/05/25/surprise-tv-networks-sue-cablevision-for-network-dvr>.

infringing on their right of reproduction by creating copies within its facilities.<sup>83</sup> They further alleged that the act of playing recorded programming at later times constituted a public performance.<sup>84</sup>

1. *Reproduction Right and Public Performance Right*

Plaintiffs alleged that the copies made by computers within Cablevision's facility constituted direct infringement and did not pursue any claims of secondary liability.<sup>85</sup> This decision to waive claims of secondary liability raised questions by legal observers though the strategy had some merit.<sup>86</sup> Therefore, plaintiffs articulated a new legal argument of direct liability on behalf of Cablevision, which ultimately proved unpersuasive to the court.<sup>87</sup>

In its opinion, the Second Circuit found that previous cases of direct infringement required a volitional act of infringement on the part of the provider of the equipment.<sup>88</sup> The court found that only "two instances of volitional conduct" existed in this case.<sup>89</sup> The first was Cablevision's designing, maintaining, and housing of the equipment, and the second was the customer's conduct in ordering the equipment to create a copy.<sup>90</sup> The court expressed reluctance to find the act of manufacturing the equipment itself as volitional conduct.<sup>91</sup> Instead the court focused on the conduct of the party committing the act that directly touches an exclusive right under copyright law.<sup>92</sup> In essence, the Second Circuit found that Cablevision was in the same situation as a public library with a photocopier or private print shop.<sup>93</sup> Each of these facilities makes available to the public a device that can be utilized for making copies, but does not volitionally engage with the customer to make that copy. This element of volitional conduct, while not explicitly required within the statute, is critical to

---

83. Brief for Appellees at 15, *The Cartoon Network LP, LLLP v. CSC Holdings, Inc.*, 536 F.3d 121 (2nd Cir. 2008) (No. 07-1480), 2007 WL 6101601.

84. *Id.*

85. Brief for Appellees, *Cartoon Network LP, LLP*, 536 F.3d 121 (No. 07-1480).

86. Steven Seidenberg, *Recording Restrictions*, INSIDER COUNSEL, (Dec. 1, 2008), <http://www.insidecounsel.com/2008/12/01/recording-restrictions> (waiving claims of secondary liability meant that plaintiffs did not wish to pursue a claim that Cablevision customers were directly liable. Experts predict that plaintiffs wished to avoid a reprisal of the *Betamax* decision where consumer made copies were found to be legally permissible).

87. *Cablevision* decision, *supra* note 12, at 130.

88. *Id.* at 131.

89. *Id.*

90. *Id.*

91. *Id.*

92. *Id.* at 133.

93. *Cablevision* decision, *supra* note 12, at 132.

the Internet industry as more services migrate to cloud computing driven by user copying and transferring of files.<sup>94</sup>

Plaintiffs further claimed that Cablevision violated the right of public performance by transmitting recorded programs from its facilities to customers' homes.<sup>95</sup> The court, in what will likely be remembered as a major step forward for technological innovation, found that Cablevision's transmissions to individual subscribers were not public performances, but rather merely private performances within the network.<sup>96</sup> Underpinning the court's reasoning was that Congress intended for the existence of a private performance exemption by defining public performances.<sup>97</sup> The court rejected plaintiffs' assertions that because the content can be viewed by multiple subscribers, regardless of the fact that each subscriber has its own copy, meant that Cablevision was publicly performing the work.<sup>98</sup>

This reasoning by the court makes sense in light of the technologically inefficient but legally permissible means of the RS-DVR service.<sup>99</sup> A technologically efficient system would simply make one copy of the requested content and provide access to the single file to all customers. This would keep costs low by reducing the need for excess storage capacity and subsequent maintenance costs of retaining the additional remote storage. However, Cablevision lawyers and engineers created a system that made excessively redundant amounts of copies in order to comply with Copyright law. The court noted that Cablevision creates and stores unique individual copies after receiving a request by the customer and individually stores each copy.<sup>100</sup> As a result, the work (the copy) is performed to only one individual (the subscriber) resulting in a private performance.<sup>101</sup> This legally permissible but technologically inefficient result has been the source of significant criticism for its negative impact on innovation in Internet streaming technologies.<sup>102</sup>

## 2. *Cablevision's Progeny: Aereo*

Following the *Cablevision* decision, a new company called Aereo was launched in compliance with the case precedent established by the Second

---

94. Archana Venkatraman, *Research Predicts 'Explosive Growth' in Enterprise Cloud Projects*, COMPUTER WEEKLY, (Sept. 9, 2013 1:49 PM), <http://www.computerweekly.com/news/2240204914/Research-predicts-explosive-growth-in-enterprise-cloud-projects>.

95. *Cablevision* decision, *supra* note 12, at 121.

96. *Id.* at 136.

97. *Id.*

98. *Id.* at 137.

99. Ed Felten, *Cablevision and Anti-Efficiency Policy*, FREEDOM TO TINKER, (Apr. 18, 2007), <https://freedom-to-tinker.com/blog/felten/cablevision-and-anti-efficiency-policy>.

100. *Cablevision* decision, *supra* note 12, at 139.

101. *Id.* at 123.

102. Masnick, *supra* note 34.

Circuit.<sup>103</sup> The New York based tech company utilized a combination of an individualized antennae array system and remote storage for recording programs.<sup>104</sup> Aereo's antennae array would capture broadcast signals from the local television station and make it possible for their recording and transmission over the Internet to subscribers.<sup>105</sup> The business plan behind the process was to allow consumers to rent an antenna from Aereo and record broadcast programming for later viewing with an Aereo DVR.<sup>106</sup> In essence, it would be a new version of the old concept of "rabbit ears" and the home VCR.

