

Outdated United States’ Online  
Copyright Infringement Practices: What  
We Can Learn From the International  
Community

IAN CARSTENS\*

TABLE OF CONTENTS

I. INTRODUCTION .....336

II. BACKGROUND.....338

    A. *What Copyrights Are* .....338

    B. *Overview of Online Copyright Infringement*.....340

    C. *Why and How Individuals Engage in Online Copyright Infringement*.....341

        1. *Why Individuals Engage in Online Copyright Infringement*.....341

        2. *How Individuals Engage in Online Copyright Infringement*.....344

III. INTERNATIONAL AGREEMENTS ON COPYRIGHT PROTECTION .....347

    A. *The Berne Convention of 1886 (most recently amended in 1979)*.....348

        1. *The Three Basic Principles of the Berne Convention* .....348

        2. *Minimum Protections Provided by the Berne Convention* .....349

        3. *Certain Limitations and Exceptions on Economic Rights Provided* .....349

    B. *The Trade-Related Aspects of Intellectual Property Rights (TRIPS) Agreement of 1995* .....349

        1. *Standards for Copyright* .....350

        2. *Dispute Settlement* .....351

\* © 2023 Ian Carstens. J.D. Candidate 2023, University of San Diego School of Law.

	3. <i>Basic Principles Provided and Pertinent General Rules</i> .....	351
IV.	THE UNITED STATES .....	351
	A. <i>The “Server Test”</i> .....	352
	B. <i>DMCA Take-Down Notices and Safe Harbor: Section 512</i> .....	353
	1. <i>Burden on Creators</i> .....	355
	2. <i>Additional Difficulties Created by Providers</i> .....	356
	C. <i>The DMCA and Livestreaming</i> .....	359
	1. <i>DMCA and Livestreaming Music Considerations</i> .....	359
	2. <i>DMCA and Livestreaming Video Considerations</i> .....	361
	D. <i>The DMCA and NFTs</i> .....	362
	E. <i>Failures in Addressing Online Video Pirating</i> .....	366
V.	LESSONS FROM ABROAD: THE UNITED KINGDOM & THE COMMONWEALTH OF AUSTRALIA .....	368
	A. <i>The United Kingdom</i> .....	368
	1. <i>Online Copyright Infringement in the U.K.</i> .....	369
	2. <i>Attacking the Problem at the Consumer Level</i> .....	370
	B. <i>The Commonwealth of Australia</i> .....	372
	1. <i>Online Copyright Infringement in Australia</i> .....	373
	2. <i>Learning From Their Past</i> .....	374
VI.	SUGGESTIONS FOR MOVING FORWARD .....	376
	A. <i>Additional WIPO Conventions</i> .....	376
	B. <i>An Internal United States Overhaul of Online Copyright Protections</i> .....	377
	C. <i>United States Taking Cues From International Allies</i> .....	380
VII.	CONCLUSION .....	381

## I. INTRODUCTION

Online copyright infringement,<sup>1</sup> sometimes referred to as internet piracy, is an ever expanding and evolving issue. This is especially true now as the entire world underwent, and is continuing to undergo to various degrees, requirements and options for individuals to stay at home en masse.<sup>2</sup> Many of those required or permitted to stay at home in the modern world turn to the internet to conduct their business or occupy their time.<sup>3</sup> Further exacerbating the importance of the issue is the recent rise of concepts such as pursuing full-time work as a “live-streamer” or “influencer”,

---

1. Online copyright infringement is the violation of a copyright holder’s exclusive legal right to reproduce, publish, sell, or distribute the matter and form of something on the internet; *see, e.g., Copyright*, LEGAL INFORMATION INSTITUTE (July 2022), <https://www.law.cornell.edu/wex/copyright> [<https://perma.cc/Y7NM-NXRX>]; *see also* discussion *infra* Part II.

2. *See, e.g., Film & Tv Piracy Surge During COVID-19 Lockdown*, MUSO, <https://www.muso.com/magazine/film-tv-piracy-surge-during-covid-19-lockdown> [<https://perma.cc/KFB7-HZQS>].

3. *See, e.g., Eleanor Lackman, Pirates Find New Shelter: Demand for Pirated Content Surges as the Public Stays Home*, MSK BLOG (Mar. 23, 2020), <https://blogmsk.com/2020/03/23/pirates-find-new-shelter/> [<https://perma.cc/TUK6-LEBG>].

simultaneous online and in-theater film releases, cryptocurrencies, and non-fungible tokens (NFTs). While there is some degree of international cooperation and uniformity in dealing with—at least certain aspects of—piracy and the online ownership of content, much of the way nations deal with this problem is unique and continuously developing.<sup>4</sup> That being said, an overhaul is needed for the tackling of online copyright infringement in order to tackle new issues and new ways of skirting existing standards. With instantaneous international access to content created and posted anywhere in the world, dealing with piracy is no simple issue.

In the United States, the controlling legislation on the vast majority of online copyright infringement cases is the Digital Millennium Copyright Act (DMCA). In 1998, the DMCA was passed as a response to the rise of the internet with no way of foreseeing how the internet's use would advance and mutate. While potentially still salvageable, the DMCA is becoming, if it is not already, antiquated.<sup>5</sup> This serves as a reflection of online copyright standards as a whole and demonstrates a need for changes to occur. Around the globe (notably in the United Kingdom, Italy, Australia, and China) actions are being taken by governments to change online copyright policies and enforcement. The U.K. and Italy have started physically serving in-person notices at the residences of infringers, as well as arresting and prosecuting those involved.<sup>6</sup> China has plans to change their policies regarding e-commerce companies and their involvement in copyright infringement after having some of their companies identified as “Notorious Markets.”<sup>7</sup> Additionally, on August 31, 2021, the United States had George

---

4. Evidenced in the United States by the fact that the Senate Judiciary Committee's IP Subcommittee investigated the DMCA throughout 2020 and have attempted to make plans to reform; *DMCA Legislative Reform*, COPYRIGHT ALLIANCE, <https://copyrightalliance.org/trending-topics/dmca-hearings-and-legislative-reform/> [<https://perma.cc/9YHR-DZUZ>].

5. Andy Day, *Instagram Might Not Care About Copyright Law and It Could Land Them in Trouble*, FSTOPPERS (Sept. 2, 2021), <https://fstoppers.com/social-media/instagram-might-not-care-about-copyright-law-and-it-could-land-them-trouble-577898> [<https://perma.cc/72GD-K5W4>] (calling the DMCA “[a]n inadequate system designed to feel fiddly.”).

6. See Aaron Brown, *Police Will Visit YOUR HOME in Latest Piracy Crackdown to Halt Free Sky TV Streams*, EXPRESS (Aug. 20, 2021, 8:17 AM), <https://www.express.co.uk/life-style/science-technology/1478963/Police-Visit-Homes-Of-People-Streaming-Sky-TV-For-Free-Piracy-Crackdown-Premier-League-UK> [<https://perma.cc/4BM2-Y2BV>]; see also Ciaran Daly, *Crackdown on People Watching Netflix and Sky Without Paying after Hundreds are Arrested*, DAILY STAR (Sept. 6, 2021, 2:37 PM), <https://www.dailystar.co.uk/tech/crackdown-people-watching-netflix-sky-24919731> [<https://perma.cc/9EYS-5KVF>].

7. Coco Liu, *China Threatens to Ban E-Commerce Sites That Flout IP Laws*, BLOOMBERG (Aug. 31, 2021, 8:50 PM), <https://www.bloomberg.com/news/articles/2021-08->

Bridi, a British national and member of an international piracy group, extradited from Cyprus to face charges.<sup>8</sup>

Current United States practices and regulations regarding what is known as “the Server Test,” the DMCA, and online piracy need to be studied and brought into the realities of the modern world. With new technologies and uses being invented for the internet every day, the U.S. cannot afford to drag its heels any longer or it risks their statutory and case law becoming dangerously underequipped to deal with daily life. This paper proposes that the United States government listen to its own departments, the wishes of its citizens, and the examples being broadcasted internationally to form a new system to evaluate and combat online copyright infringement.

Part II will provide necessary background information on what copyright is, what online copyright infringement is, and why and how individuals engage in online copyright infringement. Part III will discuss existing international agreements on copyright protection and provide brief summaries and relevant facts about the two most significant online copyright protection agreements currently influencing national laws and policies. Part IV will discuss the current practices and shortcomings of the United States’ online copyright protection laws and system. Part IV will include information about the U.S. common law “Server Test”, DMCA take-down notices and Section 512, DMCA and livestreaming, DMCA and NFTs, and U.S. failures in addressing online video piracy. Part V will look at the United Kingdom and the Commonwealth of Australia and their current practices from which the United States can learn. In Part VI, suggestions for moving forward and learning from the U.K. and Australia will be given for consideration. Finally, Part VII will briefly conclude the discussion in its entirety.

## II. BACKGROUND

### A. *What Copyrights Are*

Generally, the primary objectives of copyright are “to encourage the development of culture, science, and innovation; [t]o provide a financial benefit to copyright holders for their works; and [t]o facilitate access to knowledge and entertainment for the public.”<sup>9</sup>

---

31/china-threatens-to-ban-e-commerce-companies-that-flout-ip-laws [https://perma.cc/SEA3-2XU7].

8. See *Manhattan U.S. Attorney Announces Extradition Of British National For Participation In Online Film And TV Piracy Group*, U.S. DEP’T OF JUST. U.S. ATT’Y OFF. S.D.N.Y. (Sept. 1, 2021), <https://www.justice.gov/usao-sdny/pr/manhattan-us-attorney-announces-extradition-british-national-participation-online-film> [https://perma.cc/5JPB-46BS].

9. *International Copyright Basics: What is Copyright?*, RIGHTS DIRECT, <https://www.rightsdirect.com/international-copyright-basics/> [https://perma.cc/5EDY-HN5N].

Copyright protection varies among different countries with respect to the extent of coverage and how enforcement is conducted.<sup>10</sup> As such is the case, there is no “‘international copyright’ that will automatically protect a work throughout the world . . . [m]any countries offer protection to foreign works under certain conditions that have been greatly simplified by international copyright treaties and conventions.”<sup>11</sup> Perhaps the most significant of these treaties is the *Berne Convention for the Protection of Literary and Artistic Works* (*Berne Convention*), which proposed minimum standards for protection and has been signed by 179 countries.<sup>12</sup> According to the World Intellectual Property Organization (WIPO), “[c]opyright (or author’s right) is a legal term used to describe the rights that creators have over their literary and artistic works.”<sup>13</sup> There are many kinds of works covered by copyright protection, ranging from “books, music, paintings, sculpture, and films, to computer programs, databases, advertisements, maps, and technical drawings”,<sup>14</sup> with variations among different countries. It is necessary to distinguish the fact that copyright protection does not apply to ideas, procedures, or methods of operation, but rather only to expressions.<sup>15</sup>

There are generally two types of rights under international copyright law: economic rights and moral rights. WIPO delineates these terms as: (a) economic rights “which allow the rights owner to derive financial reward from the use of their works by others”, and (b) moral rights “which protect the non-economic interests of the author.”<sup>16</sup> Economic rights might allow an owner of the work to prohibit or authorize:

---

10. See U.S. COPYRIGHT OFF., INTERNATIONAL COPYRIGHT RELATIONS OF THE UNITED STATES (Circular 38A) (Revised Oct. 2021) [<https://perma.cc/7B8Y-KU3U>].

11. *Id.*

12. See *Summary of the Berne Convention for the Protection of Literary and Artistic Works* (1886), World Intellectual Property Organization, [https://www.wipo.int/treaties/en/ip/berne/summary\\_berne.html](https://www.wipo.int/treaties/en/ip/berne/summary_berne.html) [hereinafter *Berne Summary*] [<https://perma.cc/5YQZ-36VV>]; Contracting Parties of the Berne Convention in *WIPO-Administered Treaties*, WIPO LEX, [https://wipo.lex.wipo.int/en/treaties/ShowResults?search\\_what=C&treaty\\_id=15](https://wipo.lex.wipo.int/en/treaties/ShowResults?search_what=C&treaty_id=15) [<https://perma.cc/5QRD-A5BY>]; see *International Copyright Basics: What is Copyright?* RIGHTS DIRECT, <https://www.rightsdirect.com/international-copyright-basics/> [<https://perma.cc/5EDY-HN5N>].

13. *Copyright*, WIPO, <https://www.wipo.int/copyright/en/> [<https://perma.cc/MW4P-4Q6J>].

14. *Id.*

15. *Id.*

16. *Id.*

[a] its reproduction in various forms, such as printed publication or sound recording; [b] its public performance, such as in a play or musical work; [c] its recording, for example, in the form of compact discs or DVDs; [d] its broadcasting, by radio, cable or satellite; [e] its translation into other languages; and [f] its adaptation, such as a novel into a film screenplay.<sup>17</sup>

On the other hand, moral rights consider “the right to claim authorship of a work and the right to oppose changes to a work that could harm the creator’s reputation.”<sup>18</sup>

Finally, it is important to recognize that copyright protection is limited in duration. The *Berne Convention* provides minimum requirements of protection for fifty years following the death of the author with some exceptions, such as: (a) fifty years “after the work has been lawfully made available to the public” when the author is anonymous or using pseudonym; (b) fifty years after the making audiovisual works available to the public, or fifty years from creation if not made available; and (c) twenty-five years from the creation of applied art and photographic works.<sup>19</sup> Therefore, copyright protection is only available for a finite, relatively short, length of time.

### B. Overview of Online Copyright Infringement

To best understand what online copyright infringement is, it is important to first understand what it means to infringe on a copyright. Broadly speaking, copyright infringement is when someone acts in a way contrary to the rights given to the copyright holder. Standards for when actions are contrary to the copyright holder’s rights are determined by either the country where the copyright originated or the country where the rights are infringed. The United States Copyright Office defines copyright infringement generally as occurring “when a copyrighted work is reproduced, distributed, performed, publicly displayed, or made into a derivative work without the permission of the copyright owner.”<sup>20</sup> In the United Kingdom, infringement is described simply as being “where someone uses the whole or a substantial part of your work without your permission and none of the exceptions to copyright apply.”<sup>21</sup> Both countries’ definitions are written in the same spirit of protection, but slight distinctions are created by the differences in the exclusive rights provided to the copyright holder by each. Such slight

---

17. *Id.*

18. *Id.*

19. *Berne Summary*, *supra* note 12.

20. *FAQ’s: Definitions*, U.S. COPYRIGHT OFF., <https://www.copyright.gov/help/faq/faq-definitions.html> [<https://perma.cc/6V87-NTKH>].

21. *Enforcing your Copyright*, U.K. INTELL. PROP. OFF., (Feb. 23, 2016), <https://www.gov.uk/guidance/enforcing-your-copyright>.

distinctions in implementation and practice will be the case for any comparison made between two or more countries.