In no short period of time the same plaintiffs from the *Cablevision* decision initiated multiple lawsuits against Aereo.<sup>107</sup> They claimed several new theories that attempted to distinguish Aereo from Cablevision's RS-DVR system but were dismissed at summary judgment at the district court by the Second Circuit on appeal.<sup>108</sup> Both court opinions found that the technical architecture mirrored the Cablevision system.<sup>109</sup> Aereo had an individual antennae designated for each subscriber and a unique copy was created through the direction and control of the subscriber.<sup>110</sup> Furthermore, despite Aereo's use of the Internet for transmission of the content, the court found that the one-to-one ratio of antennae, user generated copy, and access, ensured that only a private performance occurred.<sup>111</sup>

The same litigation scenario has played out in the District Court of Massachusetts where Aereo succeeded against claims of copyright infringement based on the Second Circuit's reasoning.<sup>112</sup> However, not all subsequent litigation concluded in the same fashion. Shortly following Aereo's launch, a rival company, with a similar technological structure, called FilmOnX launched in California<sup>113</sup> and Washington D.C.<sup>114</sup> Almost immediately after FilmOnX's launch it faced lawsuits from content companies and broadcasters alleging infringement of the right of reproduction and public performance. In a noticeable departure

---

103. Nathan Ingraham, *Aereo launching streaming broadcast TV service in NYC on March 14th*, THE VERGE (Feb. 14, 2012, 12:24 PM), <http://www.theverge.com/2012/2/14/2797616/aereo-streaming-broadcast-tv-pilot-launch-nyc>.

104. Pete Putman, *Deconstructing Aereo's Patent*, TV TECHNOLOGY (Apr. 23, 2014, 3:27 PM), <http://www.tvtechnology.com/news/0086/deconstructing-aereos-patent/270097>.

105. WNET, *Thirteen v. Aereo, Inc.*, 712 F.3d 676, 680 (2d Circuit 2013).

106. *Id.* at 680-81.

107. Christina Warren, *Cord-Cutting Startup Aereo Sued by Broadcasters*, MASHABLE (Mar. 1, 2012), <http://mashable.com/2012/03/01/aereo-sued-broadcasters/>.

108. WNET, 712 F.3d at 683-84.

109. *Id.* at 683.

110. *Id.* at 689-90.

111. *Id.* at 696.

112. *Hearst Stations Inc. v. Aereo, Inc.*, 977 F.Supp.2d 32, (D.Mass. 2013).

113. Todd Spangler, *Fox Sues Aereo Copycat 'BarryDriller.com'*, MULTICHANNEL NEWS (Aug. 13, 2012, 12:58 PM), <http://www.multichannel.com/internet-video/fox-sues-aereo-copycat-barrydrillercom/131677>.

114. Kevin Goldberg, *Judge Puts the Cuffs on AereoKiller*, COMMLAWBLOG (Jan. 3, 2013), <http://www.commlawblog.com/2013/01/articles/broadcast/judge-puts-the-cuffs-on-aereokiller>.

from the Second Circuit's reasoning, the District Court for the Central District of California strongly disagreed with the assertion by the defendant FilmOnX that the unique copy to an individual consumer had relevance to the right of public performance.<sup>115</sup> Rather, the court sided with the broadcast industry and focused on who had the right of transmission of a work rather than whether a work was being transmitted to the public.<sup>116</sup>

As Aereo and other follow on companies continued to launch across the country, it was believed that inevitably a circuit split would occur.<sup>117</sup> However, prior to this happening, the Supreme Court agreed to hear the case in its 2014-2015 term.<sup>118</sup> The decisions rendered on these cases and subsequent litigation will have a significant impact on cloud computing services that reproduce and transmit copies of files under copyright by request of individual Internet users.<sup>119</sup> Under the Second Circuit's reasoning, a cloud storage based company is not directly liable under any theory of the public performance so long as the company maintains unique copies that are specific to individual subscribers. Such a model is currently being followed by leading services such as DropBox, Google Drive, and Microsoft's SkyDrive to name a small handful.<sup>120</sup> Each service holds itself out as essentially a remote repository for personal data so that consumers can upload their files with the intention of retrieving their data at different times and different places.<sup>121</sup> Under the Second Circuit's rationale, when a cloud based service transmits, for example, a legally purchased music file, that service is privately performing the work to the individual and therefore authors have no legal rights to pursue litigation. One can analogize this relationship to a storage bin that is carried with you wherever you retain access to the Internet.

However, under the lower court decisions of the D.C. Circuit and Central California District Court, the right of public performance has nothing to do with the individual performances of a unique copy, but rather is associated with the

---

115. *Fox Television Stations, Inc. v. BarryDriller Content Sys., PLC*, 915 F.Supp.2d 1138, 1146 (C.D. Cal. 2012).

116. *Id.* at 1146-47; see also Steven Musil, *TV Broadcasters Win Preliminary Injunction Against FilmOnX*, CNET (Sept. 5, 2013, 7:45 PM), [http://news.cnet.com/8301-1023\\_3-57601633-93/tv-broadcasters-win-preliminary-injunction-against-filmon-x](http://news.cnet.com/8301-1023_3-57601633-93/tv-broadcasters-win-preliminary-injunction-against-filmon-x).

117. Elizabeth Cuttner, *Circuit Split Likely in Broadcast Online Streaming Cases*, LA. L. REV., (Oct. 3, 2013), <http://lawreview.law.lsu.edu/2013/10/03/circuit-split-likely-in-broadcast-online-streaming-cases>.

118. Adam Liptak & Bill Carter, *Justices Take Case on Free TV Streaming*, N.Y. TIMES, (Jan. 10, 2014), <http://www.nytimes.com/2014/01/11/business/media/supreme-court-to-hear-case-on-retransmission-of-tv-signals-by-aereo.html>.

119. Markham Erickson & Erik Stallman, *Technological Designs Create Legal Significance – Part I*, STEPTOE CYBERBLOG (Apr. 25, 2013), <http://www.steptoecyberblog.com/2013/04/25/technological-designs-create-legal-significance-part-i>.

120. Alan Henry, *Five Best Cloud Storage Providers*, LIFEHACKER (June 30, 2013 8:00 AM), <http://lifehacker.com/five-best-cloud-storage-providers-614393607>.

121. See generally, GOOGLE DRIVE, <http://www.google.com/drive/about.html> (last visited Feb. 14, 2014); MICROSOFT ONEDRIVE, <https://onedrive.live.com/about/en-us/> (last visited Oct. 28, 2014); DROPBOX, <https://www.dropbox.com/about> (last visited Feb. 14, 2014).

basic right of transmission.<sup>122</sup> Under this scenario, works protected under the Copyright Act stored by users may subject remote storage and cloud based systems to liability on the grounds that the act of transmitting the work, without additional conduct, is a violation of an exclusive right of an author. This would be an odd result because it calls into question whether the original purchaser of the copyrighted work is subject to liability for uploading the work to remote storage in the first place.

A review of the legislative text of the Copyright Act sheds light on why these dueling contentions exist.<sup>123</sup> The Copyright Act does not define private performances. This makes private performances a liberty granted to consumers by omission as opposed to a legal right. Therefore, one must infer where the public performance right of an author ends and where consumer freedom to privately perform begins. Arguably both the District Court for the Central District of California's and Second Circuit's interpretations leaves room for a private performance. Furthermore, the freedom to privately perform must exist otherwise the inclusion of the word "public" throughout the statute would be counterintuitive. Unfortunately, the Supreme Court in its *Aereo* decision did little to directly address these open questions.

### 3. *Supreme Court Decision on Aereo and its Impact*

The issue presented before the Supreme Court was "whether a company 'publicly performs' a copyrighted television program when it retransmits a broadcast of that program to thousands of paid subscribers over the Internet."<sup>124</sup> Notably, the form of this question appears to describe a video on demand cable service, which far and wide the industry believes must be licensed, as opposed to the new method of distribution *Aereo* represents.<sup>125</sup>

The scope and reach of the claim by plaintiffs raised concern with dozens of major Internet companies who currently provide a range of remote storage and data delivery services on the Internet.<sup>126</sup> The concern centers around the fact that the plaintiffs in the pending *Aereo* case wish to create a right over the "transmission" of the service in the form of declaring it a separately copyrightable thing requiring a license to access.<sup>127</sup> If such a reading were to be validated, an untold amount of liability would suddenly exist for Internet services

---

122. *Fox Television*, 915 F.Supp.2d at 1144.

123. *See supra* Part III.

124. Petition for Writ of Certiorari, *American Broadcasting Companies, Inc. v. Aereo, Inc.*, 134 S. Ct. 2498 (2014) (No. 13-461), 2013 WL 5616728, at i (the Supreme Court agreed that this is the question presented for review).

125. CABLEVISION SYSTEMS CORP., *Aereo and the Public Performance Right* 6 (Dec. 2013), available at [http://www.cablevision.com/pdf/cablevision\\_aereo\\_white\\_paper.pdf](http://www.cablevision.com/pdf/cablevision_aereo_white_paper.pdf).

126. *See* Brief of Amici Curiae Center for Democracy & Technology et al. Supporting Cablevision, No. 07-1480-cv, at 19-20 (2d Cir. filed June 8, 2007), 2007 WL 6101596.

127. *See* CABLEVISION SYSTEMS CORP., *supra* note 125, at 9.

on the premise that they are violating the public performance right solely because the transmissions themselves are public performances.<sup>128</sup> This would run counter to the presumption of liability immunity Internet companies enjoy under the Digital Millennium Copyright Act (DMCA).<sup>129</sup>

An alternative argument that was proposed by Cablevision itself (likely in hopes of saving its DVR-S service from a judicial death knell) is that Aereo is legally a cable system and subject to the additional retransmission obligations separate from the public performance right.<sup>130</sup> The company argued that Congress intended companies such as Aereo to be subject to Section 111 of the Copyright Act of 1976, which overturned a previous Supreme Court decision that the public performance right was not violated when television broadcast signals were retransmitted by cable companies.<sup>131</sup>

Unaccounted for in this argument are the obligations of a business entity that is legally defined as a cable system by the Federal Communications Commission (the regulatory authority for cable companies) and the Communications Act. To date, services similar to Aereo have been found to not meet the legal definition of a cable entity under the Communications Act.<sup>132</sup>

In response to the arguments made the Supreme Court on June 25, 2014, issued a 6-3 opinion that Aereo was a cable system under the Copyright Act.<sup>133</sup> The rationale of the Court's majority holding was likely related to avoiding collateral issues to cloud computing technologies. In fact, the Court explicitly stated "[w]e cannot now answer more precisely how the Transmit Clause or other provisions of the Copyright Act will apply to technologies not before us."<sup>134</sup>

In reaching its decision, the Court held that "the language of the Act does not clearly indicate when an entity 'performs' (or 'transmit[s]') and when it merely

---

128. *Id.*

129. See generally Gellis, *supra* note 79, (the Digital Millennium Copyright Act provides secondary liability protection to Internet companies but obligates them to remove infringing content once they have been provided actual knowledge of an ongoing infringement).

130. CABLEVISION SYSTEMS CORP., *supra* note 125, at 27.

131. Early day cable television was predominantly rural and premised on expanding the signal of a broadcast station to areas that received no signal. Broadcasters at the time were completely funded by advertising revenue and concerns of losing advertisers to new startup cable companies prompted litigation. However, the U.S. Supreme Court found that the retransmission of free over-the-air content in no way violated copyright law's public performance right. See *Fortnightly Corp. v. United Artists Television, Inc.*, 392 U.S. 390, 399 (1968); see also *Teleprompter Corp. v. Columbia Broad. Sys., Inc.*, 415 U.S. 394 (1974). In response to the Court's decisions, the broadcast industry lobbied Congress to make it a copyright violation if a cable company and subsequently a satellite company retransmitted broadcast signals. See 17 U.S.C. § 111 (2011); see also 47 U.S.C. § 325 (2011) (the Communications Act separately defines and obligates cable and satellite companies to obtain retransmission consent from originating stations before rebroadcasting).

132. See FEDERAL COMMUNICATIONS COMMISSION, *FCC Rcd.*, 25 No. 5, 3879-83, available at <http://digital.library.unt.edu/ark:/67531/metadc28495> (last visited Feb. 15, 2014) (finding that an Internet based television provider did not qualify as a cable system under the Communications Act).

133. *Aereo* decision, *supra* note 24.

134. *Id.* at 2511.



supplies equipment that allows others to do so.”<sup>135</sup> Given the lack of clarity, the Court relied on what it believed to be the intent of Congress in 1976 when it amended the Copyright Act in response to the *Fortnightly* and *Teleprompter* decisions.<sup>136</sup> By following this reasoning, the majority opinion further found that the technological distinctions between 1970’s era cable companies and Aereo is not a critical difference.<sup>137</sup> Taking into account the actions of early day cable companies known as Community Antenna Television systems (CATV),<sup>138</sup> the Supreme Court analogizes CATV with Aereo and declared it the modern day equivalent of a company Congress intended to cover with the 1976 amendments.<sup>139</sup>

It is worth noting that the Court only narrowly answered the question of whether near simultaneous retransmission of broadcast content violated the Copyright Act and remanded further issues back to the Second Circuit.<sup>140</sup> These issues include whether the personal copies created by customers of Aereo are violations of the reproduction right of the content that was broadcasted, whether Aereo is entitled to a Section 111 compulsory license,<sup>141</sup> and what services are similar enough to Aereo to be legally defined as a cable system under the Copyright Act.<sup>142</sup> The Court also left unanswered the question of whether transmissions of content under copyright (that is not a broadcast program) by a cloud computing constitutes a public performance.<sup>143</sup>

#### IV. INTERNATIONAL COPYRIGHT LAW OVERVIEW

For decades U.S. copyright jurisprudence and legislative activity has been the result of international agreements.<sup>144</sup> Central to the international regime, as Part IV will explain, is an obligation to adhere to general uniformity in protecting

---

135. *Id.* at 2504.