Online copyright infringement, sometimes referred to as “internet piracy,” is simply the application of this principle extended to the medium of the internet. The international community discussed this application in the *WIPO Copyright Treaty*, providing that “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>22</sup>

### C. Why and How Individuals Engage in Online Copyright Infringement

#### 1. Why Individuals Engage in Online Copyright Infringement

First and foremost, the reason most individuals engage in online copyright infringement is because they often do not realize they are breaking the law. These people are either unaware of the intricacies of copyright protections or do not believe said intricacies apply online.<sup>23</sup> Examples of inadvertent infringement online include such things as fan art and fan fiction, reposting photographs or memes (usually visual creations, typically humorous in nature, that are spread rapidly by internet users), and sharing clipped videos of content creators on your personal social media platform page.<sup>24</sup>

While the fans of different works, characters, and creators may not intend to cause any problems, their use of the subject matter might often be protected by copyright.<sup>25</sup> As an illustration, in *Warner Bros. Entertainment and J.K. Rowling v. RDR Books and Does 1-10*, a fan of the Harry Potter series created an encyclopedia of the works, which was found to be copyright

---

22. WIPO, *WIPO Copyright Treaty (WCT)*, TRT/WCT/001 (Dec. 20, 1996) (emphasis added), <https://wipolex.wipo.int/en/text/295157> [<https://perma.cc/A2DN-K6R3>].

23. See, e.g., *Copyright Infringement*, DIGITAL MEDIA LAW PROJECT (Sept. 10, 2021), <https://www.dmlp.org/legal-guide/copyright-infringement> [<https://perma.cc/5BJX-GBLN>].

24. See, e.g., David Kluff, *10 Copyright Cases Every Fan Fiction Writer Should Know About*, FOLEY HOAG, LLP (Oct. 18, 2016), <https://www.trademarkandcopyrightlawblog.com/2016/10/10-copyright-cases-every-fan-fiction-writer-should-know-about/> [<https://perma.cc/5VYK-ZFWW>].

25. *Id.*

infringing and was thereby enjoined from publication.<sup>26</sup> The reasoning behind this decision was that the relevant information and characters were created by Rowling and the unofficial encyclopedia infringed on Rowling's exclusive control over her creations and her ability to create, market, and sell her own encyclopedia of the world of Harry Potter.<sup>27</sup>

Another related, and sometimes intertwining, reason for online copyright infringement is convenience for the infringer.<sup>28</sup> Infringement may be caused by convenience in cases where a journalist or news agency reuses copyrighted photographs or videos for their articles.<sup>29</sup> Convenience may also be the source of infringements where individual consumers are attempting to avoid paying fees for the consumption of things such as music or film.<sup>30</sup> Some consumers, who may be willing to pay, infringe because they do not want to wait for content that is region-locked or delayed from coming to their country or region.<sup>31</sup>

Other individuals engage in online piracy because they believe online content should be free or they should not have to pay for it (as opposed to not wanting to pay for it).<sup>32</sup> Of these individuals, those who philosophically believe online content should be free sometimes view piracy as an act that simply furthers the freeing of information.<sup>33</sup> Those who simply do not believe they should have to pay for online content often argue that they are only making digital copies and not having any impact on the original work or that piracy is a "victimless" crime.<sup>34</sup> Statistically and economically speaking, these arguments are factually inaccurate.<sup>35</sup> In fact, it was at least once commonplace in the United States to be familiar with and quote,

---

26. *Warner Bros. Ent. Inc. v. RDR Books*, 575 F. Supp. 2d 513 (S.D.N.Y. 2008).

27. *Id.*

28. This is likely the sort of infringement most casual people would think of if asked about their understanding of online copyright infringement, as it is the most widely understood.

29. See, e.g., *Nicklen v. Sinclair Broad. Grp., Inc.*, 551 F. Supp. 3d 188 (S.D.N.Y. 2021).

30. In a survey of approximately 50 students at the University of San Diego School of Law, those who said they did engage in online copyright infringement listed this as a contributing factor for their decision.

31. Leo Gutierrez, *The Legalties of Using VPNs to Bypass Copyright Restrictions*, LAW TECHNOLOGY TODAY (Apr. 28, 2020), <https://www.lawtechnologytoday.org/2020/04/the-legalties-of-using-vpns-to-bypass-copyright-restrictions/> [https://perma.cc/PNW7-JG8F].

32. David Johnson, *What is piracy? Here's What You Need to Know About Digital Piracy, and How to Avoid Stolen Digital Content*, BUSINESS INSIDER (Mar. 26, 2021), <https://www.businessinsider.com/what-is-piracy> [https://perma.cc/QPQ3-UMW7].

33. *Id.*

34. See *The Societal Costs of Digital Piracy*, WEBROOT, <https://www.webroot.com/us/en/resources/tips-articles/the-societal-costs-of-digital-piracy> [https://perma.cc/4Q3H-JLHN].

35. *Id.*



perhaps mockingly, the FBI warning and pre-film PSAs likening piracy to stealing a car, handbag, or television, and emphasizing that “[p]iracy . . . [i]t’s a crime”—and not a victimless one.<sup>36</sup>

Though the first three reasons given for infringement involved an individual’s own personal benefit, there are also those whose business is to infringe and profit from such infringement.<sup>37</sup> Ranging from individual distributors to entire companies dedicated to online piracy and copyright infringement, providing access to copyrighted material can be a lucrative business.<sup>38</sup> Distributors might sell copyrighted works or provide a service for accessing them.<sup>39</sup> Even “free” services will often contain advertisements or could be tools for planting malware on the device used to access them.<sup>40</sup> Additionally, there is a market for facilitating the “protection” of the infringer while they engage in piracy. Specifically, services such as virtual private networks (VPNs)<sup>41</sup>—which provide useful legitimate services—are also considered useful to infringers and employed by many who pirate online content.<sup>42</sup> This market for protection is bolstered by the fact that many even well-meaning sources advise using VPNs in conjunction with

---

36. *FBI Anti-Piracy Warning Seal*, FBI: WHAT WE INVESTIGATE, <https://www.fbi.gov/investigate/white-collar-crime/piracy-ip-theft/fbi-anti-piracy-warning-seal> [<https://perma.cc/X7W3-VDGG>].

37. *See Manhattan U.S. Attorney Announces Extradition Of British National*, *supra* note 8.

38. *See, e.g., Aatif Sulleyman, Pirate treasure: How criminals make millions from illegal streaming*, INDEPENDENT (Sept. 19, 2017, 11:36 AM), <https://www.independent.co.uk/tech/piracy-streaming-illegal-feeds-how-criminals-make-money-a7954026.html> [<https://perma.cc/LYL5-GHMF>].

39. *See, e.g., Oregon Poker Player Imprisoned for Pirating Movies*, KOIN 6 NEWS (July 9, 2021, 8:08 PM), <https://www.koin.com/news/crime/oregon-poker-player-imprisoned-for-pirating-movies/> [<https://perma.cc/8JZR-3KZF>].

40. Johnson, *supra* note 32.

41. VPNs serve to encrypt the connection between your internet-connected device and the internet services you access; *see, e.g., What is a VPN?*, NORDVPN, <https://nordvpn.com/what-is-a-vpn/> [<https://perma.cc/NY37-38WX>].

42. *See, e.g., Do I Really Need a VPN?*, REDDIT: R/TORRENTS (Oct. 22, 2014, 10:40 AM), [https://www.reddit.com/r/torrents/comments/2k01ve/do\\_i\\_really\\_need\\_a\\_vpn/](https://www.reddit.com/r/torrents/comments/2k01ve/do_i_really_need_a_vpn/) [<https://perma.cc/XER4-MD58>].

torrenting (defined below) or streaming services<sup>43</sup> and numerous articles detail which they believe to be the “best” ones to use.<sup>44</sup>

The above listed are only some of the most common reasons why individuals engage in online infringement. There are numerous other reasons that vary with any individual who infringes, and this should not be seen as an exhaustive list.

## 2. *How Individuals Engage in Online Copyright Infringement*

There is a myriad of methods for facilitating and engaging in online copyright infringement. Here we will look at some of the most common ones. These include peer-to-peer (P2P) transfers, torrenting, cyberlockers, streaming sites and auction sites, blog posts, chat rooms, and even reposting on social media.

First, online copyright infringement is prevalent on social media, blog posts, and online chat rooms. The reason for such prevalence is due to the fact that this is where much of the inadvertent infringement takes place. Individuals or companies who see something online often want to share it by posting it to their own social media page or website, and typically these unknowing infringers do not stop to consider whether or not what they are sharing is copyright protected material.<sup>45</sup> Additionally, these same locations are where people tend to share the artwork, music, videos, or fanfiction they created. Unless what these people have posted is a unique and creative work stemming from their own novel ideas, each of these things may also be infringing on the copyright protection of the materials which influenced and inspired them.<sup>46</sup>

Second, P2P transfers and torrenting are two of the most commonly thought of methods of online copyright infringement that most people recognize to be, on at least some level, wrong. P2P file sharing is when “two or more

---

43. See, e.g., Ludwig, *Ranking the Best Anime Fights of All Time*, YOUTUBE (July 12, 2020), [https://youtu.be/9zg\\_AfjqlzU?t=117](https://youtu.be/9zg_AfjqlzU?t=117) [<https://perma.cc/7M58-66W2>] (beginning at 2 minutes 36 seconds); see also MrBeast Gaming, *10 vs 1000 Player Manhunt!*, YOUTUBE (Dec. 23, 2021), <https://www.youtube.com/watch?v=rdsXcS4guLQ&t=190s> [<https://perma.cc/74NQ-3DR2>] (beginning at 3 minutes 10 seconds).

44. See, e.g., Adam Marshall, *The best VPN for torrenting and torrents 2022*, TECHRADAR (Feb. 28, 2022), <https://www.techradar.com/vpn/best-vpn-for-torrenting> [<https://perma.cc/EU2A-62YH>]; see also Aliza Vigderman & Gabe Turner, *The Best VPN for Torrenting*, SECURITY.ORG (Mar. 8, 2022), <https://www.security.org/vpn/best/torrenting/> [<https://perma.cc/TT7M-44GR>].

45. *Etiquette, Shmetiquette: Avoiding Copyright Infringement When you Repost Content*, THE LAW OFFICE OF ADAM N. WEISSMAN: BLOG (Mar. 16, 2017), <https://www.adamweissmanlaw.com/blog-1/2017/3/16/etiquette-shmetiquette-avoiding-copyright-infringement-when-you-repost-content> [<https://perma.cc/MV87-JMBC>].

46. See, e.g., Kluft, *supra* note 24.

computers [connect] to share resources without going through a separate server computer.”<sup>47</sup> Therefore, if an individual were to connect their computer to another’s computer either wired or wirelessly in order to transfer this Comment, these individuals have engaged in the P2P transfer of a word document. Torrenting is essentially just a more elaborate form of P2P file sharing using a BitTorrent (a specific communication protocol) network.<sup>48</sup> Torrents themselves are essentially files, or a collection of files, which are gathered on the downloading computer by receiving them from “seed” and “peer” computers—which already store some or all of the files—on the network providing them.<sup>49</sup>

Third, we have the illegal equivalent to the so-called “outline banks” (student created stashes of course notes and lecture outlines) that all law students love to use—cyberlockers.<sup>50</sup> Cyberlockers are online common storage sites where pirates can store and retrieve pirated materials.<sup>51</sup> The usage of these cyberlockers is simple; connect to the online storage site—such as Dropbox, OneDrive, or Google Drive—and then access or download from any device whatever stored content is desired.<sup>52</sup>

Fourth, a large amount of individually consumed pirated content takes place on streaming sites. This can be done through the improper use of legitimate services or through websites that exist for the purpose of watching or listening to pirated content.

For example, Netflix’s Terms of Use 4.2 provides that “[t]he Netflix service and any content accessed through our service are for your personal and non-commercial use only and may not be shared with individuals

---

47. *What Are Torrents? How Torrent Works?—BitTorrenting 101*, FOSSBYTES (Apr. 7, 2021), <https://fossbytes.com/howtorrent-works-what-isbittorrenting/> [<https://perma.cc/U4BZ-39S2>].

48. *Id.*

49. *Id.*

50. Note: Outline banks can also be liable for copyright infringement and reasonable measures should be taken to comply with copyright regulations and exceptions. Likewise, sharing outline banks to others could be problematic as well. For an opinionated perspective on the matter, see Elie Mystal, *Do Outline Banks Provide An Unfair Advantage?*, ABOVE THE LAW (Nov. 12, 2013, 12:23 PM), <https://abovethelaw.com/2013/11/do-outline-banks-provide-an-unfair-advantage/> [<https://perma.cc/9HR9-T2AE>].

51. Johnson, *supra* note 32.

52. E.g., *Features: Share Files and Links*, DROPBOX, <https://www.dropbox.com/features/share> [<https://perma.cc/FS73-AVAK>] (note that Dropbox does not condone copyright infringement, it is simply a representative example of an ideal tool to use in doing so).

beyond your household.”<sup>53</sup> This term means that when an individual shares their Netflix password with a friend in return for their Disney+ password, both are involved in copyright infringement and in violation of the licensing agreement with Netflix. Furthermore, Netflix’s Terms of Use 4.3 provides that “[y]ou may access Netflix content primarily within the country in which you have established your account and only in geographic locations where we offer our service and have licensed such content” and that content available “will vary by geographic location.”<sup>54</sup> This term means that when a consumer uses a VPN to access content that is region-locked to other geographic locations where Netflix has licensed the work, they are likely engaging in copyright infringement. Ironically, this possible copyright infringement is one of the most common benefits touted by VPN advertising and sponsors.<sup>55</sup>

Examples of websites that exist for users to consume pirated material include audiovisual streaming sites such as 123-movies(.)im or solarmovies(.)love. These category of websites host everything from new films in theaters, to television shows currently airing, to massive catalogues of past works.<sup>56</sup> Other such websites and programs exist to host and stream unlicensed music. These websites engage in “stream-ripping,” which is the process of “obtaining of a permanent copy of content that is streamed online,” and is usually used for music (e.g., LimeWire) but can be used for audiovisual works as well.<sup>57</sup>

Finally, there are illegal commercial activities of auction sites selling infringing copies of software applications, games, or digital films and television shows.<sup>58</sup> Selling bootlegged copies of Microsoft Office, or activation keys for digital movies and videogames, etc., can be accomplished on websites akin to what many would consider as a black market, or

---

53. *Netflix Terms of Use*, NETFLIX, <https://help.netflix.com/legal/termsfuse> [<https://perma.cc/RF5C-RCC3>].