136. *Id.* at 2504-06.

137. *Id.* at 2507.

138. *See Fortnightly*, 392 U.S. at 399; *See also Teleprompter Corp. v. Columbia Broad Sys., Inc.*, 415 U.S. 394 (1974).

139. *Aereo* decision, *supra* note 24, at 2507.

140. *Id.* at 2511.

141. Prior to the *Aereo* decision, the U.S. Copyright Office formally declared that transmissions over the Internet were not entitled compulsory licenses under Section 111 of the Copyright Act. This interpretative decision, now overridden by the Supreme Court under the *Aereo* decision, was entitled “Chevron Deference” by the lower courts. *See WIPX, Inc. v. IVI Inc.*, 691 F.3d 275, 279. (2d Cir. 2012).

142. *Aereo Decision*, *supra* note 24, at 2511-12 (2014) (Scalia, J., dissenting) (noting that the Court has long held that systems that transmit data over the Internet without volitional conduct on part of the companies that supply the equipment have not been found in violation of copyrights). However, under the *Aereo* decision a new “looks-like-cable-TV” standard applies separately from analyzing volitional conduct on part of equipment makers.; *see also supra* Part III A-1 (the Second Circuit utilized this same rationale in both its *Cablevision* decision and *Aereo* decision).

143. *See Aereo* decision, *supra* note 24 at 2498.

144. *A Brief Introduction and History*, *supra* note 4.

the rights of authors. When parties begin to differ on the scope of that obligation, dispute settlement mechanisms are in place to resolve the difference.<sup>145</sup> As Part IV and Part V of this Comment will explain, competing interpretations of the public performance right are beginning to emerge.

International copyright law stems from various multilateral agreements and conventions.<sup>146</sup> The Berne Convention for the Protection of Literary and Artistic Works (Berne Convention),<sup>147</sup> the Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPS),<sup>148</sup> and the World Intellectual Property Organization Copyright Treaty (WCT)<sup>149</sup> form the bulk of international copyright law.<sup>150</sup> The Berne Convention provides the foundation through a list of exclusive rights granted to authors as well as limitations and exceptions for users.<sup>151</sup> In order to comply with this treaty and its related agreements the United States implemented domestic legislation.<sup>152</sup>

#### A. Berne Convention

Originally signed on September 1886 in Berne, Switzerland, the Berne Convention has provided a framework for the international community for more than a century.<sup>153</sup> Berne originally began as a multilateral agreement among ten countries<sup>154</sup> and established a number of standards that at the time the United States did not adhere. The purpose of the Berne Convention was to harmonize copyright law and establish a uniform set of protections amongst its signatories on issues such as the length of a copyright,<sup>155</sup> the legal requirements to have a valid copyright<sup>156</sup>, and the specific exclusive rights granted to a copyright holder.<sup>157</sup> These rights include the right of reproduction<sup>158</sup> and the right of public

---

145. Eric Smith, *Worldwide Copyright Protection under the TRIPS Agreement*, 29 VAND. J. TRANSNAT'L L. 559, 575 (1996).

146. *A Brief Introduction and History*, *supra* note 4.

147. Berne Convention, *supra* note 25.

148. TRIPS, *supra* note 26.

149. WCT, *supra* note 26, at 8 n.8 (agreed statements concerning Art. 8).

150. Haochen Sun, *Overcoming the Achilles Heel of Copyright Law*, 5 NW. J. TECH & INTELL. PROP. 267, 267 (2007).

151. Berne Convention, *supra* note 25.

152. *A Brief Introduction and History*, *supra* note 4.

153. *Summary of the Berne Convention for the Protection of Literary and Artistic Works (1886)*, WORLD INTELLECTUAL PROPERTY ORGANIZATION, [http://www.wipo.int/treaties/en/ip/berne/summary\\_berne.html](http://www.wipo.int/treaties/en/ip/berne/summary_berne.html) (last visited February 14, 2014).

154. Belgium, France, Germany, Haiti, Italy, Liberia, Spain, Switzerland, the United Kingdom, and Tunisia. For a detailed listing of parties to Berne Convention and the date of their accession, see Berne Convention, *supra* note 25, Contracting Parties, available at <http://www.wipo.int/export/sites/www/treaties/en/documents/pdf/berne.pdf>.

155. Berne Convention, *supra* note 25, art. 7.

156. *Id.* art. 2.

157. *Id.* art. 8-9, 11-12, 14, 16.

performance.<sup>159</sup> In regards to the right of reproduction, the Berne Convention states:

*(1) Authors of literary and artistic works protected by this Convention shall have the exclusive right of authorizing the reproduction of these works, in any manner or form.*

*(2) It shall be a matter for legislation in the countries of the Union to permit the reproduction of such works in certain special cases, provided that such reproduction does not conflict with a normal exploitation of the work and does not unreasonably prejudice the legitimate interests of the author.*<sup>160</sup>

Whereas the right of public performance is mentioned several times throughout the convention by instance of the type of work such as newspapers,<sup>161</sup> dramatic and musical works,<sup>162</sup> cinematographic works,<sup>163</sup> and literary works.<sup>164</sup> In addition, each of these grants of exclusivity contains a requirement for a signatory nation to draft and implement its own domestic legislation for purposes of carrying out the provision.<sup>165</sup> However, over the decades Berne Convention signatories have taken different approaches to issues involving the movement of content over Internet networks.

*B. The Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPS)*

The Berne Convention provided less than ideal international enforcement mechanisms against signatories who fail to comply with its articles, which resulted in the creation of TRIPS.<sup>166</sup> As a result, the international community moved the issues revolving around the protection of intellectual property into the arena of international trade.<sup>167</sup>

Under TRIPS, member nations of the World Trade Organization (WTO) could enforce the rights of their citizens by bringing a complaint on behalf of

---

158. *Id.* art. 9.

159. *Id.* art. 12, 14.

160. *Id.* art. 9.

161. Berne Convention, *supra* note 25, art. 11, 14.

162. *Id.* art. 11.

163. *Id.* art. 14.

164. *Id.* art. 11.

165. *Id.* art. 36.

166. Laurinda L. Hicks & James R. Holbein, *Convergence of National Intellectual Property Norms in International Trading Agreements*, 12 AM. U. J. INT'L L. & POL'Y 769, 789-791 (1997)

167. Eric Smith, *supra* note 145, at 560-61.

their authors.<sup>168</sup> Those rights for copyright holders were incorporated by referencing the Berne Convention, which in turn provides deference to domestic legislatures to carry out the provisions of Berne.<sup>169</sup> In short, failure to comply with the obligations set forth under the Berne Convention and related agreements such as WCT<sup>170</sup> would trigger action under TRIPS. The teeth of the enforcement bite came primarily through the potential for trade sanctions on unrelated goods and other economic pressures in retaliation for failure to comply with international obligations.<sup>171</sup> TRIPS was finalized in 1994, and to date, 153 countries are members of the WTO and subject to TRIPS.<sup>172</sup>

In order to provide flexibility to member nations, domestic legislatures are allowed to limit the rights of copyright owners so long as those limitations are confined to special cases, do not conflict with normal exploitation of an author's work, and do not unreasonably prejudice the legitimate interest of a copyright owner.<sup>173</sup> This criterion is often referred to as the "TRIPS three-step test."<sup>174</sup>

Activating the enforcement mechanism of TRIPS requires a member party to commence sanctions against another party on the grounds that some exemption failed the TRIPS three-step test. Once a complaint is filed, a WTO dispute settlement body (DSB) hears the arguments by both parties and performs an analysis of the issue before ruling on the sanction proposal.<sup>175</sup> A quick overview of the history of the Fairness in Music Licensing Act's (FIMLA) path through the TRIPS process will provide context.<sup>176</sup>

In 1998, the United States Congress enacted FIMLA and provided an exemption to the public performance right to small businesses such as restaurants.<sup>177</sup> Shortly after passage, the EU commenced a sanction action against the U.S. at the WTO.<sup>178</sup> Ultimately, the DSB found that the empirical data showed

---

168. TRIPS, *supra* note 26, art. 41.

169. Berne Convention, *supra* note 25, art. 36.

170. WTC, *supra* note 26.

171. *Understanding the WTO: Settling Disputes*, WORLD TRADE ORGANIZATION, [http://www.wto.org/english/thewto\\_e/whatis\\_e/tif\\_e/dispu\\_e/dispu1\\_e.htm](http://www.wto.org/english/thewto_e/whatis_e/tif_e/dispu_e/dispu1_e.htm) (last visited Feb. 14, 2014).

172. *Id.*

173. Haochen Sun, *Overcoming the Achilles Heel of Copyright Law*, 5 NW. J. TECH. & INTELL. PROP. 267-68 (2007).

174. *Id.*

175. *Understanding the WTO: Settling Disputes*, *supra* note 171.

176. Panel Report, *United States – Section 110(5) of the U.S. Copyright Act*, WT/DS160/R (May 5, 2000) (adopted June 15, 2000), available at [http://www.wto.org/english/tratop\\_e/dispu\\_e/cases\\_e/ds160\\_e.htm](http://www.wto.org/english/tratop_e/dispu_e/cases_e/ds160_e.htm) [hereinafter FIMLA Panel]. It is worth noting that the United States has been involved in very few challenges through TRIPS, namely this one, and the section 301 challenge.

177. *Id.* at ¶ 6.98.

178. *Id.* at ¶ 3.1-3.4.

a sizable number of businesses<sup>179</sup> would enjoy the exemption and the broadness of its scope resulted in the U.S. violating its treaty obligations.<sup>180</sup>

In response to this failure, the U.S. was forced to pay the EU a lump-sum payment of \$3.3 million to establish a fund for general interest activities of European music copyright holders.<sup>181</sup> However, this was only a temporary measure and subsequent actions and discussions between the two parties are ongoing. To date, Congress has been unable to enact an amendment to the statute though legislation has been introduced.<sup>182</sup>

### C. *The WIPO Copyright Treaty (WCT)*

The World Intellectual Property Organization (WIPO) dates back to 1883 and is one the oldest international intellectual property institutions.<sup>183</sup> Its origins date back the formative days of European patent law and today it is a specialized agency that exists within the United Nations.<sup>184</sup> In 1996, in response to rights holders' concerns with the Internet and its impact on the distribution of Copyrighted works, the WCT was created under special agreements provisions of Article 20 of the Berne Convention.<sup>185</sup>

The WCT's path to enactment was arguably rocky due to the U.S. pursuing a maximalist's view of copyright law.<sup>186</sup> Some examples of positions adopted by the U.S. government but ultimately failed to achieve international support were liability for telephone, cable, and Internet companies for user driven violations of copyright law,<sup>187</sup> repealing the statutory protection for temporary copies of works, and providing a new exclusive right to copyright owners over all digital transmissions over networks in all forms.<sup>188</sup>

This created tension because for years settled domestic law such as the *Betamax* decision<sup>189</sup> and legislative action<sup>190</sup> contradicted many of these positions. While the U.S. and its supporters dropped their stances on various proposals<sup>191</sup>

---

179. *Id.* at ¶ 6.118 (finding 65.2 percent of eating establishments, 71.8 percent of drinking establishments, and 27 percent of retail establishments would enjoy the exemption).

180. *Id.* at ¶ 6.127, 7.1-7.2.

181. Oliver Budzinski & Katalin Monostori, *Intellectual Property Rights and the WTO* 20 (Illmenau U. Tech. Inst. Econ., Working Paper, Apr. 2012), available at <http://www.econstor.eu/handle/10419/57825>.

182. *Public Performance Right for Sound Recordings*, FUTURE OF MUSIC COALITION (Nov. 5, 2013), <https://futureofmusic.org/article/fact-sheet/public-performance-right-sound-recordings>.

183. *A Brief History*, WORLD INTELLECTUAL PROPERTY ORGANIZATION, <http://www.wipo.int/about-wipo/en/history.html> (last visited Feb. 14, 2014).