54. *Id.*

55. See *What is a VPN?*, *supra* note 41; see also I did a thing, *I Made the World’s Most Powerful Hammer!*, YOUTUBE, at 00:40 (Oct. 3, 2021), [https://www.youtube.com/watch?v=Lti\\_zl3MnT4&t=40s](https://www.youtube.com/watch?v=Lti_zl3MnT4&t=40s) [<https://perma.cc/J5A6-ZYHZ>].

56. See, e.g., R.T. Watson & Erich Schwartzel, *Hollywood Movies Flood Piracy Sites Hours After Release*, WALL ST. J. (Aug. 24, 2021, 5:30 AM), <https://www.wsj.com/articles/hollywood-movies-flood-piracy-sites-hours-after-release-11629797400> [<https://perma.cc/UW37-7GZE>] (describing these kinds of services as “Netflix without a password.”).

57. Will Richards, ‘Streamripping’ Piracy has Increased Nearly 15 Times Over in the Last Three Years, NEW MUSICAL EXPRESS (Sept. 27, 2020), <https://www.nme.com/news/music/stream-ripping-piracy-has-increased-nearly-15-times-over-in-the-last-three-years-2762788> [<https://perma.cc/M4S3-SZ89>].

58. See *Oregon Poker Player Imprisoned for Pirating Movies*, *supra* note 39.

through sales of infringing goods on typically legitimate websites like eBay or Alibaba.<sup>59</sup>

### III. INTERNATIONAL AGREEMENTS ON COPYRIGHT PROTECTION

Many organizations exist with the intention of monitoring and improving on international online intellectual property and copyright infringement and regulation; one such company is MUSO. MUSO, headquartered in London, “collects data from billions of piracy infringements every day to help entertainment companies and rights owners.”<sup>60</sup>

Another such organization is the International Association for the Protection of Intellectual Property (AIPPI). Headquartered in Switzerland, AIPPI is a non-profit organization whose “objective is to improve and promote the protection of intellectual property on both international and national bases” by conducting studies and “working for the development, expansion and improvement of international and regional treaties and agreements and national laws relating to intellectual property.”<sup>61</sup>

Additionally, there is the aforementioned WIPO. WIPO is a “self-funding agency of the United Nations, with 193 member states” whose “mission is to lead the development of a balanced and effective international IP system that enables innovation and creativity for the benefit of all.”<sup>62</sup> WIPO has had its hand in major international IP agreements including the *Paris Convention for the Protection of Industrial Property* of 1883, the *Berne Convention for the Protection of Literary and Artistic Works* of 1886, *Madrid System for the International Registration of Marks* in 1891, the *Patent Cooperation Treaty International Patent System* in 1978, and several other important works and amendments.<sup>63</sup> For the purposes of this Comment, the relevant agreements or amendments will be summarized below. A brief summary of each will help to illustrate the global standards for IP protection that have been agreed upon by many of the world’s leading

---

59. See Liu, *supra* note 7.

60. *MUSO Supporting EUIPO’s Economic Impact Study on Piracy*, MUSO, <https://www.muso.com/magazine/muso-supporting-euiposeconomic-impact-study-on-piracy> [<https://perma.cc/EA4S-6JTV>].

61. *About AIPPI*, INTERNATIONAL ASSOCIATION FOR THE PROTECTION OF INTELLECTUAL PROPERTY [hereinafter AIPPI], <https://aippi.org/about-aippi/> [<https://perma.cc/BEV3-84HX>].

62. *Inside WIPO: What is WIPO?*, WIPO, <https://www.wipo.int/about-wipo/en/> [<https://perma.cc/2RR4-QL2L>].

63. *WIPO – A Brief History*, WIPO, <https://www.wipo.int/about-wipo/en/history.html> [<https://perma.cc/CP9F-R7MX>].

nations. Additionally, these agreements provide the basis for the implementation of some of the policies currently in effect in the United States and other nations, and some of the areas where shortcomings can be addressed.

*A. The Berne Convention of 1886 (most recently amended in 1979)*

“The *Berne Convention* deals with the protection of works and the rights of their authors” and therefore the subject matter at hand.<sup>64</sup> The *Berne Convention* utilizes three basic principles and provides a series of minimum protections to be granted.<sup>65</sup>

*1. The Three Basic Principles of the Berne Convention*

The first principal addressed in the *Berne Convention* is that of “national treatment.” This principle is the idea that “[w]orks originating in one of the Contracting States (that is, works the author of which is a national of such a State or works first published in such a State) must be given the same protection in each of the other Contracting States as the latter grants to the works of its own nationals.”<sup>66</sup>

The second principal addressed in the *Berne Convention* is that of “automatic” protection. This principle is the idea that “[p]rotection must not be conditional upon compliance with any formality.”<sup>67</sup>

The third principal addressed in the *Berne Convention* is that of “independence” of protection. This principle is the idea that “[p]rotection is independent of the existence of protection in the country of origin of the work.”<sup>68</sup> However, the convention created an exception: when “work ceases to be protected in the country of origin, protection may be denied once protection in the country of origin ceases” so long as the contracting state provides protection for a term longer than the minimum imposed by the convention.<sup>69</sup> Essentially, if the country of origin provided a longer term of protection than the convention required and that term ends, protection may be denied in other contracting countries.

---

64. *Berne Summary*, *supra* note 12.

65. *Id.*

66. *Id.*

67. *Id.*

68. *Id.*

69. *Id.*

## 2. Minimum Protections Provided by the Berne Convention

First, “as to works, protection must include ‘every production in the literary, scientific and artistic domain, whatever the mode or form of its expression.’”<sup>70</sup> Second, with “certain allowed reservations, limitations or exceptions,” the convention non-exclusively lists the rights that “must be recognized as exclusive rights of authorization.”<sup>71</sup> The rather exhaustive list can be found easily in the WTO’s *Summary of the Berne Convention for the Protection of Artistic Works (1886)*.<sup>72</sup> Third, as discussed above, the convention set out certain minimum requirements for the duration of these protections.<sup>73</sup>

## 3. Certain Limitations and Exceptions on Economic Rights Provided

Part of the *Berne Convention* also provides certain “free uses” or “cases in which protected works may be used without the authorization of the owner of the copyright, and without payment of compensation.”<sup>74</sup> These free uses include “reproduction in certain special cases”, “quotations and use of works by way of illustration for teaching purposes”, “reproduction of newspaper or similar articles and use of works for the purpose of reporting current events”, and “ephemeral recordings for broadcasting purposes.”<sup>75</sup>

## B. The Trade-Related Aspects of Intellectual Property Rights (TRIPS) Agreement of 1995

The *TRIPS Agreement* (a.k.a. the “Berne and Paris-plus agreement”), described by the World Trade Organization as “the most comprehensive multilateral agreement on intellectual property” to date, covers “copyright and related rights” and six other areas of intellectual property.<sup>76</sup> The Agreement provides only minimum standards for protection and leaves members “free to determine the appropriate method of implementing the provisions of the Agreement within their own legal system and practice.”<sup>77</sup>

---

70. *Id.*

71. *Id.*

72. *Id.*

73. *See supra* Section II.A.

74. *Berne Summary*, *supra* note 12.

75. *Id.*

76. *Overview: the TRIPS Agreement*, WTO, [https://www.wto.org/english/tratop\\_e/trips\\_e/intel2\\_e.htm#generalprovisions](https://www.wto.org/english/tratop_e/trips_e/intel2_e.htm#generalprovisions) [<https://perma.cc/7WF9-HJZQ>].

77. *Id.*

The three main features of the *Agreement* are (A) Standards, (B) Enforcement, and (C) Dispute Settlement.<sup>78</sup> The *TRIPS Agreement* also provides for “certain basic principles, such as national and most-favored-nation treatment, and some general rules to ensure that procedural difficulties in acquiring or maintaining IPRs [intellectual property rights] do not nullify the substantive benefits that should flow from the Agreement.”<sup>79</sup>

### *1. Standards for Copyright*

The *TRIPS Agreement* states that “the substantive obligations of the main conventions of the WIPO, the *Paris Convention for the Protection of Industrial Property* (*Paris Convention*) and the *Berne Convention for the Protection of Literary and Artistic Works* (*Berne Convention*) in their most recent versions, must be complied with” except for the *Berne Convention*’s provisions on moral rights.<sup>80</sup> The Agreement then adds “a substantial number of additional obligations.”<sup>81</sup> The articles of the Agreement provide the minimum protections to be afforded to the citizens of signatory nations and provide a starting point for the comparison of the IP laws of different countries.

Article 9.2 of the *Agreement* solidifies that copyright protection is intended to protect the expression of ideas, and not ideas themselves.<sup>82</sup> The *Agreement* also provides protection for computer programs,<sup>83</sup> and certain online databases and compilations<sup>84</sup>—“machine readable” or otherwise.<sup>85</sup> Article 12 of the *Agreement* provides the terms of protection and how to toll the 50 years duration.<sup>86</sup> Article 13 of the *Agreement* deals with permissible limitations and exceptions signatory nations can apply to the *Agreement*, stating that members are not to work against the intended goals of the *Agreement*.<sup>87</sup> Article 14.1 of the *Agreement* deals with preventing reproduction and the “unauthorized broadcasting by wireless means and the communication to the public of their live performance.”<sup>88</sup> Additionally, Article 14.3 gives broadcasting organizations the rights “to prohibit unauthorized fixations, the reproduction of fixations, and the rebroadcasting by wireless

---

78. *Id.*

79. *Id.*

80. *Id.*

81. *Id.*

82. *Overview: the Trips Agreement, supra* note 76.

83. *Id.*

84. *Id.*

85. *Id.*

86. *Id.*

87. *Id.*

88. *Id.*



means of broadcasts, as well as the communication to the public of their television broadcasts.”<sup>89</sup>

## *2. Dispute Settlement*

Quite simply, “[t]he Agreement makes disputes between WTO Members [with respect to] the TRIPS obligations subject to the WTO’s dispute settlement procedures.”<sup>90</sup>

## *3. Basic Principles Provided and Pertinent General Rules*

The basic requirement imposed on the members to the agreement is that they afford the levels of IP protection provided by the agreement to “nationals” of the other members.<sup>91</sup> In order to determine who qualifies as a national, the Agreement states to look to the pre-existing WIPO conventions, and then apply that standard to all WTO members regardless of if they are a party to WIPO.<sup>92</sup>

## IV. THE UNITED STATES

The quality of statutes and regulations regarding online copyright infringement in the United States has been a subject of debate for some time now. The Digital Millennium Copyright Act is criticized as being out of date and ill-suited to the changes of an ever-growing technological age. Since the DMCA was enacted in 1998, the landscape of the online world and capabilities has changed dramatically. In 1998, concepts such as the widespread streaming of television, movies, and music from all around the world for free or subscription purposes had not yet even begun to be formed. Furthermore, concepts to the extent of NFTs, live-streaming as a profession, social media, simultaneous online and in-theater movie releases, or something now as indispensable as smartphones were not even conceivable. For these reasons, the enacted legislation concerning online piracy and the protection of copyright online in the United States is largely out of touch, and caselaw on the subject is sometimes questionable and varied in approach among different jurisdictions.

---

89. *Id.*

90. *Id.*

91. *Id.*

92. *Id.*

### A. The “Server Test”

One major flaw of the current United States online copyright protection system is the uncertainty regarding what exactly should be protected and who should bear the burden of ensuring this protection. The recent stress faced by the long-standing caselaw-based “Server Test” illustrates this issue. Application of the Server Test concerns a discussion of embedded content on websites. Created in 2007 by the Ninth Circuit in *Perfect 10, Inc. v. Amazon, Inc.*, 508 F.3d 1146, 1160 (9th Cir. 2007), the Server Test holds that liability for direct copyright infringement on the internet requires the image to have been stored on the defendant’s server.<sup>93</sup> Embedding content does not qualify as infringement under the Server Test because embedding something is effectively hosting a part of another website on your own website. Therefore, while the content can be seen in its entirety on the embedding site—whether it be audiovisual content, a photograph, or a social media post—it is not technically stored on the embedding website’s server. While many courts accepted the Server Test as setting the standard, some courts have challenged its use. The U.S. District Court for the Southern District of New York ruled on July 30th, 2021, that “[t]he server rule is contrary to the text and legislative history of the Copyright Act,” and refused to dismiss a copyright infringement case brought by wildlife photographer Paul Nicklen on Server Test grounds.<sup>94</sup> Unfortunately, no further decisions regarding the Server Test will come from this case as Nicklen and Sinclair Broadcasting Group, Inc. filed in October 2021 to dismiss the action with prejudice.<sup>95</sup> Additional pending legislative regarding embedding is currently present and waiting for both the Second Circuit and the U.S. District Court for the Northern District of California at the time of writing. However, District Courts in the Ninth Circuit currently remain bound by *Perfect 10*’s Server Test and will be compelled to apply the test barring new federal law or Ninth Circuit or U.S. Supreme Court rulings to the contrary.<sup>96</sup>

Legal professionals and scholars are split in their ideas regarding social media embedding and the Server Test. Some, like Joshua Jarvis (Foley Hogue LLP), believe that the Server Test “ignores display and public

---

93. Kyle Jahner, *Embed Copyright Cases Could Multiply as Server Test Faces Siege*, BLOOMBERG LAW (Aug. 17, 2021, 4:02 AM), <https://news.bloomberglaw.com/ip-law/embed-copyright-cases-could-multiply-as-server-test-faces-siege> [https://perma.cc/HP8G-HVPC].

94. *Id.*

95. Nicklen v. Sinclair Broad. Grp., Inc., No. 20-CV-10300 (JSR), 2021 WL 3239510 (S.D.N.Y. July 30, 2021) [https://perma.cc/MD4T-8LZU].

96. See, e.g., Hunley v. Instagram, LLC., No. 21-CV-03778 (CRB), 2021 U.S. Dist. LEXIS 177667\* (N.D. Cal. Sept. 17, 2021).

performance rights that are part and parcel with copyright.”<sup>97</sup> Others, like Andrew P. Bridges (Fenwick & West LLP), think the issue lies with users choosing to upload their work on platforms that specifically allow for embedding.<sup>98</sup> However, the issue is not as simple as the latter opinion would suggest. In the modern era of social media and online notoriety, there are important internal debates taking place within content creators. Social media is used as a business tool to spread appreciation and desire for an individual’s work, so a choice to either allow embedding where individuals lose the benefits of being able to exclusively distribute their content or to make their content private and not have anyone see it becomes problematic. Others have suggested options such as websites giving the option to simply “turn off” the ability to embed your posted content or having “an instant license that pops up upon an embed attempt, which could seamlessly let news organizations get permission and creators get paid.”<sup>99</sup>

Copyright attorney Dana Pellegrino has argued that the “Server Test’s validity hinges on the interpretations of key words in the Copyright Act like ‘display’ and ‘copy.’”<sup>100</sup> A potential argument exists there that “the Server Test misapplies the Copyright Act by focusing on copying, just one of several separately listed rights. Display, defined by law as to ‘show a copy of’ the work, can happen independently of whether someone created a copy.”<sup>101</sup> Copyright protection may currently be applied too narrowly and in a way that protects the businesses and individuals using the content, rather than conforming to the true intent of protecting the right holder.

#### *B. DMCA Take-Down Notices and Safe Harbor: Section 512*

In order to comply with international law, the United States passed the Digital Millennium Copyright Act as their way of abiding by the WIPO Copyright Treaty and the WIPO Performances and Phonograms Treaty.<sup>102</sup> DMCA Section 512 provides a way for content owners to issue “takedown notices” for the removal of online content which infringes the owner’s protected property.<sup>103</sup> In order to file a DMCA take-down notice, several

---

97. Jahner, *supra* note 93.

98. *Id.*

99. *Id.* (quoting James Sammataro of Pryor Cashman LLP).

100. *Id.* (quoting Dana Pellegrino of Duane Morris LLP).

101. *Id.* (quoting Jarvis).

102. U.S. COPYRIGHT OFF. SUMMARY, THE DIGITAL MILLENNIUM COPYRIGHT ACT OF 1998: U.S. COPYRIGHT OFFICE, at 1 (Dec. 1998) [<https://perma.cc/WSA2-JP4H>].

103. *Id.* at 12.

important steps must be taken and specific information must be included in the notice itself.<sup>104</sup> First, one must locate the website's host or service provider.<sup>105</sup> Then, one must determine who the copyright agent is for the service provider;<sup>106</sup> each online service provider is required to have a copyright designated agent named to receive takedown notices.<sup>107</sup> Many companies have online tools on their site to submit takedown notices directly to them.<sup>108</sup> Finally, the actual contents of a proper takedown notice under the DMCA must contain: (1) a signature, (2) identification of the work infringed, (3) identification of the infringing activity and its location on the site, (4) contact information of the sender, (5) a statement of good faith belief, and (6) a statement that the information in the notice is accurate and offered on behalf of the copyright owner.<sup>109</sup> Section 512 also allows for those who receive a takedown notice to file a counter-notice to fight the order if they believe it to be incorrect.<sup>110</sup> It should be noted that while the notice is issued to the service provider, section 512 was drafted to specifically provide safe harbor to the online service providers themselves.<sup>111</sup>

Section 512 is itself largely scrutinized today as part of the DMCA that needs to be changed. Following a multi-year study of section 512 by the Copyright Office, the office concluded that "the operation of the section 512 safe harbor system today is unbalanced."<sup>112</sup> The Copyright Office Report "highlights areas where current implementation of section 512 is out of sync with Congress' original intent, including: eligibility qualifications for the service provider safe harbors; repeat infringer policies; knowledge requirement standards; specificity within takedown notices; non-standard notice requirements; subpoenas; and injunctions."<sup>113</sup> While the Copyright

---

104. *Id.*

105. Kiffanie Stahle, *How to send a DMCA Takedown Notice*, THE ARTIST'S J.D., <https://theartistsjd.com/dmca-takedown-notice/> [<https://perma.cc/U6H7-RSHQ>].

106. *Id.*

107. Eric Schwartz & Matthew Williams, *New Regulations Issued By The Copyright Office Affecting Thousands of Websites*, MSK BLOG (Nov. 9, 2016), <https://blogmsk.com/2016/11/09/new-regulations-issued-by-the-copyright-office-affecting-thousands-of-websites/> [<https://perma.cc/XWL5-LQLG>].

108. *How To Send a DMCA Takedown Notice*, COPYRIGHT ALLIANCE, <https://copyrightalliance.org/faqs/how-to-send-dmca-takedown-notice/> [<https://perma.cc/9536-RGAT>].

109. *How To Write a DMCA Takedown Notice*, COPYRIGHT ALLIANCE, <https://copyrightalliance.org/education/copyright-law-explained/the-digital-millennium-copyright-act-dmca/write-dmca-takedown-notice/> [<https://perma.cc/3PHH-WY7U>].

110. *Digital Millennium Copyright Act*, ELECTRONIC FRONTIER FOUNDATION, <https://www.eff.org/issues/dmca> [<https://perma.cc/7SD9-XKZP>].

111. *Id.*

112. U.S. COPYRIGHT OFF., COPYRIGHT OFFICE RELEASES REPORT ON SECTION, No. 824 (May 21, 2020) [<https://perma.cc/3KGG-METM>].

113. *Id.*

Office itself did not recommend “any wholesale changes to section 512,”<sup>114</sup> others concerned with the section have gone so far as to suggest section 512 should be repealed in its entirety.<sup>115</sup> Neil Turkewitz (a copyright activist with somewhat extensive experience and credentials), observed that “[i]t would appear no one likes DMCA Section 512”, be it creators or consumers, “with the exception of large online platform operators.”<sup>116</sup> Turkewitz proposed that “[i]n the absence of Section 512, platforms would have incentives to develop and implement structural systems to deter infringement that will be much more effective, and less likely to be perceived as heavy-handed, than mere reliance on notice and takedown.”<sup>117</sup>

### 1. Burden on Creators

Currently, detractors argues that the U.S. DMCA “notice and takedown” method creates too much of a burden for creators. Turkewitz stated that section 512 “creates an impossible enforcement burden and exempts from responsibility the party most capable of taking action [the service providers] to address infringement.”<sup>118</sup> On the other hand, suggestions by the likes of UFC COO, Lawrence Epstein, to move to a “notice and stay down” system have received backlash with opponents claiming the notice and “take down” system is far better for the majority of those involved.<sup>119</sup> In a Techdirt article supporting the take down system over a stay down system, recognition was given to the fact “that placing the burden on copyright owners to police copyrights creates persistent challenges for owners in a world where streaming has become so omnipresent.”<sup>120</sup> However, a counterpoint was offered that “placing the burden on platforms ‘has the potential to disadvantage startup competitors by imposing additional costs on them that are more difficult

---

114. *Id.*

115. Neil Turkewitz, *DMCA Section 512: A Relic of the Past, or An Engine Requiring Fine Tuning?*, MEDIUM (Dec. 2, 2020), [https://medium.com/@nturkewitz\\_56674/dmca-section-512-a-relic-of-the-past-or-an-engine-requiring-fine-tuning-5f6d799ce85c](https://medium.com/@nturkewitz_56674/dmca-section-512-a-relic-of-the-past-or-an-engine-requiring-fine-tuning-5f6d799ce85c) [<https://perma.cc/L8B4-REWL>].

116. *Id.*

117. *Id.*

118. *Id.*

119. Timothy Geigner, *UFC COO Publicly Pushing ‘Notice And Stay Down’ Reforms To DMCA, Despite That Being Horrible For Almost Everyone*, TECHDIRT (Aug. 4, 2021, 11:57 AM), <https://www.techdirt.com/articles/20210729/10414747270/ufc-coo-publicly-pushing-notice-stay-down-reforms-to-dmca-despite-that-being-horrible-almost-everyone.shtml> [<https://perma.cc/J6YT-24E7>].

120. *Id.*

to absorb than for established companies . . . This could have a negative effect on innovation for online platforms.”<sup>121</sup> While valid points have been raised for both stay down and take down systems, limiting the discussion to only those two options is counterproductive. Since the benefits to either system seem to help one side of the issue at a detriment to the other, alternative solutions could be far better.

Difficulties surrounding how to solve the problem put aside for now, it is clear that the burdens placed on creators, and even ISPs, by the takedown system are great. Individual creators hypothetically need to comb through the entirety of the internet and all accounts on web-sharing platforms to find individual instances of infringement of their protected work in order to properly notify the provider for the infringing content to be removed. This is only made more difficult in situations where providers complicate the process or have incentive to allow infringement or slow down compliance.

## 2. *Additional Difficulties Created by Providers*

Providers and publishers, while often compliant with takedown notices, tend to have an incentive to keep reproduction and sharing alive for revenue and marketing purposes. Some notable companies, including the photograph-sharing social media platform Instagram, have made reporting infringement more difficult or resisted implementing features which could prevent widespread infringement from being as easy to carry out. These benefits to the provider almost exclusively come at some cost to creators.

Photographer Martin McNeil documented his experiences dealing with issuing takedown notices to Instagram and the company’s somewhat surprising policies.<sup>122</sup> Instagram is one of the providers which offers an online form to be filled out in order to get your takedown notice directly to the company.<sup>123</sup> The form itself is located in hyperlinks on a page generally dedicated to information about copyright law,<sup>124</sup> though navigating to that page can be difficult. When Googling “DMCA Instagram form,” it is necessary, at the time of writing, to click on two additional links to reach the copyright information page. After submitting the electronic form (which includes all the legally required information for a takedown notice), in contrast to what should happen—Instagram expeditiously removing the content—instead McNeil received an email from an Instagram team member

---

121. *Id.*

122. Day, *supra* note 5.

123. *Copyright Report Form*, INSTAGRAM, <https://help.instagram.com/contact/552695131608132> [<https://perma.cc/BX3F-H2UA>].

124. *Help Center: Copyright*, INSTAGRAM, <https://help.instagram.com/126382350847838> [<https://perma.cc/T35J-E5GU>].

requesting additional information.<sup>125</sup> On August 26 and 27, 2021, McNeil “filed 34 takedown notices for th[e] same photograph.”<sup>126</sup> While one instance of the photograph was removed immediately, the other 33 notices were met with emails requesting additional information, indicating that such emails represent an official policy of Instagram.<sup>127</sup> Thus, Instagram appears to be intentionally standing in the way of legal takedown notices and the removal of the content being put on notice. This policy of standing in the way of valid copyright protection claims creates a problem for individuals who are not educated in the law of copyright and the DMCA when they try to exercise their copyrighted content rights but instead are met with resistance that otherwise seems reasonable.

Social media company Twitter is likewise in hot water with the music industry and certain members of the U.S. House of Representatives over music copyright infringement on their platform. Specifically, 22 representatives “sent a letter Monday [August 2, 2021] to Twitter [C]hief [Executive Officer] Jack Dorsey, demanding the social network giant address ‘the ongoing problem of copyright infringement on Twitter and the platform’s apparent refusal to address it.’”<sup>128</sup> In their letter, the lawmakers “pointed out that in the first half of 2020, Twitter reported receiving 1.6 million takedown notices for copyright infringement,” and went on to accuse Twitter of taking “the unprecedented step of charging creators for a fully functional search API that can identify instances infringement at scale”—certainly leading to additional undiscovered infringing content.<sup>129</sup> This charge was imposed despite the fact Twitter has a readily available more sophisticated API it lets academic researchers—but not creators—use.<sup>130</sup> Twitter’s standard API was described by the lawmakers as “of such limited functionality that it cannot provide meaningful results at the scale of infringement occurring on the platform.”<sup>131</sup> The lawmakers went so far as to say that “[b]etween refusing to pay creators for their works and obstructing their discovery of infringing works, it appears that unauthorized use of copyrighted

---

125. Day, *supra* note 5.

126. *Id.*

127. *Id.*

128. Todd Spangler, *Twitter Is Turning a Blind Eye to Music Copyright Infringement, Group of U.S. Reps Says*, VARIETY (Aug. 2, 2021, 12:49 PM), <https://variety.com/2021/digital/news/twitter-music-copyright-infringement-us-representatives-1235032928/> [<https://perma.cc/T9LE-PXMQ>].

129. *Id.*

130. *Id.*

131. *Id.*

works is an unacknowledged part of Twitter's business model."<sup>132</sup> Twitter appears to be joining Instagram in choosing to disadvantage creators in the protection of their rights in order to make more money and grow their platform.

Social media providers are likely making non-trivial profits, at least indirectly, off of copyright infringement on their platforms. In addition to Twitter's being accused of having unauthorized use as a part of their business model, Instagram, Facebook, Snapchat, and other such social media companies employ the use of "community" or "feature" accounts and sections of their platforms devoted to exposing you to targeted content you are not currently engaged with.<sup>133</sup> Each of these sections both engage users to stay on the platform longer and often contain advertisements. Therefore, the popular but infringing content often being featured may lead indirectly to more platform use and more revenue for the platform.<sup>134</sup> These social media companies have greater financial incentive to create obstacles to DMCA compliance, instead of facilitating it. Arguably, the amount of money these companies make from the use of infringing content is greater than the amount of damages they would be subject to if they lost a suit for using said content.

The incentive to comply problem spreads past just social media companies. ISPs have also been found to have incentivized profits over stopping online copyright infringement. One industry profoundly impacted by this problem is, once again, the music industry. On July 26, 2021, several major record labels filed a complaint in U.S. District Court against Charter Communications—providing internet services as Spectrum.<sup>135</sup> The record companies accused Charter of "doing nothing despite receiving thousands of notices that detailed the illegal activity of its subscribers, despite its clear legal obligation to address the widespread, illegal downloading of copyrighted works on its Internet services."<sup>136</sup> Over a period of two years beginning July 26, 2018, the record companies claim to have sent "150,000 notices of infringement, including the unique IP addresses of 'flagrant and

---

132. *Id.*

133. Think of Facebook's "Watch" page, Instagram and Twitter's "Explore" pages, Snapchat's "Stories" and "Discover," etc. As an example to those unfamiliar, see *Watch*, FACEBOOK, <https://www.facebook.com/watch>.

134. See, e.g., Andy Day, *When Will Instagram Tell Us How Much Money It Makes From Your Stolen Content*, FSTOPPERS (June 11, 2021), <https://fstoppers.com/social-media/when-will-instagram-tell-us-how-much-money-it-makes-your-stolen-content-566635> [<https://perma.cc/CH8U-DQMN>].

135. Kim Lyons, *Major record labels sue Charter Communications again for alleged copyright infringement*, THE VERGE (Aug. 7, 2021, 12:03 PM), <https://www.theverge.com/2021/8/7/22614327/major-record-labels-sue-charter-communications-copyright-infringement> [<https://perma.cc/84XV-XBTF>].

136. *Id.*



serial infringers' numbering in the 'tens of thousands' on Charter's network, but that the company turned a 'blind eye' to the alleged activity.'<sup>137</sup> This case would appear problematic on its own in showing that there was a clear lack of motivation to protect copyrighted content, but this is, in fact, the second time the labels have filed suit against Charter.<sup>138</sup> The label companies' case is supported further by the fact that a different composite group of labels successfully brought suit against Cox Communications for harboring music pirates at a cost of around one billion dollars.<sup>139</sup>

The burden placed on creators to file takedown notices, combined with the incentive for providers like ISPs and social media companies to impede the process is a major issue that needs to be tackled—especially as internet content and social media only continue to rapidly grow. The safe harbor provisions of DMCA section 512 protect service providers from being held responsible for a problem they know exists and are not compelled to do anything about except to act as an intermediary and occasionally terminate user accounts.