184. *Id.*

185. WCT, *supra* note 26.

186. Pamela Samuelson, *The U.S. Digital Agenda at WIPO*, 37 Va. J. Int'l L. 369, 375-76 (1996).

187. *Id.* at 380-81.

188. *Id.* at 369, 380.

189. *Id.* at 373, 380.

190. *Id.* at 382 n.75.

191. *Id.* at 389-90.

the discussions revolving around networks encountered a different sort of friction.<sup>192</sup> The U.S. position was for transmissions over a network to be treated as distributions of copies while the EU saw such transmissions as communications to the public.<sup>193</sup> Arguably the EU articulation of network transmissions carried the day and the creation of a right to “make available” found its origins from the following provision.

*Without prejudice to the provisions of Articles 11(1)(ii), 11bis(1)(i) and (ii), 11ter(1)(ii), 14(1)(ii) and 14bis(1) of the Berne Convention, authors of literary and artistic works shall enjoy the exclusive right of authorizing any communication to the public of their works, by wire or wireless means, including the making available to the public of their works in such a way that members of the public may access these works from a place and at a time individually chosen by them.*<sup>194</sup>

This distinction carries significance when considering the focal point of the *Cablevision*, *Aereo*, and cloud computing’s growing prevalence revolves around whether or not a public performance has occurred.

In response to the WCT, the United States Congress passed implementing legislation known as the Digital Millennium Copyright Act (DMCA).<sup>195</sup> The DMCA for the most part is the governing law when considering the obligations of broadband networks, open platform services, and cloud computing services.<sup>196</sup> The basic premise of liability follows a process known as “notice and takedown” where providers of Internet services (both the provisioning of access and provisioning of Internet based services) were shielded from liability so long as they took steps to remove infringing material upon proper notification.<sup>197</sup>

When is a transmission over an Internet network to the public, what rights does an author have to exercise control over that process? Not all signatories of the Berne Convention have approached this question and answer in the same way.<sup>198</sup> The next parts of this comment will review how the EU has interpreted the same obligations deriving from Berne and WCT namely through the explicit creation of a making available right.

## V. THE EU AND THE COPYRIGHT DIRECTIVE

When the European nations came together to formulate the European Union (EU), they empowered a multi-national body known as the European

---

192. Samuelson, *supra* note 186, at 392-98.

193. *Id.* at 392-94.

194. WCT, *supra* note 26, art 8.

195. 17 U.S.C. § 512 (2011).

196. *See generally* Gellis, *supra* note 78.

197. *See generally id.*

198. *See infra* Part V.

Parliament.<sup>199</sup> Through the EU Parliament, the EU can bind itself with Directives, which are designed to harmonize the EU zone and supersede national laws.<sup>200</sup> As a result, most of the Berne Convention obligations as well as new exclusive rights under copyright law have initially been issued through EU Directives.<sup>201</sup> Furthermore, judicial disputes about how to interpret an EU Directive are handled through a referral process to the European Court of Justice (Court of Justice).<sup>202</sup>

As noted earlier, U.S. law provides copyright holders six exclusive rights and has been expanded to cover additional works over the decades.<sup>203</sup> However, a notable difference between these two jurisdictions is how the U.S. and EU interpret the “making available” right outlined in the WCT.<sup>204</sup> That difference being U.S. policy makers implemented WCT through the passage of the DMCA<sup>205</sup> while the EU explicitly created a new right per Directive 2001/29/EC (the Copyright Directive) issued on May 22, 2001.<sup>206</sup>

Under the Copyright Directive, the “right to make available to the public” works protected by copyright was defined as “covering all acts of making available such subject-matter to members of the public not present at the place where the act of making available originates.”<sup>207</sup> The policy rationale that underlies the “making available” right was the concern that Internet technologies did not provide clear contours of the legal rights of authors.<sup>208</sup> By creating this right, legal standing is provided to rights holders who wish to take action solely on the grounds that a work has been transmitted over a network.<sup>209</sup> Under U.S. law, courts have disagreed whether the transmission alone without additional facts was enough to trigger a copyright violation.<sup>210</sup> Instead, courts such as the Second Circuit analyze who is making the copy and who is receiving the copy.<sup>211</sup>

---

199. See Tilman Luder, *The Next Ten Years in E.U. Copyright: Making Markets Work*, 18 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 1, 1-4 (2007).

200. *Id.* at 5-6.

201. *Id.*

202. *Court of Justice of the European Union*, EUROPEAN UNION, [http://europa.eu/about-eu/institutions-bodies/court-justice/index\\_en.htm](http://europa.eu/about-eu/institutions-bodies/court-justice/index_en.htm) (last visited Feb. 16, 2014).

203. 17 U.S.C. § 106 (2011).

204. WCT, *supra* note 26, art 8.

205. *A Brief Introduction and History*, *supra* note 4.

206. Copyright Directive, *supra* note 28.

207. *Id.*

208. Carson, *supra* note 49, at 141-45.

209. Copyright Directive, *supra* note 28, at 12.

210. See generally Cuttner, *supra* note 117.

211. See generally *id.*

A. *How the European Court of Justice has Interpreted the “Making Available” Right*

The Court of Justice has deliberated on a handful of cases that interpreted the Copyright Directive and its “making available” right. The most analogous decision to the *Aereo* case has been *ITV Broadcasting Ltd. v. TV Catchup Ltd. (TV Catchup)*.<sup>212</sup> In that case, a UK company known as TV Catchup was sued for taking free over-the-air broadcast signals from UK broadcast stations and retransmitting them to subscribers on a one-to-one basis within the television market.<sup>213</sup> The Court of Justice, when interpreting Article 3(1) of the Copyright Directive, found that the “making available” right must be given a broad interpretation.<sup>214</sup> The court held that the “retransmission” of the broadcast signal “to the subscribers” of TV Catchup violated the Copyright Directive.<sup>215</sup> This is despite the fact that “those subscribers [were] within the area of reception of that terrestrial television broadcast” and could already “lawfully receive the broadcast on a television receiver.”<sup>216</sup>

The court rejected an argument made by TV Catchup that a public communication has not occurred because its subscribers are already licensed to receive the performance and were not a “new public” audience.<sup>217</sup> This concept of a “new public” is best described as an audience that an author selling their rights did not contemplate or authorize at the time of sale.<sup>218</sup> In simple terms, if audience A was the intended recipient of a broadcasted program but audience B received the program in addition to audience A, then the author is entitled to compensation for the “new public” of audience B.<sup>219</sup>