### *C. The DMCA and Livestreaming*

#### *1. DMCA and Livestreaming Music Considerations*

Livestreaming platforms such as Twitch, YouTube, and Facebook are no strangers to DMCA strikes and complaints when it comes to the use of copyrighted music. Twitch especially spent years as the backdrop for music copyright infringement issues, including: concerns voiced by Amazon departments at the time Twitch was acquired; complaints by those in the music industry to stop infringing uses of their material; and calls from streamers for Twitch to take even minimal steps to make deals with recording companies that might allow licensed music use.<sup>140</sup> Twitch has received thousands of DMCA notices for use of unlicensed music either prominently

---

137. *Id.*

138. *Id.*

139. Jay Peters, *Cox owes \$1 billion to record labels for harboring music pirates, jury decides*, THE VERGE (Dec. 19, 2019, 8:35 PM), <https://www.theverge.com/2019/12/19/21030812/cox-communications-record-labels-lawsuit-appeal-1-billion-piracy-isp-charter> [<https://perma.cc/Q5LE-X54T>].

140. *See generally*, Nathan Grayson, *Twitch makes deal with NMPA, but streamers still can't play licensed music*, THE WASHINGTON POST (Sept. 21, 2021, 6:11 PM), <https://www.washingtonpost.com/video-games/2021/09/21/twitch-nmpa-streamers-licensed-music/> [<https://perma.cc/Z7J4-UTXN>].

featured in streams or playing in the background.<sup>141</sup> In June 2020, Twitch received “takedown requests for clips with background music from 2017-19” and advised their partner creators to go through all clips they have ever made or to simply delete all clips made in the channel ever.<sup>142</sup>

Another layer of complexity is added when consideration is given to the fact that automated services, which identify violations, will pick up on music played within the videos or games the streamer is interacting with, without the streamer intending for the copyrighted music to be played.<sup>143</sup> In October 2020, Twitch took matters a step further and deleted clips which had strikes filed against them without informing the partner creators; instead sending mass emails advising the streamers some of their content had been deleted, but not specifying what was deleted nor giving the streamers a chance to file counter-notifications.<sup>144</sup>

It must be accepted that Twitch is acting in compliance with the DMCA and protecting copyright rights in songs at the justified request of musical artists and record companies. However, creators are accusing Twitch of shifting hardships and compliance requirements to them and of poorly handing received DMCA notices.<sup>145</sup> This is not to say that the creators themselves should not be taking efforts to remain compliant and taking reasonable measures to not use copyright protected material in the first place. The first line of defense in these situations, at least for cases with legitimate takedown notices, is for the creator to not infringe and therefore prevent any DMCA issues from arising. While Twitch does offer a curated music library called “Soundtrack by Twitch”, to “circumvent the DMCA takedown issues”,<sup>146</sup> the “license to such music only extends to live streams, and not archived clips (or VODs).”<sup>147</sup> Furthermore Twitch has been criticized for hiding behind the DMCA safe harbor to profit from its creator’s use of copyrighted music without Twitch themselves having to negotiate and

---

141. See, e.g., Nathan Grayson, *After Massive DMCA Takedown, Twitch Streamers Are Deleting Thousands of Clips*, KOTAKU (June 8, 2020, 6:30 PM), <https://kotaku.com/after-massive-dmca-takedown-twitch-streamers-are-delet-1843954430> [https://perma.cc/B7K5-53EM].

142. *Id.*

143. *Id.*

144. See Nathan Grayson, *Twitch DMCA Purge Deletes Thousands of Streamers’ Videos*, KOTAKU (Oct. 20, 2020, 6:30 PM), <https://kotaku.com/twitch-deletes-thousands-of-streamers-videos-and-issues-1845429294> [https://perma.cc/X6R8-J8A4].

145. Anita K. Sharma, *Recent DMCA Notices on Twitch and What This Means for Gaming Creators*, TALKING INFLUENCE (Aug. 16, 2021), <https://talkinginfluence.com/2021/08/16/recent-dmca-notices-on-twitch-and-what-this-means-for-gaming-creators/> [https://perma.cc/TTJ8-3CN2].

146. Nathan Grayson, *Twitch is introducing a new feature that gives streamers access to rights-cleared music*, KOTAKU (Sept. 30, 2020, 12:25 PM), <https://kotaku.com/twitch-is-introducing-a-new-feature-that-gives-streamer-1845228899> [https://perma.cc/JSP5-4K3C].

147. Sharma, *supra* note 145.

enter into license agreements with record labels.<sup>148</sup> Facebook Gaming has actively avoided such hiding tactics, “licensing music on the behalf of streamers . . . with hundreds of labels, publishers, and societies” allowing creators to have background music in both streams and VODs.<sup>149</sup> YouTube, in addition to their licenses, has an alternative method to preventing takedown notices in which streams are immediately suspended when “third-party content is identified” and issues are listed on the creator’s dashboard.<sup>150</sup> This is not to say that YouTube and Facebook Gaming streamers never run into issues playing unlicensed music mid-stream.<sup>151</sup> Twitch streamers and the musicians whose music is used will have to continue to wait for improvement as the only progress Twitch has made with recording companies comes in the form of an agreement to develop a new process for reporting uses of music announced in late September 2021.<sup>152</sup>

## 2. DMCA and Livestreaming Video Considerations

It is necessary to give the DMCA a degree of acknowledgment and celebration. Live streamers do indeed at times infringe on the copyright rights of other creators, and those creators deserve to have their rights protected. High-profile examples of such protections come in the January 2022, Twitch bans of Jeremy “Disguised Toast” Wang, and Imane “Pokimane” Anys in a DMCA crackdown. Wang’s ban came mid-stream while streaming full-length episodes of the popular anime series “Death Note.”<sup>153</sup> Anys’s ban came “mid-way through a 10-hour ‘Avatar: The Last Airbender’ watchparty”

---

148. See *id.*

149. Dean Takahashi, *Facebook Gaming Expands streamers’ access to license music*, VENTUREBEAT: GAMESBEAT (Sept. 2, 2021, 10:00 AM), <https://venturebeat.com/2021/09/02/facebook-gaming-expands-streamers-access-to-licensed-music/> [<https://perma.cc/UT3R-2FRX>].

150. *YouTube Help: Copyright issues with live streams*, YOUTUBE, <https://support.google.com/youtube/answer/3367684?hl=en> [<https://perma.cc/WR9R-NKB8>].

151. See Emma Roth, *Ludwig’s livestream was interrupted by a copyright warning days after joining YouTube*, THE VERGE (Dec. 4, 2021, 8:02 AM), <https://www.theverge.com/2021/12/4/22817263/ludwig-youtube-livestream-copyright-warning> [<https://perma.cc/SZK5-YVRS>] (detailing how popular streamer Ludwig Ahgren had his stream suspended while live for policy violations shortly after switching to streaming on YouTube).

152. Grayson, *supra* note 140.

153. See Chadley Kemp, *Disguised Toast hit with month long Twitch ban for streaming anime*, GINX ESPORTS TV (Jan. 11, 2022), <https://www.ginx.tv/en/twitch/disguised-toast-hit-with-month-long-twitch-ban-for-streaming-anime> [<https://perma.cc/AH3R-FV52>] (discussing the ban and the fact that Wang completed 25 full episodes before being banned).

in which she attempted to avoid copyright issues by mirroring the video.<sup>154</sup> Anys, to her credit, tweeted soon after that “it was inevitable that publishers would take action” and that she did not think her ban was “unfair.”<sup>155</sup> Both streamers’ bans lasted only 48 hours.<sup>156</sup> Additionally, for all the complaints that some live streamers have, the DMCA does afford them protection from others who would infringe on their creative content. When asked for comment, a prominent streamer of videogame “Tom Clancy’s Rainbow Six Siege” (who asked to remain unnamed) stated that when they find their content has been uploaded to YouTube by others—either in whole or as clips—they “prefer to claim the video” for monetization purposes but “will issue a strike” if they feel it is necessary.<sup>157</sup>

#### D. The DMCA and NFTs

NFTs are unique digital assets that exist only virtually and operate through cryptocurrency. Hannah Mayer, PhD, describes NFTs as “akin to a smart contract for a unique, non-replicable item.”<sup>158</sup> For this reason, they are used for many purposes such as art and video.<sup>159</sup> The demand of NFTs and their subsequent market has skyrocketed recently, growing from “\$13.7 million in the first half of 2020 to \$2.5 billion in the first half of 2021.”<sup>160</sup> The original NFT market for digital art, CryptoPunks, was established in 2017 on Ethereum blockchain.<sup>161</sup> “Other NFT marketplaces like OpenSea, which has become the most prominent one, soon followed

---

154. Andrew Amos, *Pokimane banned on Twitch amid DMCA drama following Avatar stream*, DEXERTO (Jan. 8, 2022, 2:53 PM), <https://www.dexerto.com/entertainment/pokimane-banned-twitch-dmca-drama-avatar-stream-1735870/> [https://perma.cc/JS86-X4UW].

155. Pokimane (@pokimanelol), TWITTER (Jan. 7, 2022, 7:14 PM), <https://twitter.com/pokimanelol/status/1479999049956663298> [https://perma.cc/3WL6-W26M].

156. Brad Norton, *Disguised Toast banned on Twitch for watching anime amid DMCA crackdown*, DEXERTO (Jan. 13, 2022, 2:43 AM), <https://www.dexerto.com/entertainment/disguised-toast-banned-on-twitch-watching-anime-1737589/> [https://perma.cc/M8VT-5PJQ].

157. YouTube allows users with access to their “Content ID” tool to claim videos that infringe on a creator’s copyright interests, designating if they want YouTube to collect statistics, monetize the video with ads, or block the video by making it unavailable. This serves as an alternative option to the creator issuing a copyright takedown notice. See *YouTube Help: The difference between copyright takedowns and Content ID claims*, YOUTUBE, <https://support.google.com/youtube/answer/7002106> [https://perma.cc/TET5-LAZU].

158. Hannah M. Mayer, *NFTs: What The Hype Is About And Where They Are Headed*, FORBES (Sept. 3, 2021, 4:00 AM), <https://www.forbes.com/sites/hannahmayer/2021/09/03/nfts-what-the-hype-is-about-and-where-they-are-headed/?sh=115711ae6773> [https://perma.cc/M84Z-MELY].

159. *Id.*

160. *Id.*

161. *Id.*

suit. Around the same time, CryptoKitties . . . emerged and took NFTs mainstream.”<sup>162</sup> NFTs allow digital artists to make a profit on their art that could otherwise be reproduced and shared without consent. However, while NFTs help solve online copyright infringements in some ways, they are themselves still susceptible to infringement, even if that seems to contradict the principal behind them. It must be remembered that “[t]ransferring an NFT does not—on its own—convey any property rights in the digital file lined in the NFT or any of the intangible rights associated with the artwork.”<sup>163</sup> For this reason, attention has been growing for both the practices of copyrighting newly minted NFTs,<sup>164</sup> and distinguishing between what might be referred to as “Copy NFTs” and “Copyright NFTs”.<sup>165</sup>

One instance of NFTs themselves causing copyright protection infringement rocked the worlds of both NFTs and internet memes. The well-known internet meme “Pepe the Frog” has been used as a symbol for both positivity and hatred. The meme has a prominent place in many “gif keyboards” and internet chatrooms, as well as having been used by both Alex Jones and as a mascot for the Neo-Nazi website the “Daily Stormer.”<sup>166</sup> Pepe’s creator, Matt Furie has utilized copyright protection for his character to various degrees against numerous uses such as those mentioned above. Where Pepe interacts with the NFT market is with a collective on OpenSea called project “Sad Frogs District.”

Sad Frogs District consisted of “7,000 cartoon frog images with varying features.”<sup>167</sup> The images were all “verified” NFTs which launched on the market in mid-August 2021, and “netted \$4 million in trading volume” in just one week, prior to Furie’s takedown notice being issued.<sup>168</sup> Furie

---

162. *Id.*

163. Harsch Khandelwal, *Minting, distributing and selling NFTs must involve copyright law*, COINTELEGRAPH (Aug. 22, 2021), <https://cointelegraph.com/news/minting-distributing-and-selling-nfts-must-involve-copyright-law> [<https://perma.cc/L2KL-D793>].

164. See Meanix, *Should You Copyright Your NFTs?*, COINDESK (June 22, 2022, 9:34 AM), <https://www.coindesk.com/layer2/2022/06/22/should-you-copyright-your-nfts/> [<https://perma.cc/Z25V-PLXZ>].

165. See James Grimmelmann, Yan Ji, & Tyler Kell, *The tangled truth about NFTs and copyright*, THE VERGE (June 8, 2022, 5:30 AM), <https://www.theverge.com/23139793/nft-crypto-copyright-ownership-primer-cornell-ic3> [<https://perma.cc/X6ET-3UWR>].

166. Ekin Genç, *Pepe the Frog’s Creator Nuked a \$4 Million NFT Collection Over Copyright*, VICE (Aug. 20, 2021, 8:00 AM), <https://www.vice.com/en/article/akg8qk/pepe-the-frogs-creator-nuked-a-dollar4-million-nft-collection-over-copyright> [<https://perma.cc/2VNC-H7DT>].

167. *Id.*

168. *Id.*

claimed the images bore strong resemblance to Pepe and after attempts to reach out to the group failed, Furie turned to the DMCA.<sup>169</sup> When OpenSea complied with the DMCA takedown, the images disappeared, effectively removing \$4 million dollars worth of belongings in the eyes of the collective and those who purchased the NFTs. While Sad Frogs District did file a counter-notice, they did so under a false name—effectively invalidating the document in the eyes of the law—however, there have also been claims Sad Frogs may attempt to fight the action on fair-use grounds, with many involved openly speaking very critically of Furie.

NFTs have been the center of attention in even more copyright headlines since the Sad Frogs District incident. With various celebrity personalities,<sup>170</sup> athletes,<sup>171</sup> musical artists,<sup>172</sup> and even the World Wildlife Foundation,<sup>173</sup> getting involved in NFTs many average people see them as legitimate and desirable without understanding the concepts behind them. This leads to both intentional and unintentional copyright issues. In January of 2022, a group by the name of Spice DAO purchased “an unpublished manuscript of Frank Herbert and Alejandro Jodorowsky’s never completed film *Dune*.”<sup>174</sup> Where NFTs come to the forefront here is when Spice DAO tweeted their plans to tokenize the book by making it public, “produce an original animated limited series inspired by the book and sell it to a streaming service,” and “support derivative projects from the community.”<sup>175</sup> Clearly Spice DAO was under the common misconception that owning this book would

---

169. *Id.*

170. See, e.g., Brian Contreras, *Jimmy Fallon hyped his Bored Ape NFTs on ‘The Tonight Show.’ Conflict of interest?*, LOS ANGELES TIMES (Jan. 26, 2022, 5:00 AM), <https://www.latimes.com/business/technology/story/2022-01-26/jimmy-fallon-nft-ape-nbc> [<https://perma.cc/JJ97-Z6E4>].

171. See, e.g., Subin Hong, *9 celebrities who have entered the NFT world, from Leo Messi to Justin Bieber*, LIFESTYLE ASIA HONG KONG (Jan. 5, 2022, 4:11 PM), <https://www.lifestyleasia.com/hk/culture/the-arts/celebrity-nfts-cryptocurrency-metaverse/> [<https://perma.cc/G7Y4-ME4F>].

172. See, e.g., Wongo Okon, *Doja Cat’s First NFT Collection Comes Through Her Own Marketplace*, UPROXX (Apr. 21, 2021), <https://uproxx.com/music/doja-cat-nft-collection-marketplace-juicy-drops/> [<https://perma.cc/XQ8C-EQHV>]; Carolyn Droke, *The Weeknd Is Hosting An NFT Auction And Selling An Unreleased Song*, UPROXX (Mar. 31, 2021), <https://uproxx.com/music/the-weeknd-nft-auction-unreleased-song/> [<https://perma.cc/5LKJ-ZW2P>].

173. See Molly Taft, *You Can Now Buy ‘Non-Fungible Animals,’ And I Hate It*, GIZMODO (Feb. 03, 2022, 2:20 PM), <https://gizmodo.com/wwf-non-fungible-animal-nft-endangered-species-1848474978> [<https://perma.cc/QJU8-N6H9>].

174. Brandon W. Clark, *Copyright Ownership, Transfers, and NFTs*, LEXOLOGY (Jan. 23, 2022), <https://www.lexology.com/library/detail.aspx?g=842a4c06-57b1-41d7-876f-cb6b819e9a97> [<https://perma.cc/HJ44-RDSJ>].

175. Spice DAO (@TheSpiceDAO), TWITTER (Jan. 15, 2022, 11:28 AM), <https://twitter.com/TheSpiceDAO/status/1482404318347153413?s=20> [<https://perma.cc/9EJS-N4NV>].

allow them to create an NFT of it, and to have control of the underlying copyright rights in the book. Although many people have this misunderstanding of NFTs, “[u]ltimately an NFT is the digital version of a certificate of authenticity, embodied in the blockchain.”<sup>176</sup>

A similar story can be seen in the case of a NFT of a Jean-Michel Basquiat drawing that was put up for auction with the seller claiming “that the transaction would confer ownership of the physical drawing” and “that the highest bidder would obtain reproduction rights.”<sup>177</sup> While the NFT was withdrawn from auction “after the Basquiat estate made it clear that the seller did not own any rights to the work,”<sup>178</sup> the conclusion remains that the seller either did not understand the law or was trying to intentional infringe on the rights and mislead potential buyers. In point of fact, minting a NFT is itself a copyright infringement if it is done by anyone other than the copyright owner or someone with their permission.<sup>179</sup>

Not all of these new violations can be written off as misunderstandings. NFT platform HitPiece gained attention February 1, 2022 when it was “exposed and accused of selling NFTs of numerous artists’ songs without their consent.”<sup>180</sup> HitPiece has been accused of scraping “Spotify’s API” and using their data “to ‘auction’ NFTs of songs without being completely clear about what is being sold.”<sup>181</sup> At the point of writing, HitPiece shut down their website and issued what it claims to be an apology on social media.<sup>182</sup>

While NFTs and blockchain are touted by some as a potential future of copyright law<sup>183</sup> they are themselves vulnerable to online copyright infringement. In fact, additional legal arguments have been posed against

176. Clark, *supra* note 174.

177. Jessica Rizzo, *The Dune NFT Fiasco Is the Least of Crypto’s Legal Worries*, WIRED (Jan. 19, 2022, 7:00 AM), <https://www.wired.com/story/nft-cryptocurrency-art-regulation-law/> [<https://perma.cc/LY24-PHND>].

178. *Id.*

179. Khandelwal, *supra* footnote 163.

180. Wongo Okon, *Artists Are Furious After They Discovered NFTs Of Their Songs Were Being Sold Without Their Consent*, UPROXX (Feb. 2, 2022), <https://uproxx.com/music/artists-upset-nfts-song-sold-without-consent/> [<https://perma.cc/27PW-DUEK>].

181. *Id.*

182. Jon Blistein, *HitPiece Wants to Make Every Song in the World an NFT. But Artists Aren’t Buying It*, ROLLINGSTONE (Feb. 2, 2022, 3:12 PM), <https://www.rollingstone.com/music/music-news/hitpiece-nft-song-controversy-1294027/> [<https://perma.cc/GJM9-H23C>].

183. UNIVERSITAT OBERTA DE CATALUNYA, *Blockchain-based copyright protection*, TECH XPLORE (Feb. 17, 2021), <https://techxplore.com/news/2021-02-blockchain-based-copyright.html> [<https://perma.cc/5DK3-2SPX>].

NFTs in their relation to online privacy; NFTs by their very nature clash with laws such as the California Consumer Privacy Act or the EU General Data Protection Regulation as any personal data included in the blockchain cannot be removed without crumbling the entire system.<sup>184</sup> NFTs merely present another area where current legislation and practices are not equipped to deal with the way society is changing. Furthermore, the general public does not understand NFTs and their interactions with copyright law, causing exploitation in some instances and unlawful mistakes in others. It never crosses the average buyer's mind that "owning the NFT does not even guarantee the ownership of the digital file covered by the NFT" or that if the service hosting the digital file shuts down, "the NFT will point to a dead link."<sup>185</sup> Serious attention should be given to the matter by both the legal and the NFT-supporting communities.

#### *E. Failures in Addressing Online Video Pirating*

Talon White is a name most individuals will be unfamiliar with, but whose story provides an excellent case study. White, a professional poker player, moonlighted producing and distributing "thousands of copyrighted movies and television shows."<sup>186</sup> In return for a subscription fee, White allowed clients to stream and download pirated video content—including movies unreleased to the public—from his many websites.<sup>187</sup> White was able to employ this scheme from 2013 until 2018, netting "more than \$8 million."<sup>188</sup> Despite White pleading guilty and sentencing being set for February 2020, he was not sentenced until July 2021, receiving far less than the maximum of 5 years in prison.<sup>189</sup> While this was ostensibly a win against online copyright infringement, White's case shows the slow pace with which these issues can proceed, the gross volume of content that infringers can provide and the amount of money infringers stand to make. Since White,

---

184. *E.g.*, Mathew Jacobs & Michael Murphy, *NFTs: Privacy Issues for Consideration*, JD SUPRA (Jan. 27, 2022), <https://www.jdsupra.com/legalnews/nfts-privacy-issues-for-consideration-7804114/> [<https://perma.cc/XXK8-WQDB>]; *see also* Veronika Wolfbauer & Peter Ocko, *The tension between the GDPR & NFTs*, LEXOLOGY (Aug. 5, 2021), [https://www.lexology.com/library/detail.aspx?g=61e0954b-c262-4d0f-b33a-2bfc4f5cb7c7#:~:text=In%20short%2C%20an%20NFT%20\(non,to%20protect%20fundamental%20privacy%20rights](https://www.lexology.com/library/detail.aspx?g=61e0954b-c262-4d0f-b33a-2bfc4f5cb7c7#:~:text=In%20short%2C%20an%20NFT%20(non,to%20protect%20fundamental%20privacy%20rights) [<https://perma.cc/E6YT-W6A7>].

185. *YouTube Help: Copyright issues with live streams*, *supra* note 150.

186. *Newport Man Pleads Guilty to Copyright Infringement for Creating Illegal Video Streaming and Downloading Website*, U.S. DEP'T OF JUST. U.S. ATT'Y OFF. DIST. OF OR. (Nov. 25, 2019), <https://www.justice.gov/usao-or/pr/newport-man-pleads-guilty-copyright-infringement-creating-illegal-video-streaming-and> [hereinafter *Newport*] [<https://perma.cc/4UWD-DLWJ>].

187. *Id.*

188. *Id.*

189. *Oregon poker player imprisoned for pirating movies*, *supra* note 39.



steps have been taken by the government to “significantly increase[] criminal penalties for those who, willfully and for commercial advantage or private financial gain, illegally stream copyrighted material.”<sup>190</sup> This was accomplished through the passage of the Protecting Lawful Streaming Act of 2020, signed into law on December 27, 2020, allowing the Department of Justice to bring felony charges against the providers of such illegal services.<sup>191</sup> This law, however, while a step in the right direction, relies on intimidation and increased penalties to stop infringers, arguably missing the mark of the larger systematic reforms needed.

The rise of streaming services such as Netflix, Hulu, and Disney+ and advances in content protection and piracy detection software led to speculation that the pirating of movies and television shows would trend downward. In fact, as more distributing agencies attempt to break into the online market, the opposite remains largely true.<sup>192</sup> Arguments have been made that the increasing number of online distributors is eliminating what made them popular in the first place, requiring subscriptions to numerous services to access your desired content.<sup>193</sup> Contrary to convenient services where one can access all the programming they want, the multitude of streaming services with exclusive programming has resulted in the same effect and expense as historically paying for a cable television subscription. The spreading of desirable content has again led to an increasing interest in piracy.

Global lockdowns and orders to quarantine at home, especially in 2020, saw demand for a pirated content surge.<sup>194</sup> Eleanor Lackman, writing for the Mitchell Silberberg and Knupp LLP blog, reported that “the number of people illegally streaming the movie *Contagion* increased by over 5600%” in early 2020.<sup>195</sup> Lackman mentions the piracy app Popcorn Time, which reemerged at the beginning of the pandemic following years of being

---

190. *Protecting Lawful Streaming Act of 2020*, U.S. PAT. AND TRADEMARK OFF. [USPTO], <https://www.uspto.gov/ip-policy/enforcement-policy/protecting-lawful-streaming-act-2020> [https://perma.cc/J632-WX6M].

191. *Id.*

192. Lackman, *supra* note 3.

193. Luke Holland, *The price is not right: are there too many streaming services?*, THE GUARDIAN (Mar. 22, 2021, 9:00 AM), <https://www.theguardian.com/tv-and-radio/2021/mar/22/the-price-is-not-right-are-there-too-many-streaming-services> [https://perma.cc/W7LX-WQAF].

194. The Alliance for Creativity and Entertainment suggests that websites hosting illegal movies and television shows drew more than 137 billion visits in 2020. *See* Watson & Schwartzel, *supra* note 56.

195. Lackman, *supra* note 3.

shut down, allowing viewers to use “BitTorrent to stream movies and television shows without needing to download them.”<sup>196</sup> Worthy of note is the fact that Popcorn Time itself advises the use of “VPNs to avoid detection by users’ ISPs.”<sup>197</sup> New Hollywood movie releases were not safe from piracy either. With the shift to simultaneous releases of films both in theaters and on streaming services, “[b]ootlegging and sharing high-quality digital copies of movies is easier than ever.”<sup>198</sup> This ability for viewers to watch free, or reduced price, pirated content within hours of the release of the films has “undermin[ed] potential ticket sales and subscriber growth as the [film] industry embraces streaming.”<sup>199</sup> Concerns over the loss of revenue due to the piracy of simultaneous release was important enough for actress Scarlett Johansson to initiate (and later settle) a suit against Disney+ in August 2021 for simultaneously releasing “Black Widow” in theaters and on their streaming service.<sup>200</sup> Johansson’s concerns were not unfounded seeing as just prior, the June 2021 release of “The Conjuring: The Devil Made Me Do It” was “the most-pirated movie in the world. . . with 9.2 million illegal streams, of which more than 1.1 million were in the U.S.”<sup>201</sup> Despite the possibility of a felony conviction, Piracy did not go away and has actually gone up in prevalence.

## V. LESSONS FROM ABROAD: THE UNITED KINGDOM & THE COMMONWEALTH OF AUSTRALIA

### A. *The United Kingdom*

In the United Kingdom copyright is “a property right which subsists in accordance with this Part in the following descriptions of work— (a) original literary, dramatic, musical or artistic works, (b) sound recordings, films or broadcasts, and (c) the typographical arrangement of published editions.”<sup>202</sup> The U.K. provides the owner of the copyright certain exclusive rights very similar to those provided in the United States.<sup>203</sup> A listing of these exclusive rights provided in the U.K. can be found in their Copyright,

---

196. *Id.*

197. *Id.*

198. Watson & Schwartzel, *supra* note 56.

199. *Id.*

200. *Id.*

201. *Id.* (internal citation omitted).

202. Copyright, Designs and Patents Act 1988, c. 48, § 1 (U.K.), <https://www.legislation.gov.uk/ukpga/1988/48/section/1>.

203. Copyright, Designs and Patents Act 1988, c. 48, § 2 (U.K.), <https://www.legislation.gov.uk/ukpga/1988/48/section/2>.

Designs and Patents Act 1988, part 1, chapter II.<sup>204</sup> Copyright infringement in the U.K. is simply defined as doing any of the exclusive rights of the owner—without license.<sup>205</sup>

### 1. Online Copyright Infringement in the U.K.

The United Kingdom's Intellectual Property Office has issued "Online Copyright Infringement tracker Surveys" since 2012. The most recent of these at the time of writing is the "11th Wave", published December 22, 2021.<sup>206</sup> To obtain their data, a two-stage approach is applied: stage one is a fifteen-minute online survey, and stage two is a "mixture of research tasks experimental conditions and discussion topics."<sup>207</sup> The report found that "the streaming/accessing categories were at the highest point seen in the study."<sup>208</sup> The study also found that many respondents indicated "that the content categories asked about were central to their lives" with the "overall level of infringement for all content categories" falling at 25%.<sup>209</sup> While the 25% mark was a 2% increase from the previous year, it is the same level as "four of the previous five years."<sup>210</sup>

Interestingly, in the U.K., live sports and digital magazines come in at the highest levels of infringement, at 29% and 27%, respectively.<sup>211</sup> Audiobooks (24%), software (23%), and film (20%) all came in just below average, and music (15%), television (14%), e-books (14%), and video games (11%) were well below the average.<sup>212</sup> Consumption was influenced heavily by the lockdowns experienced in the U.K., with participants noting "a general increase in their consumption of entertainment content compared to their

---

204. Copyright, Designs and Patents Act 1988, c. 48, ch. II (U.K.), <https://www.legislation.gov.uk/ukpga/1988/48/part/1/chapter/II>.

205. *Id.*

206. INTELL. PROP. OFF., ONLINE COPYRIGHT INFRINGEMENT TRACKER: WAVE 11, U.K. (Mar. 2020), [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/1038580/OCI-tracker-wave\\_11.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1038580/OCI-tracker-wave_11.pdf) [<https://perma.cc/K9MV-AMV9>].