The Court of Justice also rejected the claim by TV Catchup that the technical means of retransmission simply improved the original transmission.<sup>220</sup> TV Catchup attempted to rely on the Spanish *Rafael Hoteles*<sup>221</sup> case where a hotel in Spain was receiving a satellite transmission on its receiver and then redistributed the satellite programming throughout the hotel.<sup>222</sup> The Court of Justice found that

---

212. Case C-607/11, *ITV Broad. Ltd v. TV Catchup Ltd*, 2013 EUR-Lex 147, 2013 Bus. L.R. 1020 (Mar. 7, 2013).

213. David Gilson, *TVCatchup: Behind the Scenes at the Video-Streaming Service*, CNET (Mar. 2, 2010, 10:06 AM), <http://www.cnet.com/news/tvcatchup-behind-the-scenes-at-the-video-streaming-service/>.

214. See *ITV Broadcasting Ltd*, 2013 Bus. L.R. at 1020, 1024–26.

215. *Id.* at 1020, 1028.

216. *Id.*

217. *Id.* at 1020, 1027–29 (arguing that a new audience is not created for the work because it consists entirely of the old audience from the broadcast work).

218. See Case C-306/05, *Sociedad General de Autores y Editores de Espana (SGAE) v. Rafael Hoteles SL*, 2006 E.C.R. I-11519, Bus. L.R. 521, 533.

219. See *id.* at 512, 533.

220. *ITV Broad. Ltd*, 2013 Bus. L.R. at 1020, 1026.

221. SGAE, 2006 E.C.R. I11519, Bus. L.R. at 521, 534–36.

222. *Id.* at 521, 521–23.



if each television was independently capable of receiving the transmission, a violation of Article 3(1) would not occur.<sup>223</sup> This is because the provisioning of physical facilities does not amount to a communication to the public, while the act of receiving and retransmitting results in a communication.<sup>224</sup>

Underlying the Court of Justice's rejection of TV Catchup's "new public" and technical improvement arguments was its focus on whether the act of transmitting content over the Internet constituted a separate communication.<sup>225</sup> The court ignored the fact that no new members of the public would gain access to the content because they already had access to it for free or that TV Catchup guaranteed members of the public high quality capturing of the broadcast signal.<sup>226</sup> Rather, the Court of Justice viewed the two transmissions (one by broadcast and one by the Internet) as "separate transmissions that must be authorized individually and separately by the authors concerned given that each is made under specific technical conditions, using a different means of transmission for the protected works, and each is intended for a public."<sup>227</sup> Therefore, TV Catchup was violating the "making available" right of authors and was in violation of Article 3(1) of the Copyright Directive solely on retransmitting copyrighted works over the Internet.<sup>228</sup>

1. *How Would Cablevision and Aereo Been Decided Under the Copyright Directive?*

The *TV Catchup* case is arguably analogous to the *Aereo* and *Cablevision*. However, some significant differences exist between the two companies. To begin, TV Catchup utilizes an en masse receiver system through a satellite feed and distribution center.<sup>229</sup> Aereo only provisions customers with a remotely located antenna of their own.<sup>230</sup> Another difference is TV Catchup incorporates its own advertising into the stream in concert with the broadcaster's advertising<sup>231</sup> while Aereo leaves the original broadcast untouched.<sup>232</sup> Furthermore, TV Catchup owns a substantial amount of infrastructure equipment and facilities such as data centers, a network, and its own bandwidth for streaming content.<sup>233</sup> Aereo's provisioning of equipment is significantly more barebones consisting of

---

223. *ITV Broad. Ltd.*, 2013 Bus. L.R. at 1029.

224. WCT, *supra* 26, art. 8.

225. *ITV Broad. Ltd.*, 2013 Bus. L.R. at 1026.

226. *Id.*

227. *Id.* at 1027.

228. *Id.* at 1029.

229. Gilson, *supra* note 212.

230. AEREO, <https://aereo.com/about> (last visited Feb. 14, 2014).

231. See TVCATCHUP, <http://support.tvcatchup.com/entries/26623567-Advert-Blocking> (last visited Jan. 10, 2015).

232. See AEREO, *supra* note 230.

233. Gilson, *supra* note 212.

essentially a computer for remote storage, an antenna, and a method of remote access via its website.<sup>234</sup> Under the Copyright Directive, the mere provisioning of physical facilities alone does not result in a violation.<sup>235</sup>

Arguably Aereo's intentional design could be seen as a mere provisioning of physical facilities (antenna and computer storage) for the purpose of the exemption. After all, the mere provisioning clause was designed to avoid finding all forms of Internet technologies such as Internet service providers liable on copyright grounds.<sup>236</sup> However, if the Copyright Directive categorically maintains all transmissions of content over the Internet requires a license, regardless of its purpose and regardless of its impact on authors, then even *Cablevision* would be impermissible.

Further supporting a more restrictive interpretation is the EU's objective in creating the "making available" right. In specific, the EU wanted to provide "proper support for the dissemination of culture" while not "sacrificing strict protection of rights."<sup>237</sup> Part of this strictness stems from the traditional European viewpoint that an author's right is a moral right<sup>238</sup> whereas the U.S. has maintained an emphasis on the economics of copyright law.<sup>239</sup>

## VI. CONCLUSION

The Internet's contribution to improving productivity, creativity, collaboration, and idea and culture production is undeniable. Since its inception, global GDP growth provided by the Internet exceeds the entire GDP of Canada and a faster growth rate than the GDP of Brazil.<sup>240</sup> Cloud computing represents the future potential of the network. If fully embraced and unencumbered, both US and EU businesses and consumers alike will enjoy billions in cost savings, billions in economic growth, and new employment opportunities.<sup>241</sup> This bright future however is not destiny. A restrictive interpretation of the public performance right, such as the one proffered by the EU, will stifle future innovation.

The differences between U.S. and EU investor behavior prove this point.<sup>242</sup> Following the Second Circuit's *Cablevision* decision, VC groups have been more

---

234. AEREO, *supra* note 230.

235. Copyright Directive, *supra* note 28, at 12.

236. Samuelson, *supra* note 186, at 396-98.

237. Copyright Directive, *supra* note 28, at 12.

238. *See generally* Piotraut, *supra* note 52.

239. *Id.* at 554.