207. INTELL. PROP. OFF., RESEARCH AND ANALYSIS: ONLINE COPYRIGHT INFRINGEMENT TRACKER SURVEY (11TH WAVE) EXECUTIVE SUMMARY, U.K. (Dec. 22 2021), <https://www.gov.uk/government/publications/online-copyright-infringement-tracker-survey-11th-wave/online-copyright-infringement-tracker-survey-11th-wave-executive-summary>.

208. *Id.*

209. *Id.*

210. *Id.*

211. INTELL. PROP. OFF., *supra* note 206 at 3.

212. *Id.*

level before the pandemic, either due to a greater reliance on such content or to fill the[ir] free time.”<sup>213</sup> Some respondents also cited this increase in consumption as causing them to look for cheaper “unofficial sources” with infringement being driven generally by cost and greater access to content not available on paid or legal sources.<sup>214</sup>

## 2. *Attacking the Problem at the Consumer Level*

Unlike the United States, the United Kingdom does not focus almost exclusively on the providers of infringing material but pays heed to the consumers as well. The IPO’s 11th Wave also emphasizes a positive facet of the U.K.’s approach to reducing online copyright infringement. As part of the qualitative portion of the survey, attempts are made to dissuade consumers from participating in infringing activities by various means, such as creating empathy for creative industries, proposing hypothetical intervention and enforcement methods, and warning participants about malware.<sup>215</sup> This 11th Wave focused on shaping consumer behavior through communications routes and hypothetical forms of intervention that would provide real consequences for infringing.<sup>216</sup>

Participants of the 11th Wave indicated that messages about the negative economic impact of infringing worked best for individuals over entire industries, and specifically for smaller artists, small production companies, and background workers.<sup>217</sup> The study also found that as the Covid-19 pandemic progressed, “messages about the continued strain on funds and reports of job losses were seen as some of the most impactful messages.”<sup>218</sup> Threats of malware and other dangers were not compelling and had an inverse relationship with the amount of experience one had in infringing.<sup>219</sup> In regard to the hypothetical enforcement measures, the most effective idea was “the potential for internet providers to send warnings and eventually cut off internet access, followed by greater implementation and enforcement of fines.”<sup>220</sup> Finally, the report broke participants into cautious infringers who were more readily persuadable and savvy infringers who were most caused to reconsider their behaviors under the threat of greater enforcement of copyright law.<sup>221</sup>

---

213. *Id.* at 4.

214. *Id.* at 118.

215. *Id.* at 33.

216. *Id.*

217. *Id.*

218. *Id.*

219. *Id.*

220. *Id.*

221. *Id.* at 34.

In a somewhat radical move, which has produced quite positive results, police officers all across the U.K. knocked on the doors of consumers involved in piracy through free Sky TV streams.<sup>222</sup> Police directly handed to the homeowners notice warnings “to immediately cease any illegal streaming activity.”<sup>223</sup> This joint operation between the police and the anti-piracy organization FACT comes following the limited results from broadband providers sending similar notices to detected infringers in the mail.<sup>224</sup> FACT stated that they give consideration “to the scale of the offending to ensure effective and proportionate action is taken.”<sup>225</sup> Although the police in the U.K. typically have targeted providers of pirated material, a shift is coming with at least one individual already arrested.<sup>226</sup> More arrests are foreseeable as nearby Italy has arrested over 450 people for the same offenses in the last two years.

In the meantime, the IPO issued a press release on February 4, 2022, outlining its new strategy to address IP crime and infringement.<sup>227</sup> Dubbed the “Intellectual Property Counter-Infringement Strategy”, the 5-year plan outlines three overarching themes: “to co-ordinate the U.K.’s fight against IP crime and infringement; to continue to be a world leader on IP enforcement; and to raise awareness and understanding of IP crime and infringement and the risks surrounding it.”<sup>228</sup> The IPO has also committed to the delivery plan being “intelligence-led, harm-focused, and continuously improved.”<sup>229</sup> Phase one of the IPOs plan involves “laying the foundations that will enable [the U.K.] to continue to build on this work during the period of this strategy and beyond.”<sup>230</sup> The IPO plans to study current and emerging IP infringement issues and to build networks at home and abroad to discuss

---

222. See Brown, *supra* note 6.

223. *Id.*

224. *Id.*

225. *Id.*

226. See Daly, *supra* note 6.

227. Press Release, IPO launches new strategy to address IP crime and infringement, GOV.UK (Feb. 4, 2022), <https://www.gov.uk/government/news/ipo-launches-new-strategy-to-address-ip-crime-and-infringement>.

228. Intellectual Property Office, *IP Counter-Infringement Strategy 2022 to 2027*, GOV.UK (Feb. 4, 2022), <https://www.gov.uk/government/publications/ip-counter-infringement-strategy-2022-to-2027>.

229. *Id.*

230. INTELL. PROP. OFF., *INTELLECTUAL PROPERTY COUNTER-INFRINGEMENT STRATEGY: 2022 TO 2027*, at 7, U.K. (Jan. 2022), [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/1051908/IP-Counter-Infringement-Strategy-2022-2027.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1051908/IP-Counter-Infringement-Strategy-2022-2027.pdf).

and tackle specific issues.<sup>231</sup> The IPOs decision to double down on maintaining a consumer approach aspect to their infringement efforts is of great interest to this present piece. Under the strategy’s “Education” heading the IPO states:

The education aims focus specifically on our work with consumers, for both those knowingly and unknowingly infringing. We want to have a clear plan for the different ways in which we will tackle consumer behaviour and how we will bring other government departments, enforcement agencies, and industry into this work.<sup>232</sup>

The IPO intends to work toward a community atmosphere where infringement is seen as socially unacceptable.

### *B. The Commonwealth of Australia*

In the Commonwealth of Australia, copyright provides exclusive rights to do several actions. Interestingly, the list of exclusive actions in Australia differs in regard to literary, dramatic, or musical works<sup>233</sup> versus artistic works.<sup>234</sup> In addition, slightly different rules also exist for “commercial rental arrangement[s].”<sup>235</sup> For guidance purposes the Copyright Act 1968 also lays out several ways in which copyright infringement in works might occur.<sup>236</sup>

An entirely different section of the Act exists for “[c]opyright in subject-matter other than works,” a category which includes sound recordings, cinematograph films, television broadcasts, sound broadcasts, and published editions of works.<sup>237</sup> Conveniently, copyright infringement in subject matter other than works is at the base level the same as infringement for works.<sup>238</sup> Additionally, the Australian government maintains a listing of the copyright treaties and conventions which apply in its jurisdiction.<sup>239</sup>

---

231. *Id.*

232. *Id.* at 34.

233. A listing of the exclusive rights for copyright holders in Australia can be found at *Copyright Act 1968* (Cth) pt III div 1 (Austl.), <https://www.legislation.gov.au/Details/C2021C00407> [<https://perma.cc/TPL4-T4Z6>].

234. *Id.*

235. *Id.*

236. *Copyright Act 1968* (Cth) pt III div 2 (Austl.), <https://www.legislation.gov.au/Details/C2021C00407> [<https://perma.cc/TPL4-T4Z6>].

237. A listing of these exclusive rights for copyright holders in Australia can be found at, *Copyright Act 1968* (Cth) pt IV div 2 (Austl.), <https://www.legislation.gov.au/Details/C2021C00407> [<https://perma.cc/TPL4-T4Z6>].

238. For specifics see *Copyright Act 1968* (Cth) pt IV div 6 (Austl.), <https://www.legislation.gov.au/Details/C2021C00407> [<https://perma.cc/TPL4-T4Z6>].

239. See *Copyright basics*, AUSTL GOV’T: DEP’T OF INFRASTRUCTURE, TRANSP., REG’L DEV. AND COMMC’N, <https://www.infrastructure.gov.au/media-communications-arts/copyright/copyright-basics> (last visited Mar. 9. 2022).

*1. Online Copyright Infringement in Australia*

While at first blush one might assume that Australia's copyright laws are out of date as they stem from the Copyright Act 1968, in actuality, the Australian government has actively updated and reformed its copyright regulations.<sup>240</sup> Pertinent to this Comment is the Copyright Amendment (Online Infringement) Act 2018.<sup>241</sup> The Online Infringement Act replaces the preexisting Section 115(A) as the aptly titled "[i]njuncts relating to online locations outside of Australia."<sup>242</sup> Section 115(A)(1) allows copyright owners to apply to the Federal Court of Australia to:

[G]rant an injunction that requires a carriage service provider. . .to disable access to an online location outside Australia that: (a) infringes, or facilitates an infringement, of the copyright; and (b) has the primary purpose or the primary effect of infringing, or facilitating an infringement, of copyright (whether or not in Australia).<sup>243</sup>

The subsection (1) application may also request that online search engines no longer "provide a search result that refers users to the online location."<sup>244</sup> If the Court so chooses, an injunction granted against either the carriage service provider or online search engine provider might have strict requirements. The Court may:

[R]equire the carriage service providers to take reasonable steps to do either or both of the following: (i) block domain names, URLs and IP addresses providing access to the online location and that are specified in the injunction; (ii) block domain names, URLs and IP addresses that the carriage service provider and the owner of the copyright agree, in writing, have started to provide access to the online location after the injunction is made.<sup>245</sup>

They may also:

[R]equire the online search engine provider to take reasonable steps to do either or both of the following: (i) not provide search results that include domain names, URLs and IP addresses that provide access to the online location and that are specified in the injunction; (ii) not provide search results that include domain

---

240. *See Past copyright reform*, AUSTL GOV'T: DEP'T OF INFRASTRUCTURE, TRANSP., REG'L DEV. AND COMM'C'N, <https://www.infrastructure.gov.au/media-communications-arts/copyright/past-copyright-reform> (last visited Mar. 9, 2022).

241. *Copyright Amendment (Online Infringement) Act 2018* (Cth), <https://www.legislation.gov.au/Details/C2018A00157>.

242. *Id.*

243. *Id.*

244. *Id.*

245. *Id.*

names, URLs and IP addresses that the online search engine provider and the owner of the copyright agree, in writing, have started to provide access to the online location after the injunction is made.<sup>246</sup>

A significant outcome of this legislation is the fact that “[o]nce an injunction has been granted, the ISP can block, mirror, and proxy sites without needing to return to court.”<sup>247</sup> This legislation was seen by some to send a strong anti-online theft message, and by others to remove “important public interest protections” putting legitimate sites and activities at risk.<sup>248</sup>

## 2. *Learning From Their Past*

A 2015 Online Copyright Infringement (OCI) Research Report prepared for the Australian Department of Communications concluded that 26% of “Australian internet users aged 12+ consumed at least one item of online content illegally over the first 3 months of 2015” and 7% (included in the larger 26%) “exclusively consumed illegal content.”<sup>249</sup> When the sample population is changed to only account for those internet users who consumed content in the three-month period, 43% consumed at least one item illegally.<sup>250</sup> The report estimated a shocking “254 million music tracks, 95 million movies, 82 million [television] programmes and 9 million video games were illegally consumed online” in just the first quarter of 2015.<sup>251</sup> These numbers indicate high levels of illegal access indicative of intentional infringement, however, unintentional infringement was still a contributing factor. Especially when 43% of internet users aged 12+ surveyed “stated they were either ‘not particularly’ or ‘not at all confident’ in their knowledge regarding what is and what is not legal online.”<sup>252</sup>

Reacting to the 2015 OCI report, the Australian government instituted the changes discussed above in section VI(A). Survey findings for 2021 convey a promising story of progress in Australia’s battle against online copyright infringement.<sup>253</sup> Overall consumption of online content in 2021

---

246. *Id.*

247. Emma Woollacott, *Australia Tightens Online Piracy Laws*, FORBES (Nov. 29, 2018, 5:33 AM), <https://www.forbes.com/sites/emmawoollacott/2018/11/29/australia-tightens-online-piracy-laws/?sh=4575ab593d12> [<https://perma.cc/MR8E-RFB8>].

248. *Id.*

249. DEPT. OF COMM’N, ONLINE COPYRIGHT INFRINGEMENT REPORT, AUSTL. (June 24, 2015), [https://www.infrastructure.gov.au/sites/default/files/DeptComms%20Online%20Copyright%20Infringement%20Report%20FINAL%20.pdf?acsf\\_files\\_redirect](https://www.infrastructure.gov.au/sites/default/files/DeptComms%20Online%20Copyright%20Infringement%20Report%20FINAL%20.pdf?acsf_files_redirect).

250. *Id.*

251. *Id.*

252. *Id.*

253. It must be noted that due to methodology changes made to the survey in 2020 and 2021 direct comparisons to earlier surveys cannot be relied upon with complete accuracy. Additionally, it should be noted that the 2020 survey was administered early in the



“decreased across all content types” since 2020 but remains significantly higher than 2015 levels.<sup>254</sup> In this most recent survey, 69% of respondents who consumed content online did so “only in ways that were likely to be lawful” and only 30% of respondents had consumed “at least some content online in ways that were likely to be unlawful.”<sup>255</sup> When considering content by type: “only lawful” content consumption has increased for television (80% increase from 67% in 2015), movies/film (77% increase from 51%), and music (79% increase from 63%); and only decreased for video games (71% increase from 78%) and live sport (76% decrease from 94% in 2019).<sup>256</sup> Worthy of consideration, however, is the fact that while the video game and live sport categories may be down from their earliest years, both showed increases from the previous year.<sup>257</sup> Further showing improvement, 29% of respondents (increase from 20% in 2015) considered themselves “very confident that they would be able to identify whether at least one type of content was lawful or unlawful.”<sup>258</sup> Finally, the findings indicate that “11% of respondents had encountered a blocked website”—as per the legislative changes—and of those 11%, most did not access unlawful content.<sup>259</sup>

It can be inferred from a comparison of the 2015 and 2021 surveys that Australian adaptation and regulations have had positive impacts on consumer online copyright infringement. Crucially, the Australian government still recognizes that there is work to be done and improvements to be made.<sup>260</sup> In fact, on December 21, 2021, the Department of Infrastructure, Transport, Regional Development, and Communications released a draft copyright

---

COVID-19 pandemic which may skew results some due to people spending more time at home. See Survey Findings Report, Consumer Survey on Online Copyright Infringement 2021, AUSTL GOV'T: DEP'T OF INFRASTRUCTURE, TRANSP., REG'L DEV. AND COMM'C'N (July 2021), <https://www.infrastructure.gov.au/sites/default/files/documents/consumer-survey-on-online-copyright-infringement-2021-presentation.pdf>.

254. *Id.* at 5.

255. *Id.* at 6–7.

256. *Id.* at 6.

257. *Id.*

258. *Id.* at 25.

259. Of those who did encounter blocked websites, 59% gave up, 18% sought alternative lawful access, 13% bypassed the blocked site, and 5% sought alternative free but unlawful access. Survey Findings Report, Consumer Survey on Online Copyright Infringement 2021, *supra* note 253, at 25.

260. For instance, with the increasing shift of educators and education facilities moving more services online in the wake of COVID-19. *Have your say on draft copyright reform legislation*, AUSTL GOV'T: DEP'T OF INFRASTRUCTURE, TRANSP., REG'L DEV. AND COMM'C'N (Dec. 21, 2021), <https://www.infrastructure.gov.au/departments/media/news/have-your-say-draft-copyright-reform-legislation>.

reform legislation “after extensive industry consultation,” and are seeking feedback through February 11, 2022, from any parties interested in making a submission.<sup>261</sup> This recognition represents a commitment to continuing positive change and clear and reasonable online copyright policies that fit the needs and suggestions of the Australian citizens as a whole.

## VI. SUGGESTIONS FOR MOVING FORWARD

### A. *Additional WIPO Conventions*

A preliminary suggestion that encompasses more than just the United States would be to hold another convention to create a WIPO-administered treaty. As a mere thought experiment, this suggestion seems like a wonderful idea. After all, the *Berne Convention* significantly shaped United States law surrounding online copyright both domestically and internationally. In a perfect world, an assembly would be held where many member nations attend, and agree to an international set of rules and regulations governing online copyright infringement. Seeing as online copyright infringement has become a global phenomenon causing citizens of one country to fall under the jurisdiction of the IP laws of another, it is sensible to think that the governments of the world would want to work together on a solution. Unfortunately, this idea is untenable due to the complex interplay of domestic goals and policies and the lengthy process by which such an agreement would have to go through in order to possibly be created.

Widespread differences in cultural and economic priorities would prevent agreements from being formed in the first place.<sup>262</sup> Attempting to force a member into an agreement it does not wish to follow would only lead to more problems. Indeed, even when conventions are held, treaties are drafted, and member states give contractual signatures, there is no guarantee that the signatory will act in haste to put the treaty in force. A perfect example of this, and yet another illustration of the shortcomings of U.S. online copyright law, is the Beijing Treaty on Audiovisual Performances (2012).<sup>263</sup> Despite the U.S. being a contracting party who signed the treaty in June

---

261. *Id.*

262. See, e.g., Austin Williams, *The origins of China’s copycat culture*, GLOBAL: THE INTERNATIONAL BRIEFING, <https://www.global-briefing.org/2014/01/the-origins-of-chinas-copycat-culture/> [<https://perma.cc/T7GM-99CM>] (discussing in part how “[s]een through Chinese eyes, copying is not only sensible, but it is a symbol of respect for authority” and how the Chinese people “have created a society in which copying is deeply rooted in the culture and not seen as something negative”).

263. *Main Provisions and Benefits of the Beijing Treaty on Audiovisual Performances (2012)*, WIPO (2016), [https://www.wipo.int/edocs/pubdocs/en/wipo\\_pub\\_beijing\\_flyer.pdf](https://www.wipo.int/edocs/pubdocs/en/wipo_pub_beijing_flyer.pdf) [<https://perma.cc/3TC6-PFSE>].

2012<sup>264</sup> and the USPTO providing a draft bill and explanatory letter to then Vice-President Joe Biden in February 2016,<sup>265</sup> nearly six years after the creation of the treaty, the United States has still not submitted instruments to the WIPO or brought the treaty into force.<sup>266</sup>

For the foregoing reasons, though an international agreed upon treaty would be a possible solution, it is not a feasible plan of action.

### *B. An Internal United States Overhaul of Online Copyright Protections*

United States online copyright infringement policies such as the Server Test, the Digital Millennium Copyright Act—especially section 512—and failure to properly evaluate and respond to video pirating, are flawed and should be submitted to intense review and overhaul. Both the Server Test and DMCA section 512, intended to be protective measures and answers to real problems, have become broken in the face of technological advances and serve not to protect the interest of creator copyright holders but to shield large corporations, social media giants, ISPs, and host platforms.

*Perfect 10's* Server Test was created by the Ninth Circuit Court in response to a suit brought against online search engine providers for showing thumbnails of infringing images contained on target websites the search engines returned for the entered query.<sup>267</sup> When given the context of an attempted suit against search engines for something they have little control over, it is sensible to have a rule which protects the website unless it has the infringing image contained in its server. Unfortunately, in the modern world where embedding content created by others in your social media posts or on your website is as simple as selecting an image and choosing the prompt to embed or posting a hyperlink with preview enabled, the Server Test no longer makes sense. Instead of protecting the innocent companies and individuals who are accidentally infringing on someone

---

264. *WIPO-Administered Treaties: Beijing Treaty on audiovisual Performances*, WIPO LEX, [https://wipolex.wipo.int/en/treaties/ShowResults?search\\_what=C&treaty\\_id=841](https://wipolex.wipo.int/en/treaties/ShowResults?search_what=C&treaty_id=841) [<https://perma.cc/6QCR-WGQH>].

265. Letter from Michelle K. Lee, Under Secretary of Commerce for Intellectual Property and Director of the U.S. Pat. Trade. Off., to Joseph R. Biden, President of the Senate (Feb. 26, 2016), <https://www.uspto.gov/sites/default/files/documents/Beijing-treaty-package.pdf> [<https://perma.cc/24WK-TAVX>].

266. *Beijing Treaty on audiovisual Performances*, *supra* note 263.

267. *Law School Case Brief: Perfect 10, Inc. v. Amazon.com, Inc.* – 508 F.3d 1146 (9th Cir. 2007), LEXISNEXIS, <https://www.lexisnexis.com/community/casebrief/p/casebrief-perfect-10-inc-v-amazon-com-inc> [<https://perma.cc/3QGV-PH4V>].

else's display rights, the Server Test currently shields those who steal the IP of others without a second thought to their actions. Another argued fundamental issue with the Server Test is that it misapplies the text and history of the Copyright act.<sup>268</sup> The court in *Perfect 10* was too concerned with the "copy" aspect of copyright protection and not with the likewise-protected "display" aspect.<sup>269</sup> Immediate benefits could be seen if news and social media companies augmented their licensing and embedding policies. It is in the interest of these companies, however, to allow reposting to continue. With *Nicklen* having settled out of court, copyright law will have to wait for the next court to challenge the Server Test. Ideally, the next challenge to the Server Test would reach the U.S. Supreme Court for a definitive ruling. Alternatively, if the government were to inspect the history of the Copyright Act, the application of the Server Test, and the benefits to individual copyright holders of a world without the Server Test, the logical conclusion would be to legislate around the Server Test and circumvent the need to wait for an unforeseen case.

Section 512 of the DMCA undeniably needs modification or complete removal. A multi-year study of section 512 has already been completed by the U.S. Copyright Office, reaching the conclusion that "the operation of the section 512 safe harbor system today is unbalanced."<sup>270</sup> Concerningly, this 250-page report was issued nearly three years ago (May 2020)<sup>271</sup> with minimal action taken since to remedy a copyright protection issue identified by the government agency dedicated to the subject. With the identification of problems causing a desync from the original intent of congress ranging from "eligibility qualification for the service provider safe harbors" to "repeat infringer policies" to "specificity within takedown notices,"<sup>272</sup> flaws can be seen to be pervasive throughout the legislation. Even disregarding the flaws of the section itself, looking at the transparency data provided by Google shows that 99.97% of the over 16.4 million trusted notices Google received just in January of 2017 were for URLs "not in our [Google's] search index in the first place."<sup>273</sup> In order for service providers to avoid liability and keep their safe harbor status, even DMCA notices from fabricated

---

268. Jahner, *supra* note 93.

269. *Id.*

270. *Section 512 Study*, COPYRIGHT.GOV, <https://www.copyright.gov/policy/section512/> [<https://perma.cc/92YN-KWAH>].

271. A Report of the Register of Copyrights: Section 512 of Title 17, U.S. Copyright Off. (May 2020), <https://www.copyright.gov/policy/section512/section-512-full-report.pdf> [<https://perma.cc/JQ6A-ZUPZ>].

272. *Id.*

273. Andy Maxwell, *Google: 99.95% of Recent 'Trusted' DMCA Notices Were Bogus*, TORRENTFREAK (Feb. 22, 2017), <https://torrentfreak.com/google-99-95-of-recent-trusted-dmca-notices-were-bogus-170222/> [<https://perma.cc/375M-T9X6>].

companies will be honored without hesitation, shifting burden to the targeted party to prove the notice was fraudulent.<sup>274</sup> In a world where an ever-growing number of individuals make their living as influencers and content creators, current DMCA rules have the power to immediately erase an entire business personality or work product portfolio. While recognizing that the DMCA as a whole has beneficial and redeeming characteristics that are liked by both service providers and rights holders, section 512 at a minimum needs to be done away with in whole and refashioned. Ignorance of the service provider distributors, themselves in a more secure position to deal with these issues, is a detriment to the very concept the DMCA is meant to protect.

Video piracy continues to be a substantial problem in the United States as well as the world at large. The United States, however, seems to be reacting more sluggishly than their international partners in dealing with the situation. Examples of how to begin to at least reduce the impact of this issue have been provided by the U.K., Australia, and Italy among other nations. A progressive plan to educate citizens on the intricacies and harms of online piracy would be a good place to start. At the same time, the U.S. can borrow bits and pieces from the methods used around the world to create a plan that works for the U.S. Given the population size and widespread nature of internet piracy in the U.S., a two-pronged plan to crack down both on service providers as well as the distributors *and consumers* of knowingly pirated materials. Kieron Sharp of FACT agrees that “the modern landscape needs a new approach” with focus now on “trying to prevent and disrupt” the piracy market.<sup>275</sup> With the phasing out of physical interaction in piracy the notion of piracy as the victimless crime is once again on the rise in consumers who often do not realize the gravity of the criminal ventures they are participating in. Strong government opposition and prosecution—or at least the threat thereof—of both distributors and consumers would help to overcome this obstacle. Another important facet of this issue is legitimate privacy software being abused for infringement

---

274. Manik Berry, *Google's DMCA Implementation Is Broken And Legitimate Sites Are Falling Through The Cracks*, FOSSBYTES (Sept. 1, 2021), <https://fossbytes.com/googles-dmca-system-broken/> [https://perma.cc/8ZHT-JXEV].

275. Joel Khalili, *A crackdown on piracy and illegal streaming is coming*, TECHRADAR (Aug. 16, 2021), <https://www.techradar.com/news/a-crackdown-on-piracy-and-illegal-streaming-is-coming> [https://perma.cc/3DNA-ARPG].

purposes.<sup>276</sup> ISPs have already been accused of turning a blind eye to infringement complaints of recording companies,<sup>277</sup> a complaint complicated immensely when applied to VPNs. Though VPN companies will not advertise their products in this way themselves, users and reviewers of VPNs specifically mention using the product features to avoid online content restrictions and to engage in P2P sharing of infringing content.<sup>278</sup> Due to this commonly known use of VPNs, VPN providers should be required in the same way as ISPs to log<sup>279</sup> and report user piracy. New legislation requiring VPNs to report piracy or face charges for conspiracy or contributory infringement would significantly reduce online piracy over a short period of time.

### *C. United States Taking Cues From International Allies*

The United States should be attacking the online copyright infringement problem at a consumer level like the United Kingdom. Online copyright infringement is not just about the providers, it is about the people knowingly consuming the content. As the laws of supply and demand dictate, without a demand from consumers, a good deal of intentional online copyright infringement loses its value and diminishing returns would lead to less individuals and services providing pirated content and materials. The effects of infringement on those who create the materials should be explained to consumers. Attempts should be made to humanize the issues, and not to simply state that “it is not a victimless crime” without providing more information. If consumers are not moved by the knowledge of what impact their actions are having, then the Government should start letting the consumer know they will lose their access to the internet—the most effective enforcement measure from the U.K. 11th Wave study. If this warning does not work, the U.S. should follow the U.K.’s and Italy’s lead and start having police officers show up at the homes of individuals they know to be involved with online copyright infringement. The U.K. is taking copy right problems

---

276. See Raphael Roswell, *VPN Companies Could Be Held Liable for Their Customers Pirating Content*, TECH TIMES (Sept. 03, 2021, 6:09 PM), <https://www.techtimes.com/articles/264979/20210903/vpn-companies-being-sued-for-piracy.htm> [<https://perma.cc/P5QW-SVNA>].

277. Jon Brodtkin, *\$1 billion piracy ruling could force ISPs to disconnect more Internet users*, ARS TECHNICA (June 7, 2021, 3:43 PM), <https://arstechnica.com/tech-policy/2021/06/1-billion-piracy-ruling-could-force-isps-to-disconnect-more-internet-users/> [<https://perma.cc/5VCD-JGUB>].

278. See Roswell, *supra* note 276.

279. See, e.g., Anthony Spadafora, *Movie firms want VPN firms to log pirates*, TECHRADAR. (Sept. 3, 2021), <https://www.techradar.com/news/movie-firms-want-vpn-firms-to-log-pirates> [<https://perma.cc/PU6M-JY26>] (detailing similar calls from film companies and streaming services).

seriously and on a much larger scale than the United States. As such, the U.K.'s 5-year plan seems promising. The U.S. should consider adoption and adaptation of the U.K.'s plan. Equally important in the fight against online copyright infringement in today's ever-changing world, is the kind of continuous update and reform implemented by the Australian government. Australia has enabled injunctions to entirely block online access to infringing sources and has instructed online search engines to not provide infringing sites in search results. U.S. officials need to begin learning from the past and adapting to the future or many of their laws may not keep up. Australia's recognition that the fight against copy right issues continues, acknowledgement that they need to do more, and attempts seek advice from experts is admirable and should be emulated by the U.S.

## VII. CONCLUSION

Online copyright infringement and internet piracy in the United States has become outdated and currently exists as a wellspring of legal and ethical problems. The United States needs to take cues from our international partners such as the Commonwealth of Australia and the United Kingdom. Detailed investigations and surveys into online copyright infringement and public opinion on the matter of internet piracy served as the basis for both countries to form a plan to tackle their own online copyright infringement problems. Notable issues with the United States online copyright infringement standards are the Server Test, DMCA section 512, and the handing of internet piracy. If the U.S. fails to act in the near immediate future technologies will continue to compound the issues currently faced. Instead of continuing outdated practices, the U.S. needs to consider the historic purposes of copyright protection and the desires of its law-abiding citizens. Finally, the United States stands to gain from a realization that international cooperation and dialogue are necessary as "IP criminals will work across borders and [international governments] must be able to do the same."<sup>280</sup>

---

280. *IP Counter-Infringement Strategy 2022 to 2027*, *supra* note 228.