240. JAMES MANYIKA & CHARLES ROXBURGH, THE GREAT TRANSFORMER: THE IMPACT OF THE INTERNET ON ECONOMIC GROWTH AND PROSPERITY I (McKinsey Global Institute 2011).

241. *See supra* Part II

242. *See supra* Part III.

willing to take investment risks in the U.S. market.<sup>243</sup> These new investments attract more consumers, which attracts more investments creating a virtuous cycle.<sup>244</sup> Policy makers should take note that the virtuous cycle is not limited to the technology industry. In fact, despite arguments made to the contrary by copyright maximalists<sup>245</sup>, the Internet has been a boon to authors and current copyright holders.<sup>246</sup> Even the plaintiffs for the upcoming *Aereo* case acknowledge that the future (in terms of making profits) is bright even if they lost at the Supreme Court.<sup>247</sup>

Despite the benefits of *Cablevision*, a more restrictive interpretation of international copyright law marches forward across the Atlantic. The EU's Copyright Directive has been interpreted so broadly that Internet transmissions alone, without additional culpable conduct, are now considered subject to copyright holders' authorization through the "making available" right.<sup>248</sup> This interpretation reflects a philosophy EU policy makers have held in regards to the Internet and copyright law since the drafting of the WCT.<sup>249</sup> Adopting the EU interpretation of the public performance right will relegate future innovations into a permissions based system. Were it possible that EU jurisprudence and legislative activity be isolated, the impact of this restrictive path would be sizable but contained.

International copyright law requires harmony among its member states. The Supreme Court's *Aereo* decision did little to determine if U.S. Copyright law is falling in synch with the European Court of Justice's findings that transmissions categorically are subject to independent authorizations by copyright holders.<sup>250</sup> As a result, an international interpretative split remains a possibility and a debate over the obligations of the WCT will follow. Further complicating the dispute is the internal disagreement among U.S. Members of Congress and legal scholars on whether or not the U.S. already does in fact meet its WCT obligations under the Copyright Act.<sup>251</sup> To resolve this difference, the U.S. and EU can either

---

243. See Brad Anderson, *The Virtuous Cycle of Cloud Computing*, TECHNET (Feb. 17, 2014, 1:10 PM), [http://blogs.technet.com/b/in\\_the\\_cloud/archive/2014/01/29/the-virtuous-cycle-of-cloud-computing.aspx](http://blogs.technet.com/b/in_the_cloud/archive/2014/01/29/the-virtuous-cycle-of-cloud-computing.aspx).

244. *Id.*

245. David Byrne, *The Internet Will Suck All Creative Content Out of Our World*, THE GUARDIAN (Oct. 11, 2013, 10:53 AM), <http://www.theguardian.com/music/2013/oct/11/david-byrne-internet-content-world>

246. MICHAEL MASNICK, *The Sky is Rising*, TECHDIRT (Jan. 2012), available at Jan. 2012, <http://www.techdirt.com/skyisrising/>.

247. Tom Risen, *CBS Says Aereo Can't Stifle Broadcast Profits*, U.S. NEWS (Feb. 13, 2014, 5:39 PM), [http://www.usnews.com/news/articles/2014/02/13/cbs-says-aereo-cant-stifle-broadcast-profits?s\\_cid=rss:cbs-says-aereo-cant-stifle-broadcast-profits](http://www.usnews.com/news/articles/2014/02/13/cbs-says-aereo-cant-stifle-broadcast-profits?s_cid=rss:cbs-says-aereo-cant-stifle-broadcast-profits).

248. See *supra* Part IV.

249. See *supra* Part IV.

250. See *supra* Part III.A.2-3.

251. *The Scope of Copyright: Hearing Before the Subcomm. on Courts, Intellectual Prop. & the Internet of the H. Comm. on the Judiciary*, 113th Cong. (2014) (statement of Glynn S. Lunney, Jr., McGlinchey Stafford Professor of Law, Tulane University School of Law), available at <http://docs.house.gov/meetings/JU/JU03/20140114/101642/HHRG-113-JU03-Wstate-LunneyG-20140114.pdf>.

attempt to invoke the TRIPS dispute resolution process or revisit the text of the WCT.<sup>252</sup>

While revisiting a treaty is a herculean effort, it may be inevitable as the “TRIPS three-step test” will likely fail to provide clarity on the correct interpretation. Both parties can credibly argue that an expansive interpretation of a private performance is broad (and therefore prejudicial to authors) or narrow.<sup>253</sup> The individual using a cloud-based service for receiving their legally obtained, copyrighted work is an isolated incident and conveys a narrow exception. When considering millions of people connected to the Internet performing the same action, it begins to look like a very broad exception.

Even if the U.S. was found to be in violation of its international obligations, actions by Congress to remedy the problem by giving authors a new Internet-based exclusive right will encounter harsh resistance from Internet freedom activists, startup entrepreneurs, and the Internet industry.<sup>254</sup> It is also against U.S. economic interests to surrender potential boosts to GDP and job growth.<sup>255</sup> The combination of these two facts makes it likely that U.S. policymakers will follow the same path of inaction that they have undertaken with the FIMLA dispute.<sup>256</sup> In the end, the difference between public performances and private performances carry fundamental importance. Given that international treaties and national laws all recognize a public performance right, then inherently within the texts of these acts the contours of a private performance liberty must exist. This would be a logical construction of the treaty and statutory text. Otherwise policymakers from the start would have simply avoided the use of the word “public” and simply drafted the right to be a *right of performance*. One hopes that the courts and legislatures do not forget that tipping the balance in favor of finding more acts as public performances takes away freedoms currently held by the public who ultimately are the intended benefactor of copyright law.

---

252. See *supra* Part IV

253. See *supra* Part IV.B.

254. Letter from Public Knowledge et. al. to U.S. Congress (Feb. 6, 2012), available at [https://www.publicknowledge.org/files/Public\\_Knowledge-Internet\\_Letter\\_to\\_Congress.pdf](https://www.publicknowledge.org/files/Public_Knowledge-Internet_Letter_to_Congress.pdf) (letter was in response to the most recent failure by Congress to expand the U.S. Copyright Act into the Internet realm through the Stop Online Piracy Act and PROTECT IP Act. Signatories included a wide swath of technologists, human rights groups, engineers, venture capitalists firms, and Internet companies).

255. See *supra* Part II.

256. See *supra* Part IV.B.

